



Draft  
Environmental Impact Report  
for the

# Lancaster Health District Master Plan



SCH No. 2017051076 | **December 2020**

Prepared for:  
**City of Lancaster**

Development Services Department  
Community Development Division  
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## 1.0 EXECUTIVE SUMMARY

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The City of Lancaster (City) is proposing the Lancaster Health District Master Plan to guide the future development around the Antelope Valley Hospital located within the central portion of the City (Master Plan or Proposed Project). The proposed Master Plan lays the groundwork for growth that is anticipated to occur on the 272.4-acre project site. The Master Plan includes a vision plan, implementation plan, and development code to guide future development over the next 20 years.

This section of the Environmental Impact Report (EIR) provides information on the background of the Proposed Project, as described in Section 3.0: Project Description, assessed in this EIR, and a summary of the information in this Draft EIR identifying the potential environmental impacts of the Proposed Project, the mitigation measures identified to lessen these impacts, and the alternatives evaluated to provide additional information on ways to avoid or reduce these impacts.

### 1.1 PURPOSE OF THIS ENVIRONMENTAL IMPACT REVIEW

The environmental review process for the Proposed Project is being conducted by the City. The California Environmental Quality Act (CEQA) was adopted to inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities, identify the ways that environmental damage can be avoided or significantly reduced and prevent significant, avoidable damage to the environment by requiring changes in project through the use of feasible alternatives or mitigation measures. When it is determined through preliminary review that a proposed project may result in significant impacts to the quality of the natural environment, preparation of an EIR in accordance with the process defined in CEQA is required.

The City, acting as the Lead Agency for the planning and environmental review of the Proposed Project, has prepared this Programmatic EIR in compliance with CEQA, including the CEQA Guidelines (California Code of Regulations Title 14 Section 15000 et seq.).

### 1.2 OVERVIEW OF THE PROPOSED PROJECT

#### 1.2.1 Regional and Community Setting

The proposed Master Plan defines the development program for an approximately 272.4-acre area around the Antelope Valley Hospital (project site) for the next 20 years. As shown in Figure 3.0-1: Regional Location Map, and Figure 3.0-2: Vicinity Map, the 272.4-acre project site is located within the central portion of the City, which is located in the northern portion of Los Angeles County. Regional access to the project site is provided by State Route (SR) 14, located west of the Amargosa Creek and borders the proposed Master

Plan's western boundary. Vehicular access to the project site is provided by Avenue J, Avenue K, 10th Street West, 15th Street West, and 20th Street West.

As shown in Figure 3.0-3: Aerial Photograph, the project site is generally located south of Avenue J; north of Avenue K; east of 20th Street West and SR 14; and west of Kingtree Avenue on the north and 15th Street West on the south.

## 1.2.2 Project Characteristics

The proposed Lancaster Health District Master Plan is divided into five chapters, (1) Purpose and Intent, (2) Setting and Context, (3) The Health District Plan, (4) Design Standards and Guidelines, and (5) Implementation. The project site has been organized into three planning sub-areas defined by the centerlines of Avenue J-8 and 15th Street West, as well as the overall project site boundaries, as shown in Figure 3.0-4: District Sub-Areas. Mixed-use development is proposed, including medical and general offices, retail and commercial uses, and a range of housing types, as shown in Figure 3.0-5: Regulating Plan.

The proposed Master Plan would allow flexibility for design, use, and intensity. Actual development and building footprints may change as long as the development is consistent with the applicable land use district and adheres to the development regulations and design guidelines. The proposed Master Plan would enable replacement of the existing 342-bed Antelope Valley Hospital with up to 300 beds within a new approximately 700,000 (square feet) sf facility with a new 12,000 sf plant facility; and up to 80 beds within approximately 91,000 sf of acute care facilities. Further, the proposed Master Plan would allow additional development of up to 284 beds within 249,800 sf of sub-acute care facilities; 400 rooms within 480,000 sf of continuum of care space; 400,000 sf of medical office space, 200,000 sf of office space, 151,000 sf of retail space, 91,000 sf of restaurant space; 180 hotel rooms with 70,000 sf of conference center space; 250 single family condominium units and 1,350 multifamily apartment units, for a total of 1,600 housing units. A 385,000-sf parking car garage with 1,100 parking spaces is also proposed. The existing heliport would be relocated approximately 400 feet from the existing landing area and would accommodate patients for the replaced Antelope Valley Hospital. Full buildout of the proposed Master Plan would include existing development, redevelopment of the hospital, and new development. An internal roadway backbone network would be constructed by the City as part of a capital project, as shown in Figure 3.0-6: Circulation Plan. These roadways are part of the proposed project and would support the development proposed within the Master Plan Area.



### 1.2.3 Land Use

As previously mentioned, the project site has been organized into three planning sub-areas defined by the centerlines of Avenue J-8 and 15th Street West. The three planning sub-areas are described below.

#### **a. Sub-Area 1: Central District**

Sub-Area 1, the Central District, would consist of the core medical uses including the new hospital and heliport, sub-acute care uses, continuum of care uses; hospitality uses; medical office space; office space, retail space; restaurant space; and new multifamily housing types within approximately 147.2 acres. Permitted development within this sub-area would enable replacement of the existing 342-bed Antelope Valley Hospital main facility with up to 300 beds within a new 700,000 sf facility and 80 beds within 79,000 sf of acute care space for a total of approximately 791,000 sf of acute care space. Permitted development would also include 284 beds in 249,800 sf of sub-acute care space and 400 beds within 480,000 sf of continuum of care space.

Permitted development would also include up to 802 multifamily apartment homes, approximately 400,000 sf of medical office space, 200,000 sf of office space, 50,000 sf of retail space, 75,000 sf of retail space, 45,000 sf of restaurant space, and up to 180 hospitality rooms and 70,000 sf of conference space within approximately 329,200 sf hotel space. A new 12,000 sf plant facility, which would provide power to the new hospital, relocation of the existing heliport, and a 385,000 sf parking car garage with 1,100 spaces is also proposed in this sub-area. As shown in Figure 3.0-4, the Central District is the largest sub-area and located within the northwestern and central portion of the project site.

#### **b. Sub-Area 2: East Neighborhood**

Sub-Area 2, East Neighborhood, would consist of residential and some retail and restaurant uses within approximately 72.7 acres. Permitted development within this sub-area would include 465 multifamily apartments and 40 single family condominiums for up to 505 new homes. Additional permitted development would include 38,000 sf of retail space and 23,000 sf of restaurant space. As shown in Figure 3.0-4, the East Neighborhood is located within the northeastern portion of the project site.

#### **c. Sub-Area 3: South Campus**

Sub-Area 3, South Campus, would consist of residential housing, retail uses, and restaurant uses within approximately 52.5 acres. Permitted development within this sub-area would include up to 83 multifamily apartment homes and 210 single family condominium homes for up to 293 homes. Additional permitted development would include 38,000 sf of retail space and approximately 23,000 sf of restaurant space. As shown in Figure 3.0-4, the South Campus is located within the southern portion of the project site.

## 1.2.4 Proposed Master Plan Zoning Districts

The proposed Master Plan includes the Health District Code, which is the implementing mechanism to guide future development within the project site. The proposed Health District Code includes three new zoning sub-districts that would replace the existing zones within the project site. The proposed Regulating Plan identifies the approximate locations of each zoning district, as depicted in Figure 3.0-5. The zones are further described below.

**District Core (DC)**—The intent of the DC zone is to provide vibrant, walkable, urban main street areas that would provide locally and regionally serving medical, commercial, retail, entertainment, and civic uses. This zone is characterized by active, pedestrian-oriented medical, retail, restaurant, art galleries, and other ground-floor uses set at or near the sidewalk, with offices and housing on upper floors. Building heights would typically range from one to six stories; hotels and hospitals would have no height limits.

**District General (DG)**—The intent of the DG zone is to provide a variety of urban housing choices in medium to large footprint buildings that reinforce the walkable nature of the neighborhood and would support public transportation. This zone is characterized by a flexible mixture of active residential and retail frontages, and both house-form and block-form buildings.

**District Edge (DE)**—The intent of the DE zone is to provide a variety of urban housing choices in small-to-medium footprint buildings that would support a very high-quality, safe, and comfortable pedestrian public realm, supported by public transportation and neighborhood-serving retail and service uses. The DE is the least intense of the three new zoning sub-districts. This zone abuts existing single-family and multifamily neighborhoods and is characterized primarily by multifamily residential buildings. Buildings would be limited to three-stories along street frontages, and would be set back with landscaped front yards, porches, and stoops.

## 1.2.5 Circulation

Vehicular, bicycle, and pedestrian access to each proposed sub-area would be via new roadway connections to the arterial roadway network surrounding and traversing the project site. Primary internal street network connections include the extensions of 18th Street West and 13th Street West/Lowtree Avenue to provide north-south connectivity, and Avenue J-3 and Avenue J-5 to provide east-west connectivity. All internal roadways would be two-lane facilities with bike lanes and sidewalks. The roadways shown in Figure 3.0-6, would be constructed by the City as part of a capital project supporting development within the Master Plan Area. Other roadways needed to accommodate the development with the Master Plan Area would be constructed in coordination with individual development projects to the specifications identified in the proposed Master Plan's development code.

The intersections of 20th Street West/Home Depot driveway, 15th Street West with Avenue J-3 and Avenue J-8, and the Avenue J/Lowtree Avenue are currently signalized. Existing intersections that are unsignalized, such as the Avenue J-8/12th Street West intersection, as well as new connections to the arterial network, would be controlled by one-way stop control or all-way stop control, depending on location. Roundabouts are also proposed at four major intersections, as shown on Figure 3.0-6, including at Home Depot Southerly Street/18th Street West ; Avenue J-5/18th Street West; Avenue J-5/North/South Street east of Women & Infants Pavilion; and Avenue J-5/13th Street West.

### **1.2.6 Development Standards**

The proposed Master Plan establishes development regulations to guide the development of the physical components of the project site and apply to new development or redevelopment<sup>1</sup> in the project site. They are intended to provide for programmatic flexibility and creative design solutions, provide a buffer for adjacent property owners, and produce an environment that is consistent with the City's goals. The development standards for each zoning district provide regulations for building placement and orientation, height, setbacks, open space, and landscaping.

### **1.2.7 Design Guidelines**

Future development accommodated by the proposed Master Plan would be required to comply with the proposed Master Plan's design guidelines. Design guidelines provide direction for architecture, signage, parking, landscape, circulation, and lighting features. These design guidelines include both mandatory standards and interpretive design guidelines. The proposed Master Plan's landscape guidelines would incorporate sustainable site design practices and focus on enhancing and improving landscaping features throughout the project site. Specific projects developed pursuant to the proposed Master Plan would also be developed in compliance with the City's landscaping installation and maintenance requirements (Lancaster Municipal Code [LMC], Chapter 8.5).

### **1.2.8 Master Plan Development Time Frame**

Development of the Master Plan would occur over an extended period of time and therefore would need to be flexible enough to respond to changing demands in medical research and patient service needs, as well as funding opportunities. The proposed Master Plan would be implemented on a project-by-project basis as future development applications are submitted to the City and would be in response to market conditions. Construction activities would include demolition of existing uses, grading and excavation, and construction of new structures and related infrastructure. Infrastructure improvements within the project

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1 For purposes of the Health District Code, "redevelopment" shall include any project that either demolishes 50 percent or more of the existing floor area of the primary building on site, or adds an amount of floor area that is equal to or more than 50 percent of the existing floor area of the primary building on site.

site would be phased with each individual development project. For purposes of environmental analysis, buildout of the project site under the Master Plan is anticipated to occur through 2040.

### 1.3 PROJECT OBJECTIVES

The primary objective of the proposed Master Plan is to surround the Antelope Valley Hospital with a variety of health and wellness related uses, supporting and expanding the hospital's medical facilities and treatment capabilities while accommodating the needs of patients and their families, staff, and the community. The following objectives for the Proposed Project will aid decision makers in their review of potential environmental impacts:

- Surround the Antelope Valley Hospital with a variety of health- and wellness-related uses, thereby supporting and expanding the hospital's medical facilities and treatment capabilities while accommodating the needs of patients and their families, staff, and the community.
- Take advantage of vacant and underutilized properties surrounding the hospital to encourage healthcare-related development, accommodate a wide range of wellness supportive businesses and activities, improve community health outcomes, and stimulate the local economy.
- Develop enhanced and expanded open space within the project site to encourage Antelope Valley Hospital patients, employees, and visitors to enjoy a healthy, active lifestyles and to support compact, mixed-use, transit-ready urban development patterns and forms.
- Upgrade and expand utilities and infrastructure necessary to support project site growth and development, while reducing negative impacts to the greater community.
- Implement buildings, public spaces and landscapes that complement and are responsive to Lancaster's climate and natural environment, and that minimize consumption of non-renewable resources.
- Support City and regional planning programs that emphasize sustainability and mobility by increasing development intensity and diversity of use in areas that are well served by transit.
- Improve and streamline multimodal transportation and access throughout the project site, including by foot, bicycle, car, shuttle and regional transit.
- Increase employee density in proximity to public transit while reducing or mitigating all net new greenhouse gas emissions from construction and operations.
- Provide proximate and shared parking facilities for patients, visitors and employees, including parking structures and surface lots distributed among the District's blocks and buildings to serve project site populations while reducing travel demand for internal car trips.

## 1.4 SUMMARY OF ALTERNATIVES

Analysis of a reasonable range of alternatives is required by CEQA. The purpose of the alternatives analysis is to provide additional information on ways to avoid or minimize the significant effects of a project. The alternatives to the Proposed Project evaluated in this Draft EIR include:

- Alternative 1 – No Project/No Development
- Alternative 2 – No Project/General Plan Buildout
- Alternative 3 – Reduced Intensity

A brief description of each of these alternatives is provided below.

### 1.4.1 Alternative 1—No Project /No Development

The No Project/No Development Alternative (Alternative 1) assumes the proposed Health District Master Plan would not be adopted and the 272.4-acre site would remain in its current condition with its existing developed uses including the existing hospital, and the existing approximately 110 acres of vacant areas. None of the commercial/office space, hotel rooms, or residential units would be built. The hospital would not be re-developed. Further, the vacant and undeveloped land would not be developed in accordance with the City's General Plan 2030 Land Use Map.

### 1.4.2 Alternative 2—No Project/General Plan Buildout

The No Project/General Plan Buildout Alternative (Alternative 2) examines the impacts that would result from development of the project site with the type and density of land uses allowed by the current General Plan land use and zoning designations for the vacant areas of the project site. Under Alternative 2, development of up to approximately 91.3 acres of mixed-use uses, approximately 15.4 acres of health care uses, approximately 1.1 acres of office/professional uses, and approximately 2.2 acres of multi-residential uses would be permitted. Based on maximum permitted development within the 110 acres of vacant land within the project site, approximately 335,412 square feet (sf) of medical uses, 1,376,496 sf of commercial/office space uses, and 1,055 multi-family residential units could be developed. Overall, Alternative 2 would permit approximately 968,092 fewer square feet of development and 545 less multifamily units when compared to the Proposed Project.

### 1.4.3 Alternative 3—Reduced Intensity Alternative

The Reduced Density Alternative (Alternative 3) considers implementation of the Proposed Project, with a 50 percent reduction of density of all land uses except for the hospital which would remain similar to the Proposed Project. This alternative would implement the same land use categories as the Proposed



Project but at a smaller scale: 382 beds within 404,400 sf of additional medical related uses, 597,100 sf of commercial and office space, a 90 room hotel, 125 single family attached units, and 675 multi-family units. Under this alternative, the layout of the land uses would not change as compared to the Proposed Project.

#### **1.4.4 Environmentally Superior Alternative**

Section 15126.6(e)(2) of the CEQA Guidelines indicates that the analysis of alternatives to a project shall identify an environmentally superior alternative among the alternatives evaluated. The purpose of the alternatives analysis is to identify potentially feasible ways to avoid or minimize the significant effects of the Proposed Project. The CEQA Guidelines indicate that if the No Project/No Development Alternative is identified as the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives.

Alternative 3, the Reduced Density Alternative, would be considered environmentally superior because it would result in the greatest incremental reduction of the overall level of impact when compared to the Proposed Project. Alternative 3 would eliminate the Proposed Project's significant and unavoidable impacts related to regional air quality emissions of volatile organic compounds (VOC), carbon monoxide (CO), and fine particulate matter (PM<sub>2.5</sub>) and substantially reduce nitrous oxides (NO<sub>x</sub>) and coarse particulate matter (PM<sub>10</sub>) emissions. Further, Alternative 3 would reduce impacts related to: aesthetics, construction-related air quality emissions, energy, GHG emissions, construction-related hydrology and water quality, operation-related noise, public services, recreation, operation-related transportation, water supply and service, wastewater, and solid waste when compared to the Proposed Project. This alternative would result in similar, less than significant impacts with mitigation related to biological resources, cultural resources, geology and soils, hazards and hazardous materials, operation related hydrology and water quality, construction-related noise and vibration, population and housing, construction-related transportation, tribal cultural resources, and dry utilities.

Since this alternative would involve a 50 percent reduction in allowable land use intensity, there would be reduced development on the project site that might improve the City's economic base. However, this alternative would meet these objectives to a lesser extent than the Proposed Project; thereby only partially meeting these objectives. As such, the Reduced Density Alternative would not be as effective in meeting the Proposed Project's purpose to create a regional healthcare district that stimulates economic development opportunities for the City and the greater community. Overall, the Reduced Density Alternative would not meet the Proposed Project's purpose and the objectives that support the proposed Master Plan's purpose to the same extent as the Proposed Project.

## 1.5 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

Some issues of concern were expressed through responses to the Notice of Preparation (NOP). Areas of concern included the Proposed Project's increase in vehicle miles traveled (VMT) on the State Highway System; the Proposed Project's consistency with the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategies goal; the Project site will be outside the Sanitation Districts of Los Angeles County boundaries and will require annexation into District 14; noted that the sewer capacity of the Proposed Project does not currently have any deficiencies; provided wastewater generation associated with the Proposed Project; recommended that each new individual project should be analyzed to determine if there is sufficient sewer capacity; indicated that there would be fees charged for each connection; and that the District 14 could provide service up to the levels that are legally permitted in accordance with Southern California Association of Governments projections; early consultation with California Native American tribes through Assembly Bill (AB) 52 and Senate Bill (SB) 18; various access and water requirements; effects on nesting birds, landscaping, and mitigation options; and potential impact on Los Angeles County Sheriff Department's service capabilities.

## 1.6 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

A summary of the potential environmental impacts of the Proposed Project and the measures identified to mitigate these impacts is provided below for each topic addressed in this Draft EIR. Table 1.0-1: Summary of Proposed Project Impacts, summarizes the significance of the impacts of the Proposed Project based on the information and analysis in Section 5.0 of this Draft EIR.

**Table 1.0-1  
Summary of Proposed Project Impacts**

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<b>5.1 AESTHETICS</b>			
<i>Have a substantial adverse effect on a scenic vista.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Substantially damage scenic resources, including but not limited to, trees rock outcroppings, and historic buildings within a state scenic highway.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.2 AIR QUALITY</b>			
<i>Conflict with or obstruct implementation of the applicable air quality plan.</i>	Potentially Significant.	<b>MM AQ-1</b> Prior to ground disturbance activities, the project operator shall provide evidence to the Development Services Director that the project operator and/or construction manager has developed a “Valley Fever Training Handout”, along with training and a schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, handout(s), and schedule shall be submitted to the Development Services Director within 24 hours of the first	With implementation of <b>MM AQ-1</b> , construction impacts would be Less than Significant.  With implementation of <b>MM AQ-2</b> through

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Development Services Director regarding the “Valley Fever Training Handout” and Session(s) shall include the following:</p> <ol style="list-style-type: none"> <li>a. A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session.</li> <li>b. Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever.</li> <li>c. Training on methods that may help prevent Valley Fever infection.</li> <li>d. A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Where respirators are required, the equipment shall be readily available, and shall be provided to employees for use during work. Proof that the demonstration is included in the training shall be submitted to the County. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs.</li> </ol> <p>The project operator also shall consult with the Los Angeles County Public Health to develop a Valley Fever Dust Management Plan that addresses the potential presence of the Coccidioides spore and mitigates for the potential for Coccidioidomycosis (Valley Fever). Prior to issuance of permits, the project operator shall submit the</p>	<p><b>MM AQ-7,</b> operational impacts would remain Significant and Unavoidable.</p>

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>Plan to the Los Angeles County Public Health for review and approval. The Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities, and to identify appropriate safety procedures that shall be implemented, as needed, to minimize personnel and public exposure to potential Coccidioides spores. Measures in the Plan shall include the following:</p> <ol style="list-style-type: none"> <li>a. Provide HEP-filters for heavy equipment equipped with factory enclosed cabs capable of accepting the filters. Cause contractors utilizing applicable heavy equipment to furnish proof of worker training on proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment.</li> <li>b. Provide communication methods, such as two-way radios, for use in enclosed cabs.</li> <li>c. Require National Institute for Occupational Safety and Health (NIOSH)-approved half- face respirators equipped with minimum N-95 protection factor for use during worker collocation with surface disturbance activities, as required per the hazard assessment process.</li> <li>d. Cause employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144).</li> <li>e. Provide separate, clean eating areas with hand-washing facilities.</li> <li>f. Install equipment inspection stations at each construction equipment access/egress point.</li> </ol>	



Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off-site.</p> <ul style="list-style-type: none"> <li>g. Train workers to recognize the symptoms of Valley Fever, and to promptly report suspected symptoms of work-related Valley Fever to a supervisor.</li> <li>h. Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever.</li> <li>i. Work with a medical professional, in consultation with the Los Angeles County Public Health, to develop an educational handout for on-site workers and surrounding residents within three miles of the project site, and include the following information on Valley Fever: what are the potential sources/ causes, what are the common symptoms, what are the options or remedies available should someone be experiencing these symptoms, and where testing for exposure is available. Prior to construction permit issuance, this handout shall have been created by the project operator and reviewed by the project operator and reviewed by the Development Services Director. No less than 30 days prior to any work commencing, this handout shall be mailed to all existing residences within a specified radius of the project boundaries as determined by the Development Services Director. The radius shall not exceed three miles and is dependent upon the location of the project site.</li> <li>j. When possible, position workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks.</li> </ul>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<ul style="list-style-type: none"> <li>k. Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with handwashing facilities.</li> <li>l. Post warnings on-site and consider limiting access to visitors, especially those without adequate training and respiratory protection.</li> <li>m. Audit and enforce compliance with relevant Cal OSHA health and safety standards on the job site.</li> </ul>	
		<p><b>MM AQ-2 Electric Vehicle Charging Stations</b></p> <p>Require that the requisite number of electric vehicle (EV) charging stations be provided based on the total number of parking spaces required for a given use, including one EV charging station for 1–50 parking spaces, two for 51-200 parking spaces, and four for 201 parking spaces and over.</p>	
		<p><b>MM AQ-3 Delivery Vehicle Idling Time</b></p> <p>Delivery vehicle idling time shall be limited to no more than five minutes. For any delivery that is expected to take longer than five minutes, the vehicle’s operator shall be required to shut off the engine. The project component shall notify vendors of these idling requirements at the time the delivery purchase order is issued and again when vehicles enter the facility. Signs shall be posted at entry to the facility’s delivery area stating that idling longer than five minutes is not permitted.</p>	
		<p><b>MM AQ-4 Paving and Roofing Materials</b></p> <p>Light-colors paving and roofing materials shall be utilized on site, to the greatest extent practical.</p>	
		<p><b>MM AQ-5 Lawn Maintenance</b></p> <p>Electric lawn mowers and leaf blowers shall be used on site to the greatest extent practical until the citywide</p>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>ordinance, which requires all landscape contractors to use electric landscape maintenance equipment, goes into effect in 2024.</p> <p><b>MM AQ-6 Cleaning Products</b></p> <p>Builders shall, to the maximum extent feasible, use flooring and insulation products that are low-emitting in terms of volatile organic compounds (VOCs) and formaldehyde. Low- and zero-VOC paints, finishes, adhesives, caulks, and other substances are also recommended to improve indoor air quality and reduce the harmful health effects of off-gassing.</p> <p><b>MM AQ-7 Employee Rideshare</b></p> <p>Require that large employers (250 or more employees at a single work-site location) provide a transportation demand management program, such as vanpools/carpools, ride-sharing/ride-matching, and/or “guaranteed ride home” services that allow employees who use public transit to get a free ride home if they need to stay at work late.</p> <p>Provide incentives for employees working at the proposed commercial and retail uses to encourage the use of public transportation or carpooling, such as discounted transit passes or carpool rebates.</p> <p>Implement a rideshare program for employees working at the proposed commercial and retail uses and set a goal to achieve a certain participation rate over a period of time.</p>	
<p><i>Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.</i></p>	<p>Potentially Significant.</p>	<p>Incorporation of <b>MM AQ-2</b> through <b>MM AQ-7</b> above.</p>	<p>With implementation of <b>MM AQ-1</b>, construction impacts would be Less than Significant.</p>

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<p><i>Expose sensitive receptors to substantial pollutant concentrations.</i></p>	<p>Potentially Significant.</p>	<p><b>MM AQ-8</b> Prior to approval for an individual project which proposes a dry cleaner using perchloroethylene (PCE), the project applicant shall provide written documentation to the Development Services Department of the distance between the proposed dry cleaner using PCE and any sensitive receptor. A sensitive receptor is defined as a residence, school, daycare center, playground and medical facility. If the proposed dry cleaner is greater than 500 feet from a sensitive receptor, then project approval can proceed. If the proposed dry cleaner using PCE is within 500 feet of a sensitive receptor, then preparation of a Health Risk Assessment (HRA) that provides a detailed comprehensive analysis to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure for human populations including those exposures resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1, and to assess and quantify both the individual and population-wide health risks associated with those levels of exposure during operation of the Proposed Project; and shall provide measures to reduce any potential exceedances. The HRA shall be provided to the Development Services Department and the Antelope Valley Air Quality Management District.</p>	<p>With implementation of <b>MM AQ-2</b> through <b>MM AQ-7</b>, operational impacts would remain Significant and Unavoidable.</p> <p>Less than Significant.</p>

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<i>Result in other emissions (such as those leading to odors adversely affecting a substantial number of people.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.3 BIOLOGICAL RESOURCES</b>			
<i>Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.</i>	Potentially Significant.	<p><b>MM BIO-1</b> A detail survey of the Joshua trees on the project site shall be prepared and submitted to both the City of Lancaster and the California Department of Fish and Wildlife. This report shall include detailed information regarding each of the Joshua trees including GPS coordinates, height, width, general health, and tree specific photographs. In the event that the Joshua trees cannot be preserved on the project site through construction and occupancy, the developer shall obtain an Incidental Take Permit for the Joshua trees prior to the issuance of any grading/construction permits and removal of the trees</p> <p><b>MM BIO-2</b> Prior to the issuance of any construction-related permits for an individual project, the applicant shall have a permitted biologist conduct a preconstruction survey for Blainville’s horned lizard within 72 hours prior to site disturbance and submit the written results to the Development Services Department. If lizards are not found during the preconstruction survey, work can commence. If lizards are observed, no work shall commence until the individuals have left the area or have been relocated by a qualified biologist in accordance with California Department of Fish and Wildlife (CDFW) protocols.</p> <p><b>MM BIO-3</b> Prior to the issuance of any construction-related permits for an individual project, the applicant shall have a qualified, permitted biologist determine the suitability of habitat and availability of burrows within the individual projects disturbance area and submit the written results to the Development Services Department. If suitable</p>	Less than Significant.

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>habitat and borrows are determined within the individual project site, then a permitted biologist shall conduct protocols related to burrowing owls as identified in the Staff Report on Burrowing Owl Mitigation prepared by the CDFW on March 7, 2012.</p> <p><b>MM BIO-4</b> Prior to the issuance of any construction-related permits for an individual project, the applicant shall have a qualified biologist conduct nesting bird surveys of the property no more than three days prior to the removal of any vegetation or structures with the potential to support nesting birds, including loggerhead shrike, and shall submit the written results to the Development Services Department. If a loggerhead shrike nest is found, a 300-foot buffer shall be established in which construction activities are prohibited until all young have fledged; for Migratory Bird Treaty Act (MBTA)-listed and raptor species, this buffer shall be expanded to 500 feet.</p>	
<p><i>Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.</i></p>	<p>Potentially Significant.</p>	<p><b>MM BIO-5</b> Prior to construction work in jurisdictional waters, applications for Clean Water Act (CWA) Section 404 and CFGC (CFGC) 1602 permits shall be prepared and submitted to the regulatory agencies and the permits shall be obtained by the applicant of each individual project. Mitigation shall be proposed at a 1:1 ratio, or as required by the permitting agencies, to preserve similar ephemeral, streambed and associated riparian, and swales for no net loss of jurisdictional aquatic resources.</p>	<p>Less than Significant.</p>
<p><i>Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.</i></p>	<p>Less than Significant.</p>	<p>Incorporation of <b>MM BIO-5</b> above.</p>	<p>Less than Significant.</p>

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<i>Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.</i>	Potentially Significant.	No mitigation measures are required.	Less than Significant.
<i>Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.4 CULTURAL RESOURCES</b>			
<i>Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?</i>	Potentially Significant.	<b>MM CUL-1</b> Prior to the issuance of any construction-related permits for an individual project that would modify a structure over 50 years, the applicant shall retain a qualified consultant to determine the potential historical significance of the structure and submit the written results to the Development Services Department. If the structure is determined to be of potential historic significance, then the applicant shall have a qualified consultant ensure that complete Historic American Building Survey (HABS) level documentation will be prepared for structures that will be demolished prior to commencement of demolition. The intent is to preserve an accurate record of historic property that can be used in research and other preservation activities. HABS documentation shall provide the appropriate level of visual documentation and written narrative based on the	Less than Significant.

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<p><i>Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.</i></p>	<p>Potentially Significant.</p>	<p>importance of the resource, as determined in consultation with Development Services Department</p> <p><b>MM CUL-2</b> Prior to the initiation of ground-disturbing activities associated with each individual project, a Worker Education Training and Awareness Program shall be developed to discuss the Proposed Project’s potential for impacting cultural resources. The training shall be presented by the qualified archaeologist in conjunction with representatives from the San Manuel Band of Mission Indians, the Morongo Band of Mission Indians and the Fernandeano Tataviam Band of Mission Indians. This education/training program shall discuss the types of artifacts and features that may be encountered, the procedures to be followed if cultural materials are unearthed at the project site, contact information for Lead Agency and Tribal personnel, and the regulatory requirements for the protection of cultural resources. This education program shall be provided to all construction personnel (e.g., contractors, earthmoving personnel, etc.) prior to any work being done on the project site.</p> <p><b>MM CUL-3</b> Prior to the initiation of ground-disturbing activities associated with each individual project, a Monitoring, Avoidance, and Treatment Plan that is reflective of the project mitigation in this section shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Morongo Band of Mission Indians, and the Fernandeano Tataviam Band of Mission Indians. Once all parties review and approve the plan, it shall be adopted by the Lead Agency. This plan shall be finalized and adopted prior to the issuance of any construction-related permits (grading, building, etc.) associated with the Proposed Project. Any</p>	<p>Less than Significant.</p>



Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>and all findings shall be subject to the protocol detailed within the Monitoring and Treatment Plan.</p> <p><b>MM CUL-4</b> Due to the heightened cultural sensitivity of the Proposed Project area, an archaeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within each individual Project area including, but not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation (benches, signage, boulders, walls, seat walls, fountains, etc.), and archaeological work. A sufficient number of archaeological monitors shall be present each workday to ensure that simultaneously occurring ground-disturbing activities receive thorough levels of monitoring coverage.</p> <p><b>MM CUL-5</b> Due to the heightened cultural sensitivity of the Project area, Tribal monitors representing the San Manuel Band of Mission Indians, the Morongo Band of Mission Indians, and the Fernandeño Tataviam Band of Mission Indians shall be present for all ground-disturbing activities that occur within each individual Project area including, but not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation (benches, signage, boulders, walls, seat walls, fountains, etc.), and archaeological work. A sufficient number of Tribal monitors shall be present each workday to ensure that simultaneously occurring ground-disturbing activities receive thorough levels of monitoring coverage.</p>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
	<p><b>MM CUL-6</b></p>	<p>If a precontact cultural resource is discovered during Project implementation, ground-disturbing activities shall be suspended 60 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Morongo Band of Mission Indians, the Fernandeño Tataviam Band of Mission Indians, the Archaeological Monitor/applicant, and the Lead Agency shall confer regarding treatment of the discovered resource, as detailed within the Monitoring and Treatment Plan. A research design shall be developed and will include a plan to evaluate the resource for significance under CEQA criteria. The research design shall also acknowledge that, regardless of significance under CEQA, all finds are subject, if feasible, to avoidance/preservation in place as treatment.</p> <p>Should any resource(s) not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the above listed tribes, unless otherwise decided by said tribes. All plans for analysis shall be reviewed and approved by the Applicant, Lead Agency and listed Tribes prior to implementation, and all removed material shall be temporarily curated on site. It is preferred that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon</p>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>by the identified tribes, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the Project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to the Lead Agency, CHRIS, and the identified Tribes. All reburials are subject to a reburial agreement that shall be developed between the landowner and the identified Tribes outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts (vis-à-vis Project plans, conservation/preservation easements, etc.).</p> <p>Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with identified tribes to identify an American Association of Museums (AAM) accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the project developer/applicant to pay for those fees.</p> <p>All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead</p>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>Agency and identified Tribes for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and identified Tribes.</p> <p><b>MM CUL-7</b> In the event that any human remains are discovered within the Project area, ground-disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately notify the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Morongo Band of Mission Indians, the Fernandeño Tataviam Band of Mission Indians, the Applicant/developer, and the Lead Agency. The Lead Agency and the Applicant/developer shall then immediately contact the County Coroner regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code Section 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code Section 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-</p>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>eight (48) hours of the site visit, as required by California Public Resources Code Section 5097.98.</p> <p>Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code Section 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The Applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties.</p> <p>It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, Parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code Section 6254 (r).</p>	
<p><i>Disturb any human remains, including those interred outside of formal cemeteries.</i></p>	<p>Potentially Significant.</p>	<p>Incorporation of <b>MM CUL-7</b> above.</p>	<p>Less than Significant.</p>
<p><b>5.5 ENERGY</b></p>			
<p><i>Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of</i></p>	<p>Less than Significant.</p>	<p>No mitigation measures are required.</p>	<p>Less than Significant.</p>

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<i>energy resources during construction or operation.</i>			
<i>Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.6 GEOLOGY AND SOILS</b>			
<i>Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving Seismic-related ground failure, including liquefaction.</i>	Potentially Significant.	<b>MM GEO-1</b> Prior to the issuance of any construction-related permits for an individual project in an identified liquefaction zone, a geotechnical investigation report shall be prepared by a registered design professional and the written results submitted to the Development Services Department. The geotechnical investigation report shall define the scope of the investigation, including the number and types of borings or soundings, the equipment used to drill or sample, the in-situ testing equipment and laboratory testing program. If risk for seismic ground failure and liquefaction in and around the proposed development site is identified, special design and construction	Less than Significant.

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		provisions shall be incorporated into the design of the proposed development project, as necessary.	
<i>Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Result in substantial soil erosion or the loss of topsoil.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Be located on a geologic unit or soil that is unstable, or that would become unstable as result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.</i>	Potentially Significant.	<b>MM GEO-2</b> Prior to the initiation of any excavation activities for an individual project, field personnel shall be alerted to the possibility of fossil remains. In the event fossil remains are encountered during excavation activities associated with each individual project, the contractor shall cease all earth-disturbing activities within a 60-foot radius of the area of discovery, notify the City’s Development Services Director, and, with direction from the City’s Development Services Director, shall retain a qualified paleontologist to	Less than Significant.

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<p>evaluate the significance of the find and recommend an appropriate course of action. Any fossils recovered shall be deposited in an accredited and permanent scientific institution for the benefit of current and future generations. Work within the area of discovery shall resume only after the resource has been appropriately mitigated.</p>			
<p><b>5.7 GREENHOUSE GAS EMISSIONS</b></p>			
<p><i>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.</i></p>	<p>Less than Significant</p>	<p>No mitigation measures are required.</p>	<p>Less than Significant.</p>
<p><i>Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.</i></p>	<p>Less than Significant.</p>	<p>No mitigation measures are required.</p>	<p>Less than Significant.</p>
<p><b>5.8 HAZARDS AND HAZARDOUS MATERIALS</b></p>			
<p><i>Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.</i></p>	<p>Less than Significant.</p>	<p>No mitigation measures are required.</p>	<p>Less than Significant.</p>
<p><i>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.</i></p>	<p>Potentially Significant.</p>	<p><b>MM HAZ-1</b> Prior to the issuance of any construction related permits for individual projects, the applicant shall confirm the presence or absence of polychlorinated biphenyls (PCBs) and submit the written results to the Development Services Department. If PCBs are determined to occur within the individual project site, development shall undergo site characterization and remediation per applicable Federal, State, and/or local standards and guidelines set by the applicable regulatory agency.</p>	<p>Less than Significant.</p>



Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p><b>MM HAZ-2</b> Prior to the issuance of any construction related permits for an individual project, all buildings to be demolished, redeveloped, or otherwise altered as part of each individual project shall be surveyed and sampled for asbestos-containing building materials by a licensed asbestos abatement contractor and written results shall be submitted to the Development Services Department. If asbestos-containing building materials are determined to be present in the structures to be demolished, an Asbestos Removal Work Plan shall be prepared and all asbestos-containing materials must be removed under acceptable engineering methods and work practices by the licensed asbestos abatement contractor prior to demolition. These practices include, but are not limited to, containment of the area by plastic, negative air filtration, wet removal techniques and personal respiratory protection and decontamination. The process shall be designed and monitored by a California Certified Asbestos Consultant. The abatement and monitoring plan shall be developed and submitted for review and approval by the appropriate regulatory agencies (currently the City of Lancaster Building Official and Antelope Valley Air Quality Management District) and must include all on-site structures with asbestos-containing materials (ACMs).</p>	
		<p><b>MM HAZ-3</b> Prior to the issuance of construction related permits, each individual project with proposed demolition and/or alteration of buildings within the project site shall first complete a lead inspection to determine if lead based paint or other lead containing materials are present at the future development site and shall submit written results to the Development Services Department. If necessary, all lead containing materials, including lead based paint shall be removed and disposed of by a licensed and certified</p>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		lead abatement contractor, in accordance with local, state, and federal regulations.	
	<b>MM HAZ-4</b>	Prior to the issuance of any construction related permits for individual projects located on vacant sites within the project site, the applicant shall require representative soil sampling and analytical testing to assess for the presence of residual organochlorine pesticides or herbicides be performed prior to the commencement of construction efforts. If presence of residual organochlorine pesticides or herbicides are found above acceptable levels a Remediation Action Plan would be prepared to address the removal of contaminated soil onsite prior to construction efforts.	
	<b>MM HAZ-5</b>	The suspected imported fill area located on the eastern portion of Vacant Lot 2 shall be further assessed. Representative soil sampling and analytical testing should be performed to evaluate for the potential presence of hazardous substances and/or petroleum products in the fill. The applicant shall submit written results to the Development Services Department. If hazardous substances are identified, they shall be removed in accordance with State and Federal regulations.	
	<b>MM HAZ-6</b>	In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction within the Lancaster Health District Master Plan area, construction activities in the immediate vicinity of the contamination must cease immediately. If contamination is encountered, a Risk Management Plan must be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		development and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures must include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements must be prepared and implemented prior to commencement of work in any contaminated area.	
<i>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>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.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Be 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Result in an impaired implementation of or physically interference with an adopted emergency response plan or emergency evacuation plan.</i>	Potentially Significant.	<b>MM HAZ-7</b> Any off-site roadway improvements and lane closures shall be approved by the City’s Traffic Division prior to the commencement of construction activities that include lane closure, impede vehicle movement along roadways, and interrupt emergency access. The General Contractor	Less than Significant.

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		shall notify the Los Angeles County Fire Department and Los Angeles County Sheriff's Department in addition to receiving the approval from the City.	
<i>Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.9 HYDROLOGY AND WATER QUALITY</b>			
<i>Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.10 LAND USE AND PLANNING</b>			
<i>Physically divide an established community.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.11 NOISE</b>			

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<p><i>Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</i></p>	<p>Potentially Significant.</p>	<p><b>MM NOI-1 Construction Management Plan</b></p> <p>Prior to the issuance of a grading permit, a construction management plan shall be prepared by the future applicant and/or construction contractor for each individual project. The construction management plan shall contain at a minimum, but not limited to, the following construction best management practices (BMPs) to quantify that reduction of construction noise levels fall below the City’s established thresholds:</p> <ul style="list-style-type: none"> <li>• The on-site speed limit for all vehicles and construction equipment shall be limited to 15 mph on any construction site.</li> <li>• Construction operations shall not occur between 8:00 PM and 7:00 AM on weekdays or Saturday or at any time on Sunday. The hours of any construction related activities shall be restricted to periods and days permitted by the City’s Noise Ordinance.</li> <li>• The on-site construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process to the owner shall be established prior to construction commencement that will allow for resolution of noise problems that cannot be immediately solved by the site supervisor.</li> <li>• Electrically handheld power equipment shall be used instead of pneumatic or internal combustion powered equipment to the extent feasible.</li> <li>• Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far away as practicable from noise-sensitive receptors.</li> </ul>	<p>Less than Significant.</p>

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<ul style="list-style-type: none"> <li>Fixed construction equipment, including compressors and generators, shall be located as far as practicable from noise-sensitive receptors.</li> <li>The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.</li> <li>No project-related public address or music system from construction sites shall be audible at any adjacent receptor.</li> <li>All noise producing construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating conditions that meet or exceed original factor specifications. Mobile or fixed “package” equipment (e.g., arcwelders, air compressors, etc.) shall be equipped with shrouds and noise control features that are readily available for the type of equipment.</li> <li>Temporary noise barriers shall be used during construction phases when the use of heavy equipment is prevalent within 50 feet of sensitive receptors.</li> </ul>	
		<p><b>MM NOI-2 Loading Docks</b></p> <p>Prior to the issuance of a building permit, sound attenuation measures must be incorporated into the design of individual projects to minimize noise from loading docks so that noise levels stay remain below the City’s established thresholds. These measures may include, but are not limited to, designing loading docks to have either a depressed (i.e., below grade) loading area, an internal bay, or a wall to break the line of sight between on-site and adjacent residential land uses and loading</p>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>operations. Acoustical analysis shall be performed to demonstrate that the loading dock does not result in noise levels on sensitive uses within the City that exceed the noise compatible land use objectives on nearby receptors. These components must be incorporated into the plans submitted by the applicant to the City for review and approval, prior to issuance of building permits.</p>	
<p><i>Generation of excessive groundborne vibration or groundborne noise levels.</i></p>	<p>Potentially Significant</p>	<p><b>MM NOI-3</b> Prior to the issuance of a grading permit, a construction-related vibration management plan shall be prepared by the future applicant and/or construction contractor for each individual project. The construction-related vibration management plan shall contain at a minimum, but not limited to, the following construction best management practices (BMPs) to quantify that reduction of construction vibration levels fall below the perceptible level threshold:</p> <ul style="list-style-type: none"> <li>• In the event heavy duty construction vibration equipment are to be used, equipment use shall be limited to the following to minimize impacts related to human annoyance:                             <ul style="list-style-type: none"> <li>– Caisson drilling and large bulldozers shall be limited to be no less than 50 feet and vibratory rollers to no less than 100 feet within the nearest sensitive receptor to not exceed the 78 VdB perceptible level threshold. Additionally, limiting the use of jackhammers to no less than 25 feet of the nearest sensitive receptors would result in vibration levels below the 78 VdB perceptible levels.</li> </ul> </li> </ul>	<p>Less than Significant.</p>
<p><i>For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public</i></p>	<p>Less than Significant.</p>	<p>No mitigation measures are required.</p>	<p>Less than Significant.</p>



Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<i>airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.</i>			
<b>5.12 POPULATION AND HOUSING</b>			
<i>Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.13 PUBLIC SERVICES</b>			
<b>5.13.1 FIRE SERVICES</b>			
<i>Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.13.2 SHERIFF SERVICES</b>			
<i>Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered</i>	Potentially Significant.	No mitigation measures are required.	Less than Significant.

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<i>law enforcement facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for law enforcement services.</i>			
<b>5.13.3 SCHOOLS</b>			
<i>Result in substantial adverse physical impacts associated with the provisions of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain performance objectives for school services.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.13.4 LIBRARY SERVICES</b>			
<i>Result in capacity or service level problems, or result in substantial adverse physical impact associated with the provision of new or physically altered library facilities in order to maintain acceptable service ratios, or other performance objectives for library services.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.14 RECREATION</b>			
<i>Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Include recreational facilities or require the construction or expansion of recreational</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<p><i>facilities which might have an adverse physical effect on the environment.</i></p>			
<p><i>Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks.</i></p>	<p>Less than Significant.</p>	<p>No mitigation measures are required.</p>	<p>Less than Significant.</p>
<p><b>5.15 TRANSPORTATION</b></p>			
<p><i>Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.</i></p>	<p>Potentially Significant Construction Impact.</p> <p>Less Than Significant Operation Impact.</p>	<p><u>Mitigation Measure: Construction</u></p> <p><b>MM TRAF-1:</b> Prior to obtaining a grading permit, a project applicant shall prepare and submit to the City of Lancaster detailed construction traffic management plans for review and approval. The construction traffic management plans shall include the following elements:</p> <ul style="list-style-type: none"> <li>• Provisions for temporary traffic control during all construction activities adjacent to public right-of-way to improve traffic flow on public roadways (e.g., flag person);</li> <li>• Identification of construction-related vehicle parking areas;</li> <li>• Provision of safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers;</li> <li>• Schedule construction-related deliveries to reduce travel during peak travel periods;</li> <li>• Outline adequate measures to ensure emergency vehicle access during all aspects of the project's</li> </ul>	<p>Less than Significant.</p>

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>construction, including, but not limited to, the use of flagmen during partial closures to streets surrounding the project site to facilitate the traffic flow until construction is complete.</p> <ul style="list-style-type: none"> <li>• Include the implementation of security measures during construction in areas that are accessible to the general public to help reduce any increased demand on law enforcement services, including fencing construction areas, providing security lighting, and providing security personnel to patrol construction sites.</li> </ul>	
		<p><u>Operational Improvement Measures</u></p>	
	<p>TRAF-2:</p>	<p>20th Street West and Avenue J [Intersection 8]</p> <p>Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of 20th Street West and Avenue J and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City’s Traffic Division of the City’s Development Services Department for approval. The written results shall identify the individual project’s fair share contribution towards the following improvements in order for this intersection to operate acceptably in 2040 with the addition of Proposed Project traffic:</p> <ul style="list-style-type: none"> <li>• Signal modification to add Northbound Right overlap.</li> </ul>	
	<p>TRAF-3:</p>	<p>15th Street West and Avenue J [Intersection 10]</p> <p>Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of</p>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>15th Street West and Avenue J and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City’s Traffic Division of the City’s Development Services Department for approval. The written results shall identify the individual project’s fair share contribution towards the following improvements in order for this intersection to operate acceptably in 2040 with the addition of Proposed Project traffic:</p> <ul style="list-style-type: none"> <li>• Add additional northbound left turn lane (dual lefts); and</li> <li>• Add eastbound right turn lane.</li> </ul>	
	TRAF-4:	<p>20th Street West and Avenue J-8 [Intersection 18]</p> <p>Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of 20th Street West and Avenue J-8 and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City’s Traffic Division of the City’s Development Services Department for approval. The written results shall identify the individual project’s fair share contribution towards the following physical improvements in order for this intersection to operate acceptably in 2040 with the addition of Proposed Project traffic:</p> <ul style="list-style-type: none"> <li>• Avenue J-8 road diet project will reduce westbound through lanes from 2 to 1; and</li> <li>• Add westbound through/right turn lane.</li> </ul>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
	<p>TRAF-5:</p>	<p>15th Street West and Avenue J-8 [Intersection 19]</p> <p>Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of 15th Street West and Avenue J-8 and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City’s Traffic Division of the City’s Development Services Department for approval. The written results shall identify the individual project’s fair share contribution towards the following physical improvements in order for this intersection to operate acceptably in 2040 with the addition of Proposed Project traffic:</p> <ul style="list-style-type: none"> <li>• Add westbound through/right turn lane.</li> </ul>	
	<p>TRAF-6:</p>	<p>10th Street West and Avenue J-8 [Intersection 20]</p> <p>Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of 10th Street West and Avenue J-8 and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City’s Traffic Division of the City’s Development Services Department for approval. The written results shall identify the individual project’s fair share contribution towards the following physical improvements in order for this roadway segment to operate acceptably in 2040 with the addition of Proposed Project traffic:</p> <ul style="list-style-type: none"> <li>• Restripe the eastbound approach to create an Eastbound Left/Through lane and a de facto right turn lane. This could be accomplished by restriping the</li> </ul>	

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		<p>double yellow line on the west leg of the intersection to the north.</p> <p>TRAF-7: Division Street and Avenue K [Intersection 28]</p> <p>Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of Division Street and Avenue K and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City’s Traffic Division of the City’s Development Services Department for approval. The written results shall identify the individual project’s fair share contribution towards the following physical improvements in order for this roadway segment to operate acceptably in 2040 with the addition of Proposed Project traffic:</p> <ul style="list-style-type: none"> <li>• Add Eastbound Right turn overlap.</li> </ul>	
<i>Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Result in inadequate emergency access.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.16 TRIBAL CULTURAL RESOURCES</b>			
<i>Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in</i>	Potentially Significant.	Incorporation of <b>MM CUL-1</b> through <b>MM CUL-7</b> above.	Less than Significant.

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<p><i>terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).</i></p>			
<p><i>Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</i></p>	<p>Potentially Significant.</p>	<p>Incorporation of <b>MM CUL-1</b> through <b>MM CUL-7</b> above.</p>	<p>Less than Significant.</p>
<p><b>5.17 UTILITIES AND SERVICE SYSTEMS</b></p>			
<p><b>5.17.1 WATER</b></p>			
<p><i>Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of</i></p>	<p>Less than Significant.</p>	<p>No mitigation measures are required.</p>	<p>Less than Significant.</p>



Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<i>which could cause significant environmental effects.</i>			
<i>Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.17.2 WASTEWATER</b>			
<i>Require or result in the relocation or construction of new or expanded wastewater treatment, or storm water drainage facilities, the construction or relocation of which could cause significant environmental effects.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Result in a determination by the wastewater treatment provider which serves or may serve the project that is has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.17.3 SOLID WASTE</b>			
<i>Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<i>Comply with federal, State, and local management and reduction statues and regulations related to solid waste.</i>	Less than Significant.	No mitigation measures are required.	Less than Significant.
<b>5.17.4 DRY UTILITIES</b>			
<i>Require or result in the relocation or construction of new or expanded power,</i>	Potentially Significant.	<b>MM UT-1</b> Electric and gas service shall remain available to all existing customers during construction of new and	Less than Significant.

Proposed Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
<i>natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.</i>		replacement electrical and/or gas lines within the project site.	

## 2.0 INTRODUCTION

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### 2.1 PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

The California Environmental Quality Act (CEQA) requires that all State and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. This Draft Environmental Impact Report (EIR) has been prepared to satisfy CEQA (Public Resources Code [PRC], Sections 21000 et seq.) and the State Guidelines for Implementation of CEQA (CEQA Guidelines), as amended (California Code of Regulations [CCR], Sections 15000 et seq.). The EIR is the public document designed to provide decision makers and the public with an analysis of the environmental effects of the Proposed Project, to indicate possible ways to reduce or avoid environmental damage, and to identify alternatives to the Proposed Project. The EIR must also disclose significant environmental impacts that cannot be avoided; growth-inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects.

The intent of this Draft EIR is to provide sufficient information on the potential environmental impacts of the proposed Lancaster Health District Master Plan Project (Master Plan or Proposed Project) to allow the City of Lancaster (City) to make an informed decision regarding approval of the Proposed Project. Specific discretionary actions to be reviewed by the City are described in Section 3.0: Project Description of this Draft EIR.

The overall purpose of this Draft EIR is to inform the City, responsible agencies, decision makers, and the general public about the environmental effects of the proposed development and operation that could occur with implementation of the proposed Master Plan, as required by CEQA Guidelines Section 15146. This Draft EIR addresses effects that may be potentially significant and adverse, evaluates alternatives to the Proposed Project, and identifies mitigation measures to reduce or avoid adverse effects, if necessary.

### 2.2 LEGAL AUTHORITY

This EIR has been prepared in accordance with all criteria, standards, and procedures of CEQA (PRC Section 21000 et seq.) and the CEQA Guidelines (CCR, Title 14, Division 6, Chapter 3, Section 15000 et seq.).

Pursuant to CEQA (PRC Section 21067) and CEQA Guidelines (CCR, Article 4 and Section 15367), the City is the Lead Agency under whose authority this EIR has been prepared. The term “Lead Agency” refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the Lead Agency and before taking action to approve the Proposed Project, the City has the obligation to: (1) ensure that this EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision-making process; (3) make a statement that this EIR reflects the

City's independent judgment; (4) ensure that all significant effects on the environment are eliminated or substantially lessened where feasible; and, if necessary, (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or Project alternatives identified in this EIR are infeasible and citing the specific benefits of the Proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines Sections 15090 through 15093).

Pursuant to CEQA Guidelines Sections 15040 through 15043 and upon completion of the CEQA review process, the City will have the legal authority to do any of the following:

- Approve the Proposed Project;
- Require feasible changes in any or all activities involved in the Proposed Project in order to substantially lessen or avoid significant effects on the environment;
- Deny approval of the Proposed Project, if necessary, in order to avoid one or more significant effects on the environment that would occur if the Proposed Project was approved as proposed; or
- Approve the Proposed Project even though the Proposed Project would cause a significant effect on the environment if the City makes a fully informed and publicly disclosed decision that: 1) there is no feasible way to lessen the effect or avoid the significant effect; and 2) expected benefits from the Proposed Project would outweigh significant environmental impacts of the Proposed Project.

This EIR fulfills the CEQA environmental review requirements for the Proposed Project, and all other governmental discretionary and administrative actions related to the Proposed Project.

### 2.3 RESPONSIBLE AND TRUSTEE AGENCIES

Section 21104 of the PRC requires that all EIRs be reviewed by responsible and trustee State agencies (see CEQA Guidelines Section 15082 and Section 15086(a)). As defined by CEQA Guidelines Section 15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power over the project." A "Trustee Agency" is defined in CEQA Guidelines Section 15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California."

Responsible and Trustee Agencies and other entities that may use this EIR in their decision-making process or for informational purposes include the following, among others:

- California Department of Fish and Wildlife;
- Lahontan Regional Water Quality Control Board;
- Los Angeles County Fire Department;
- County Sanitation Districts of Los Angeles County;
- Los Angeles County Waterworks, District 40; and
- Antelope Valley Air Quality Management District.

## 2.4 NOTICE OF PREPARATION

Prior to commencing preparation of the Draft EIR, the City issued a Notice of Preparation (NOP) to solicit views from the public and other governmental agencies in accordance with the provisions of CEQA. The City prepared and circulated the NOP for review on May 15, 2017. The NOP was sent to the State Office of Planning and Research—State Clearinghouse, Los Angeles County and other public agencies, and the owners and residents of surrounding properties. In addition, notice of a public scoping meeting for the Proposed Project was included in the NOP. The public scoping meeting was held on May 31, 2017, at the Cedar Center for the Arts located at 44851 Cedar Avenue, Lancaster, California, 93534. The public scoping meeting was held with the specific intent of affording interested individuals, groups, and public agencies a forum in which to orally present input directly to the Lead Agency in an effort to assist in further refining the intended scope and focus of the EIR, as described in the NOP. The NOP (provided in Appendix A: Notice of Preparation and Comment Letters) described the Proposed Project and proposed scope of environmental study. Subsequent to the release of the NOP in 2017 (Original NOP), the Master Plan program of development was updated and a revised NOP (Revised NOP) was released for public review on April 1, 2020.

Four comments were received on the Original NOP from the California Department of Transportation (DOT)—District 7 Office, Southern California Association of Governments (SCAG), Los Angeles County Sanitation Districts (Sanitation Districts), and Laborers International Union of North America (LIUNA), Local Union 300. Seven comments were received on the Revised NOP from California DOT—District 7 Office, California Department of Fish and Wildlife (CDFW), Native American Heritage Commission (NAHC), SCAG, Sanitation Districts, County of Los Angeles Fire Department (LACFD), and the Los Angeles County Sheriff's Department (LASD). The DOT indicated that the EIR include a transportation impact study to ensure all modes are served well by planning and development activities, with specific concern regarding the potential traffic conflict on the State facilities. This includes reducing single occupancy vehicle trips, ensuring safety, reducing vehicle miles traveled (VMT), supporting accessibility, and reducing greenhouse gas emissions. SCAG provided specific 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals that should be considered in the EIR; demographic and growth forecasts; and potential strategies for the use of mitigation measures, if necessary. Additionally, SCAG indicated that the proposed final 2020 RTP/SCS (Connect SoCal) has been released and anticipated to be adopted on May 7, 2020. The Sanitation Districts noted that portions of the project site would be outside the District's boundaries and would require annexation into District 14; noted that the sewer capacity of the project area does not currently have any deficiencies; provided wastewater generation associated with the Proposed Project; recommended that each new individual project be analyzed to determine if there is sufficient sewer capacity; indicated that there would be fees charged for each connection; and that the District could provide service up to the levels that are legally permitted in accordance with SCAG

projections. Additionally, the Sanitation Districts indicated that some projects may require an amendment to a Districts' Permit for Industrial Wastewater Discharge; identified nearby infrastructure and capacity; and provided an updated wastewater generation calculation. The NAHC provided information regarding early consultation with California Native American tribes through Assembly Bill (AB) 52 and Senate Bill (SB) 18. LACFD noted various access and water requirements, various responsibilities of LACFD, and had no further comments. CDFW provided specific comments related to nesting birds, landscaping, and for a biological baseline assessment, as well as general comments on the EIR, California Endangered Species Act, and mitigation options. LASD noted that the Proposed Project is within their service area and potential impact on their service capabilities. LIUNA, Local Union 300 requested that future notices be sent related to the Proposed Project.

## 2.5 EIR SCOPE, FORMAT, AND CONTENT

### 2.5.1 EIR Scope

This EIR contains an analysis of the Proposed Project described in Section 3.0. Pursuant to CEQA Guidelines Section 15161, this EIR focuses primarily on the changes in the environment that would result from the proposed development forecast by the proposed Master Plan and examines potential environmental impacts associated with the Proposed Project including from demolition, construction, and operation.

Pursuant to CEQA Guidelines Section 15060(d), the City determined that an EIR will be required for the Proposed Project and as such, the Lead Agency did not prepare an Initial Study and instead began work directly on the EIR. In the absence of an Initial Study, this EIR evaluates all environmental factors as listed in Appendix G, Environmental Checklist Form of the CEQA Guidelines as listed below.

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population / Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

The topics of Agricultural Resources, Mineral Resources, and Wildfire are not analyzed in this EIR because the subject property does not contain any known agricultural land, any mineral deposits or active mineral extraction operations, and is not located within a wildfire hazard zone. Discussions of these topics can be found in Section 8.1: Effects Not Found to Be Significant.

## **2.5.2 EIR Format and Content**

Section 1.0: Executive Summary summarizes the EIR including details of the Proposed Project, potential impacts, mitigation measures if required, and alternatives.

Section 2.0: Introduction provides introductory information about the CEQA process and the responsibilities of the City, serving as the Lead Agency of this EIR.

Section 3.0: Project Description serves as the EIR's Project Description for purposes of CEQA and contains a level of specificity pursuant to CEQA Guidelines Sections 15123 and 15146.

Section 4.0: Environmental Setting describes the environmental setting, including descriptions of the project site's physical conditions and surrounding context. The existing setting is defined as the condition of the project site and surrounding area at the approximate date of this EIR's NOP; which was originally released for public review on May 15, 2017. Since the release of the Original NOP, the Master Plan program of development was updated and a Revised NOP was released for public review on April 1, 2020.

Section 5.0: Environmental Impact Analysis provides an analysis of potential direct, indirect, and cumulative impacts that may occur with implementation of the Proposed Project. A conclusion concerning significance is reached for each discussion; mitigation measures are presented as warranted. The analyses are based in part upon technical reports that are appended to this EIR. Information is also drawn from other sources of analytical materials that directly or indirectly relate to the Proposed Project. Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation, feasible mitigation measures are recommended to reduce or avoid the significant effect.

Section 6.0: Project Alternatives describes and evaluates alternatives to the Proposed Project that could reduce or avoid the Proposed Project's adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Proposed Project but rather to consider a reasonable range of alternatives that will foster informed decision making and public participation.

Section 7.0: Growth-Inducing Impacts includes a discussion on potential growth-inducing impacts of the Proposed Project.

Section 8.0: Other Environmental Impacts includes specific topics that are required by CEQA. These include a summary of the Proposed Project's significant and unavoidable environmental effects and a discussion of the significant and irreversible environmental changes that would occur should the Proposed Project be implemented. This section also includes a discussion of the potential environmental effects that were found not be significant.

Section 9.0: Terms, Definitions, and Acronyms lists all the terms, definitions and acronyms used in this EIR.

Section 10.0: Organizations and Persons Consulted lists the agencies and persons that were consulted in preparing this EIR. This section also lists the persons who authored or participated in preparing this EIR.

Section 11.0: References cites all reference sources used in preparing this EIR.

## 2.6 INCORPORATION BY REFERENCE

Pertinent documents relating to this EIR have been cited in accordance with CEQA Guidelines Section 15150, which encourages incorporation by reference as a means of reducing redundancy and the length of environmental reports. The following documents are incorporated by reference into this EIR. Information contained within these documents has been utilized for each section of this EIR. Copies of these documents are available for review or purchase at the City of Lancaster (44933 Fern Avenue, Lancaster, CA 93534) and on the City's website ([http:// www.cityoflanasterca.org](http://www.cityoflanasterca.org)). A brief synopsis of the scope and content of these documents is provided below.

- Lancaster General Plan 2030 (General Plan), adopted July 14, 2009. The General Plan is a policy document, designed for the City's long-term outlook for future growth. The General Plan includes the following elements: Plan for Natural Environment, Plan for Public Health and Safety, Plan for Active Living, Plan for Physical Mobility, Plan for Physical Development (Community Design subsection), Plan for Economic Development, Plan for Municipal Services and Facilities, and the Housing Element. The Housing Element was last adopted by City Council on October 23, 2013 and certified by the California Department of Housing and Community Development on December 31, 2013. The General Plan identifies the types of development that will be allowed, the spatial relationships among land uses, and the general pattern of future development. It presents the issues which face the City of Lancaster as well as the goals, objectives, policies, and specific actions which the City will pursue to resolve those issues. All development projects including subdivisions, public works, redevelopment projects, zoning decisions, and other various implementation tools must be consistent with the General Plan.
- Lancaster General Plan 2030 Program Environmental Impact Report (General Plan EIR), certified July 14, 2009. The General Plan EIR is intended to provide decision makers and the public with information



concerning the environmental effects of implementation of the General Plan. The General Plan EIR includes background data, analyzes potential environmental impacts, identifies General Plan EIR strategies and actions that serve as mitigation, and identifies additional mitigation measures to reduce potentially significant effects due to implementation of the General Plan. The General Plan EIR determined that implementation of the General Plan would result in various irreversible environmental changes in the area including soil erosion associated with grading and construction activities, alteration of the human environment as a consequence of the development process, increased usage of public services and utilities during and after construction, temporary and permanent commitment of energy and water resources as a result of construction, operation, and maintenance of new developments, utilization of various new raw materials for construction, and incremental increased in vehicular activity within the City. Significant environmental effects include increased traffic and circulation impacts, depletion of groundwater resources, additional air and noise pollution emissions, and increased consumption of natural resources such as water supply.

- Lancaster General Plan 2030 Master Environmental Assessment (Master Environmental Assessment), dated April 2009. The Master Environmental Assessment was developed as part of the Lancaster General Plan 2030 update. The purpose of the Master Environmental Assessment is to provide existing baseline conditions within the General Plan study area. Physical, environmental, cultural, social and economic conditions for the study area are identified in the Master Environmental Assessment to establish where the City is today and to help formulate goals and policies that will guide the City into the future. The Master Environmental Assessment provides the City with baseline data for EIRs and all project and policy related CEQA documents. Additionally, it provides the baseline environmental information for initial studies to help the City determine whether significant impacts will occur with the development of individual projects.
- Lancaster Municipal Code (LMC) codified through Ordinance No. 1076, adopted October 27, 2020. The LMC provides regulations for governmental operations, development, infrastructure, public health and safety, and business operations within the City. Title 17, Zoning, of the LMC represents the City's Zoning Ordinance. The Zoning Ordinance is established to protect the public health, safety, and general welfare of the visitors to and residents of the City, to regulate the use of buildings, structures, and land for residential, commercial, industrial and institutional purposes, to regulate location, height, bulk, and area covered by buildings and structures, and to control lot size, yards, intensity of land use, signs and off-street parking. The latest change to the Zoning Ordinance occurred on January 14, 2020 with the adoption of Ordinance 1070.

## 3.0 PROJECT DESCRIPTION

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The City of Lancaster (City) is proposing the Lancaster Health District Master Plan to guide the future development around the Antelope Valley Hospital located within the central portion of the City (Master Plan or Proposed Project). The proposed Master Plan lays the groundwork for growth that is anticipated to occur on the 272.4-acre project site. The Master Plan includes a vision plan, implementation plan, and development code to guide future development over the next 20 years.

This section describes the location, objectives, and characteristics of the Proposed Project and the intended uses of this Draft Environmental Impact Report (EIR). A general description of the Proposed Project's technical, economic, and environmental characteristics is provided in this section.

### 3.1 PROJECT LOCATION AND SETTING

#### 3.1.1 Project Location

As shown in Figure 3.0-1: Regional Location Map, and Figure 3.0-2: Vicinity Map, the 272.4-acre project site is located within the central portion of the City, which is located in the northern portion of Los Angeles County. Regional access to the project site is provided by State Route (SR) 14, located west of Amargosa Creek and borders the Master Plan's western boundary. Vehicular access to the project site is provided by Avenue J, Avenue K, 15th Street West, and 20th Street West.

As shown in Figure 3.0-3: Aerial Photograph, the project site is generally located south of Avenue J; north of Avenue K; east of 20th Street West and SR 14; and west of Kingtree Avenue on the north and 15th Street West on the south.

#### 3.1.2 Surrounding Uses

North of Avenue J are commercial and office uses with single-family residential uses to the northeast. To the east of the project site are public uses, including the Antelope Valley Juvenile Court and Sunnydale Elementary School, as well as multifamily and single-family residential uses. Additionally, office uses are located east of the project site at the southeastern corner of the Avenue J-8 and 15th Street West, and commercial uses, including a vacant big-box store (former Toys R Us – now demolished), are located to the southeast of the project site near Avenue K. South of the project site is additional commercial development near Avenue K and a vacant parcel. Amargosa Creek and SR 14 form the western boundary for a majority of the project site. West of SR 14 are commercial uses, including several hotels, and multifamily and single-family residential development, with vacant parcels interspersed. Several commercial shopping centers are located to the west, northwest, and north of the project site across 20th Street West and across Avenue J.

### 3.1.3 Existing Conditions

The project site is currently occupied by the existing Antelope Valley Hospital which contains 342 beds within 489,930 square feet (sf) with a 78-bed Woman and Infant Facility within approximately 277,000 sf for a total of 420 beds within 691,930sf and a ground-based heliport. The Antelope Valley Hospital is a public hospital specializing in acute care and is a Level II trauma center.<sup>1</sup> The project site contains 59 single-family attached units and 376 multifamily units, for a total of 435 housing units. There is also a total of 1,040,430 sf of office and commercial space and approximately 230,000 sf of medical office space within the project site.

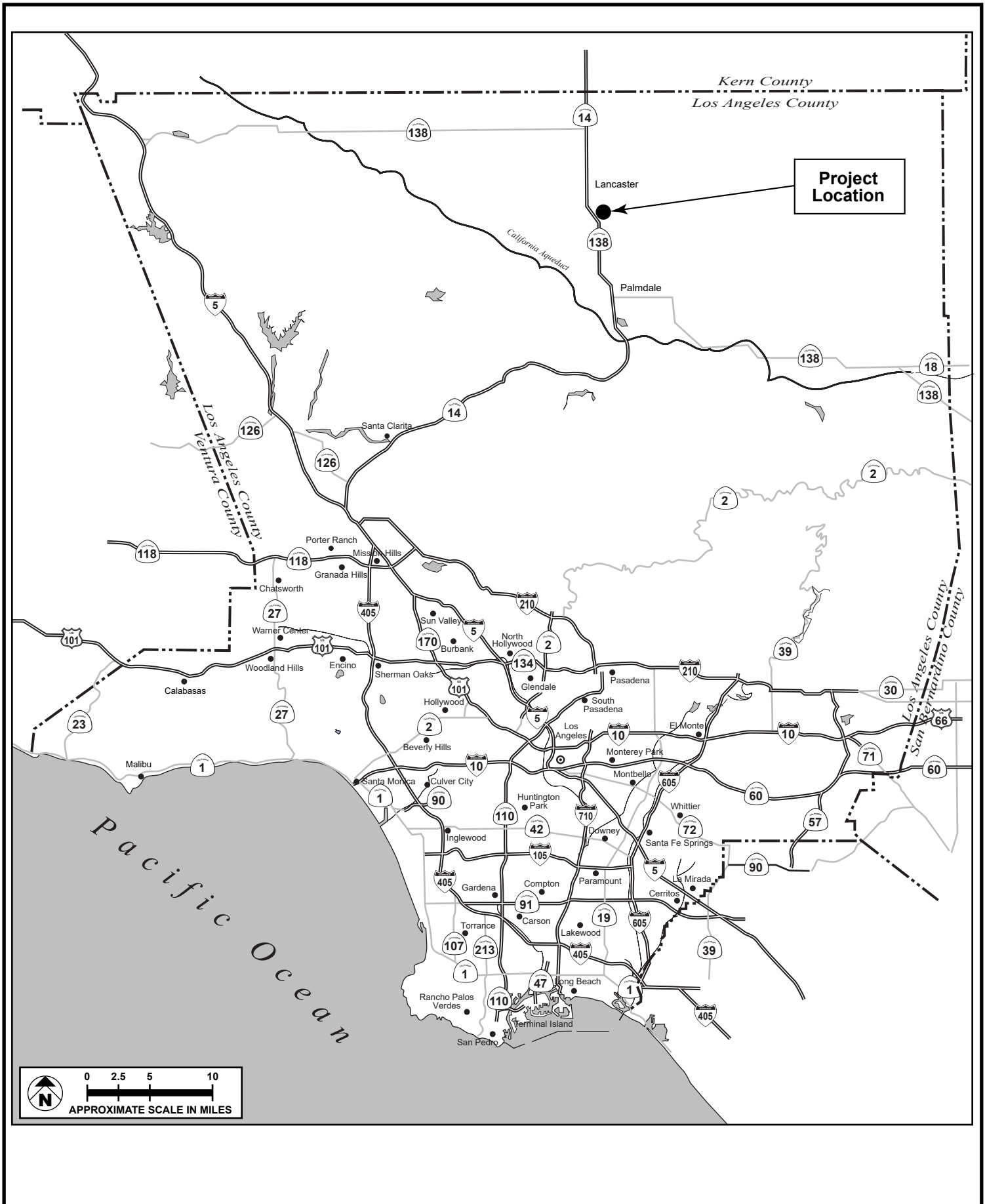
## 3.2 PROJECT OBJECTIVES

The primary objective of the proposed Master Plan is to surround the Antelope Valley Hospital with a variety of health and wellness related uses, supporting and expanding the hospital's medical facilities and treatment capabilities while accommodating the needs of patients and their families, staff, and the community. The following objectives for the Proposed Project will aid decision makers in their review of potential environmental impacts:

- Surround the Antelope Valley Hospital with a variety of health- and wellness-related uses, thereby supporting and expanding the hospital's medical facilities and treatment capabilities while accommodating the needs of patients and their families, staff, and the community.
- Take advantage of vacant and underutilized properties surrounding the hospital to encourage healthcare-related development, accommodate a wide range of wellness supportive businesses and activities, improve community health outcomes, and stimulate the local economy.
- Develop enhanced and expanded open space within the project site to encourage Antelope Valley Hospital patients, employees, and visitors to enjoy a healthy, active lifestyles and to support compact, mixed-use, transit-ready urban development patterns and forms.
- Upgrade and expand utilities and infrastructure necessary to support project site growth and development, while reducing negative impacts to the greater community.
- Implement buildings, public spaces and landscapes that complement and are responsive to Lancaster's climate and natural environment, and that minimize consumption of non-renewable resources.
- Support City and regional planning programs that emphasize sustainability and mobility by increasing development intensity and diversity of use in areas that are well served by transit.
- Improve and streamline multimodal transportation and access throughout the project site, including by foot, bicycle, car, shuttle and regional transit.

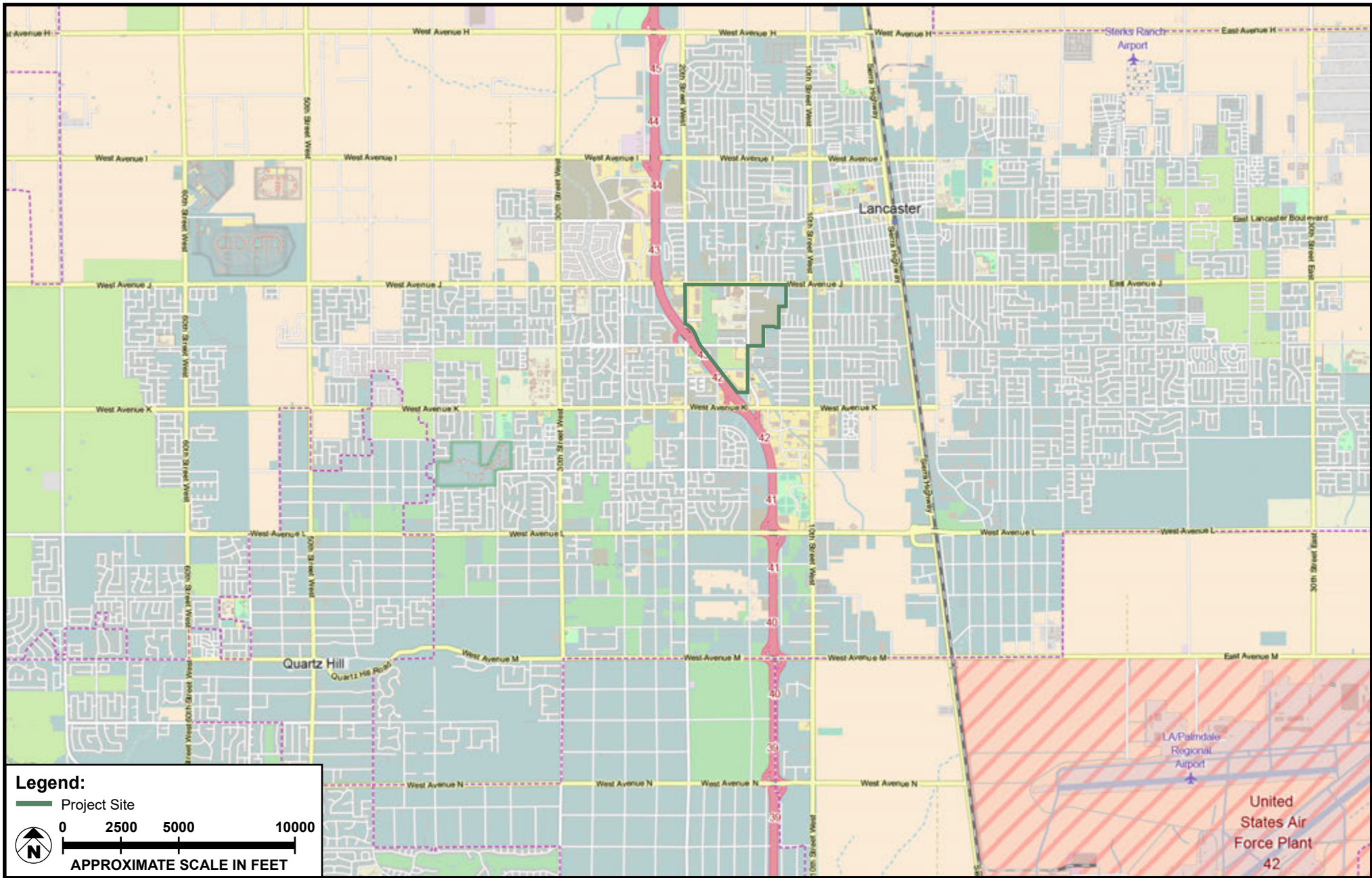
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1 A Level II Trauma Center is a licensed hospital able to initiate definitive care for all injured patients, accredited by the Joint Commission on Accreditation of Healthcare Organizations in accordance with California Code of Regulations, Title 22, Division 9, Chapter 7, Section 100248.



SOURCE: Meridian Consultants, LLC - 2020

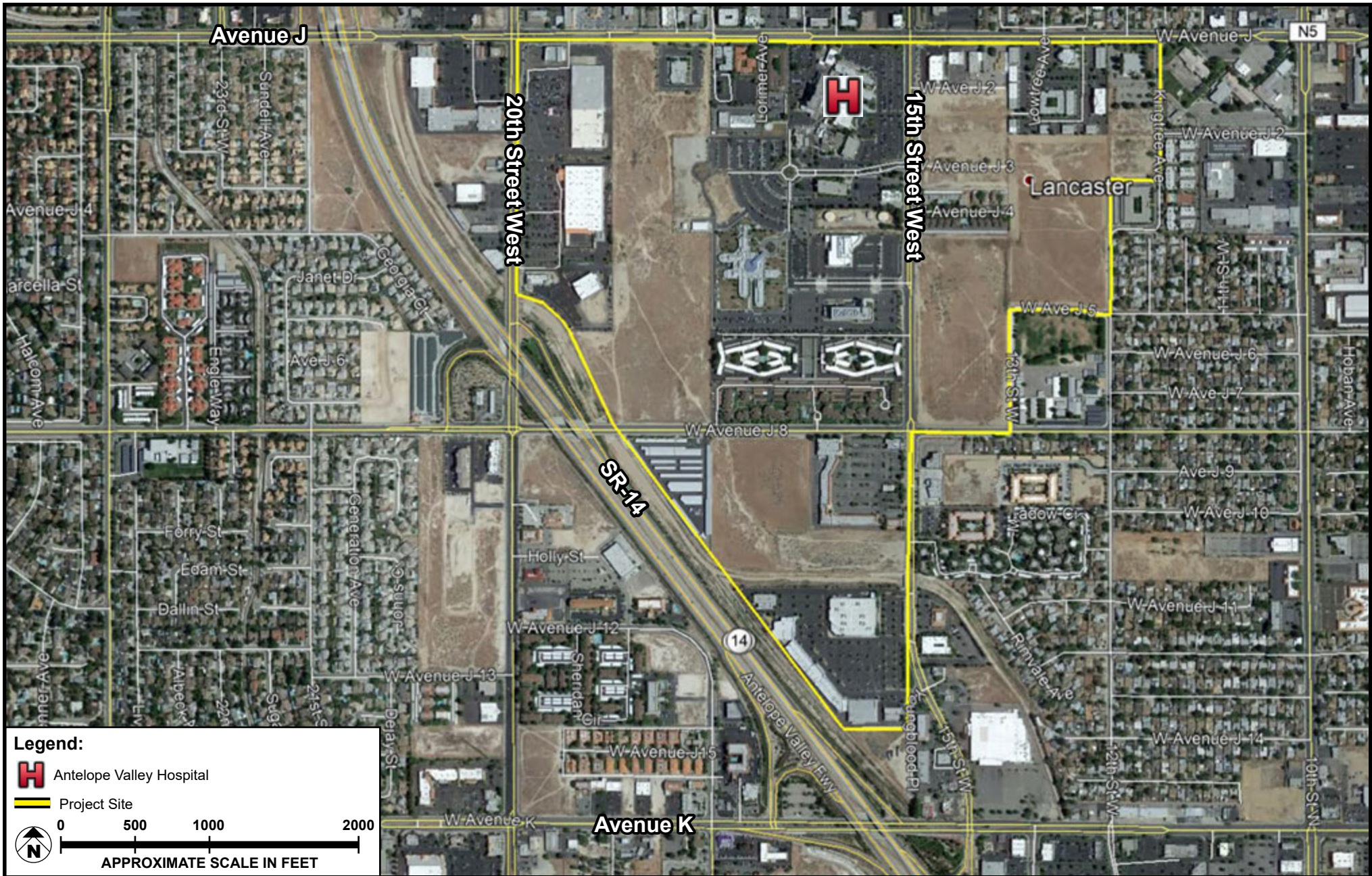
FIGURE 3.0-1



SOURCE: © OpenStreetMap contributors - 2020

FIGURE 3.0-2





SOURCE: Google Earth - 2020

FIGURE 3.0-3

- Increase employee density in proximity to public transit while reducing or mitigating all net new greenhouse gas emissions from construction and operations.
- Provide proximate and shared parking facilities for patients, visitors and employees, including parking structures and surface lots distributed among the District’s blocks and buildings to serve project site populations while reducing travel demand for internal car trips.

### 3.3 PROJECT CHARACTERISTICS

A “project” as defined by the Section 15378 of the CEQA Guidelines, means:

*The whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following:*

- (1) An activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700.*
- (2) An activity undertaken by a person which is supported in whole or in part through public agency contacts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.*
- (3) An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.*

#### 3.3.1 Description of the Proposed Project

The proposed Master Plan would guide development of the project site for the next 20 years (through 2040). The Master Plan would be implemented through General Plan Amendment (GPA) No. 17-03 and a Zone Change (ZC) No. 17-03.

A *Real Estate Market Analysis* for the proposed Master Plan was conducted and indicated that the City of Lancaster and the Antelope Valley, in general, lack facilities and personnel needed to address key health and wellness service gaps.<sup>2</sup> The proposed Master Plan defines a vision for the long-term improvements that would enable the City to transform the existing urban character toward a pedestrian-oriented, transit-oriented, mixed-use district character that would support new and existing medical institutions and health-related businesses of many types.

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<sup>2</sup> HR&A, *Real Estate Market Analysis for a Proposed Health and Wellness District*, City of Lancaster, July 18, 2016.



The proposed Master Plan contains elements to encourage a broad range of design solutions to guide development and improvements. The proposed Master Plan addresses the replacement of existing outdated and/or obsolete buildings with modern facilities, including inpatient (hospital), outpatient (clinic) uses, and a relocated heliport, hospitality uses, office uses, commercial uses, and a range of housing types. The proposed Master Plan also allows the development of parking structures, surface parking lots, internal roadways, pedestrian amenities, landscaping, open space, and other related improvements. Ultimately, the proposed Master Plan would create a more walkable campus environment that builds upon and enhances existing inpatient and outpatient facilities, office, commercial, hospitality, housing types, parking, and open space uses.

### **3.3.2 Lancaster Health District Master Plan**

The proposed Lancaster Health District Master Plan is divided into five chapters, (1) Purpose and Intent, (2) Setting and Context, (3) The Health District Plan, (4) Design Standards and Guidelines, and (5) Implementation. The project site has been organized into three planning sub-areas defined by the centerlines of Avenue J-8 and 15th Street West, as well as the overall project site boundaries, as shown in Figure 3.0-4: District Sub-Areas. Mixed-use development is proposed, including medical and general offices, retail and commercial uses, and a range of housing types as shown in Figure 3.0-5: Regulating Plan.

#### ***a. Proposed Project Buildout***

The proposed Master Plan would allow flexibility for design, use, and intensity. Actual development and building footprints may change as long as the development is consistent with the applicable land use district and adheres to the development regulations and design guidelines. The proposed Master Plan would enable replacement of the existing 342-bed Antelope Valley Hospital with up to 300 beds within a new approximately 700,000 sf facility with a new 12,000 sf plant facility; and up to 80 beds within approximately 91,000 sf of acute care facilities. Further, the proposed Master Plan would allow additional development of up to 284 beds within 249,800 sf of sub-acute care facilities; 400 rooms within 480,000 sf of continuum of care space; 400,000 sf of medical office space, 200,000 sf of office space, 151,000 sf of retail space, 91,000 sf of restaurant space; 180 hotel rooms with 70,000 sf of conference center space; 250 single family condominium units and 1,350 multifamily apartment units, for a total of 1,600 housing units, as shown in Table 3.0-1: Proposed Project Buildout Development. A 385,000-sf parking car garage with 1,100 parking spaces is also proposed. The existing heliport would be relocated approximately 400 feet from the existing landing area and would accommodate patients for the replaced Antelope Valley Hospital. Full buildout of the proposed Master Plan would include existing development, redevelopment of the hospital, and new development. An internal roadway backbone network would be constructed by the City as part of a capital project, as shown in Figure 3.0-6: Circulation Plan. These roadways are part of the proposed project and would support the development proposed within the Master Plan Area.



## **b. Proposed Master Plan District Sub-Areas**

As previously mentioned, the project site has been organized into three planning sub-areas defined by the centerlines of Avenue J-8 and 15th Street West. The three planning sub-areas are described below.

### **Sub-Area 1: Central District**

Sub-Area 1, the Central District, would consist of the core medical uses including the new hospital and heliport, sub-acute care uses, continuum of care uses; hospitality uses; medical office space; office space, retail space; restaurant space; and new multifamily housing types within approximately 147.2 acres. As shown in Table 3.0-1, permitted development within this sub-area would enable replacement of the existing 342-bed Antelope Valley Hospital main facility with up to 300 beds within a new 700,000 sf facility and 80 beds within 79,000 sf of acute care space for a total of approximately 791,000 sf of acute care space. Permitted development would also include 284 beds in 249,800 sf of sub-acute care space and 400 beds within 480,000 sf of continuum of care space.

Permitted development would also include up to 802 multifamily apartment homes, approximately 400,000 sf of medical office space, 200,000 sf of office space, 50,000 sf of retail space, 75,000 sf of retail space, 45,000 sf of restaurant space, and up to 180 hospitality rooms and 70,000 sf of conference space within approximately 329,200 sf hotel space. A new 12,000 sf plant facility, which would provide power to the new hospital, relocation of the existing heliport, and a 385,000 sf parking car garage with 1,100 spaces is also proposed in this sub-area. As shown in Figure 3.0-4, the Central District is the largest sub-area and located within the northwestern and central portion of the project site.

### **Sub-Area 2: East Neighborhood**

Sub-Area 2, East Neighborhood, would consist of residential and some retail and restaurant uses within approximately 72.7 acres. As shown in Table 3.0-1, permitted development within this sub-area would include 465 multifamily apartments and 40 single family condominiums for up to 505 new homes. Additional permitted development would include 38,000 sf of retail space and 23,000 sf of restaurant space. As shown in Figure 3.0-4, the East Neighborhood is located within the northeastern portion of the project site.

### **Sub-Area 3: South Campus**

Sub-Area 3, South Campus, would consist of residential housing, retail uses, and restaurant uses within approximately 52.5 acres. As shown in Table 3.0-1, permitted development within this sub-area would include up to 83 multifamily apartment homes and 210 single family condominium homes for up to 293 homes. Additional permitted development would include 38,000 sf of retail space and approximately 23,000 sf of restaurant space. As shown in Figure 3.0-4, the South Campus is located within the southern portion of the project site.

### **c. Proposed Master Plan Zoning Districts**

The proposed Master Plan includes the Health District Code, which is the implementing mechanism to guide future development within the project site. The proposed Health District Code includes three new zoning sub-districts that would replace the existing zones within the project site. The proposed Regulating Plan identifies the approximate locations of each zoning district, as depicted in Figure 3.0-5. The zones are further described below.

**District Core (DC)**—The intent of the DC zone is to provide vibrant, walkable, urban main street areas that would provide locally and regionally serving medical, commercial, retail, entertainment, and civic uses. This zone is characterized by active, pedestrian-oriented medical, retail, restaurant, art galleries, and other ground-floor uses set at or near the sidewalk, with offices and housing on upper floors. Buildings would have strong ground floor bases, simple fenestration patterns with solar shading, and strong top profiles and roof terraces. Building heights would typically range from one to six stories; hotels and hospitals would have no height limits.

**District General (DG)**—The intent of the DG zone is to provide a variety of urban housing choices in medium to large footprint buildings that reinforce the walkable nature of the neighborhood and would support public transportation. This zone is characterized by a flexible mixture of active residential and retail frontages, and both house-form and block-form buildings. Nonresidential ground floor frontages would be similar to those in the DC, whereas residential ground floors would be raised and/or set back to provide residents with an appropriate amount of privacy, while giving them direct access to, and views of, the public realm. This would provide a sense of pedestrian comfort and safety within the public realm, which extends into semi-public open spaces in the form of shared courtyards and/or semi-private patios. Rooftop terraces are also encouraged to provide communal open spaces within these relatively densely populated Lancaster neighborhoods.

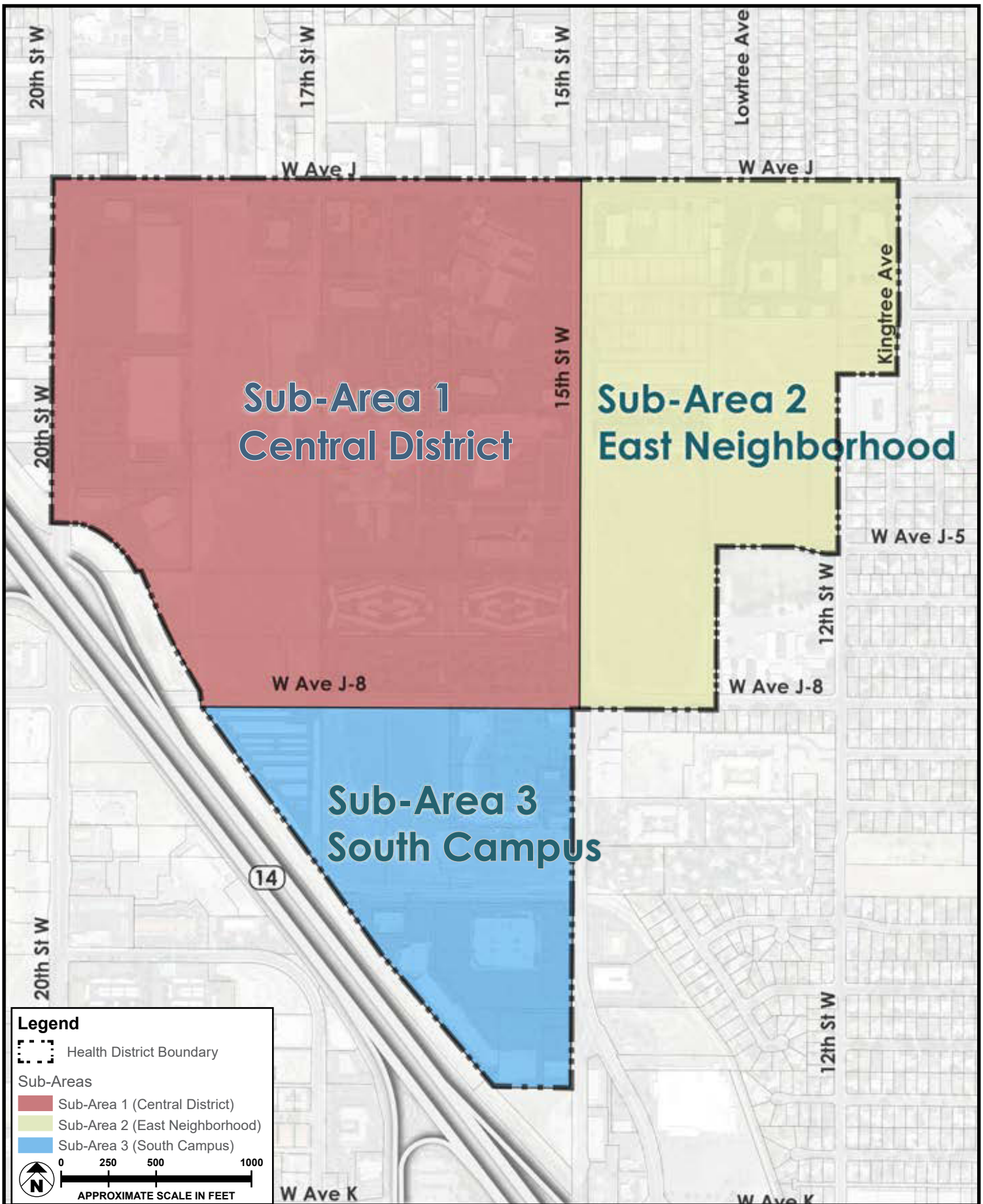
**District Edge (DE)**—The intent of the DE zone is to provide a variety of urban housing choices in small-to-medium footprint buildings that would support a very high-quality, safe, and comfortable pedestrian public realm, supported by public transportation and neighborhood-serving retail and service uses. The DE is the least intense of the three new zoning sub-districts. This zone abuts existing single-family and multifamily neighborhoods and is characterized primarily by multifamily residential buildings. Live/work units and small neighborhood-serving commercial businesses would also be permitted, but only to the extent that they are in scale and character with this primarily residential zone. Buildings would be limited to three-stories along street frontages, and would be set back with landscaped front yards, porches, and stoops.

**Table 3.0-1  
Proposed Project Buildout Development**

	Sub-Area 1 Central District			Sub-Area 2 East Neighborhood			Sub-Area 3 South Campus			Totals		
<i>Housing</i>	<i>Units</i>	<i>sf</i>	<i>Acres</i>	<i>Units</i>	<i>sf</i>	<i>Acres</i>	<i>Units</i>	<i>sf</i>	<i>Acres</i>	<i>Units</i>	<i>sf</i>	<i>Acres</i>
Single family (Condominiums)	—	—	—	40	—	—	210	—	—	250	—	—
Multifamily (Apartments)	802	—	—	465	—	—	83	—	—	1,350	—	—
<i>Subtotals:</i>	<i>802</i>	<i>—</i>	<i>13.9</i>	<i>505</i>	<i>—</i>	<i>12.4</i>	<i>293</i>	<i>—</i>	<i>17.9</i>	<i>1,600</i>	<i>—</i>	<i>44.2</i>
<i>Office/Commercial/ Hospitality</i>	<i>Rooms</i>	<i>sf</i>	<i>Acres</i>	<i>Rooms</i>	<i>sf</i>	<i>Acres</i>	<i>Rooms</i>	<i>sf</i>	<i>Acres</i>	<i>Rooms</i>	<i>sf</i>	<i>Acres</i>
Medical Office Building	—	400,000	—	—	—	—	—	—	—	—	400,000	—
Office	—	200,000	—	—	—	—	—	—	—	—	200,000	—
Retail	—	75,000	—	—	38,000	—	—	38,000	—	—	151,000	—
Restaurant	—	45,000	—	—	23,000	—	—	23,000	—	—	91,000	—
Hospitality	180	329,200*	—	—	—	—	—	—	—	180	329,200	—
<i>Subtotals:</i>	<i>180</i>	<i>509,200</i>	<i>11.7</i>	<i>—</i>	<i>61,000</i>	<i>8.7</i>	<i>—</i>	<i>61,000</i>	<i>6.4</i>	<i>180</i>	<i>1,171,200</i>	<i>26.8</i>
<i>Institutional</i>	<i>Beds</i>	<i>sf</i>	<i>Acres</i>	<i>Beds</i>	<i>Beds</i>	<i>Acres</i>	<i>Beds</i>	<i>sf</i>	<i>Acres</i>	<i>Beds</i>	<i>sf</i>	<i>Acres</i>
Hospital	300	700,000	—	—	—	—	—	—	—	300	700,000	—
Acute Care	80	79,000	—	—	—	—	—	—	—	80	79,000	—
Sub-Acute Care	284	249,800	—	—	—	—	—	—	—	284	249,800	—
Continuum of Care	400	480,000	—	—	—	—	—	—	—	400	480,000	—
<i>Subtotals:</i>	<i>664</i>	<i>1,508,800</i>	<i>25.2</i>	<i>—</i>	<i>—</i>	<i>6.7</i>	<i>—</i>	<i>—</i>	<i>2.8</i>	<i>1,064</i>	<i>1,508,800</i>	<i>34.7</i>

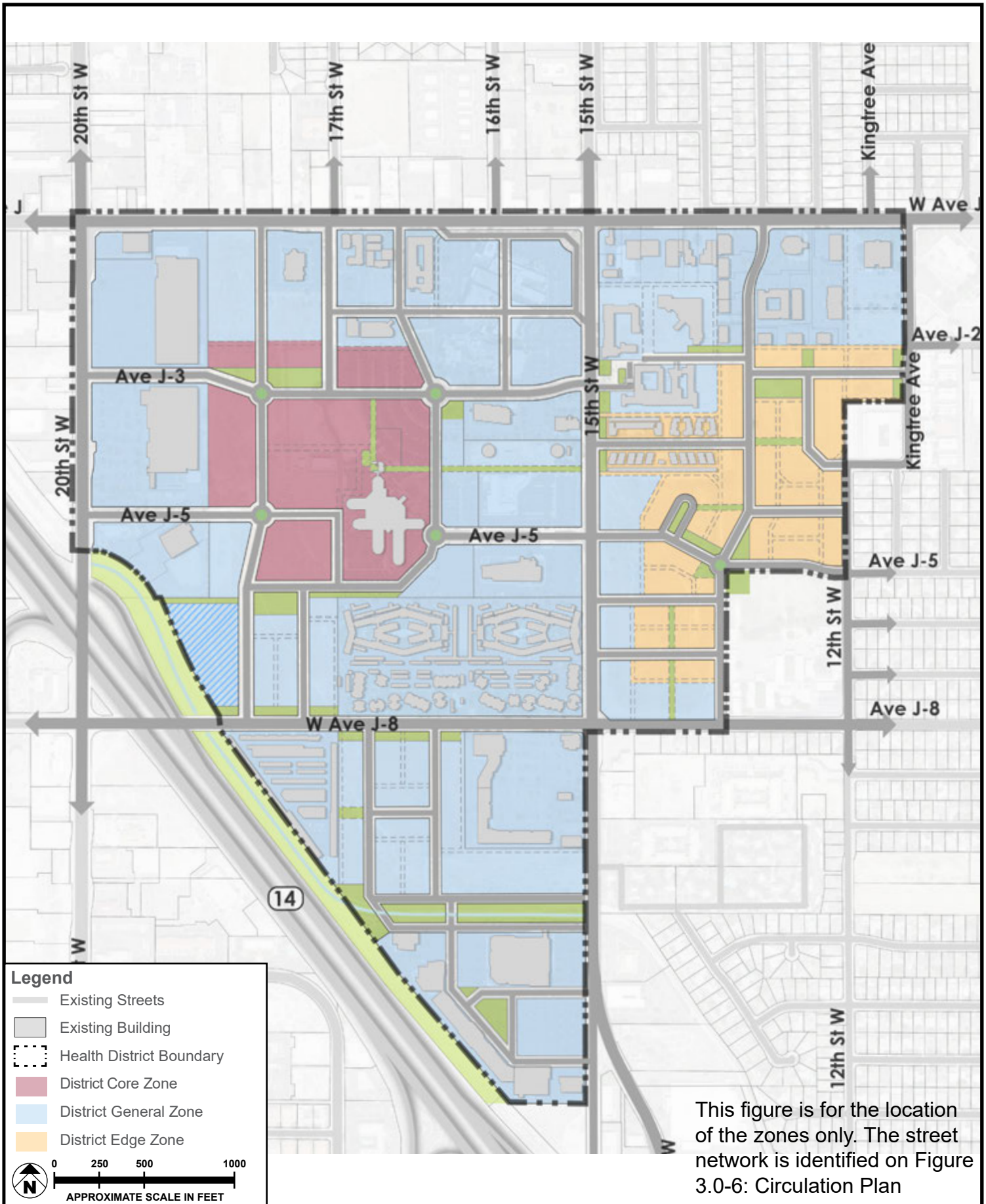
Abbreviations: *sf.* = square feet.

\* Includes approximately 70,000 *sf* of conference facility space.



SOURCE: Meridian Consultants, LLC - 2020

FIGURE 3.0-4



This figure is for the location of the zones only. The street network is identified on Figure 3.0-6: Circulation Plan

SOURCE: Meridian Consultants, LLC - 2020

FIGURE 3.0-5



#### **d. Circulation**

Vehicular, bicycle, and pedestrian access to each proposed sub-area would be via new roadway connections to the arterial roadway network surrounding and traversing the project site. Primary internal street network connections include the extensions of 18th Street West and 13th Street West/Lowtree Avenue to provide north-south connectivity, and Avenue J-3 and Avenue J-5 to provide east-west connectivity. All internal roadways would be two-lane facilities with bike lanes and sidewalks. The roadways shown in Figure 3.0-6, would be constructed by the City as part of a capital project supporting development within the Master Plan Area. Other roadways needed to accommodate the development with the Master Plan Area would be constructed in coordination with individual development projects to the specifications identified in the proposed Master Plan's development code.

The intersections of 20th Street West/Home Depot driveway, 15th Street West with Avenue J-3 and Avenue J-8, and the Avenue J/Lowtree Avenue are currently signalized. Existing intersections that are unsignalized, such as the Avenue J-8/12th Street West intersection, as well as new connections to the arterial network, would be controlled by one-way stop control or all-way stop control, depending on location. Roundabouts are also proposed at four major intersections, as shown on Figure 3.0-6, including at Home Depot Southerly Street/18th Street West ; Avenue J-5/18th Street West; Avenue J-5/North/South Street east of Women & Infants Pavilion; and Avenue J-5/13th Street West.

#### **e. Project Interface with the Public Realm**

The structural framework that organizes the project site would include a network of public spaces, including streets, greens, plazas, paseos, and playgrounds. In the project site, the design of the proposed development's interface with the public realm environment would be specifically focused toward healthy, active living by creating a comfortable, safe, and efficient environment for walking and biking, and physical activity by way of shaded sidewalks, trails and bike facilities, parks, playgrounds, and flexible gathering places. These spaces could be used for a variety of health-related events, including farmer's markets, health and fitness classes, and many others.

#### **f. Infrastructure and Utility Improvements**

Infrastructure improvements would be constructed as needed to support the planned land uses, including water, sewer, drainage, and flood retention systems. Specific improvements would be determined at the time individual building projects are proposed.

Water service is currently provided by the Los Angeles County Waterworks District No. 40 and sewer service is currently provided by the Los Angeles County Sanitation District No. 14, and existing drainage flows from the City are treated at the Lancaster Wastewater Treatment Plant. Electricity is provided by

both Lancaster Choice Energy and Southern California Edison, and natural gas service is provided by the Southern California Gas Company.

***g. Development Standards***

The proposed Master Plan establishes development regulations to guide the development of the physical components of the project site and apply to new development or redevelopment<sup>3</sup> in the project site. They are intended to provide for programmatic flexibility and creative design solutions, provide a buffer for adjacent property owners, and produce an environment that is consistent with the City’s goals. The development standards for each zoning district provide regulations for building placement and orientation, height, setbacks, open space, and landscaping.

***h. Design Guidelines***

Future development accommodated by the proposed Master Plan would be required to comply with the proposed Master Plan’s design guidelines. Design guidelines provide direction for architecture, signage, parking, landscape, circulation, and lighting features. The purpose is to establish visual themes that are aesthetically pleasing and that would create a cohesive “sense of place” for people who work or visit the project site, and to ensure that the project site remains compatible with surrounding uses. These design guidelines include both mandatory standards and interpretive design guidelines.

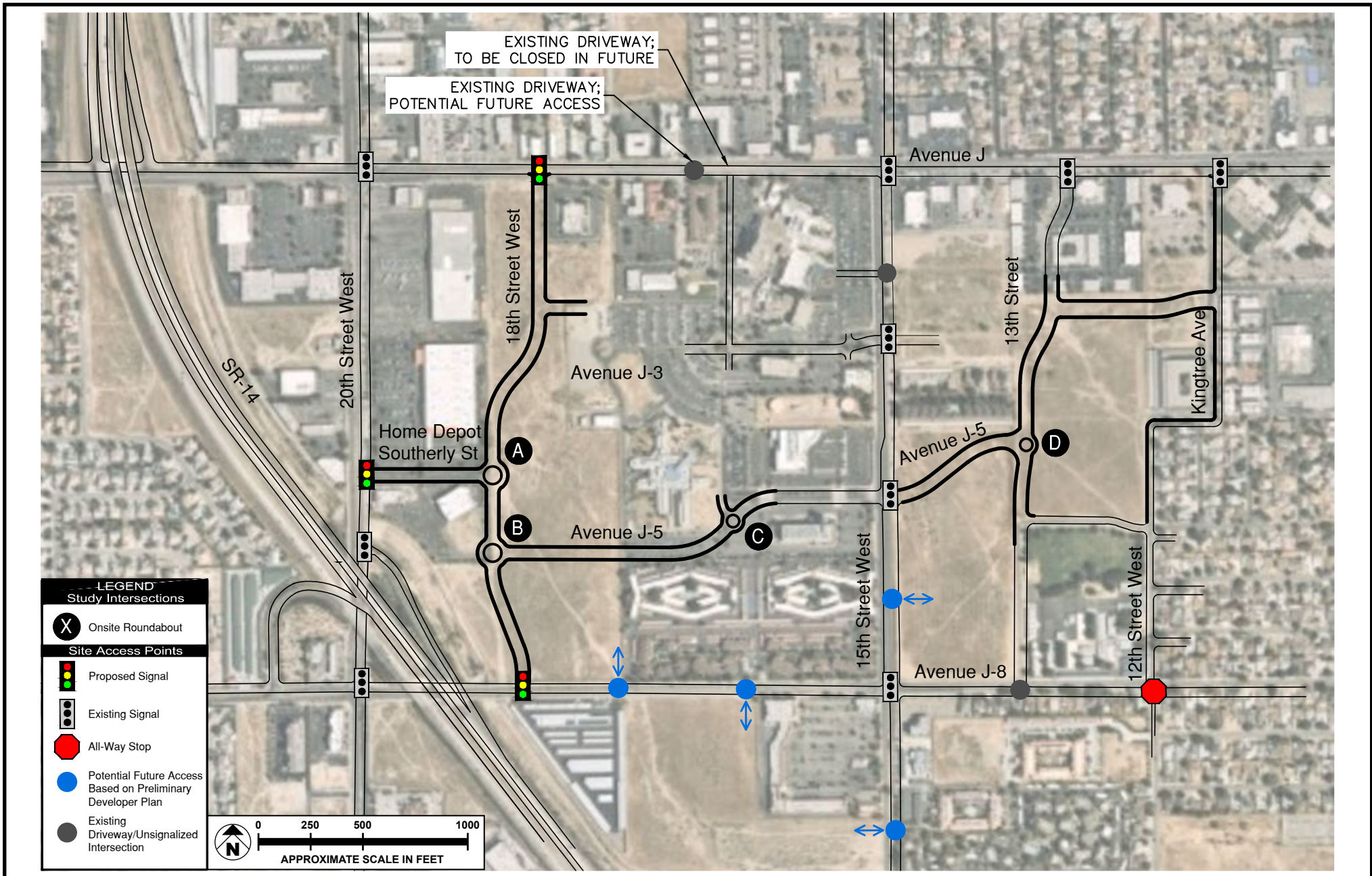
The proposed Master Plan’s landscape guidelines would incorporate sustainable site design practices and focus on enhancing and improving landscaping features throughout the project site. The landscape guidelines would emphasize the use of native species. Specific projects developed pursuant to the proposed Master Plan would also be developed in compliance with the City’s landscaping installation and maintenance requirements (Lancaster Municipal Code [LMC], Chapter 8.5).

***i. Master Plan Development Time Frame***

Development of the Master Plan would occur over an extended period of time and therefore would need to be flexible enough to respond to changing demands in medical research and patient service needs, as well as funding opportunities. The proposed Master Plan would be implemented on a project-by-project basis as future development applications are submitted to the City and would be in response to market conditions. Construction activities would include demolition of existing uses, grading and excavation, and construction of new structures and related infrastructure. Infrastructure improvements within the project site would be phased with each individual development project. For purposes of environmental analysis, buildout of the project site under the Master Plan is anticipated to occur through 2040.

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3 For purposes of the Health District Code, “redevelopment” shall include any project that either demolishes 50 percent or more of the existing floor area of the primary building on site, or adds an amount of floor area that is equal to or more than 50 percent of the existing floor area of the primary building on site.



SOURCE: Kimley Horn, 2020.10.12 - LHD TIA Addendum

FIGURE 3.0-6



### 3.4 INTENDED USES OF THIS EIR/DISCRETIONARY ACTIONS

Section 15124 (d) of the CEQA Guidelines requires that an EIR project description include a list of permits and other approvals required to implement a project, the agencies expected to use the EIR in their decision making, and related environmental review and consultation requirements. The City will consider approval of the following actions:

- General Plan Amendment No. 17-03 to change the land use designation to Mixed Use;
- Zone Change No. 17-03 to change the zoning to Mixed Use-Health District;
- All other discretionary permits deemed necessary to implement the Proposed Project, including but not limited to tentative tract/parcel maps and conditional use permits.
- All other ministerial permits deemed necessary to implement the Proposed Project including but not limited to, encroachment permits, demolition permits, grading permits, and building permits.
- Further refinement of design/development standards for the Plan Area (Phase II Development Standards).

## 4.0 ENVIRONMENTAL SETTING

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This section of the Environmental Impact Report (EIR) provides a general overview of the existing regional and local setting in which the project site is located, as well as a brief description of the existing conditions of the project site. Detailed environmental setting information is provided in each of the environmental issue analyses provided in Section 5.0: Environmental Impact Analysis of this EIR.

### 4.1 REGIONAL AND LOCAL SETTING

The 272.4-acre project site is located in the central portion of the City of Lancaster (City), which is located in the northern portion of Los Angeles County approximately 70 miles north of downtown Los Angeles, as shown in Figure 3.0-1: Regional Location Map in Section 3.0: Project Description of this EIR. Regional access to the project site is provided by Antelope Valley Freeway/State Route (SR) 14. The project site is located east of SR 14 and the Amargosa Creek and the western boundary of the project site generally follows SR 14. Vehicular access to the project site is provided by Avenue J, Avenue K, 15th Street West, and 20th Street West.

As shown in Figure 3.0-3: Aerial Photograph in Section 3.0 of this EIR, the project site is generally located south of Avenue J; north of Avenue K; east of 20th Street West and SR 14; and west of Kingtree Avenue on the north and 15th Street West on the south.

### 4.2 ON-SITE CONDITIONS

The project site is predominantly defined by built-up hospital, commercial, and residential areas. The project site is currently occupied by the existing Antelope Valley Hospital which contains 342 beds with a 78-bed Woman and Infant Facility for a total of 420 beds within 691,930 sf and a ground-based heliport. The Antelope Valley Hospital is a public hospital specializing in acute care and is a Level II trauma center.<sup>1</sup> The project site contains 59 single-family attached units and 376 multifamily units, for a total of 435 housing units. Additionally, there is a total of approximately 1,040,430sf of office and commercial space and approximately 230,000 sf of medical office space. A majority of the presently developed land is hardscape with minimal landscaping.

As shown in Figure 4.0-1: Vacant and Undeveloped Lots, approximately 110 acres of the project site are currently vacant. The vacant land consists of typical desert vegetation.

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1 A Level II Trauma Center is a licensed hospital able to initiate definitive care for all injured patients, accredited by the Joint Commission on Accreditation of Healthcare Organizations in accordance with California Code of Regulations, Title 22, Division 9, Chapter 7, Section 100248.

### 4.3 SURROUNDING USES

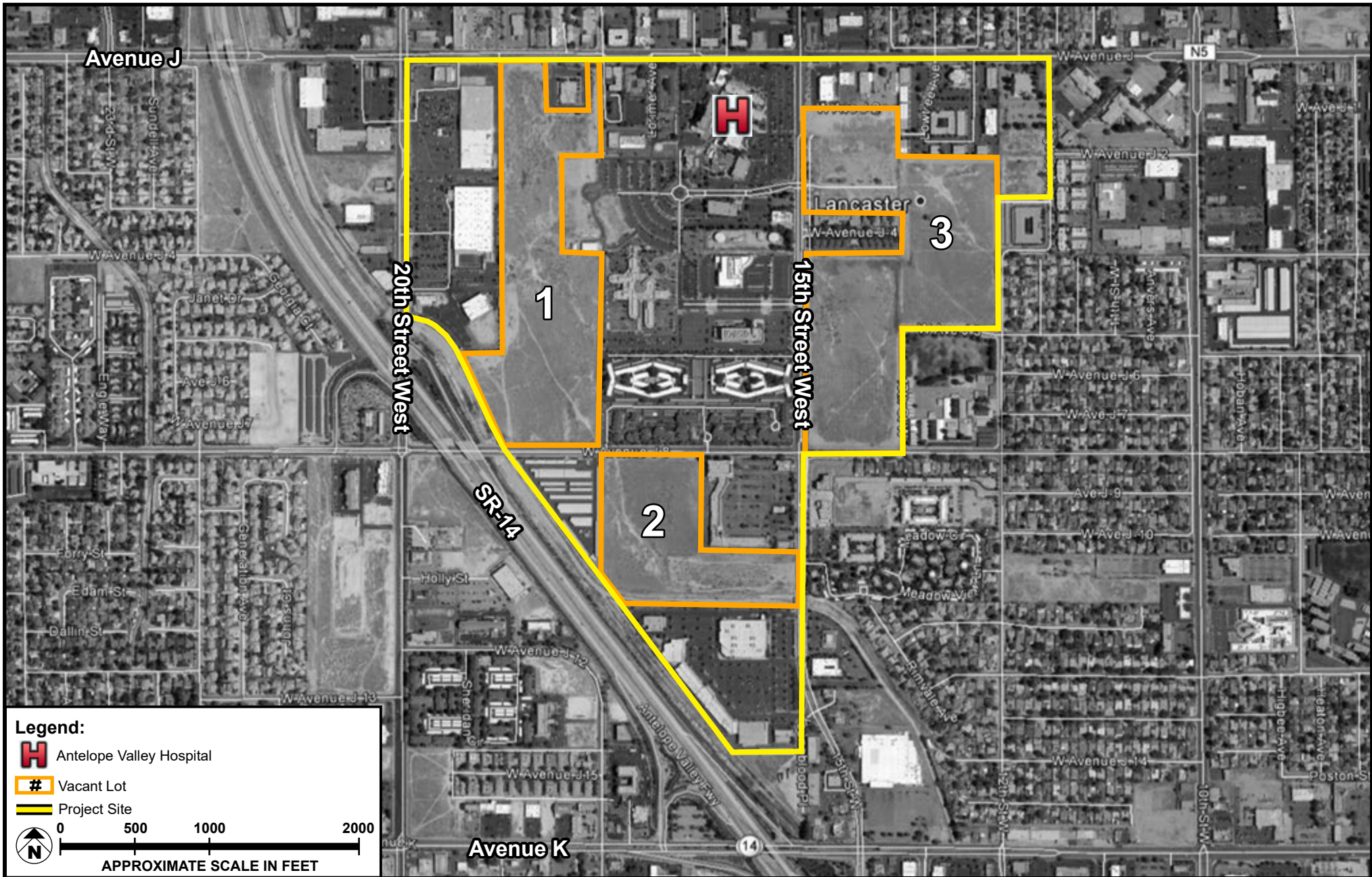
The project site is surrounded by various residential and commercial uses. North of Avenue J are commercial and office uses with single-family residential uses to the northeast. To the east of the project site are public uses, including the Antelope Valley Juvenile Court and Sunnydale Elementary School, as well as multifamily and single-family residential uses. Additionally, office uses are located east of the project site at the southeastern corner of the Avenue J-8 and 15th Street West, and commercial uses, including a vacant big-box store (former Toys R Us site – now demolished), are located to the southeast of the project site near Avenue K. South of the project site is additional commercial development near Avenue K and a vacant parcel. Amargosa Creek and SR 14 form the western boundary for a majority of the project site. West of SR 14 are commercial uses, including several hotels, and multifamily and single-family residential development, with vacant parcels interspersed. Several commercial shopping centers are located to the west, northwest and north of the project site across 20th Street West and across Avenue J.

### 4.4 LAND USE PLANS

Regionally, land use in the project area is regulated by plans adopted by the Southern California Association of Governments (SCAG) and other regional agencies; Los Angeles County; and the City. Regional plans applicable to the project site include SCAG's *2016–2040 and 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*; the Antelope Valley Air Quality Management District's (AVAQMD) Air Quality Management Plan (AQMP); and the City's General Plan and Zoning Code.

#### 4.4.1 Southern California Association of Governments

SCAG is a Joint Powers Authority (JPA) under California State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law, as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities in an area covering more than 38,000 square miles. SCAG serves as the regional forum for cooperative decision making by local government elected officials and its primary responsibilities in fulfillment of federal and State requirements include the development of the RTP/SCS; the Federal Transportation Improvement Program; the Overall Work Program; and transportation-related portions of air quality management plans. SCAG's other major functions include determining that regional transportation plans and programs are in conformity with State air quality plans, periodic preparation of a Regional Housing Needs Assessment (RHNA) , and intergovernmental review of regionally significant development projects.



SOURCE: Google Earth - 2020; Meridian - 2020

FIGURE 4.0-1

The 2016–2040 *Regional Transportation Plan/Sustainable Communities Strategy* (2016 RTP/SCS) is an update to the 2012–2035 RTP/SCS that reflects changes in economic, policy, and demographic conditions.<sup>2</sup> The guiding policies for the 2016 RTP/SCS are intended to focus future investments on the best-performing projects and strategies to preserve, maintain, and optimize the performance of the existing transportation system. Additionally, one of the strategies proposed by the 2016 RTP/SCS is to focus new growth and infill development around transit areas to promote “Complete Communities.”<sup>3</sup> This goal would guide the development of additional housing and jobs near transit areas while protecting the viability of existing single-family areas. Similarly, SCAG adopted the 2020-2045 RTP/SCS, also known as *Connect SoCal*, on May 7, 2020. The 2020–2045 RTP/SCS focuses on a more prosperous mobile approach through implementing planning strategies that focus on transportation networks.<sup>4</sup> The 2020–2045 RTP/SCS core vision centers on maintaining and better managing the transportation network for moving people and goods, while expanding mobility choices by locating housing, jobs and transit closer together and increasing investment in transit and complete streets.<sup>5</sup> On May 7, 2020, SCAG’s Regional Council adopted *Connect SoCal* and certified the EIR for federal transportation conformity purposes only. In light of the COVID-19 pandemic, the Regional Council considered approval of *Connect SoCal* in its entirety and for all other purposes on September 3, 2020. Currently, SCAG has sent the greenhouse gas (GHG) reduction targets associated with the 2020–2045 SCS to the California Air Resources Board (CARB) for concurrence.

SCAG developed a RHNA allocating the region’s share of housing demand to the cities and counties within the region. Projected housing needs in the City are specifically defined as the City’s share of the regional housing need as established in the Regional Housing Needs Plan (RHNP) prepared by SCAG. The allocation establishes the number of new housing units needed by income category, to accommodate expected population growth over the planning period of the City’s Housing Element. The RNHP provides a benchmark for evaluating the adequacy of local zoning and regulatory actions to ensure that each local government is providing sufficient appropriately designated land and opportunities for housing development to address population growth and job generation.

#### 4.4.2 Antelope Valley Air Quality Management District

The project site is located in the Mojave Desert Air Basin (MDAB) and is under the jurisdiction of the AVAQMD. The AVAQMD is located within the desert portion of Los Angeles County within the MDAB. The AVAQMD sets forth a comprehensive program that would lead the area into compliance with all federal and State air quality standards. The AVAQMD adopted its own *2008 Federal 8-Hour Ozone*

2 Southern California Association of Governments (SCAG), *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy* [2016 RTP/SCS] (adopted April 2016), 17.

3 A “Complete Community” is a mixed-use district located in a strategic growth area.

4 Southern California Association of Governments (SCAG), *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Draft*, “Chapter 1,” <https://www.connectsocial.org/Pages/Connect-SoCal-Draft-Plan.aspx>, Accessed on May 2020.

5 Complete streets ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians, and transit riders, as well as motorists.

*Attainment Plan (Western Mojave Desert Non-Attainment Area)* on May 20, 2008. The *2008 Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-Attainment Area)* includes the latest planning assumptions regarding population, vehicle, and industrial activity and addresses all existing and forecast ozone precursor-producing activities within the Antelope Valley through the year 2020.

#### **4.4.3 Lahontan Regional Water Quality Control Board Basin Plan**

The City is within the jurisdictional boundaries of the Lahontan Regional Water Quality Control Board (RWQCB). The RWQCB develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. Water quality standards and control measures for surface and ground waters of the Lahontan Region are contained in the Water Quality Control Plan for the Lahontan Region (also known as the Basin Plan). The Basin Plan designates beneficial uses for water bodies and establishes water quality objectives, waste discharge prohibitions, and other implementation measures to protect those beneficial uses.

#### **4.4.4 Lancaster General Plan**

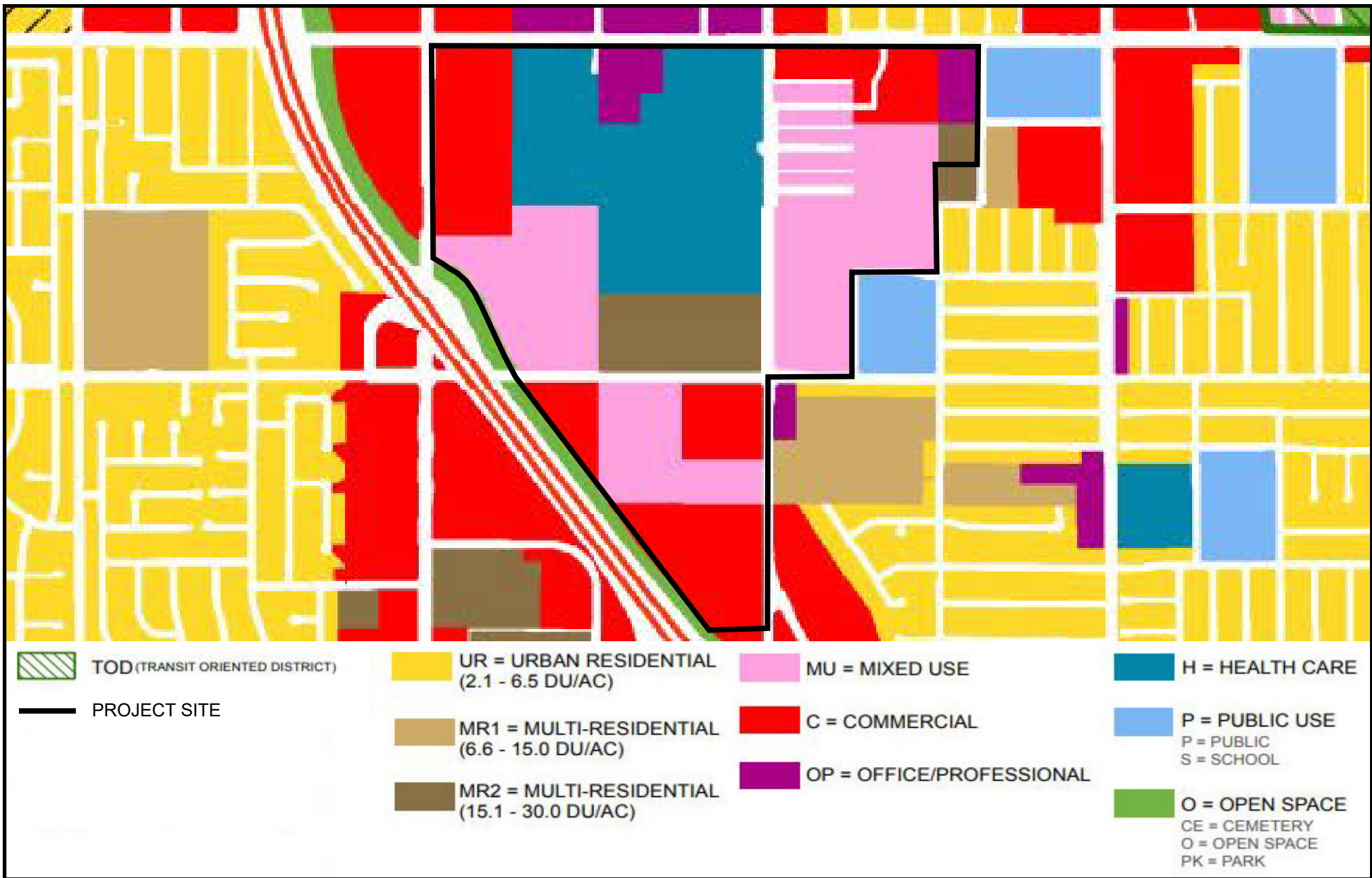
The City's General Plan (General Plan), was adopted on July 14, 2009. As depicted on Figure 4.0-2: Existing General Plan Land Use Designations, the land use map designates the project site as Commercial (C), Mixed Use (MU), Health Care (H), Office/Professional (OP), and Multi-Residential (15.1-30.0 dwelling units/acre) (MR2).

The project site is surrounded by land that is designated as MR2, OP, C, and Urban Residential (UR) to the north; Public Use (P), MR2, OP, C and UR to the east; C and MR2 to the south; and C, MR2 and UR the west.

#### **4.4.5 Lancaster Zoning Code**

Zoning is the means by which cities implement their General Plan. The City's Zoning Code translates the long-term goals and policies of the General Plan into the guidelines used for the decision making on future developments.





SOURCE: City of Lancaster—Revised 2019

FIGURE 4.0-2

While the General Plan provides long-range and broad categories of land use, zoning provides specific development requirements, such as density, building height, building size, and development character.

As shown on Figure 4.0-3: Existing Zoning Designations, the project site is zoned Health Care (H), Commercial (C), Mixed Use—Commercial (MU-C), Office Professional (OP), Commercial Planned Development (CPD), Mixed Use—Neighborhood (MU-N), and High Density Residential (HDR).

Surrounding zoning designations consist mostly of CPD and Single-Family Residential on 7,000-square-foot lots (R-7,000). Other zone designations include School (S), Medium Density Residential (7.1-15 units/acre) (MDR), OP, and C.

## **4.5 RELATED PROJECTS**

Section 15130 of the California Environmental Quality Act (CEQA) requires that an EIR consider the environmental effects of a proposed project individually, as well as cumulatively. As defined in Section 15355 of the CEQA Guidelines, cumulative impacts refer to two or more individual effects that when considered together are considerable, or that compound or increase other environmental impacts.

As set forth in Section 15130 of the CEQA Guidelines, the determination of cumulative impacts is generally a two-step process. The first step is to determine whether or not the combined effects from the proposed project and related projects would result in a potentially significant cumulative impact. If the answer is no, then the EIR only briefly needs to indicate why the cumulative impact is not significant. If the answer is yes, then the analysis proceeds to the second step, which is to determine whether the proposed project's incremental effects are cumulatively considerable. Section 15065(a)(3) of the CEQA Guidelines defines "cumulatively considerable" to mean that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. In accordance with CEQA Guidelines Section 15130(a)(3), a project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. In addition, the lead agency is required to identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.

CEQA Guidelines Section 15130(b) further provides that the discussion of cumulative impacts reflect "the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone." Rather, the discussion is to "be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact."



CEQA Guidelines Section 15130(b) states that complying with one of the following two protocols is necessary to provide an adequate discussion of significant cumulative impacts:

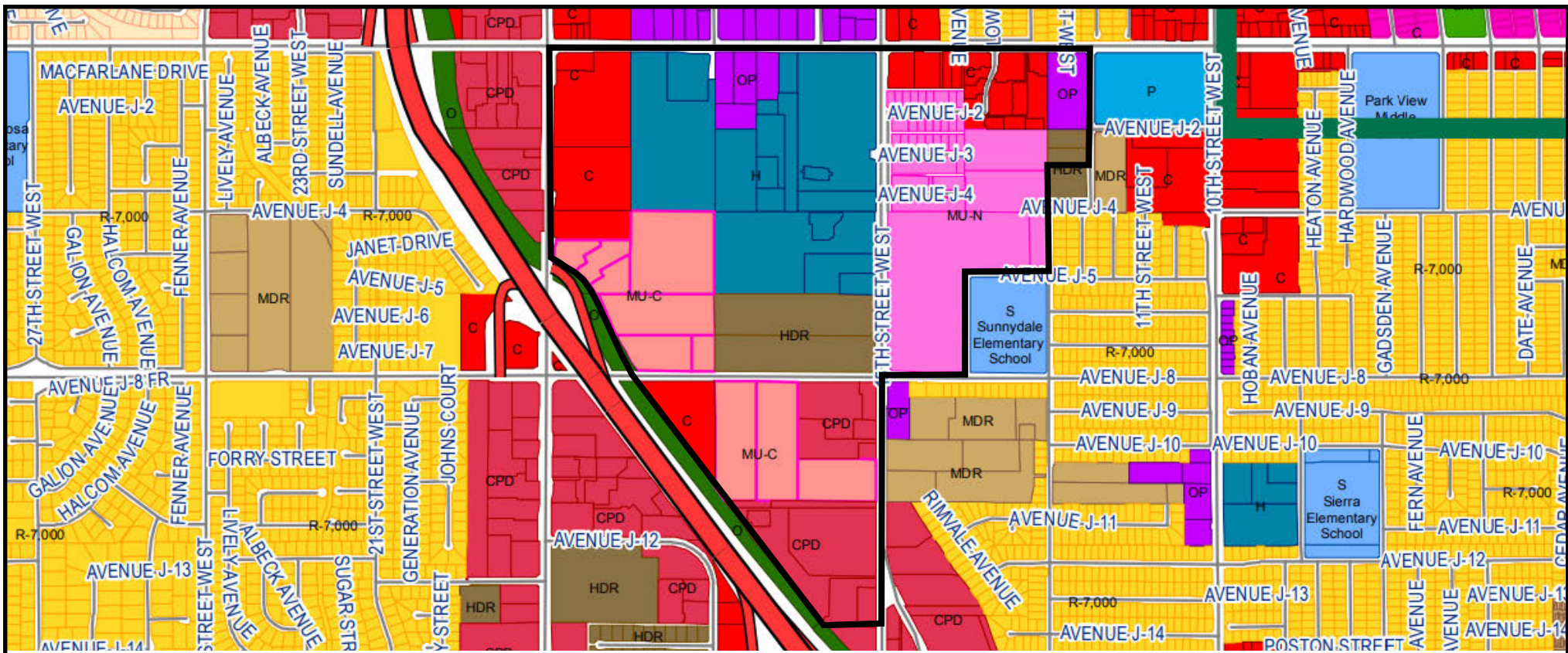
- (A) A list of past, present, and probable future projects producing related or cumulative impacts including, if necessary, those projects outside the control of the agency; or
- (B) A summary of projections contained in an adopted local, regional or Statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.















Cumulative study areas are defined based on an analysis of the geographical scope relevant to each particular environmental issue. Therefore, the cumulative study area for each individual environmental impact issue may vary. For example, a cumulative land use impact generally may only affect the compatibility of uses within the vicinity of a project site, while a cumulative air quality impact may affect the entire air basin. The specific boundaries and the projected growth within those boundaries for the cumulative study area of each environmental issue are identified in the applicable environmental issue section in Section 5.0 of this EIR.

As discussed in Section 5.12: Population and Housing of this EIR, SCAG is responsible for producing socioeconomic forecasts and developing, refining, and maintaining macro and small-scale forecasting models. Where indicated in this EIR, SCAG's regional growth forecast is used in evaluating cumulative impacts.

The City's General Plan is designed to determine the City's long-term outlook for future growth. The projections in the City's General Plan are used in the assessment of potential cumulative impacts.

The analysis of traffic impacts was conducted using the City's Travel Demand Forecasting (TDF) Model. The model contains future Year 2035 growth projections for the City and in north Los Angeles County as well as the planned local and regional transportation improvements. This includes development within the project site with anticipated commercial and household land use increases. An additional 5 years of growth was added by assuming straight-line growth trends to produce Year 2040 (buildout) forecasts.



	<b>R-7000</b>	Single Family Residential - 7000 Square Foot Lot		<b>C</b>	Commercial		<b>H</b>	Health Care
	<b>HDR</b>	High Density Residential - 15.1-30 Units/Acre		<b>CPD</b>	Commercial Planned Development		<b>P</b>	Public
	<b>MDR</b>	Moderate Density Residential - 7.1-15 Units/Acre		<b>OP</b>	Office Professional		<b>S</b>	School
	<b>Project Site</b>			<b>MU-C</b>	Mixed Use Commercial		<b>SP</b>	Specific Plan
				<b>MU-N</b>	Mixed Use Neighborhood		<b>PK</b>	Park

SOURCE: City of Lancaster—Revised 2019

FIGURE 4.0-3



## Existing Zoning Designations

## 5.0 ENVIRONMENTAL IMPACT ANALYSIS

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The following subsections contain a detailed environmental analysis of the existing conditions, project impacts (including direct and indirect, short-term, long-term, and cumulative impacts), recommended mitigation measures and unavoidable significant impacts, if applicable.

This EIR examines environmental factors outlined in Appendix G of the California Environmental Quality Act (CEQA) Guidelines, as follows:

- 5.1 Aesthetics
- 5.2 Air Quality
- 5.3 Biological Resources
- 5.4 Cultural Resources
- 5.5 Energy
- 5.6 Geology and Soils
- 5.7 Greenhouse Gas Emissions
- 5.8 Hazards and Hazardous Materials
- 5.9 Hydrology and Water Quality
- 5.10 Land Use and Planning
- 5.11 Noise
- 5.12 Population and Housing
- 5.13 Public Services
- 5.14 Recreation
- 5.15 Transportation
- 5.16 Tribal Cultural Resources
- 5.17 Utilities and Service Systems

As indicated in the original and revised Notice of Preparations (NOP) (refer to Appendix A), no significant impacts upon agriculture and forestry resources and mineral resources are anticipated. As a result, these issue areas are addressed in Section 8.0: Effects Not Found to Be Significant. Each potentially significant environmental issue area is addressed in a separate section of the EIR and is organized into seven subsections, as follows:

- “Environmental Setting” describes the physical conditions that exist at the present time of the Revised NOP and that may influence or affect the issue under investigation.
- “Regulatory Setting” lists and discusses the laws, ordinances, regulations, and standards that apply to the Proposed Project.
- “Impact Thresholds and Significance Criteria” provides the thresholds that are the basis of conclusions of significance, which are primarily the criteria in Appendix G of the CEQA Guidelines (14 California Code of Regulations Section 15000–15387).

- Primary sources used in identifying the criteria include the CEQA Guidelines; local, State, federal, or other standards applicable to an impact category; and officially established significance thresholds. “An ironclad definition of significant effect is not possible because the significance of any activity may vary with the setting” (CEQA Guidelines Section 15064[b]). Principally, “a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance” constitutes a significant impact (CEQA Guidelines Section 15382).
- “Impacts and Mitigation Measures” describes potential environmental changes to the existing physical conditions that may occur if the proposed project is implemented. Evidence, based on factual and scientific data, is presented to show the cause and effect relationship between the proposed project and the potential changes in the environment. The exact magnitude, duration, extent, frequency, range or other parameters of a potential impact are ascertained, to the extent possible, to determine whether impacts may be significant; all of the potential direct and reasonably foreseeable indirect effects are considered.
  - Impacts are generally classified as potentially significant, less than significant, or no impact. The “Level of Significance after Mitigation” identifies the impacts that would remain after the application of mitigation measures, and whether the remaining impacts are or are not considered significant. When these impacts, even with the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as “unavoidable significant impacts.”
  - “Mitigation Measures” are measures that would be required of the Proposed Project to avoid a significant adverse impact; to minimize a significant adverse impact; to rectify a significant adverse impact by restoration; to reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or to compensate for the impact by replacing or providing substitute resources or environment.
- “Cumulative Impacts” describes potential environmental changes to the existing physical conditions that may occur as a result of the Proposed Project together with all other reasonably foreseeable, planned, and approved future projects producing related or cumulative impacts.
- “Significant Unavoidable Impacts” describes impacts that would be significant and cannot be feasibly mitigated to less than significant levels, and thus would be unavoidable. To approve a project with unavoidable significant impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency is required to balance the benefits of a project against its unavoidable environmental impacts in determining whether to approve the project. If the benefits of a project are found to outweigh the unavoidable adverse environmental effects, the adverse effects may be considered “acceptable” (CEQA Guidelines Section 15093[a]).

## 5.1 AESTHETICS

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This section describes the existing landform and aesthetic character of the project site and surrounding area. The potential aesthetic and visual impacts resulting from implementation of the Proposed Project are addressed in this section. The information presented in this section is based on field reconnaissance, review of photographs of the project site and the surrounding land uses, and review of the proposed Master Plan and other planning documents.

### 5.1.1 EXISTING CONDITIONS

#### 5.1.1.1 Visual Setting

##### *a. Regional*

The City of Lancaster (City) is situated within the Antelope Valley region of the western Mojave Desert, approximately 70 miles north of downtown Los Angeles. The Antelope Valley is a predominantly desert and mountainous region with a variety of contrasting and dramatic geographic features. The Antelope Valley contains a series of low-lying desert flatlands, sloping dunes, and rolling foothills that are ringed by distant mountain ranges. The San Gabriel Mountains in the Angeles National Forest are located approximately 9 miles to the south of the City at its closest point, the Sierra Pelona Mountains are approximately 15 miles to the southwest, and the Tehachapi Mountains are approximately 28 miles to the northwest.

The rugged and dramatic topography of the San Gabriel, Sierra Pelona, and Tehachapi Mountains are the predominant visual resource in the Antelope Valley. These mountains provide a natural scenic backdrop to the City as well as the rest of the Antelope Valley. No designated or eligible State scenic highways are present in or near the City. The nearest officially designated State scenic highway is State Route (SR) 2 (Angeles Crest Scenic Highway), located on the north side of the San Gabriel Mountains approximately 10 miles south of the City. SR 14 is designated as a “Scenic Route” in the City’s General Plan.

##### *b. Project Site*

The project site is generally flat with a slight slope from south to north. Elevations range from approximately 2,384 feet above mean sea level (amsl) at the southern end of the project site to approximately 2,360 feet amsl at the east and 2,349 feet amsl at the west.<sup>1</sup> The elevation at the northeastern portion of the project site is approximately 2,348 feet amsl and 2,344 feet amsl at the northwest.

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1 Google Earth, 2020.

The project site is predominantly developed with urban uses, with vacant, undeveloped parcels interspersed. Primary views from the project site consist of views of distant mountain ranges, including the Sierra Pelona Mountains to the southwest and the San Gabriel Mountains to the south. Views of these ranges are provided looking west on major east-west roadways and looking south on major north-south roadways. Further, views of these ranges to the west are available across vacant, undeveloped portions of the project site. However, existing views in the project area are impaired by existing buildings, trees, and other features of urban development.

As shown in Figure 5.1-1: Map of Photo Locations, thirteen locations were selected to provide photographic illustrations of the existing buildings, site improvements, and uses across the project site and its vicinity. These viewpoints demonstrate the existing level of interface between the project site and surrounding uses, described in more detail below.

### 5.1.1.2 Surrounding Land Uses

The project site is bordered by Avenue J to the north; 15th Street West, Kingtree Avenue, and 13th Street West to the east; Avenue K to the south; and the SR 14 to the west. North of Avenue J are commercial and office uses with single-family residential uses to the immediate northeast. Figure 5.1-2: Location 1: Avenue J and 20th Street West provides viewpoints of each direction at the intersection of Avenue J and 20th Street West, the northwestern limit of the project site. A gas station and several commercial shopping centers are located to the west, northwest, and north of the project site across 20th Street West and across Avenue J. Figure 5.1-3: Location 2: Avenue J and 15th Street West shows similar commercial and office use development at the intersection of Avenue J and 15th Street West at the northern limit of the project site. Figure 5.1-4: Location 3: Avenue J and Kingtree Avenue demonstrates the transition to residential development surrounding the northeastern limit of the project site.

To the east of the project site are public uses, including the Antelope Valley Juvenile Court, as well as both multifamily and single-family residential uses. Figure 5.1-5: Location 4: Kingtree Avenue and Avenue J-3, Figure 5.1-6: Location 5: Avenue J-5 and 12th Street West, and Figure 5.1-7: Location 6: 13th Street and Avenue J-5 all show views of the eastern edge of the project site, including vacant, undeveloped portions of the project site adjacent to surrounding uses, single-family uses, multifamily uses, and Sunnydale Elementary School. Additionally, office uses are located east of the project site at the southeastern corner of the Avenue J-8 and 15th Street West, as shown in Figure 5.1-8: Location 7: Avenue J-8 and 15th Street West. Commercial uses are located to the southeast of the project site near Avenue K, represented in Figure 5.1-9: Location 8: Youngblood Place and 15th Street West. South of the project site is additional commercial development near Avenue K and a vacant parcel.

Amargosa Creek and SR 14 form the western boundary for a majority of the project site. Figure 5.1-10: Location 9: Avenue J-8 East of SR 14 demonstrates the vacant, undeveloped land within the project site approximately midpoint along its western boundary. Across SR 14 are commercial uses, including a number of hotels, and multi- and single-family residential development, with vacant parcels interspersed. Figure 5.1-11: Looking East-Northeast from SR 14 along West Side of Project Site provides four viewpoints through and across the project site from SR 14, proceeding north to south. These views document existing commercial development with substantial portions of vacant, undeveloped land interspersed. The view from point 10B also demonstrates the current height and massing of the Antelope Valley Hospital and adjacent related uses.

### 5.1.1.3 Light and Glare

A number of existing sources of light and glare are present on the project site and its vicinity associated with the medical, commercial, office, retail, and residential uses on site. Sources of nighttime light include indoor lighting from urban development and exterior lighting along building frontages throughout the site. Exterior night lighting in building entrances, common open space areas, and parking areas exist to largely provide adequate night visibility for residents and visitors and to provide a measure of security. Street lighting and illuminated landscaping are further sources of nighttime light. Additionally, vehicular traffic along interior and surrounding roadways is a source of intermittent light during the evening, night, and early morning hours. Helicopters and illuminated landing areas associated with the Antelope Valley Hospital medical uses also provide a source of nighttime light.

Reflective surfaces that currently produce glare in the project site and vicinity include automobiles traveling along roadways and parked on streets, exterior building windows, and surfaces of brightly painted buildings. Excessive glare not only restricts visibility, but also increases the ambient heat reflectivity in a given area. Vacant, undeveloped portions of the project site do not contain artificial sources of light or glare.

#### 5.1.1.4 Regulatory Setting

##### *a. State*

#### **California Streets and Highways Code, Sections 260 through 263**

##### ***California Scenic Highway Program***

The California Department of Transportation (Caltrans) Scenic Highway Program protects and enhances the natural scenic beauty of California's highways and corridors through special conservation treatment. Caltrans defines a scenic highway as any freeway, highway, road, or other public right-of-way that transverses an area of exceptional scenic quality. Caltrans designates a scenic highway by evaluating how much of the natural landscape a traveler sees and the extent to which visual intrusions degrade the scenic corridor. No officially designated scenic highways are located near the project site or in or near the City.<sup>2</sup> The nearest officially designated State scenic highway is SR 2 (Angeles Crest Scenic Highway), located on the north side of the San Gabriel Mountains approximately 10 miles south of the City.

#### **California Code of Regulations**

##### ***California Building Standards Code***

The California Building Code (CBC), Title 24 of the California Code of Regulations (CCR), is administered by the California Building Standards Commission (CBSC). The CBC, as amended and adopted by each local jurisdiction, regulates the design of all new buildings within the State of California. The CBC also contains standards for outdoor lighting that are intended to improve energy efficiency and reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls. The 2019 CBC (Cal. Code Regs., Title 24) was published July 1, 2019 and went into effect on January 1, 2020.<sup>3</sup>

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2 County of Los Angeles, *GIS Data Portal*, "Scenic Highways," accessed June 2020, available at <https://egis3.lacounty.gov/dataportal/2017/04/20/scenic-highways/>.

3 California Energy Commission, *2019 Building Energy Efficiency Standards*, accessed June 2020, <https://www.energy.ca.gov/title24/2019standards/>.



## **b. Local**

### ***Lancaster General Plan***

The City's General Plan was adopted on July 14, 2009 and provides for a 20-year planning horizon. The General Plan is organized into a number of plans that cover broad topical areas, while addressing the issues required by State law. The following plans included in the City's General Plan specifically relate to views and visual resources.

#### **Plan for the Natural Environment**

The Plan for the Natural Environment evaluates the natural and human-induced environments within the City. This plan focuses on those resources determined to be suitable for certain levels of maintenance and protection, as well as their limitations for rural or urban use. Overall, the Plan for the Natural Environment provides a management program for those resources consistent with the City's values and ensures the City as an active participant in the management of the Antelope Valley's resources. Relevant goals, objectives, policies, and specific actions of the Plan for the Natural Environment are as follows:

Goal 3	To identify the level of natural resources needed to support existing and future development within the City and its sphere of influence and ensure that these resources are managed and protected.
Objective 3.8	Preserve and enhance important views within the City, and significant visual features that are visible from the City of Lancaster.
Policy 3.8.1	Preserve views of surrounding ridgelines, slope areas and hilltops, as well as other scenic vistas.
Specific Action 3.8.1(a):	Encourage the creation of vistas and view corridors of community or neighborhood value during the development review process, through the siting of buildings to avoid blocking views and view corridors.

#### **Plan for Physical Development**

The purpose of the Plan for Physical Development is to organize the City's physical environment into a logical, functional, and aesthetic pattern consistent with the City's long-term vision. The plan focuses on understanding current land uses and the design and form of present developments, as well as identifies land use constraints to development, land use trends for the future, and agency coordination to ensure compatible land uses. Relevant goals, objectives, and policies of the Plan for Physical Development are as follows:

- Goal 19 To achieve an attractive and unique image for the community by creating a sustainable, cohesive and enduring built environment.
- Objective 19.2 Integrate new development with established land use patterns through quality infill to enhance overall community form and create a vibrant sense of place.
- Policy 19.2.1 Promote a diversity of neighborhood environments, from the traditional downtown core to well-integrated new growth areas.
- Policy 19.2.2 Create walkable, mixed-use, transit-accessible neighborhoods and commercial districts that provide opportunities for young and old to live, work, shop, and recreate.
- Policy 19.2.5 Create a network of attractive paths and corridors that encourage a variety of modes of transportation within the City.
- Policy 19.2.6 Minimize the visual impacts of utility corridors and their associated equipment.
- Policy 19.3.1 Promote high quality development by facilitating innovation in architecture/building design, site planning, streetscapes, and signage.
- Policy 19.3.2 Enhance the livability of Lancaster by creating attractive, safe, and accessible gathering spaces within the community.

***Lancaster Municipal Code***

Title 15, Chapter 15.08, Building Code, of the Lancaster Municipal Code (LMC) is the presiding building code within the City for purposes of regulating construction, demolition, occupancy, height, and area maintenance of all structures, all contributors to aesthetic quality and scenic character.

### ***Lancaster Zoning Code***

Nighttime lighting is regulated in residential zones within the City in Chapter 17.08.140, Outdoor Lighting, of the City's Zoning Code which allows lighting in a manner that provides for proper illumination without producing an adverse impact on neighboring property. This Municipal Code Section states: "exterior lighting of the building and site shall be provided, maintained, and utilized during the hours of darkness in accordance with the following requirements for outdoor lighting in general:

- Lighting shall be part of the architectural concept. Fixtures, standards, and all exposed accessories shall be compatible with the building design.
- Lighting shall be placed to provide adequate illumination for security and safety.
- Lighting used to illuminate the premises shall be directed away from adjacent properties.
- Lighting shall be designed and located in a manner that prevents glare onto adjacent properties.



SOURCE: Meridian - 2020

FIGURE 5.1-1



Map of Photo Locations





View Looking North



View Looking South



View Looking East



View Looking West

SOURCE: Meridian - 2020

FIGURE 5.1-2



View Looking North



View Looking South



View Looking East



View Looking West

SOURCE: Meridian - 2020

FIGURE 5.1-3





View Looking East



View Looking West



View Looking South

SOURCE: Meridian - 2020

FIGURE 5.1-4



View Looking North



View Looking Northwest



View Looking South



View Looking Southeast

SOURCE: Meridian - 2020

FIGURE 5.1-5





View Looking North



View Looking South



View Looking West

SOURCE: Meridian - 2020

FIGURE 5.1-6



View Looking South



View Looking West

SOURCE: Meridian - 2020

FIGURE 5.1-7





View Looking North



View Looking South



View Looking East



View Looking West

SOURCE: Meridian - 2020

FIGURE 5.1-8



View Looking North



View Looking South



View Looking East



View Looking West

SOURCE: Meridian - 2020

FIGURE 5.1-9





View Looking Northwest



View Looking Southwest



View Looking East



View Looking South

SOURCE: Meridian - 2020

FIGURE 5.1-10



View from 10A



View from 10B



View from 10C



View from 10D

SOURCE: Meridian Consultants - 2020

FIGURE 5.1-11



## 5.1.2 ENVIRONMENTAL IMPACTS

### 5.1.2.1 Thresholds of Significance

The California Environmental Quality Act Guidelines Appendix G was utilized to assess potential environmental impacts associated with aesthetics. In order to assist in determining whether a project would have a significant effect on the environment except as provided in Public Resources Code (PRC) Section 21099, the City finds a project may be deemed to have a significant aesthetic impact if it would:

- |                        |   |
|------------------------|---|
| <b>Threshold AES-1</b> | <b>Have a substantial adverse effect on a scenic vista.</b>   |
| <b>Threshold AES-2</b> | <b>Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.</b>  |
| <b>Threshold AES-3</b> | <b>In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.</b> |
| <b>Threshold AES-4</b> | <b>Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.</b>   |

### 5.1.2.2 Methodology

The analysis identifies and examines factors that contribute to the perception of the aesthetic and visual character of the project site and the surrounding area. Potential aesthetic impacts are evaluated by considering proposed grading, landform alteration, building setbacks, scale, massing, typical construction materials, and landscaping features associated with the design of the Proposed Project. Edge conditions and view alterations are considered in the context of the above factors. The aesthetic compatibility of the Proposed Project with the surrounding area and potential impacts to visual resources and viewers in the project site are examined. An overview of the fundamentals of aesthetics and views relevant to this analysis is provided below.

#### **a.                   *Fundamentals of Aesthetics***

A scenic vista refers to views of focal points or panoramic views of broader geographic areas that have visual interest. A focal point view would consist of a view of a notable object, building, or setting. Diminishment of a scenic vista would occur if the bulk or design of a building or development were to contrast enough with a visually interesting view such that the quality of the view is permanently affected.

Size, number, and type of visual obstacles, both natural and man-made, and distance and viewing angle affect available views into and through a site. These views can be from stationary sources, such as homes or businesses, or from mobile sources, such as motor vehicles. The visibility of an object largely depends on the distance from the observer. The farther the structure is from the viewer, the less distinct the structure becomes, and there is a greater possibility of intervening objects blocking some or all of the view of that structure. With distance, more objects enter into the viewing panorama, and the area becomes more visually “lost.”

### 5.1.2.3 Project Impacts

**Threshold AES-1            Have a substantial adverse effect on a scenic vista.**

#### ***Construction***

Short-term construction-related activities associated with the Proposed Project would temporarily alter the existing visual character of the project site and surrounding area. The visual impact associated with construction activities would involve graded surfaces, construction materials, equipment, and truck traffic. Soil would be stockpiled and equipment for grading activities would be staged at various locations. In addition, temporary construction offices and other temporary storage structures could be located on-site during various stages of construction. Material storage areas and/or construction debris piles may be visible at staging areas. Exposed trenches, roadway bedding, spoils/debris piles, and steel plates would be visible during construction of proposed street and utility infrastructure improvements. These construction activities and equipment could temporarily degrade the existing visual character and quality of the project site during each construction phase.

Construction staging and parking areas would occur within the boundaries of the project site. Views of the construction activities and staging area within the project site could be visible from the residential uses within and adjacent to the project site, as well as pedestrians, motorists, and bicyclists traveling along Avenue J, Avenue J-8, 20th Street West, and 15th Street West. However, standard construction management techniques include screening of equipment staging areas that would reduce views toward construction staging areas. Moreover, development areas would vary such that areas of temporary construction-related visual impacts would change depending upon the location of development within the project site. Notwithstanding, potential construction-related visual impacts to less than significant.

#### ***Operation***

Potential viewers of a scenic vista in the vicinity of the project site are those on public lands, public rights-of-way, facilities, and adjacent properties, specifically the residential uses onsite and residential and public uses immediately east of the site. No visually sensitive public lands or facilities are located in the project



area. The majority of the project site is developed with urban uses with portions of the project site containing vacant land with desert scrub plant communities. As indicated in the City's General Plan Master Environmental Assessment, this area is not identified as a scenic resource.<sup>4</sup> Scenic resources within or near the City are identified by the City's General Plan as unique visual features that provide attractive views either into or from the City. The five scenic resources discussed in the Master Environmental Assessment include: the Foothills Area, located approximately 10 miles to the southwest of the project site; the Little Buttes area located approximately 18 miles to the northwest; Quartz Hill area that is located approximately 5 miles to the south, Piute Ponds located approximately 6.5 miles to the northeast and Little Rock Wash located 9 miles to the east.<sup>5</sup> Mountain ranges further from the project site include the Sierra Pelona Mountains approximately 13 miles to the southwest, and the San Gabriel mountains approximately 20 miles to the southeast.

Distant views of these area mountain ranges are currently afforded to motorists, bicyclists, and pedestrians traveling along major thoroughfares within and bordering the project site. Figure 5.1-2, Figure 5.1-3, Figure 5.1-4, Figure 5.1-8, Figure 5.1-9, and Figure 5.1-11 illustrate the predominantly developed nature of the project site along major roadways including existing buildings, trees, and other features of urban development which substantially limit available views of these scenic ranges. Available views of distant mountain ranges are also provided looking west along Avenue J and south along 20th Street West and 15th Street West, respectively. Views of these ranges to the west and south are also available across vacant, undeveloped portions of the project site from uses east of the site. Figure 5.1-7 represents such views looking south along 13th Street West near Avenue J-5.

The proposed Master Plan would guide development of three sub-areas across the project site divided into Sub-Area 1: Central District, Sub-Area 2: East Neighborhoods, and Sub-Area 3: South Campus. The Proposed Project would ensure compatibility with existing development near the project site by applying appropriate planning, landscaping, and architectural design approaches. Nevertheless, with implementation of the Proposed Project, future development could screen some public views of distant mountain ranges, particularly along major east–west and north–south thoroughfares such as Avenue J, Avenue J-8, 20th Street West, and 15th Street West. Moreover, as vacant portions of the project site currently offer views of mountain ranges to the west and south from uses and roadways east of the project site; development of the project site could potentially impact these views. Sub-areas within the project site would be designed to be architecturally compatible with the existing uses surrounding the project site through building massing, intensity, and design. To provide sufficient context, a description of the

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4 City of Lancaster, *2030 General Plan Master Environmental Assessment*, page 12-1, April 2009.

5 City of Lancaster, *2030 General Plan Master Environmental Assessment*, Figure 12-1, April 2009.

anticipated project site development pattern, building forms, and massing is provided on a sub-area basis as follows, with the anticipated visual impacts of the Proposed Project to scenic vistas discussed below.

### **Sub-Area 1: Central District**

Sub-Area 1 is the largest sub-area within the northwestern and central portion of the project site and would contain approximately 147.2 acres. According to the Regulating Plan, which is also illustrated on Figure 3.0-4: District Sub-Areas in Section 3.0: Project Description of this EIR, Sub-Area 1 would contain the District Core (DC) zone near its center, surrounded by the District General (DG) zone. As described in Section 3.0, the intent of the DC zone is to provide vibrant, walkable, urban main street areas that would provide locally and regionally serving medical, commercial, retail, entertainment, and civic uses. This area would consist of the core hospital uses, including the new hospital, heliport, and hospitality uses. Permitted development within this sub-area would enable replacement of the existing 342-bed Antelope Valley Hospital main facility with up to 300 beds within a new approximately 700,000 square foot (sf) facility and 80 beds within 79,000 sf of acute care space for a total of approximately 791,000 sf of acute care space. Permitted development would also include 284 beds in 249,800 sf of sub-acute care space and 400 beds within 480,000 sf of continuum of care space.

Permitted development would also include up to 802 multifamily apartment homes, approximately 400,000 sf of medical office space, 200,000 sf of office space, 50,000 sf of retail space, 75,000 sf of retail space, 45,000 sf of restaurant space, and up to 180 hospitality rooms and 70,000 sf of conference space within an approximately 329,200 sf of hospitality space. A new 12,000 sf plant facility, which would provide power to the new hospital, relocation of the existing heliport, and a 385,000 sf parking car garage with 1,100 spaces is also proposed in this sub-area. Building heights in the DC zone would typically range from one to six stories with small to no setback areas. The relocated hospital and hotels would be exempt from the height restrictions of this zone.

### **Sub-Area 2: East Neighborhood**

Sub-Area 2 is located within the northeastern portion of the project site and would include approximately 72.7 acres. Sub-Area 2 would consist of residential, retail, and medical office uses. Permitted development within this sub-area would include 465 multifamily apartments and 40 single family condominiums for up to 505 new homes. Additional permitted development would include 38,000 sf of retail space and 23,000 sf of restaurant space. According to the Regulating Plan, which is also illustrated on Figure 3.0-4 in Section 3.0 of this EIR, Sub-Area 2 would contain the DG zone along its northern and western edges near Avenue J and 15th Street West, respectively, and the District Edge (DE) zone primarily on its central and eastern portions. The DG zone is intended to provide a variety of urban housing choices in medium to large footprint buildings that promote walkability and access to public transportation. This zone is characterized

by a mixture of active residential and retail frontages, and both house-form and block-form buildings. Buildings could extend up to four stories in height with small to medium setback areas. The DE zone is intended to provide a variety of urban housing choices in small-to-medium footprint buildings that would support a very high-quality, safe, and comfortable pedestrian public realm, supported by public transportation and neighborhood-serving retail and service uses. The DE is the least intense of the three new zoning districts. This zone abuts existing single-family and multifamily neighborhoods and is characterized primarily by multifamily residential buildings. Live/work units and small neighborhood-serving commercial businesses would also be permitted, but only to the extent that they are in scale and character with this primarily residential zone. Buildings would be limited to three-stories along street frontages, and would be set back with landscaped front yards, porches, and stoops.

### **Sub-Area 3: South Campus**

Sub-Area 3 would be located within the southern portion of the project site and would include approximately 52.5 acres. Sub-Area 3 would consist of residential housing, retail, and restaurant uses. As shown in Table 3.0-1, permitted development within this sub-area would include 83 multifamily apartments and 210 single family condominiums for up to 293 new homes. Additional permitted development would include 38,000 sf of retail space and 23,000 sf of restaurant space. According to the Regulating Plan, which is also illustrated on Figure 3.0-5 in Section 3.0 of this EIR, development within Sub-Area 3 would be entirely subject to the requirements of the DG zone. As such, a variety of urban housing choices in medium to large footprint buildings would be provided, with a mixture of active residential and retail frontages.

The design and layout of the Proposed Project would provide compatible new development amongst surrounding development by proposing buildings with the greatest allowable height and density, such as those allowed in the DC zone, be oriented towards interior portions of the project site away from major surrounding thoroughfares. Accordingly, building height and intensity would gradually increase towards the center of Sub-Area 1. As mentioned previously, the visibility of an object decreases as the distance from the observer increases. Accordingly, the increase in building height and density across the project site would be gradual and would not obstruct panoramic views of the broader geographic area. Moreover, building heights and densities proposed for the DC zone are generally consistent with the existing Antelope Valley Hospital and would not introduce a new or substantially greater building profile allowance. Surrounding uses to the east and northeast of the project site include single family residential neighborhoods. Consistent with these land uses, the DE zone proposed within Sub-Area 2 would enable similar house-form development and a transition of uses and building form across the project site.

Further, the proposed Master Plan establishes minimum setback standards for development of the project site. These setback standards are intended to correspond with the density pattern of the site, with larger setbacks established for lower density residential development in the eastern portion of the site, mid-range setbacks and moderately higher densities for development across the majority of the site, including the northern, southern, and western edges, and smaller to no setbacks and higher density development oriented towards the central, northwestern portion of the site. These standards serve to integrate the project site more cohesively with surrounding properties.

Additionally, and as discussed in Section 3.0, the Proposed Project would provide for the enhancement of the public realm through a variety of streetscape and landscape improvements incorporated into the proposed Master Plan, as well as for existing arterials bordering the project site. These improvements would provide an active and landscaped interface between the project site and surrounding neighborhoods.

The scenic vistas as seen from roadways through or surrounding the project site or from surrounding public vantage points would not be substantially obstructed or adversely impacted by the Proposed Project. The building heights, densities, and landscaping along these roadways would be visually compatible with surrounding land uses and would serve to maximize preservation of the distant mountains views for those traveling on these arterial roadways and of the broader geographic views from uses east of the site. Accordingly, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold AES-2                      Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.**

The project site is not located within a State-designated Scenic Highway or associated view corridor. The nearest officially designated State Scenic Highway is SR 2 (Angeles Crest Scenic Highway), located on the north side of the San Gabriel Mountains approximately 10 miles south of the City. Due to the distance of the project site from this highway, the Proposed Project would not damage scenic resources within a State-designated Scenic Highway. Furthermore, the project site consists of developed land characterized by a variety of medical, commercial, retail, and residential buildings along with vacant, undeveloped parcels interspersed. As discussed in Section 5.4: Cultural Resources, no known historical resources are recorded

within the project site boundaries, including any resources listed on the National Register of Historic Places or the California Register of Historical Resources. Additionally, as discussed in Section 5.3: Biological Resources and Section 5.6: Geology and Soils, the only special-status plant species on the project site is the Joshua tree as there are a total of nine scattered throughout the undeveloped portions. There are also several native and non-native species trees on site. Additionally, there are no known rock outcroppings are known to occur within the project site.

As discussed in Section 3.0: Project Description, the Proposed Project would provide for the enhancement of the public realm through a variety of streetscape and landscape improvements throughout the project site. The proposed Master Plan includes provisions for enhanced scenic quality throughout the project site with building standards (height, setbacks, intensities), high quality signage requirements, and provisions for additional street trees, varied building frontages, and architectural screening of utilities and rooftop equipment. Additionally, streetscape improvements such as trees are proposed for existing arterials bordering the project site to accommodate a cohesive interface between the site and surrounding neighborhoods. Due to these scenic improvements and the location of the project site outside a State Scenic Highway, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold AES-3      In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.**

The Proposed Project would guide future development across the 272.4-acre project site and would enable the development of a more walkable and compact campus core oriented around the new Antelope Valley Hospital that builds upon and enhances existing inpatient and outpatient facilities, office, commercial, hospitality, housing, parking, and open space uses. The project site is located within the central portion of the City, a highly developed urban area. The City's General Plan Land Use Map designates the project site a mix of Commercial (C), Mixed Use (MU), Health Care (H), Office/Professional (OP), and

Multi-Residential (MR2).<sup>6</sup> Consistent with the project site's Land Use Map designations, the City's zoning map applies the C, H, OP, Commercial Planned Development (CPD), High Density Residential (HDR), Mixed Use-Neighborhood (MU-N), and Mixed Use-Commercial (MU-C) zoning designations to the project site.<sup>7</sup>

Commercial land uses include a broad spectrum of uses, including regional, community, neighborhood, and highway-oriented uses with floor area ratios (FAR) ranging from 0.5 to 1.0. The Mixed Use land use category combines retail, service, and office uses with higher density residential uses in the same building or on the same site with residential potentially located above commercial activities. Mixed-use development typically functions as the center of activity for the surrounding area and emphasizes integrated design with strong pedestrian/transit connections. Unit density and floor area ratios may vary depending on the purpose and design but the average density would be 21 dwelling units per acre and the average FAR would be 1.0. Health Care land uses include public and private hospitals, health care facilities, and related independent or assisted-living residential facilities. Land designated OP would enable office and professional uses and supporting commercial uses with maximum floor area ratios of 0.75. MR2 land uses include high density multifamily residential development, with density ranging from 15.1 to 30.0 dwelling units per acre.

The Proposed Project would require a General Plan Amendment to change the land use designation to Mixed Use and a Zone Change to Mixed Use - Health District. The proposed Master Plan includes the Health District Code, which is the implementing mechanism to guide future development within the project site, and includes standards and guidelines that would ensure high-quality design and creativity in site planning and architectural design while allowing for variation and flexibility. Although the Proposed Project would alter the visual appearance of the project site from developed land interspersed with vacant, undeveloped parcels to higher building densities than currently allowed, adherence to the Development Code building standards and design provisions would ensure that the project site would be developed as a high-quality medical campus and would not substantially affect the aesthetic appearance of the project site or surrounding area.

Further, the Proposed Project would be consistent with the goals, objectives, and policies of the City's General Plan related to aesthetic value. The Proposed Project would enable the replacement of existing outdated and/or obsolete buildings with modern facilities, including inpatient (hospital) and outpatient (clinic) uses, hospitality uses, office uses, commercial uses, and a range of housing types, generally uses envisioned for the project site in the City's zoning ordinance. The proposed Development Code ensures

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6 City of Lancaster, *General Plan 2030 Land Use Map*, adopted November 24, 2013 and last revised January 22, 2019, accessed June 2020, <https://www.cityoflanasterca.org/home/showdocument?id=9333>.

7 City of Lancaster, *Zoning Map*, adopted July 13, 2010 and last revised January 22, 2019, accessed June 2020, <https://www.cityoflanasterca.org/home/showdocument?id=12653>.

that the project site would be developed in a manner that is compatible with the surrounding residential and non-residential neighborhoods through appropriate, transitional in-fill development patterns and the inclusion of high-quality architecture, streetscape improvements, and landscape design. As such, the buildings closer to the perimeter of the project site would be comparable to the existing buildings on the adjacent properties; the project site would be surrounded by location-appropriate setback areas, streetscape improvements, and trees; and taller buildings would be located near the center of the project site where they would be screened by landscaping and smaller buildings over the life of the Proposed Project. In addition, the distance between the taller buildings and the perimeter of the project site would help further minimize the effects on views from adjacent roads and developments. All future development enabled by the Proposed Project would comply with the City's zoning requirements related to lighting, including directing light downwards to minimize light and glare spill. In parking areas, lighting would be recessed and shielded to confine glare and reflections within the boundaries of the project site, away from adjoining properties and the public right-of-way. With adherence to the proposed Development Code and compliance with the City's zoning requirements related to light and glare, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold AES-4            Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

### **Construction**

Construction activities are anticipated to occur primarily during the daytime hours. Light and glare during daytime construction activities would not impact surrounding uses. Construction activities would comply with the City's Noise Ordinance, which allows construction to occur between the hours of 7:00 AM and 8:00 PM Monday through Saturday. In the event that construction would require nighttime lighting for security purposes it would be oriented downward and away from adjacent residential areas and would consist of the minimal wattage necessary to provide safety at the construction site. Accordingly, impacts would be less than significant.

### **Operation**

A number of existing sources of light and glare are present on the project site and its vicinity associated with the existing medical, commercial, retail, and residential uses. Sources of nighttime light include indoor lighting from urban development and exterior lighting along building frontages throughout the site. Street lighting and illuminated landscaping are further sources of nighttime light. Additionally, vehicular traffic along interior and surrounding roadways is a source of intermittent light during the evening, night, and early morning hours. Helicopters and illuminated landing areas associated with the Antelope Valley Hospital medical uses also provide a source of nighttime light. Reflective surfaces that currently produce glare in the project vicinity include automobiles traveling and parked on streets, exterior building windows, and surfaces of brightly painted buildings.

Vacant, undeveloped portions of the project site do not currently produce sources of light or glare. As these areas are primarily targeted for future development enabled by the proposed Master Plan, the Proposed Project would result in new sources of light or glare within the project site. Future development proposed by the Master Plan would introduce new light and glare sources typical of healthcare, residential, commercial, office, and mixed-use uses. Exterior night lighting is expected to be provided in building entrances, common open space areas, and parking areas largely to provide adequate night visibility for residents and visitors and to provide a measure of security. Other sources of light would include security lighting, nighttime traffic, and sign illumination. Lighting from the project site would be visible from surrounding areas that are currently undeveloped or sparsely developed. However, the new light sources introduced by the Proposed Project would be similar to the existing light and glare associated with the surrounding developed properties. As provided in the proposed Development Code, future lighting would be constructed in compliance with LMC 17.08.140 for residential outdoor lighting standards. Lighting in parking areas would be recessed and shielded, and glare and reflections would be confined within the boundaries of the project site.

The proposed Development Code would enable a variety of high quality building finishes and textures, but the Proposed Project's architectural finishes would feature mostly non-glare-producing materials, including stucco, perforated metal panels, wire panels, finished concrete, and other high quality materials. Glass materials are reflective by nature, but the Proposed Project would not introduce any source of glare that would be incompatible with the surrounding area. Additionally, parking areas would be screened to the greatest extent feasible through landscaping placement. Therefore, while the Proposed Project would provide new light and glare sources, impacts would be reduced to the greatest extent feasible through design and compliance with local standards. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.



## Level of Significance

Construction and operation related light and glare impacts would be less than significant.

### 5.1.2.4 Cumulative Impacts

The evaluation of aesthetic and visual impacts is by nature a subjective exercise due to widely varying personal perceptions. Nevertheless, for purposes of analysis herein, the Proposed Project's cumulative study area for aesthetics comprises all areas visible from and visible to the project site. Implementation of the Proposed Project would alter views of surrounding visual resources and would also alter the visual character of the project site and surrounding areas. Upon development of the project site and buildout of other vacant lands in the vicinity, cumulative development could result in substantial changes to the visual character of the project site and add to the creation of nighttime light and glare. However, this would not constitute a significant adverse impact as the project site and surrounding area would be developed in accordance with the proposed Master Plan and in areas outside of the project site per the City's General Plan. Additionally, future individual projects enabled by the proposed Master Plan would follow appropriate, transitional in-fill development patterns and include high-quality architecture, streetscape improvements, and landscape design provided in the proposed Development Code, as well as comply with the City's zoning requirements related to light and glare.

As with the Proposed Project, related projects would undergo specific discretionary review. Determinations regarding the significance of direct or indirect impacts of any related project related to aesthetics would be made on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement appropriate mitigation measures. Aesthetic impacts associated with the Proposed Project would not be cumulatively considerable; thus, cumulative impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Level of Significance

Impacts would be less than significant.

### 5.1.3 SUMMARY OF SIGNIFICANCE

Aesthetic and visual impacts during construction and operation of the Proposed Project would be less than significant. Adherence to the provisions outlined in the proposed Master Plan and compliance with the City's zoning requirements related to light and glare would result in less than significant impacts. The Proposed Project's cumulative impacts would also result in less than significant impacts to aesthetics.

## 5.2 AIR QUALITY

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This section of the Environmental Impact Report (EIR) describes and evaluates the potential air quality impacts from the Proposed Project. In assessing air quality impacts, the following sources were considered: emissions from equipment that will be used during construction related activities, operational related emissions generated from electricity and water use, and emissions from motor vehicles generated by trips to and from the project site. More specifically, this section evaluates impacts associated with the Proposed Project that may potentially affect the regional and local air quality. Various federal, State, regional, and local programs and regulations related to anticipated air quality impacts are also discussed in this section. Emission calculations and air quality modeling completed for the Proposed Project are contained in Appendix B: Air Quality Model Output of this EIR.

### 5.2.1 ENVIRONMENTAL SETTING

#### 5.2.1.1 Existing Conditions

The project site is located in the City of Lancaster (City) which is within the Mojave Desert Air Basin (MDAB). Regulatory oversight for air quality in the Antelope Valley portion of the MDAB is provided by the Antelope Valley Air Quality Management District (AVAQMD) at the regional level, the California Air Resources Board (CARB) at the State level, and the U.S. Environmental Protection Agency (USEPA) Region IX office at the federal level.<sup>1</sup>

##### **a. Background**

Air pollutant emissions within the MDAB are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point sources and area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples of point sources are boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and produce many small emissions. Examples of area sources include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products, such as barbeque lighter fluid and hair spray. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources include vehicles traveling on roadways and highways. Off-road sources include aircraft, trains, race cars, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

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<sup>1</sup> California Air Resources Board (CARB), *Annual Network Plan*, June 2016.

The USEPA and the CARB designate air basins where air pollution levels exceed the State or federal ambient air quality standards (AAQS) as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, an area is considered “unclassified.” Federal nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. The federal and State standards have been set at levels considered safe to protect public health, including the health of “sensitive” populations, such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Air pollution can affect the health of both adults and children. The adverse health effects associated with air pollution are diverse and include cardiovascular effects, respiratory effects, cancer, reproductive effects, neurological effects, and other health outcomes.

**b. Topography, Climate, and Meteorology**

The MDAB contains an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. The Mojave Desert is bordered on the southeast by the San Bernardino Mountains, separated from the San Gabriel Mountains by the Cajon Pass. A lesser pass lies between the San Bernardino Mountains and the Little San Bernardino Mountains in the Morongo Valley. Many of the lower mountains that dot the terrain rise from 1,000 to 4,000 feet above the valley floor. The mountains separate the MDAB from the southern California coastal and central California valley, whose passes form the main channels for the air masses in the MDAB.<sup>2</sup>

Air quality in the project area is affected by various emissions sources (mobile, industrial, etc.) and by atmospheric conditions such as wind speed, wind direction, temperature, and rainfall. Prevailing winds in the MDAB are out of the west and southwest due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north. Air masses pushed onshore in southern California by differential heating are channeled through the MDAB.

During the summer, the MDAB is generally influenced by a Pacific subtropical high cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south. The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert. Pacific storm fronts normally move into the area from the west, driven by prevailing winds from the west and southwest. During late summer, moist

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<sup>2</sup> City of Lancaster, *General Plan 2030 Master Environmental Assessment*, April 2009.

high-pressure systems from the Pacific collide with rising heated air from desert areas, resulting in brief, high-intensity thunderstorms that can cause high winds and localized flash flooding.

### c. **Criteria Air Pollutants**

The criteria air pollutants that are most relevant to current air quality planning and regulation in the MDAB include ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), respirable particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (Pb). In addition, volatile organic compounds (VOC) and toxics air contaminants (TACs) are a concern in the MDAB, but are not classified under AAQS. The characteristics of each of these pollutants are briefly described below.

The State and National AAQS and their attainment status in the AVAQMD for each of the criteria pollutants are summarized in Table 5.2-1: Ambient Air Quality Standards and Attainment Status. Under federal and State standards, the MDAB is currently designated as nonattainment for O<sub>3</sub> and PM<sub>10</sub>.

**Table 5.2-1  
Ambient Air Quality Standards and Attainment Status**

Pollutant	Averaging Period	California		Federal	
		Standards	Attainment Status	Standards	Attainment Status
Ozone (O <sub>3</sub> )	1-hour	0.09 ppm (180 µg/m <sup>3</sup> )	Nonattainment	--	Nonattainment
	8-hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.070 ppm (137 µg/m <sup>3</sup> )	
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic mean	0.03 ppm (57 µg/m <sup>3</sup> )	Attainment	0.053 ppm (100 µg/m <sup>3</sup> )	Unclassified/Attainment
	1-hour	0.18 ppm (339 µg/m <sup>3</sup> )		0.100 ppm (188 µg/m <sup>3</sup> )	
Carbon Monoxide (CO)	8 hours	9.0 ppm (10 mg/m <sup>3</sup> )	Attainment	9 ppm (10 mg/m <sup>3</sup> )	Unclassified/Attainment
	1 hour	20 ppm (23 mg/m <sup>3</sup> )		35 ppm (40 mg/m <sup>3</sup> )	
Sulfur Dioxide (SO <sub>2</sub> )	1 hour	0.25 ppm	Attainment	0.075 ppm	Unclassified/Attainment
	24 hour	0.04 ppm		-	
Lead (Pb)	30-day average	1.5 µg/m <sup>3</sup>	Attainment	-	Unclassified/Attainment
	Rolling 3-month average	-		0.15 µg/m <sup>3</sup>	
	24 hour	50 µg/m <sup>3</sup>	Nonattainment	150 µg/m <sup>3</sup>	

Pollutant	Averaging Period	California		Federal	
		Standards	Attainment Status	Standards	Attainment Status
Respirable Particulate Matter (PM <sub>10</sub> )	Annual arithmetic mean	20 µg/m <sup>3</sup>		-	Unclassified/Attainment
	24 hours	-		35 µg/m <sup>3</sup>	
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual arithmetic mean	12 µg/m <sup>3</sup>	Unclassified	12 µg/m <sup>3</sup>	Unclassified/Attainment

Source: Antelope Valley Air Quality Management District, Antelope Valley AQMD Attainment Status, <https://avaqmd.ca.gov/files/e0986ab83/AVAQMD+2017+Attainment+Status+Table.pdf>.

Attainment indicates that the ambient air quality standards (AAQS) are met for that particular pollutant.

Nonattainment indicates that the pollutant levels are in exceedance of State and/or federal AAQS.

Note: ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter; mg/m<sup>3</sup> = milligrams per cubic meter.

## Ozone (O<sub>3</sub>)

O<sub>3</sub> is a highly reactive and unstable gas that is formed when reactive organic gases (ROGs), sometimes referred to as VOC, and nitrogen oxides (NO<sub>x</sub>), byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O<sub>3</sub> concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

Individuals exercising outdoors, children and people with preexisting lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible sub-groups for ozone effects. Short-term exposures (lasting for a few hours) to O<sub>3</sub> at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in high ozone communities.

Ozone exposure under exercising conditions is known to increase the severity of the observed responses mentioned above. Animal studies suggest that exposures to a combination of pollutants that include ozone may be more toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

### **Carbon Monoxide (CO)**

CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, motor vehicles operating at slow speeds are the primary source of CO. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of worsening oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with oxygen transport by competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.

Reduction in birth weight and impaired neurobehavioral development has been observed in animals chronically exposed to CO resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels. These include pre-term births and heart abnormalities. Additional research is needed to confirm these results.

### **Nitrogen Dioxide (NO<sub>2</sub>)**

NO<sub>2</sub> is a reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO). NO<sub>2</sub> is also a byproduct of fuel combustion. Like ozone, NO<sub>2</sub> is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between NO and atmospheric oxygen. NO and NO<sub>2</sub> are collectively referred to as NO<sub>x</sub> and are major contributors to O<sub>3</sub> formation. NO<sub>2</sub> also contributes to the formation of PM<sub>10</sub>. High concentrations of NO<sub>2</sub> can cause breathing difficulties and there is some indication of a relationship between NO<sub>2</sub> and chronic pulmonary fibrosis. Some increase of bronchitis in children (2-3 years old) has been observed at concentrations below 0.3 parts per million (ppm).

### **Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)**

Particulate Matter (PM) consists of a small liquid and solid particles floating in the air, including smoke, soot, dust, salts, acids, and metals and can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. A consistent correlation between elevated ambient respirable and fine particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) levels and an increase in mortality rates,

respiratory infections, number and severity of asthma attacks, and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life span, and an increased mortality from lung cancer.

Daily fluctuations in fine-particulate-matter concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of PM<sub>10</sub> and PM<sub>2.5</sub>.

### **Sulfur Dioxide (SO<sub>2</sub>)**

SO<sub>2</sub> is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, as well as from chemical processes occurring at chemical plants and refineries. When SO<sub>2</sub> oxidizes in the atmosphere, it forms sulfates (SO<sub>4</sub>). Collectively, these pollutants are referred to as sulfur oxides (SO<sub>x</sub>).

A few minutes of exposure to low levels of SO<sub>2</sub> can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. Asthmatics' acute exposure to SO<sub>2</sub> increases their resistance to air flow and reduces their breathing capacity, which leads to severe breathing difficulties. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO<sub>2</sub>.

Animal studies suggest that despite the fact that SO<sub>2</sub> is a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off cells lining the respiratory tract.

Most of the health effects associated with fine particles and SO<sub>2</sub> at ambient levels are also associated with SO<sub>4</sub>. Thus, both mortality and morbidity effects have been observed with an increase in ambient SO<sub>4</sub> concentrations. However, efforts to separate the effects of SO<sub>4</sub> from the effects of other pollutants have generally not been successful. Clinical studies of asthmatics exposed to sulfuric acid suggest that adolescent asthmatics are possibly a subgroup susceptible to acid aerosol exposure. Animal studies suggest that acidic particles, such as sulfuric acid aerosol and ammonium bisulfate, are more toxic than non-acidic particles like ammonium sulfate. Whether the effects are attributable to acidity or to particles remains unresolved.

## Volatile Organic Compounds (VOCs)

VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide (CO<sub>2</sub>), carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation. VOC emissions often result from the evaporation of solvents in architectural coatings. Reactive organic gases are any reactive compounds of carbon, excluding methane, CO, CO<sub>2</sub> carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. ROG emissions are generated from the exhaust of mobile sources.<sup>3</sup> Both VOC and ROGs are precursors to ozone and the terms can be used interchangeably.<sup>4</sup>

## Toxic Air Contaminants

TACs refer to a diverse group of “non-criteria” air pollutants that can affect human health but have not had ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed previously, but because their effects tend to be local rather than regional. TACs are classified as carcinogenic and noncarcinogenic, where carcinogenic TACs can cause cancer and noncarcinogenic TAC can cause acute and chronic impacts to different target organ systems (e.g., eyes, respiratory, reproductive, developmental, nervous, and cardiovascular, etc.).

The CARB and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or “listed,” as a TAC in California.<sup>5</sup> Diesel Particulate Matter (DPM), which is emitted in the exhaust from diesel engines, was listed by the State as a TAC in 1998. DPM has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter less than 2.5 micrometers (µm)), including a subgroup of ultrafine particles (ultrafine particles have a diameter less than 0.1 µm). Collectively, these particles have a large surface area, which makes them an excellent medium for absorbing organics. The visible emissions in diesel exhaust include carbon particles or “soot.” Diesel exhaust also contains a variety of harmful gases and cancer-causing substances.

Exposure to DPM may be a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. DPM levels and resultant potential health effects may be higher near heavily-traveled roadways with substantial truck traffic or near industrial facilities. According to CARB, DPM exposure may lead to the following adverse health effects: (1) aggravated

3 SCAQMD, Appendix A: Calculation Details for CalEEMod (October 2017), accessed June 2020, [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6).

4 Both VOC and ROGs are both precursors to ozone so they are summed in the CalEEMod report under the header ROG. For the purposes of comparing the ROG value to a VOC significance threshold, the terms can be used interchangeably.

5 The complete list of such substances is located at [www.arb.ca.gov/toxics/id/taclist.htm](http://www.arb.ca.gov/toxics/id/taclist.htm).



asthma; (2) chronic bronchitis; (3) increased respiratory and cardiovascular hospitalizations; (4) decreased lung function in children; (5) lung cancer; and (6) premature deaths for people with heart or lung disease.<sup>6</sup>

To provide a perspective on the contribution that DPM has on the overall Statewide average ambient air toxics potential cancer risk, CARB evaluated risks from specific compounds using data from CARB's ambient monitoring network. CARB maintains a 21-site air toxics monitoring network that measures outdoor ambient concentration levels of approximately 60 air toxics. CARB has determined that, of the top ten inhalation risk contributors, DPM contributes approximately 68 percent of the total potential cancer risk.<sup>7</sup>

### Valley Fever

Coccidioidomycosis, more commonly known as "Valley Fever," is primarily a disease of the lungs caused by the spores of the *Coccidioides immitis* fungus. The spores are found in soils, become airborne when the soil is disturbed, and are subsequently inhaled into the lungs. After the fungal spores have settled in the lungs, they change into a multicellular structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

Valley Fever symptoms occur within two to three weeks of exposure. Approximately 60 percent of Valley Fever cases are mild and display flu-like symptoms or no symptoms at all. Of those who are exposed and seek medical treatment, the most common symptoms include fatigue, cough, loss of appetite, rash, headache, and joint aches. In some cases, painful red bumps may develop on the skin. One important fact to mention is that these symptoms are not unique to Valley Fever and may be caused by other illnesses as well. Identifying and confirming this disease require specific laboratory tests such as: (1) microscopic identification of the fungal spherules in infected tissue, sputum, or body fluid sample; (2) growing a culture of *Coccidioides immitis* from a tissue specimen, sputum, or body fluid; (3) detection of antibodies (serological tests specifically for Valley Fever) against the fungus in blood serum or other body fluids; and (4) administering the Valley Fever Skin Test (called coccidioidin or spherulin), which indicate prior exposure to the fungus.

Valley Fever is not contagious, and therefore, cannot be passed on from person to person. Most of those who are infected would recover without treatment within six months and would have a life-long immunity to the fungal spores. In severe cases, especially in those patients with rapid and extensive primary illness, those who are at risk for dissemination of disease, and those who have disseminated disease, antifungal

6 CARB, Overview: Diesel Exhaust and Health, accessed June 2020, <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>.

7 SCAQMD, "Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-IV)." May 2015, accessed June 2020, <http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf>.

drug therapy is used. The type of medication used and the duration of drug therapy are determined by the severity of disease and response to the therapy. The medications used include ketoconazole, itraconazole and fluconazole in chronic, mild-to-moderate disease, and amphotericin B, given intravenously or inserted into the spinal fluid, for rapidly progressive disease. Although these treatments are often helpful, evidence of disease may persist and years of treatment may be required.

The usual course of Valley Fever in healthy people is complete recovery within six months. In most cases, the body's immune response is effective and no specific course of treatment is necessary. About five percent of cases of Valley Fever result in pneumonia (infection of the lungs), while another five percent of patients develop lung cavities after their initial infection with Valley Fever. These cavities occur most often in older adults, usually without symptoms, and about 50 percent of them disappear within two years. Occasionally, these cavities rupture, causing chest pain and difficulty breathing, and require surgical repair. Only one to two percent of those exposed who seek medical attention would develop a disease that disseminates (spreads) to other parts of the body other than the lungs.

Factors that affect the susceptibility to coccidioidal dissemination are race, sex, pregnancy, age, and immunosuppression. While there are no racial or gender differences in susceptibility to primary infection with coccidioidomycosis, differences in risk of disseminated infection do appear to exist. Men have a higher rate of dissemination than do women and several studies have shown that the rate of dissemination in African Americans and Filipinos is several times higher than in the rest of the US population. Native Americans, Hispanics, and Asians may also have a higher rate of dissemination than the general population, but these population differences are not well defined.

The *Coccidioides immitis* fungal spores are often found in the soil around rodent burrows, Indian ruins, and burial grounds. The spores become airborne when the soil is disturbed by winds, construction, farming, and soil disturbing activities. This type of fungus is endemic to the southwestern United States and is common in the Antelope Valley. The project site is located in an area designated as suspected endemic for Valley Fever by the Center for Disease Control and Prevention (CDC).<sup>8</sup> Annual morbidity reports for 2011 through 2015 from Los Angeles County Public Health (LACPH) indicate that the Antelope Valley area of Los Angeles County has the highest incident rates for Valley Fever within the County, with the highest reported case rate greater than 25 per 100,000 population.<sup>9</sup>

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8 Centers for Disease Control and Prevention, *Sources of Valley Fever (Coccidioidomycosis)*, <https://www.cdc.gov/fungal/diseases/coccidioidomycosis/index.html>, accessed June 2020.

9 Los Angeles County Department of Public Health, *Acute Communicable Disease Control*, <http://publichealth.lacounty.gov/acd/Diseases/Cocci.htm>

### c. Local Air Quality

The project site's ambient air quality is monitored by AVAQMD and CARB. CARB monitors ambient air quality at approximately 250 air monitoring stations across the State. Air quality monitoring stations usually measure pollutant concentrations ten feet above-ground level; therefore, air quality is often referred to in terms of ground-level concentrations. AVAQMD maintains one permanent air quality monitoring location located 43301 Division Street.<sup>10</sup> This station monitors pollutant concentrations of O<sub>3</sub> (1-hour and 8-hour), NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>. This station does not monitor CO and SO<sub>2</sub>.

Table 5.2-2: Air Quality Monitoring Summary lists the ambient pollutant concentrations registered and the violations of State and federal standards that have occurred at the abovementioned monitoring stations from 2016 through 2018, the most recent years for which data are available. As shown, the monitoring stations have registered values above State and federal standards for O<sub>3</sub>.

**Table 5.2-2**  
**Air Quality Monitoring Summary**

Air Pollutant	Average Time (Units)	2016	2017	2018
Ozone (O <sub>3</sub> )	State Max 1 hour (ppm)	0.108	0.109	0.125
	Days > CAAQS threshold (0.09 ppm)	3	10	5
	National Max 8 hour (ppm)	0.090	0.087	0.104
	Days > NAAQS threshold (0.070 ppm)	60	43	48
	State Max 8 hour (ppm)	0.091	0.087	0.105
	Days > CAAQS threshold (0.07 ppm)	65	43	49
Nitrogen dioxide (NO <sub>2</sub> )	National Max 1 hour (ppm)	0.049	0.047	0.048
	Days > NAAQS threshold (0.100 ppm)	0	0	0
	State Max 1 hour (ppm)	0.048	0.046	0.047
	Days > CAAQS threshold (0.18 ppm)	0	0	0
Particulate matter (PM <sub>10</sub> )	Annual Average (µg/m <sup>3</sup> )	25.7	26.3	25.2
	24 hours (µg/m <sup>3</sup> )	145.0	82.4	89.3
	Days > CAAQS threshold (50 µg/m <sup>3</sup> )	0	0	0
	Days > NAAQS threshold (150 µg/m <sup>3</sup> )	0	0	0
Fine particulate matter (PM <sub>2.5</sub> )	National Max (µg/m <sup>3</sup> )	64.8	26.6	40.4
	National Annual Average (µg/m <sup>3</sup> )	7.6	7.2	7.2
	Days > NAAQS threshold (35 µg/m <sup>3</sup> )	2	0	1

Source: California Air Resources Board, "Top 4 Summary," <https://www.arb.ca.gov/adam/topfour/topfour1.php>.

Notes:

> = exceeds; CAAQS = California Ambient Air Quality Standard; max = maximum; mean = annual arithmetic mean; µg/m<sup>3</sup> = micrograms per cubic meter; N/A = no data; NAAQS = National Ambient Air Quality Standard; ppm = parts per million.

10 CARB, Quality Assurance Air Monitoring Site Information for Lancaster-Division Street, accessed June 2020, [https://ww3.arb.ca.gov/qaweb/site.php?s\\_arb\\_code=70301](https://ww3.arb.ca.gov/qaweb/site.php?s_arb_code=70301).

#### **d. Sensitive Receptors**

Some people, such as children, elderly persons with preexisting respiratory or cardiovascular illness, and athletes are especially sensitive to air pollutant emissions. Facilities where these segments of the population live, gather, play or exercise (e.g., residences, daycare centers, hospitals and schools, etc.) are considered sensitive land uses or sensitive receptors. Residential areas are considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods, resulting in sustained exposure to pollutants. Recreational land uses are considered moderately sensitive to air pollution because exercise places a high demand on respiratory functions, which can be impaired by air pollution. The AVAQMD has developed guidance and permitting programs to limit exposures to TACs by sensitive receptors.<sup>11</sup>

There are multi-family and single-family residential housing neighborhoods located within the project site and off-site to the north, south, east, and west of the project site boundary. In addition, there are multiple schools within a 0.1-mile radius of the project site, the closest being the Desert Sands Charter High School and Sunnydale Elementary School, located at 44130 20th Street West and 1233 J-8 Avenue, respectively.

#### **e. Existing Operational Emissions**

The project site currently contains the existing 342-bed Antelope Valley Hospital (489,930 square feet (sf)) with a 78-bed Woman and Infant Facility (277,000 sf) for a total of 420 beds within 691,930 sf and a ground-based heliport. The project site also contains 59 single-family attached units and 376 multi-family units for a total of 435 housing units. There is a total of 1,040,430 sf of office and commercial space and approximately 230,000 sf of medical office space. A majority of the presently developed land is hardscape with minimal landscaping.

The project site has been organized into three planning sub-areas defined by the centerlines of Avenue J-8 and 15th Street West, as well as the overall project site boundaries (refer to Figure 3.0-4: District Sub-Areas). The estimated operational emissions are based on the existing development within each sub-area of the project site and are presented in Table 5.2-3: Existing Operational Air Quality Emissions. The most current CARB-approved, MDAB recommended air quality modeling software, California Emissions Estimator Model (CalEEMod), was used to estimate existing air quality operational emissions.

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<sup>11</sup> AVAQMD, *Rule 1401 New Source Review for Toxic Air Contaminants*, 2002.

**Table 5.2-3  
Existing Operational Air Quality Emissions**

Source	Pollutant (pounds/day)						Pollutant (tons/year)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Total	866	551	2,197	5	346	180	55	85	222	1	39	14

*Source: Refer to the data sheets in Appendix B.1 (Existing Sub Areas) for the Air Quality Model Outputs.*

### 5.2.1.2 Regulatory Setting

#### a. Federal

##### Clean Air Act

The USEPA is responsible for the implementation of portions of the Clean Air Act (CAA) of 1970, which regulates certain stationary and mobile sources of air emissions and other requirements. Charged with handling global, international, national, and interstate air pollution issues and policies, the USEPA sets national vehicle and stationary source emission standards, oversees the approval of all State Implementation Plans (SIP), provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards (NAAQS). A SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain NAAQS. The NAAQS were established to protect public health, including that of sensitive individuals; for this reason, the standards continue to change as more medical research becomes available regarding the health effects of the criteria pollutants. The primary NAAQS defines the air quality considered necessary, with an adequate margin of safety, to protect the public health. NAAQS for the six common air pollutants (ozone, PM<sub>10</sub> and PM<sub>2.5</sub>, NO<sub>2</sub>, CO, Pb, and SO<sub>2</sub>) are identified in the CAA.

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA that are most applicable to the Proposed Project include Title I, Nonattainment Provisions, and Title II, Mobile Source Provisions.

The NAAQS were also amended in July 1997 to include an 8-hour standard for ozone and to adopt a NAAQS for PM<sub>2.5</sub>. The NAAQS were amended in September 2006 to include an established methodology for calculating PM<sub>2.5</sub>, as well as to revoke the annual PM<sub>10</sub> threshold.

## **b. State**

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both State and federal air pollution control programs within California. In this capacity, CARB conducts research, sets CAAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions and the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the State. The CAAQS include more stringent standards than the NAAQS. Criteria pollutants that are in nonattainment in the AVAQMD under the CAAQS include O<sub>3</sub> and PM<sub>10</sub>.

### **Air Quality and Land Use Handbook**

CARB published the *Air Quality and Land Use Handbook*<sup>12</sup> on April 28, 2005, to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions.

Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural road with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 50 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more dry cleaning machines.

### **California Code of Regulations**

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by the state agencies pursuant to the Administrative Procedure Act (APA). The CCR includes regulations that pertain to air quality emissions.<sup>13</sup> Specifically, Section 2485 in Title 13 of the CCR

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12 CARB, *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005, <https://www.arb.ca.gov/ch/handbook.pdf>.

13 CARB, Section 2485 in Title 13 of the CCR, [https://www.arb.ca.gov/msprog/truck-idling/13ccr2485\\_09022016.pdf](https://www.arb.ca.gov/msprog/truck-idling/13ccr2485_09022016.pdf).

states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location. In addition, Section 93115 in Title 17 of the CCR states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.<sup>14</sup>

***CARB Rule 2449, General Requirements for In-Use Off-Road Diesel-Fueled Fleets***

Requires off-road diesel vehicles to limit nonessential idling to no more than 5 consecutive minutes.<sup>15</sup>

***c. Regional***

**Antelope Valley Air Quality Management District**

Air districts have the primary responsibility to control air pollution from all sources other than those directly emitted from motor vehicles, which are the responsibility of the CARB and the USEPA. Air districts adopt and enforce rules and regulations to achieve State and Federal ambient air quality standards and enforce applicable State and federal law. The AVAQMD has jurisdiction over the northern, desert portion of Los Angeles County. This region includes the incorporated cities of Lancaster and Palmdale, Air Force Plant 42, and the southern portion of Edwards Air Force Base. The AVAQMD boundaries start on the south just outside of Acton, north to the Kern County line, east to the San Bernardino County line, and west to the Quail Lake area.

The *Antelope Valley AQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*<sup>16</sup> establishes thresholds for pollutant emissions generated both during and following construction. Actions that violate the Federal standards for criteria pollutants (i.e., primary standards designed to safeguard the health of people considered to be sensitive receptors, and outdoor and secondary standards designed to safeguard human welfare) are considered significant impacts. Additionally, actions that violate State standards developed by the CARB or criteria developed by the AVAQMD, including thresholds for criteria pollutants, are considered significant impacts. The significance of localized project impacts depends on whether the ambient CO levels in the vicinity of the project are above or below the State and Federal CO standards.

The Southeast Desert Modified Air Quality Maintenance Area (AQMA) (as defined in 40 Code of Federal Regulations [CFR] 81.167) has been designated nonattainment for the NAAQS for ozone by USEPA.

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14 CARB, Final Regulation Order: Amendments to the Airborne Toxic Control Measure For Stationary Compression Ignition Engines, May 19, 2011, <https://www.arb.ca.gov/diesel/documents/FinalReg2011.pdf>.

15 CARB, Final Regulation Order: Regulation for In-Use Off-Road Diesel-Fueled Fleets, <https://www.arb.ca.gov/msprog/ordiesel/documents/finalregorder-dec2011.pdf>.

16 CEQA & Federal Conformity Guidelines, August 2016 <https://avaqmd.ca.gov/files/e5b34d385/AV%20CEQA%20Guides%202016.pdf>, accessed June 2020.

AVAQMD has experienced ambient ozone concentrations in excess of the one-hour ozone NAAQS and the ozone CAAQS. The AVAQMD 2004 Ozone attainment Plan: 1) demonstrates that the AVAQMD will meet required federal ozone planning milestones, attainment of the ozone by 2007, 2) presents the progress the AVAQMD will make towards meeting all required state ozone planning milestones, including attainment of the ozone CAAQS; and 3) discusses the 8 hour ozone NAAQS, in preparation of an expected non-attainment designation for the new NAAQS.

### **Southern California Association of Governments (SCAG)**

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and State air quality requirements, including the Transportation Conformity Rule and other applicable federal, State, and air district laws and regulations. As the federally designated Metropolitan Planning Organization (MPO) for the six-county Southern California region, SCAG is required by law to ensure that transportation activities “conform” to, and are supportive of, the goals of regional and State air quality plans to attain the NAAQS. With regard to future growth, SCAG’s RTP provides population, housing, and employment projections for cities under its jurisdiction.

#### **d. Local**

##### **City of Lancaster General Plan**

The City of Lancaster General Plan, Plan for the Natural Environment focuses on actions which will be undertaken by the City to protect natural resources including local air quality. However, due to the regional nature of air resource management and the broad list of actions required to properly manage air quality, many of the actions require cooperation with other agencies. As a result, the program’s effectiveness depends on the effectiveness, timeliness, and coordination of actions taken by the City and by other local and regional agencies. More specifically, the Air Quality program focuses to minimize vehicular travel through efficient land uses, energy conservation programs, reduction in air pollution emissions to protect sensitive receptors, reduction of fugitive dust from construction activities, and increasing public awareness of air quality issues.

The City has prepared a series of objectives, policies, and specific actions related to air quality as part of the City of Lancaster General Plan 2030 which was adopted in 2009.<sup>17</sup> The objectives rely on cooperation

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<sup>17</sup> City of Lancaster, *General Plan 2030*, adopted July 14, 2009.



with the AVAQMD regarding rules and regulations. The air resources objectives, policies, and specific actions applicable to the Proposed Project are listed below.

Objective 3.1	Preserve acceptable air quality by striving to attain and maintain national, state and local air quality standards.
Policy 3.3.1	Minimize the amount of vehicular miles traveled.
Policy 3.3.2	Facilitate the development and use of public transportation and travel modes such as bicycle riding and walking.
Policy 3.3.3	Minimize air pollutant emissions generated by new and existing development.
Specific Action 3.3.3(a)	Through the environmental review process, evaluate proposed land uses which could contribute significantly to air quality degradation (heavy manufacturing, e.g.), and require mitigation measures to reduce their emissions.
Policy 3.3.4	Protect sensitive uses such as homes, schools, and medical facilities, from the impact of air pollution.
Specific Action 3.3.4(a)	Through the development review process, ensure that the potential stationary air pollution sources that conflict with residential areas and other sensitive receptors are mitigated.
Policy 3.3.5	Cooperate with the AVAQMD and other agencies to protect air quality in the Antelope Valley.
Specific Action 3.3.5(d)	Consult with the AVAQMD in reviewing the air quality analysis in environmental impact reports, developing ordinances, and obtaining smog episode information.

The Ozone Attainment Plan assigns local governments responsibilities to assist the AVAQMD in meeting air quality goals and policies. In general, a first step toward implementation of a local government's responsibility is accomplished by identifying air quality goals, policies, and implementation measures in its General Plan. Through capital improvement programs, local governments can fund infrastructure that contributes to improved air quality, by requiring such improvements as bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review

process, local governments assess air quality impacts, require mitigation of potential air quality impacts by conditioning discretionary permits, and monitor and enforce implementation of such mitigation.

The General Plan policies 3.6.1, 10.2.3, 10.2.4, 14.4.3, 19.2.2, and 19.2.5 require the development of bikeways and pedestrian paths and encourage balanced development that reduces vehicle miles travelled by providing jobs in the “housing rich” area. The General Plan policies 3.6.1 through 3.6.6 also require that State Energy Efficiency Standards (Title 24) be implemented and enforced and encourage the use of passive design concepts to increase energy efficiency.

### **City of Lancaster Zero Net Energy Ordinance**

The City adopted the Zero Net Energy (ZNE) Home Ordinance in February 2017. The ZNE Ordinance mandates all builders to install a solar system equal to two watts per square foot for each home built. Developers would have three options available to comply with the City’s ZNE requirement: a solar component, mitigation fees in lieu of a solar component, or a combination of both.<sup>18</sup> This ordinance became obsolete with the implementation of the 2019 Building Code on January 1, 2020 which requires all single-family residences to be ZNE.

The City also requires that all new dwelling units install Energy Star rated appliances and the most energy-efficient water heaters and air conditioning systems that meet current State Building Code requirements. The City shall also require all new buildings and major renovations to use energy efficient lighting (indoor and outdoor) that meet current State Building Code requirements.

## **5.2.2 ENVIRONMENTAL IMPACTS**

### **5.2.2.1 Thresholds of Significance**

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with air quality. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant air quality impact if it would:

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18 California Energy Commission, *New Solar Homes Partnership Draft Guidebook*, March 2017.

<b>Threshold AQ-1</b>	<b>Conflict with or obstruct implementation of the applicable air quality plan.</b>
<b>Threshold AQ-2</b>	<b>Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.</b>
<b>Threshold AQ-3</b>	<b>Expose sensitive receptors to substantial pollutant concentrations.</b>
<b>Threshold AQ-4</b>	<b>Result in other emissions (such as those leading to odors adversely affecting a substantial number of people.</b>

The AVAQMD's *CEQA and Federal Conformity Guidelines* identifies several methods to determine the project-level impacts, cumulative significance of land use projects, conformity impacts, and impacts on sensitive receptors. Based on the AVAQMD's pollutant emissions thresholds, the Proposed Project would have a potentially significant impact if it exceeds local significance thresholds for construction or operational emissions (both direct and indirect emissions). These thresholds are outlined in Table 5.2-4, AVAQMD Significance Thresholds. Additionally, the AVAQMD identifies a significance threshold for sensitive receptors, specifically if any project, "Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1."

**Table 5.2-4**  
**AVAQMD Significance Thresholds**

<b>Pollutant</b>	<b>Emissions (pounds/day)</b>	<b>Emissions (tons/year)</b>
Nitrogen Oxides (NO <sub>x</sub> )	137	25
Volatile Organic Compounds (VOC)	137	25
Carbon Monoxide (CO)	548	100
Sulfur Oxides (SO <sub>x</sub> )	137	25
Respirable Particulate Matter (PM <sub>10</sub> )	82	15
Fine Particulate Matter (PM <sub>2.5</sub> )	65	12

### 5.2.2.2 Methodology

The air quality analysis includes estimated emissions that would be generated on a short-term basis by construction and on a longer-term basis by operations of the Proposed Project's new facilities. The

analysis of operational emissions addresses each individual sub-area's emissions, as well as the full occupancy and use of the Proposed Project's new facilities. Emission estimates were calculated using the latest available version of CalEEMod. The air quality analysis was conducted in conformance with the AVAQMD's *CEQA and Federal Conformity Guidelines* with associated updates, and City requirements.

### ***Emissions Inventory Modeling***

Criteria air pollutants with potential regional impacts would be generated by vehicle trips associated with the Proposed Project and by stationary sources on the project site, such as emissions from air conditioning, heating, and ventilation energy consumption and fugitive dust. The concentrations of CO (CO hot spots) near intersections and roadway segments in the project site vicinity were evaluated based on the traffic volumes of each proposed sub-area.

The breakdown of proposed development assumed for each sub-area is provided in Table 3.0-1. Construction and operation related emissions were modeled using the CARB-approved CalEEMod computer program as recommended by AVAQMD.

Construction activities produce combustion emissions from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the construction crew. Grading activities produce fugitive dust emissions (PM<sub>10</sub> and PM<sub>2.5</sub>) from soil-disturbing activities. Exhaust emissions from construction activities on site would vary daily as construction activity levels change. Short-term emissions of criteria air pollutants (e.g., CO, SO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>) generated by Proposed Project construction and ozone precursors (e.g., VOCs and NO<sub>x</sub>) were assessed in accordance with AVAQMD-recommended methods. CalEEMod is designed to model construction emissions for land use development projects and allows for the input of project-specific information. The program contains default settings specific to the air district, county, air basin, or State level using approved vehicle emissions factors, established methodologies, and the latest survey data. The final source of emissions generated by construction activities is the vehicle commutes of the construction workers to and from the project site, as well as vendor and haul trips. The emissions associated with these activities were determined using CalEEMod defaults.

Compliance with fugitive dust rules is mandatory for all construction projects within AVAQMD jurisdiction. Based on the CalEEMod model, the emission calculations take into account compliance with Rule 403 by incorporating the watering of exposed surfaces and unpaved roads three times daily, reducing speed on unpaved roads to less than 15 mph, and sweeping loose dirt from paved site access roadways. These measures are estimated to reduce fugitive dust emissions (both PM<sub>10</sub> and PM<sub>2.5</sub>) by a maximum of 61 percent and 44 percent, respectively, per guidance from AVAQMD. Rule 403 contains other best available control measures to minimize fugitive dust emissions, but the model is not able to account for reductions.

The air quality model also incorporated use of Tier 3 engines for off-road vehicles during construction activities, as required by CARB regulations.

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities of the project site. Source emissions would be generated by the consumption of natural gas and landscape maintenance. Mobile emissions would be generated by the motor vehicles traveling to and from the project site.

Project-generated, regional area and mobile-source emissions of criteria air pollutants and ozone precursors were also modeled using the CalEEMod computer program. CalEEMod allows land use selections that include project location specifics and trip generation rates. CalEEMod accounts for area-source emissions from the use of natural gas, landscape maintenance equipment, and consumer products and from mobile-source emissions associated with vehicle trip generation.

## **Area Source Emissions**

### ***Architectural Coatings***

Routine maintenance is required to prevent deterioration due to normal wear and tear of structures. This maintenance usually requires the application or use of architectural coatings, such as paints, primers, solvents, and other surface coatings. Most of these other architectural coatings emit evaporative VOC emissions when they are applied or used. CalEEMod assumes a certain percentage of the square footage of these structures are coated per year, at a default rate of 10 percent, with all structures maintained. It was assumed that any paints used would meet the current AVAQMD Rule 1113, Architectural Coatings, VOC limit of 50 grams per liter (g/L) for flats, 100 g/L for non-flat, and those used for traffic coating would meet the 100 g/L VOC limit.

### ***Consumer Products***

Consumer products include a wide variety of items such as household cleaning products, aerosols, personal cosmetics and hairsprays. Many of these products contain VOCs which are emitted during use. CalEEMod uses a default emission factory based on a 2008 emissions inventory. It is important to note, CARB approved the *Regulation for Reducing Emissions from Consumer Products*<sup>19</sup> in 2019, with many products seeing a reduction in allowable VOCs.

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19 CARB, *Consumer Products Regulations*, 2019, accessed June 2020, <https://ww2.arb.ca.gov/our-work/programs/consumer-products-program/current-regulations>.

### ***Landscape Maintenance***

Landscape maintenance includes fuel combustion equipment such as lawn mowers, shredders/grinders, trimmers, and hedge trimmers. The emissions are associated with both the commercial and residential landscape, and were estimated using default emission factors in CalEEMod. It should be noted that on April 23, 2019 the City approved Ordinance 1063 which prohibits landscape maintenance businesses from using gasoline powered landscape equipment within in the City effective April 1, 2024.

### ***Hearths***

The emissions from hearths are associated with wood stoves and fireplaces. The Proposed Project would not have any wood stoves. However, it was assumed natural gas fireplaces would be included in future development of the residential uses.

### **Energy Source Emissions**

Combustion emissions from energy sources are based on the two largest utilities, electricity and natural gas consumption. These emissions are associated with the Proposed Project and were calculated by CalEEMod using default energy intensity rates.

### **Mobile Source Emissions**

#### ***Vehicle Trips***

The operational emissions from mobile sources in CalEEMod are based on daily residential vehicle trips to work, shopping, or other locations and vehicle trips associated with the commercial portions of the project from customers, workers, and non-workers. The trip rates for the proposed land-use types were utilized from the Transportation Impact Analysis (refer to Appendix K).

#### ***Fleet Mix***

The fleet mix within CalEEMod provides the fraction of vehicle types that would be associated with the vehicle miles traveled in each of the trip scenarios. This would include residents use of light duty automobiles (LDA) such as compact cars and sedans, to medium duty vehicles (MDV), such as large work pick-up trucks. Also captured are other smaller fractions of travel methods like urban buses (UB) and motorcycles (MCY). Similarly, these fractions are also applied to travel trips associated with the commercial land use subtypes with those having a more diverse fleet mix due to deliveries of goods and services. The default fleet mix rate is applied to all land use subtypes.

### 5.2.2.3 Project Impacts

#### Threshold AQ-1 Conflict with or obstruct implementation of the applicable air quality plan?

A potentially significant impact to air quality would occur if the Proposed Project would conflict with or obstruct implementation of the applicable Air Quality Plan. Therefore, it is necessary to assess the Proposed Project's consistency with the 2008 Attainment Plan as well as the General Plan 2030 and growth forecasts. The purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus, if it would interfere with the region's ability to comply with Federal and State air quality standards. Consistency with plans means that a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the Federal and State air quality standards.

According to AVAQMD CEQA and Federal Conformity Guidelines a project is consistent with applicable air quality plans if it complies with all applicable AVAQMD rules and regulations, complies with all proposed control measures that are adopted from applicable plans, and is consistent with the growth forecasts in the applicable plan(s). Conformity with growth forecasts can be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast.

Although the Proposed Project requires a general plan amendment and zone change, the potential growth from implementation of the Proposed Project would not affect SCAG's nor the 2008 Attainment Plan's buildout projections for the City. As discussed in Section 5.12: Population and Housing, the Proposed Project would result in an estimated 5,120 direct residents and 6,477 indirect residents for a conservative new population of 11,597 residents. The Department of Finance (DOF) estimates the 2019 population for the City to be 161,604 residents. According to the SCAG estimates, the 2040 population within the City is expected to be 209,900 residents. This level of population growth represents approximately 8.3 percent of the General Plan's forecasted growth in new residents by 2030; or approximately 11.8 percent of the forecasted growth between 2017 and 2030. Therefore, the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan.

#### **Construction**

Individual projects proposed under the Master Plan would be required to comply with AVAQMD Rule 403 which requires the minimization and control of fugitive dust emissions resulting from the various stages of construction for projects that include the following:<sup>20</sup>

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20 Antelope Valley Air Quality Management District, *Dust Control Plan Clearance Checklist/Questionnaire (AVAQMD Rule 403)*, accessed June 2020, <https://avaqmd.ca.gov/files/b1831c8c8/Dust+Control+Plan+Checklist+Form.pdf>.

- On-site mechanical activities in preparation of or related to the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to: grading, excavation, loading, crushing, cutting, mowing, planning, shaping or ground breaking, that is five (5) acres or greater; or
- The site be used for: mining operations, commercial solar facilities, concrete crushing, pavement recycling and landfill operations and/or continuing operations with Disturbed Surface Area of five (5) acres or more.

Further, AVAQMD Rule 403(D) indicates that a dust control plan is required for ten acres or more of disturbed surface area for residential developments, or five acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. Each individual project proposed pursuant to the proposed Master Plan that meets the AVAQMD Rule 403 definition would be required to prepare a Dust Control Plan (DCP) pursuant to AVAQMD rules. Compliance with AVAQMD Rule 403 would require the DCP to detail all fugitive dust control measures (including suppressants, if required) to be utilized at all disturbed areas for each project proposed within the project site. In addition, the AVAQMD rules and federal air quality regulations require the construction equipment utilized meet US EPA Tier 3 non-road compression-ignition engine standards or better.

The primary source of NO<sub>x</sub>, CO, and SO<sub>x</sub> emissions is from construction equipment exhaust and on-road haul truck trips while the majority of particulate matter emissions would occur as a result of fugitive dust emissions generated during grading and excavation activities. Primary sources of PM<sub>10</sub> and PM<sub>2.5</sub> emissions would be clearing activities, demolition, excavation and grading operations, construction vehicle traffic on unpaved ground, and wind blowing over exposed earth surfaces. The estimated maximum daily and yearly emissions for construction of the proposed Master Plan are provided in Table 5.2-5: Project Construction Emissions. These estimates are based on the anticipated location, size, and development permitted pursuant to the proposed Master Plan. The analysis assumes that all of the construction equipment and activities would occur continuously over the day and that activities would overlap. In reality, this would not occur, as most equipment operates only a fraction of each workday and many of the activities would not overlap on a daily basis. Therefore, this analysis of construction emissions is considered conservative. As shown in Table 5.2-5, construction emissions for the Proposed Project would not exceed the applicable AVAQMD significance threshold. Impacts would be less than significant.



**Table 5.2-5  
Project Construction Emissions**

Source	Pollutant (pounds/day)						Pollutant (tons/year)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Regulatory Compliance Maximum	108	109	163	<1	27	8	14	14	20	<1	4	1
AVAQMD Threshold	137	137	548	137	82	65	25	25	100	25	15	12
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Refer to Appendix B.2 Proposed Buildout (Summer) and Appendix B.3 Proposed Buildout (Winter) for the Air Quality Model Outputs. Refer to Appendix F Proposed Buildout (Annual) for the GHG Model Outputs.

Abbreviations: CO = carbon monoxide; NO<sub>x</sub> = nitrogen oxide; PM<sub>10</sub> = particulate matter less than 10 microns; PM<sub>2.5</sub> = particulate matter less than 2.5 microns; VOC = volatile organic compound; AVAQMD = Antelope Valley Air Quality Management District; SO<sub>x</sub> = sulfur oxide.

### **Valley Fever**

Nearby people, as well as workers at the project site, could be exposed to Valley Fever from fugitive dust generated during construction. There is the potential that cocci spores would be stirred up during excavation, grading, and earth-moving activities, exposing construction workers and nearby people to these spores and thereby to the potential of contracting Valley Fever.

Construction fugitive dust emissions would be controlled by an AVAQMD approved DCP for certain sized projects, and the likelihood of project caused Valley Fever infection is considered low. However, it cannot be ruled out during the higher dust emitting activities that occur during project construction, either for area residents or for project construction workers. Therefore, implementation of Mitigation Measure MM AQ-1 would provide personal protective respiratory equipment to construction workers and provide information to all construction personnel and visitors about Valley Fever and the risk of exposure to Valley Fever. Accordingly, impacts would be less than significant with mitigation.

### **Operational**

As discussed above in the Methodology subsection, CalEEMod was used to calculate regional mobile source emissions, on-road fugitive dust, architectural coatings, landscape equipment, and energy use (electricity and natural gas consumption). AVAQMD Rule 1113 would limit the VOC content of architectural coatings. Thus, compliance with this AVAQMD rule is incorporated into the analysis provided below. Further, although not reflected in the modeling, the boilers and emergency generators associated with the existing hospital are regulated under AVAQMD Rule 1146 and Rule 1146.1 and are currently permitted. Similar to existing conditions, the relocated hospital would include the construction of a new

12,000 sf plant facility which would include new boilers and emergency generators to power the hospital. In accordance with AVAQMD Rule 1146 and 1146.1, the new boilers and emergency generators would be required to meet AVAQMD standards and new permits would be needed.

The estimated operational emissions based on overall development of the Proposed Project are presented in Table 5.2-6: Proposed Project Buildout Operational Emissions and are compared to the AVAQMD established operational significance thresholds. As indicated in Table 5.2-6, air quality impacts at Proposed Project buildout would exceed the daily significance thresholds for VOC, NO<sub>x</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub> and the annual significance threshold for VOC, NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>.

Internal combustion associated with motor vehicle usage is the major source of the hydrocarbons. Emissions of VOCs are a precursor for the formation of O<sub>3</sub>. Project NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> exceedances are largely associated with the number of vehicle trips expected to be generated at Project buildout. Approximately 88 percent of Project-related NO<sub>x</sub> emissions, 69 percent of CO emissions, 98 percent of PM<sub>10</sub> emissions and 94 percent of PM<sub>2.5</sub> emissions are due to motor vehicle trips. Because Project-related NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions are directly linked to motor vehicle trip generation rates associated with the proposed land uses, there are no feasible ways to mitigate emissions without changing project land uses, or project density.

The number of vehicle trips could be reduced, to some extent, by the use of alternative modes of transportation by those accessing the project site. However, the elective use of alternative modes of transportation by Project patrons cannot be accurately quantified and applied as a mitigation measure.

Reduction from compliance with local and state standards are not reasonably quantifiable in the CalEEMod model and would provide additional emissions reductions that are not accounted for. The Proposed Project would be designed in accordance with applicable residential and non-residential sections of the CALGreen Building Code and Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings. These standards are updated, nominally every three years to incorporate improved energy efficiency technologies and methods. The current 2019 standards were effective January 1, 2020. Furthermore, components of the proposed Master Plan would emphasize the use of solar energy including solar panels by installing the most feasible number of solar energy arrays on the building roof or install EV charging stations at each residential and non-residential building. The location of the project site in relation to the Metrolink train station, which is approximately 1 mile to the northeast, could indirectly reduce the vehicle miles traveled (VMT) associated with the Proposed Project uses which would also incrementally reduce NO<sub>x</sub> and PM<sub>10</sub> mobile emissions.

Mitigation Measures MM AQ-2 through MM AQ-7 provide a number of strategies to reduce operational air emissions to the greatest extent possible, including but not limited to the provision of electric charging stations, the limitation of idling delivery vehicle times, light-colored paving and roofing materials, alternatively fueled sweepers, lawn maintenance, low VOC cleaning products and employee rideshare programs. However, operational impacts will continue to exceed emissions, and impacts would be significant and unavoidable.

**Table 5.2-6  
Proposed Project Buildout Operational Emissions**

Source	Pollutant (pounds/day)						Pollutant (tons/year)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area	123	2	166	<1	1	1	22	1	15	<1	<1	<1
Energy	4	35	26	<1	3	3	1	6	5	<1	1	1
Mobile	51	356	475	3	248	67	7	54	67	<1	37	10
TOTAL	178	393	665	3	252	71	29	61	87	<1	38	12
AVAQMD threshold	137	137	548	137	82	65	25	25	100	25	15	12
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes

Source: Refer to Appendix B.2 Proposed Buildout (Summer) and Appendix B.3 Proposed Buildout (Winter) for the Air Quality Model Outputs. Refer to Appendix F Proposed Buildout (Annual) for the GHG Model Outputs.

Note: Stationary emission sources would be less than 0.03 tons per year, and less than 1 pound per day, for any pollutant.

### **Air Quality and Impacts to Human Health**

At the State level, CARB is primarily responsible for reducing emissions from motor vehicles and consumer products. AVAQMD has authority over most area sources and all point sources. The AVAQMD has developed list and implementation schedule for measures to reduce particulate matter pursuant to Health & Safety Code Section 39614(d).<sup>21</sup> NO<sub>x</sub> and VOC are important precursors to ozone formation, and SO<sub>x</sub> along with directly emitted PM<sub>10</sub>, contribute to the region's PM<sub>10</sub> nonattainment challenges. This illustrates that actions at the local, State, and federal level are needed to ensure the region attains the federal ambient air quality standards.

As shown in Table 5.2-6, the project will exceed daily VOC, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions and annual VOC, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. As it relates to health impacts, short-term exposure to mobile related emissions can result in airway constriction and diminished lung capacity and is highly toxic by

21 AVAQMD, *List and Implementation Schedule for District Measures to Reduce PM Pursuant to Health & Safety Code Section 39614(d)*, August 2005, accessed November 2020, <https://avaqmd.ca.gov/files/4a77d7781/AVPMMeasuresListfnl.pdf>.

inhalation. Populations living near roadways are more likely to experience the effects of nitrogen oxides due to elevated exposure to motor vehicle exhaust. Because the project's operational exceedances are mainly due to motor vehicle travel, and motor vehicle travel increases with population growth, it can be assumed that individuals in the region are already exposed to increasing levels of VOC, NO<sub>x</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub> emissions as shown in Table 5.2-3 and that the project will contribute to existing conditions. Additionally, project emissions assume full capacity traffic conditions. In reality, the proposed Master Plan will not reach capacity most days, especially in the winter months due to the reduced amount of trips.

Since AVAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by criteria pollutant emissions, then a general description of the adverse health impacts resulting from the pollutants at issue is all that can be provided at this time. Therefore, consistent with the California Supreme Court's Friant Ranch decision, the above information provides details regarding the potential health effects from the Proposed Project's significant and unavoidable criteria pollutant emissions. Due to these limitations, the extent to which the project poses a health risk is uncertain but unavoidable.

## **Mitigation Measures**

### ***Construction***

The following mitigation measures would be implemented to reduce potentially significant air quality and Valley Fever impacts during construction.

- MM AQ-1** Prior to ground disturbance activities, the project operator shall provide evidence to the Development Services Director that the project operator and/or construction manager has developed a "Valley Fever Training Handout", along with training and a schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, handout(s), and schedule shall be submitted to the Development Services Director within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Development Services Director regarding the "Valley Fever Training Handout" and Session(s) shall include the following:
- a. A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session.

- b. Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever.
- c. Training on methods that may help prevent Valley Fever infection.
- d. A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Where respirators are required, the equipment shall be readily available, and shall be provided to employees for use during work. Proof that the demonstration is included in the training shall be submitted to the County. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs.

The project operator also shall consult with the Los Angeles County Public Health to develop a Valley Fever Dust Management Plan that addresses the potential presence of the *Coccidioides* spore and mitigates for the potential for *Coccidioidomycosis* (Valley Fever). Prior to issuance of permits, the project operator shall submit the Plan to the Los Angeles County Public Health for review and approval. The Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities, and to identify appropriate safety procedures that shall be implemented, as needed, to minimize personnel and public exposure to potential *Coccidioides* spores. Measures in the Plan shall include the following:

- a. Provide HEP-filters for heavy equipment equipped with factory enclosed cabs capable of accepting the filters. Cause contractors utilizing applicable heavy equipment to furnish proof of worker training on proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment.
- b. Provide communication methods, such as two-way radios, for use in enclosed cabs.
- c. Require National Institute for Occupational Safety and Health (NIOSH)-approved half- face respirators equipped with minimum N-95 protection factor for use during worker collocation with surface disturbance activities, as required per the hazard assessment process.
- d. Cause employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144).

- e. Provide separate, clean eating areas with hand-washing facilities.
- f. Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off-site.
- g. Train workers to recognize the symptoms of Valley Fever, and to promptly report suspected symptoms of work-related Valley Fever to a supervisor.
- h. Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever.
- i. Work with a medical professional, in consultation with the Los Angeles County Public Health, to develop an educational handout for on-site workers and surrounding residents within three miles of the project site, and include the following information on Valley Fever: what are the potential sources/ causes, what are the common symptoms, what are the options or remedies available should someone be experiencing these symptoms, and where testing for exposure is available. Prior to construction permit issuance, this handout shall have been created by the project operator and reviewed by the project operator and reviewed by the Development Services Director. No less than 30 days prior to any work commencing, this handout shall be mailed to all existing residences within a specified radius of the project boundaries as determined by the Development Services Director. The radius shall not exceed three miles and is dependent upon the location of the project site.
- j. When possible, position workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks.
- k. Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with handwashing facilities.
- l. Post warnings on-site and consider limiting access to visitors, especially those without adequate training and respiratory protection.
- m. Audit and enforce compliance with relevant Cal OSHA health and safety standards on the job site.

### **Operation**

The following mitigation measures would be implemented to reduce potentially significant operational air quality impacts.

#### **MM AQ-2 Electric Vehicle Charging Stations**

Require that the requisite number of electric vehicle (EV) charging stations be provided based on the total number of parking spaces required for a given use, including one EV charging station for 1–50 parking spaces, two for 51-200 parking spaces, and four for 201 parking spaces and over.

#### **MM AQ-3 Delivery Vehicle Idling Time**

Delivery vehicle idling time shall be limited to no more than five minutes. For any delivery that is expected to take longer than five minutes, the vehicle’s operator shall be required to shut off the engine. The project component shall notify vendors of these idling requirements at the time the delivery purchase order is issued and again when vehicles enter the facility. Signs shall be posted at entry to the facility’s delivery area stating that idling longer than five minutes is not permitted.

#### **MM AQ-4 Paving and Roofing Materials**

Light-colors paving and roofing materials shall be utilized on site, to the greatest extent practical.

#### **MM AQ-5 Lawn Maintenance**

Electric lawn mowers and leaf blowers shall be used on site to the greatest extent practical until the citywide ordinance, which requires all landscape contractors to use electric landscape maintenance equipment, goes into effect in 2024.

#### **MM AQ-6 Cleaning Products**

Builders shall, to the maximum extent feasible, use flooring and insulation products that are low-emitting in terms of volatile organic compounds (VOCs) and formaldehyde. Low- and zero-VOC paints, finishes, adhesives, caulks, and other substances are also recommended to improve indoor air quality and reduce the harmful health effects of off-gassing.

**MM AQ-7 Employee Rideshare**

Require that large employers (250 or more employees at a single work-site location) provide a transportation demand management program, such as vanpools/carpools, ride-sharing/ride-matching, and/or “guaranteed ride home” services that allow employees who use public transit to get a free ride home if they need to stay at work late.

Provide incentives for employees working at the proposed commercial and retail uses to encourage the use of public transportation or carpooling, such as discounted transit passes or carpool rebates.

Implement a rideshare program for employees working at the proposed commercial and retail uses and set a goal to achieve a certain participation rate over a period of time.

**Level of Significance**

With implementation of MM AQ-1, construction impacts would be less than significant.

Operational emissions associated with buildout of the Master Plan would exceed daily significance threshold for VOC, NO<sub>x</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub> and the annual significance threshold for VOC, NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>. Although implementation of Mitigation Measure MM AQ-2 through MM AQ-7 would provide a number of strategies to reduce operational air emissions to the greatest extent possible, reduction of emissions from these measures are not reasonably quantifiable. These measures include, but are not limited to, the provision of electric charging stations, the limitation of idling delivery vehicle times, light-colored paving and roofing materials, alternatively fueled sweepers, lawn maintenance, low VOC cleaning products and employee rideshare programs. However, operational impacts will continue to exceed emissions, and impacts will be significant and unavoidable.

**Threshold AQ-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.**

If an individual project results in air emissions of criteria pollutants that exceed AVAQMD’s recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. By applying AVAQMD’s cumulative air quality impact methodology, implementation of the proposed Master Plan would result in an exceedance in operational thresholds for daily emissions of VOC, NO<sub>x</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub> and the annual emissions of VOC, NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>. Emissions would contribute to existing violations of the criteria pollutants in exceedance and are considered significant for this reason.



## Mitigation Measures

Refer to previous discussion for Mitigation Measures MM AQ-2 through MM AQ-7.

## Level of Significance

With implementation of MM AQ-1, construction impacts would be less than significant.

Even with implementation of MM AQ-2 through MM AQ-7, operational impacts would remain significant and unavoidable.

### **Threshold AQ-3      Expose sensitive receptors to substantial pollutant concentrations.**

The AVAQMD has standards that are specific for sensitive receptors. Residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. As described and listed above, specific project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated.

The land uses proposed under the Master Plan do not include a distribution center. A potential dry cleaning use could be permitted within the project site. In accordance with AVAQMD guidance, a dry cleaner using perchloroethylene (PCE) proposed within 500 feet of a sensitive receptor would potentially expose sensitive receptors to substantial pollutant concentrations. Therefore, a use which meets the above criteria would result in a potentially significant impact. Individual projects proposed under the Master Plan that meet the criteria would be required to comply with AVAQMD Rules 201 and 203, which require that any facility with the potential to emit substantial amounts of air pollutants must receive permits to construct and operate the facility. Furthermore, implementation of MM AQ-8 would require documentation to first determine if the proposed dry cleaner using PCE is within 500 feet of the sensitive use. If the use is outside of 500 feet, then potentially significant impacts would be less than significant with written documentation as identified in MM AQ-8. If the proposed dry cleaner using PCE is within 500 feet of a sensitive receptor, then detailed comprehensive analysis shall be prepared to determine if the use results in a cancer risk greater than or equal to 10 in a million and/or a HI (non-cancerous) greater than or equal to 1. With implementation of MM AQ-8, impacts would be less than significant with mitigation. Additionally, the permitting process thereby ensures that facilities would not emit criteria pollutants that would result in a significant impact.

Reduction from compliance with local and State standards are not reasonably quantifiable in the CalEEMod model and would provide additional emissions reductions that are not accounted for. As mentioned previously, the Proposed Project would be required to comply with the applicable building

requirements including the CALGreen Building Code. With implementation of MM AQ-8, the Proposed Project's potential impacts on sensitive receptors would be less than significant.

### ***Carbon Monoxide Hotspots***

Motor vehicles are a primary source of pollutants within the project vicinity. Traffic-congested roadways and intersections have the potential to generate high levels of localized CO. Localized areas where ambient concentrations exceed State and/or federal standards are termed CO "hotspots." Such hot spots are defined as locations where the ambient CO concentrations exceed the State or federal ambient air quality standards. CO is produced in greatest quantities from vehicle combustion and is usually concentrated at or near ground level because it does not readily disperse into the atmosphere. As a result, potential air quality impacts to sensitive receptors are assessed through an analysis of localized CO concentrations. Areas of vehicle congestion have the potential to create CO hotspots that exceed the State ambient air quality 1-hour standard of 20 ppm or the 8-hour standard of 9 ppm. The federal levels are less stringent than the State standards. Thus, an exceedance condition would occur based on the State standards prior to exceedance of the federal standard.

A CO hotspot is an area of localized CO pollution caused by severe vehicle congestion on major roadways, typically near intersections. If a project increases average daily traffic at signalized intersections operating at Level of Service (LOS) E or F or causes an intersection that would operate at LOS D or better without the project to operate at LOS E or F with the project, further screening is required. As discussed in Section 5.15: Transportation, in the early stages of the implementation of the proposed Master Plan development, the study intersections are not expected to experience any operational or safety impacts. Over time as individual projects within the Master Plan are proposed, additional operational and safety analyses shall be conducted to determine the operational performance of the adjacent intersections and identify any improvements due to the traffic generated by individual development projects. Therefore, the Proposed Project would not result in the creation of a CO hotspot and would not expose sensitive receptors to substantial pollutant concentrations associated with a CO hotspot. The Proposed Project's impacts would be less significant.

In the event that the traffic mitigation measures are determined inconsistent with the Proposed Project's objectives and City General Plan policies, the increase in traffic volumes at the analyzed intersections would result in a minimal increase in background CO concentrations which would not result in CO levels higher than the 20 ppm 1-hour standard or the 9.0 ppm 8-hour for CO. As a result, no significant Proposed Project-related impacts would occur relative to future CO concentrations.

## Mitigation Measures

The following mitigation measure would be implemented to reduce potential significant impacts to less than significant.

**MM AQ-8** Prior to approval for an individual project which proposes a dry cleaner using perchloroethylene (PCE), the project applicant shall provide written documentation to the Development Services Department of the distance between the proposed dry cleaner using PCE and any sensitive receptor. A sensitive receptor is defined as a residence, school, daycare center, playground and medical facility. If the proposed dry cleaner is greater than 500 feet from a sensitive receptor, then project approval can proceed. If the proposed dry cleaner using PCE is within 500 feet of a sensitive receptor, then preparation of a Health Risk Assessment (HRA) that provides a detailed comprehensive analysis to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure for human populations including those exposures resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1, and to assess and quantify both the individual and population-wide health risks associated with those levels of exposure during operation of the Proposed Project; and shall provide measures to reduce any potential exceedances. The HRA shall be provided to the Development Services Department and the Antelope Valley Air Quality Management District.

## Level of Significance

Impacts would be less than with significant with MM AQ-8 incorporated.

**Threshold AQ-4**      **Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

## Construction

During the Proposed Project's construction phase, activities associated with the operation of construction equipment, the application of asphalt, the application of architectural coatings and other interior and exterior finishes, and roofing may produce discernible odors typical of most construction sites. AVAQMD Rule 1113 limits the amount of VOCs in architectural coatings and solvents to further reduce the potential for odiferous emissions. Although these odors could be a source of nuisance to adjacent uses, they would be temporary and intermittent in nature. As construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. Accordingly, impacts would be less than significant.

### **Operation**

Land uses associated with the Proposed Project operation are not expected to be a source of persistent odors. Refuse associated with operation of the Proposed Project would be disposed of in accordance with all applicable regulations. Trash receptacles on the project site would be enclosed to minimize the generation of odors. As discussed previously, the project site is immediately bordered by residential communities to the northeast.

Any unforeseen odors generated by the Proposed Project would be controlled in accordance with AVAQMD Rule 402 (Nuisance). Rule 402 prohibits the discharge of air contaminants that cause “injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.” Failure to comply with Rule 402 could subject the offending facility to possible fines and/or operational limitations in an approved odor control or odor abatement plan. No significant impacts from odors are anticipated.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

#### **5.2.2.4 Cumulative Impacts**

The AVAQMD is considered the appropriate cumulative study area for the determination of whether or not the Proposed Project would have a cumulatively considerable impact on the AVAQMD’s ability to implement the *AVAQMD 2008 Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-Attainment Area)*. The Proposed Project is a master-planned health district that would be consistent with the land use and zoning designations applied to the property by the City of Lancaster *General Plan 2030*. The AVAQMD considered buildout of the City’s General Plan when it developed the *2008 Federal 8-Hour Ozone Attainment Plan*. Therefore, the Proposed Project is consistent with the growth forecasts relied upon by the AVAQMD. However, individual projects that exceed AVAQMD-recommended daily thresholds for project-specific impacts would be considered to cause a cumulatively considerable increase in emissions for those pollutants for which the AVAQMD is in nonattainment. As presented above in Table 5.2-6, operation of the Proposed Project would result in an increase of regional VOC, NO<sub>x</sub>, CO, and PM<sub>10</sub>. Contribution of these emission to air quality would be considered cumulatively considerable.

In regards to potential pollutant concentrations associated with CO hotspots generated by vehicular traffic, as discussed in Section 5.15, the Proposed Project would generate a total of 39,858 daily trips not taking into account any internal capture reductions. As discussed previously, in the early stages of the implementation of the proposed Master Plan, the study intersections are not expected to experience any operational or safety impacts. Over time as individual projects within the Master Plan are proposed, additional operational and safety analyses shall be conducted to determine the then operational performance of the adjacent intersections and identify any improvements due to the traffic generated by individual development projects. Thus, the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations associated with a CO hotspot and the Proposed Project's impacts are less than cumulatively considerable. In the event that transportation mitigation measures are not implemented, the Proposed Project's increase in traffic volumes at the analyzed intersections would result in a minimal increase in background CO concentrations which would not result in CO levels higher than the 20 ppm 1-hour standard or the 9.0 ppm 8-hour for CO.

Regarding odors, the smell of architectural coating products is not generally considered objectionable, and because such odors dissipate quickly outdoors, the Proposed Project's contribution of potential odor impacts is less than cumulatively considerable. In the long-term, sources of odor would be limited to potential odors associated with residential, commercial, and institutional refuse storage. Impacts would be less than cumulatively considerable, because these uses would be required to store refuse in covered containers and comply with all regulations regarding refuse storage and collection.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

The daily operational VOC, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions generated by the Proposed Project cannot be feasibly mitigated to a less than significant level and the contribution of these emissions to the air quality within the AVAQMD is also considered to be cumulatively considerable, and thus a significant impact.

## **5.2.3 SUMMARY OF SIGNIFICANCE**

Construction regional criteria pollutant emissions would be less than significant with incorporation of Mitigation Measure MM AQ-1.

Operational emissions associated with buildout of the Master Plan would exceed daily significance threshold for VOC, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> and the annual significance threshold for VOC, NO<sub>x</sub>, PM<sub>10</sub>,

and PM<sub>2.5</sub>. Although implementation of MM AQ-2 through MM AQ-7 would provide a number of strategies to reduce operational air emissions to the greatest extent possible, reduction of emissions from these measures are not reasonably quantifiable. These measures include but not limited to the provision of electric charging stations, the limitation of idling delivery vehicle times, light-colored paving and roofing materials, alternatively fueled sweepers, lawn maintenance, low VOC cleaning products and employee rideshare programs. However, operational impacts will continue to exceed emissions, and impacts will be significant and unavoidable.

Potential impacts to sensitive receptors would be reduced to less than significant impacts with implementation of MM AQ-8.

The daily operational VOC, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions generated by the Proposed Project cannot be feasibly mitigated to a less than significant level and the contribution of these emissions to the air quality within the AVAQMD is also considered to be cumulatively considerable, and thus a significant impact.

## 5.3 BIOLOGICAL RESOURCES

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This section of the Environmental Impact Report (EIR) evaluates the potential for the Proposed Project to affect biological resources that may be present on the project site and within the surrounding area. An analysis of compliance with applicable federal, State, and local laws and policies regarding biological resources has also been conducted. This section incorporates information from the following study of the project site:

- *Habitat and Natural Resources Assessment for the Lancaster Health District, Lancaster, California*, BioResource Consultants, Inc. (BRC), July 28, 2016.

A complete copy of the *Habitat and Natural Resources Assessment* is included as Appendix C: Biological Resources Study of this EIR.

### 5.3.1 ENVIRONMENTAL SETTING

#### 5.3.1.1 Existing Conditions

##### **a. General Plan Study Area**

The City is situated within the Antelope Valley region of the western Mojave Desert, approximately 70 miles north of downtown Los Angeles. The Antelope Valley is an internally drained basin surrounded by the Tehachapi Mountains to the northwest and the San Gabriel Mountains to the southwest. The proximity and aspect of the area to the San Gabriel and Tehachapi mountains combine to create a desert climate. The dry basins, or playas, of Rosamond and Rogers lakes form dominant natural landscape features within the Antelope Valley. Historically, much of the area was cultivated with alfalfa and small grain crops before groundwater withdrawals were restricted in the 1950s due to a reduction in aquifer levels. However, extensive areas of undisturbed saltbush scrub (*Atriplex confertifolia* and *Atriplex polycarpa*) and Joshua tree (*Yucca brevifolia*) woodland habitats occur in areas where high soil salinity/alkalinity renders the land unsuitable for agriculture. Surface flows from the mountainous watersheds to the west and south move overland towards Rosamond Lake (one of three terminal water bodies within Antelope Valley) as sheet flow, or within natural or artificial channels (i.e., desert wash areas).

#### **Botanical Resources**

Primary vegetation communities on the project site include the following communities:

Desert scrub is generally characterized as a shrub dominated community on sandy soils with a minimal understory of herbaceous plants that occurs in areas of markedly low precipitation.

Desert wash includes drainages and channels created by natural runoff from nearby mountains. Most of these washes support a variety of desert scrub plants, such as burro-weed, Parry's saltbush (*Atriplex parryi*), arrowscale (*Atriplex phyllostegia*), rabbitbrush, and burrobrush. The type and extent of plants a channel supports depends on its topography as well as the amount and frequency of runoff. Artificial drainages and washes are also present within the vicinity of developed areas as a result of runoff. As in developed areas, these artificial drainages support a variety of weedy or introduced species such as cheatgrass (*Bromus tectorum*), black mustard, and doveweed.

Desert woodland community, particularly Joshua tree woodland, is described as open woodland with Joshua tree (*Yucca brevifolia*) typically as the only arborescent species (up to 40 feet high) and numerous shrub species. The California Department of Fish and Wildlife (CDFW) considers the Joshua tree woodland as a threatened habitat within California.

The ruderal community includes fallow or vacant agricultural areas which support nonnative grasses such as cheatgrass, barley (*Hordeum* spp.), and fescue (*Vulpia* spp.). Other common weedy species on fallow agricultural lands include Russian thistle, or tumbleweed (*Salsola tragus*), curly dock (*Rumex crispus*), and varieties of mustard (*Brassica* spp.), including black mustard (*B. nigra*). Additionally, portions of developed areas within the City have been planted with nonnative tree species, such as tamarisk (*Tamarix tetandra*).

While a number of factors contribute to the overall composition and distribution of these vegetation communities in the area, water availability is the most limiting factor to plant establishment and growth. For this reason, desert scrub, desert wash, and desert woodland communities contain many of the same drought-tolerant species.

## **Zoological Resources**

Special-status wildlife species include those that are State- or federally-listed as threatened or endangered, have been proposed for listing as threatened or endangered, have been designated as State or federal candidates for listing, are considered State Species of Special Concern, or State-designated as Fully Protected. The California Natural Diversity Database (CNDDB) and several and other sources indicate the potential for special status species to occur within the City.

### **b. Project Site**

The approximately 272.4-acre project site is located within the central portion of the City, with elevations ranging from 2,348 to 2,394 feet above mean sea level (amsl). The project site consists of developed land characterized by a variety of medical facilities, commercial, retail, and residential buildings along with vacant, undeveloped parcels dominated by native and nonnative vegetation. Amargosa Creek traverses the western boundary and bisects the southern portion of the project site. The undeveloped parcels are



disturbed due to alteration from compaction of soil, dumping and excavation, off-road vehicle use, and other man-made disturbances.

### Botanical Resources

The majority of the project site is developed with urban uses interspersed with undeveloped vacant land that includes two vegetation communities: Fourwing Saltbush Scrub and Mediterranean Grass/Russian Thistle Scrub, as shown in Figure 5.3-1: Vegetation Communities Within the Project Site Area. Approximately 22 acres of Fourwing Saltbush Scrub, approximately 80 acres of Mediterranean Grass/Russian Thistle Scrub, approximately 171 acres identified as disturbed/developed, and approximately 15 acres as the Amargosa Creek that traverses the western boundary and bisects the southern portion of the project site were surveyed within the project area, as indicated in Table 5.3-1: Vegetation Communities Within the Project Area.

Fourwing Saltbush Scrub is dominated by fourwing saltbush (*Atriplex canescens*) with rabbitbrush scrub (*Ericameria nauseous*) as co-dominant in the scrub canopy with Russian thistle (*Salsola tragus*) and Mediterranean grass (*Schismus barbatus*). Seasonal herbs and nonnative grasses are interspersed throughout the undeveloped parcels within the project site. The Mediterranean Grass/Russian Thistle Scrub is dominated by Mediterranean grass and Russian thistle, with storksbill (*Erodium cicutarium*).

**Table 5.3-1  
Vegetation Communities Within the Project Site Area**

Vegetation Community	Acres Within Project Site
<i>Atriplex canescens</i> Shrubland Alliance (Fourwing Saltbush Scrub) (FWSS)	22
<i>Schismus barbatus/Salsola tragus</i> (Mediterranean Grass/Russian Thistle Scrub) (MG/RTH)	80
Disturbed/Developed (D)	171
Flood Control Channel	15
<b>Total</b>	<b>288</b>

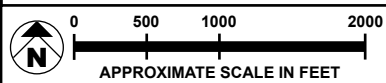
Source: Biological Resources Study in Appendix C of this EIR.

Note: A total of approximately 288 acres were surveyed, including approximately 274 acres comprising the project site and approximately 15 acres within the adjacent flood control channel. Difference in values reflect rounding of acreages.



Service Layer Credits: Source: Esri

- Planning Area
- Plant Communities**
- Developed
- Flood Control Channel
- Fourwing Saltbush Scrub-Atriplex Canascens Shrubland Alliance
- Mediterranean Grass/Russian Thistle



SOURCE: BioResource Consultants Inc. - 2020

FIGURE 5.3-1

A number of special-status plant species are documented to occur within the vicinity of the project area. The *Habitat and Natural Resources Assessment for the Lancaster Health District* prepared for the Proposed Project identified a total of 25 plant species, including 15 native and 10 nonnative species, on the project site as identified in Table 5.3-2: Vegetation Within the Project Area.

**Table 5.3-2  
Vegetation Within the Project Area**

Scientific Name	Common Name	Family	Native/Non-Native
<i>Amaranthus blitoides</i>	prostrate pigweed	Amaranthaceae	Native
<i>Ambrosia psilostachya</i>	western ragweed	Asteraceae	Native
<i>Ambrosia salsola</i>	Russian thistle	Chenopodiaceae	Non-native
<i>Atriplex canescens</i>	Four-winged saltbush	Chenopodiaceae	Native
<i>Atriplex polycarpa</i>	allscale	Chenopodiaceae	Native
<i>Bromus diandrus</i>	ripgrut brome	Poaceae	Non-native
<i>Bromus. rubens</i>	red brome	Poaceae	Non-native,
<i>Chenopodium album</i>	goosefoot	Chenopodiaceae	Non-native
<i>Conyza canadensis</i>	horseweed	Asteraceae	Native
<i>Croton californica</i>	croton	Euphorbiaceae	Native
<i>Datura stramonium</i>	jimson weed	Solanaceae	Native
<i>Distichlis spicata</i>	saltgrass	Poaceae	Native
<i>Ericameria nauseosa</i>	rubber rabbitbrush	Asteraceae	Native
<i>Heliotropum convolvulaceum</i>	phlox heliotrope	Boraginaceae	Native
<i>Helminthotheca echioides</i>	bristly ox-tongue	Asteraceae	Non-native
<i>Hirschfeldia incana</i>	summer mustard	Brassicaceae	Non-native,
<i>Marrubium vulgare</i>	horehound	Lamiaceae	Non-native
<i>Plantago erecta</i>	California plantain	Plantaginaceae	Native
<i>Rumex acetosella</i>	common sheep sorrel	Polygonaceae	Native
<i>Rumex hymenosepalus</i>	dock	Polygonaceae	Native
<i>Schismus barbatus</i>	meditrianian schismus	Poaceae	Non-Native
<i>Stephanomeria runcinata</i>	wire lettuce	Asteraceae	Native
<i>Tamarix sp.</i>	saltcedar	Tamaricaceae	Non-native
<i>Tribulus terrestris</i>	Puncture vine	Zygophyllaceae	Non-native
<i>Yucca brevifolia</i>	Joshua tree	Agavaceae	Native

Source: *Biological Resources Study in Appendix C of this EIR.*

Note: A total of approximately 288 acres were surveyed, including approximately 274 acres comprising the project site and approximately 15 acres within the adjacent flood control channel.

The Joshua tree was designated as a candidate species under the California Endangered Species Act (CESA) by the California Fish and Game Commission in September, 2020. A total of nine Joshua trees are present

on the project site. These Joshua trees were determined to be isolated in their location and do not constitute Joshua tree woodland habitat. No other special-status species were identified on the project site. Additionally, no sensitive or designated critical habitats were found to be present on the project site. Based on the absence of suitable habitat for other special-status plant species within the project area, all of the potential special-status plant species were determined to have a low likelihood to occur. Several ornamental, nonnative trees are also found on the vacant, undeveloped parcels and throughout the project site including, but not limited to *Tamarix* sp. (saltcedar).

### Zoological Resources

Surveys of the project site observed a total of seven wildlife species including Great Basin fence lizard, turkey vulture, rock pigeon, common raven, house finch, California ground squirrel, and Jackrabbit. None of these species are special-status species. However, while no special-status wildlife species were observed, based on the presence of suitable habitat within the project site area and nearby documented occurrences within a 5-mile radius, three special-status wildlife species have a potential to occur on site; the Blainville's horned lizard (*Phrynosoma blainvillii*), Loggerhead shrike (*Lanius ludovicianus*), and the burrowing owl (*Athene cunicularia*). The remaining special-status species have a low likelihood to occur within the project area. The three species that have the potential to occur within the project site are further described below.

**Loggerhead shrike (*Lanius ludovicianus*)**, a California SSC. Loggerhead shrikes have a medium likelihood of occurrence as suitable habitat is present on the project site within the vacant undeveloped parcels. Shrubs at the project site provide nesting habitat for this species and the remainder of the project site provides foraging habitat. Loggerhead shrikes inhabit open country with short vegetation and well-spaced shrubs or low trees, particularly those with spines or thorns. They frequent agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses, and cemeteries. As previously indicated, the species was not observed during project surveys.

**Blainville's horned lizard (*Phrynosoma blainvillii*)**, a California Species of Special Concern (SSC). Blainville's horned lizard has a low likelihood of occurrence, as suitable habitat is present on the project site within the vacant non-developed parcels. The species inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains. Typically found in grasslands, coniferous forests, woodlands, and chaparral with open areas and patches of loose soil, this species could occur throughout the project site. As previously indicated, this species was not observed during project surveys.

**Burrowing owl (*Athene cunicularia*)**, a SSC is a small, terrestrial owl that favors flat, open grassland or gentle slopes and sparse shrubland ecosystems. These owls prefer annual and perennial grasslands, typically with sparse, or nonexistent, tree or shrub canopies. In California, burrowing owls are found in

close association with California ground squirrels, using ground squirrel burrows for shelter and nesting. Ground squirrels also maintain areas of short vegetation height, which provide foraging habitat and allow for visual detection of avian predators by burrowing owls. In the absence of ground squirrel populations, habitats soon become unsuitable for occupancy by owls.

## 5.3.2 REGULATORY SETTING

### 5.3.2.1 Federal

#### *a. Federal Endangered Species Act*

The federal Endangered Species Act (FESA)<sup>1</sup> provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing, as endangered or threatened under the FESA.

The FESA has four major components: provisions for listing species; requirements for consultation with the US Fish and Wildlife Services (USFWS) and the National Marine Fisheries Services (NOAA); prohibitions against “taking” of listed species; and provisions for permits that allow an incidental “take.”<sup>2</sup>

- Section 4(a) requires that critical habitat be designated by the USFWS “to the maximum extent prudent and determinable, at the time a species is determined to be endangered or threatened.” Critical habitat is formally designated by USFWS to provide guidance for planners/managers and biologists with an indication of where suitable habitat may occur and where high priority of preservation for a particular species should be given.
- Section 7, called “Interagency Cooperation,” is the mechanism by which federal agencies ensure that the actions they take, including those they fund or authorize, do not jeopardize the existence of any listed species. Section 7 of the FESA requires federal agencies to consult with the USFWS on proposed federal actions that may affect endangered, threatened, or proposed (for listing) species or critical habitat that may support the species.
- Section 9 prohibits the “take” of endangered species.
- Section 10 provides the regulatory mechanism that allows the incidental take of a listed species by private interests and nonfederal government agencies during lawful activities. Habitat conservation plans (HCPs) for the impacted species must be developed in support of incidental take permits for nonfederal projects to minimize impacts to the species and develop viable mitigation measures to offset the unavoidable impacts.

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1 United States Endangered Species Act of 1973 (FESA), 16 USC sec. 1531 et seq.

2 “Take,” as defined under the ESA, means to “harass, harm, pursue, hunt, wound, kill, trap, capture, collect, or attempt to engage in any such conduct.”

**b. *Migratory Bird Treaty Act***

Enacted in 1918, the Migratory Bird Treaty Act (MBTA)<sup>3</sup> is the domestic law that affirms or implements the United States' commitment to four international conventions with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations.

As with the ESA, the MBTA also authorizes the Secretary of the Interior to issue permits for take. The procedures for securing such permits are found in Title 50 of the Code of Federal Regulations, together with a list of the migratory birds covered by the act. This law is generally protective of migratory birds, but does not specify the type of protection required. The USFWS administers permits to take migratory birds in accordance with the regulations promulgated by the MBTA. In common practice, USFWS places restrictions on disturbances allowed near active raptor nests.

**c. *US Army Corps of Engineers***

Pursuant to Section 404 of the Clean Water Act (CWA), the US Army Corps of Engineers (ACOE) regulates the discharge of dredged and/or fill material into "waters of the United States." The term "wetlands" (a subset of waters) is defined in 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of ACOE jurisdiction in nontidal waters, such as intermittent streams, extend to the "ordinary high-water mark," which is defined in 33 CFR 328.3(e).

Section 320.4(b)(2) of the ACOE General Regulatory Policies (33 CFR 320–330) list criteria for consideration when evaluating wetland functions and values. These include wildlife habitat (spawning, nesting, rearing, and resting), food chain productivity, water quality, groundwater recharge, and areas for the protection from storm and floodwaters.

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3 US Migratory Bird Treaty Act (MBTA), 16 United States Code 703 et seq.

### 5.3.2.2 State

#### **a. California Endangered Species Act (CESA)**

In addition to federal laws, the State of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in “take” of individuals (defined in CESA as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) are regulated by CDFW. Habitat degradation or modification is not included in the definition of “take” under CESA. Nonetheless, CDFW has interpreted “take” to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State-threatened and endangered species are fully protected against take, as defined previously.

The CDFW has also produced a species of special concern (SSC) list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection.

#### **b. California Fish and Game Code (CFGC)**

According to Sections 3511 and 4700 of the CFGC, which regulate birds and mammals, respectively, a “fully protected” species may not be taken or possessed without a permit from the Fish and Game Commission, and “incidental takes” of these species are not authorized.

According to Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. Finally, Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory

nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

For the purposes of these State regulations, CDFW currently defines an active nest as one that is under construction or in use and includes existing nests that are being modified. For example, if a hawk is adding to or maintaining an existing stick nest in a transmission tower, then it would be considered to be active and covered under these CFGC sections.

### **Section 1600 et. Seq.: Lake and Streambed Alteration Program**

The Lake and Streambed Alteration Program requires that a project proponent notify the CDFW of any proposed alteration of streambeds, rivers, and lakes. The intent of the program is to protect habitats that are important to fish and wildlife. CDFW has regulatory authority over activities in streams and lakes that will:

- Substantially divert or obstruct the natural flow of any river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake;
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

### **Section 1900: California Native Plant Protection Act**

The California Native Plant Protection Act (NPPA)<sup>4</sup> was enacted in 1977 and includes measures to preserve, protect, and enhance endangered and rare native plants.<sup>5</sup> The list of native plants afforded protection by the NPPA includes those listed as endangered and threatened under the CESA. The NPPA specifies that no person shall import into the State, or take, possess, or sell within this State any endangered or rare native plant, except in compliance with provisions of the NPPA. Even where exceptions apply, individual landowners who have been notified by CDFW of the presence of a rare or endangered plant are required to notify CDFW at least 10 days before changing land uses to allow CDFW to salvage any endangered or rare native plant material.

### **Section 3500 et. Seq.**

Section 3500 et. seq.<sup>6</sup> of the CFGC regulates the taking of migratory birds and their nests, including eggs and feathers. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or

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4 The Native Plant Protection Act (NPPA) of 1977 (Fish and Game Code Sections 1900–1913) directed the California Department of Fish and Game (CDFG; now CDFW) to carry out the Legislature's intent to “preserve, protect and enhance rare and endangered plants in this State.” The NPPA gave the California Fish and Game Commission the power to designate native plants as “endangered” or “rare” and protected endangered and rare plants from “take.”

5 California Fish and Game Code (CDFG), sec. 1900 et. seq.

6 CDFG, sec. 3500–3516, div 4, Birds and Mammals, pt. 2, Birds, ch. 1, General Provisions.



abandonment of eggs or young) may violate these sections, as well as and federal law protecting migratory birds.

The CFGC classifies some species as “fully protected,” and “take” of these species is generally prohibited.<sup>7</sup> In 2011, legislation amended the CFGC to allow “take” of fully protected species covered under approved natural community conservation plans.

**c. California Environmental Quality Act (CEQA)**

Section 15380 of the CEQA Guidelines independently defines “endangered” and “rare” species separately from the definitions of the CESA. Under CEQA, “endangered” species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while “rare” species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

**5.3.2.3 Regional and Local**

**a. West Mojave Plan**

The West Mojave Plan (WMP) is a Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) prepared by the US Department of the Interior (DOI), Bureau of Land Management (BLM), and adopted as an amendment to the California Desert Conservation Area (CDCA) Plan in March 2006.<sup>8</sup> The planning area covers approximately 9.3 million acres in the western portion of the Mojave Desert, covering parts of San Bernardino, Los Angeles, Kern, and Inyo Counties. The WMP (1) presents a comprehensive strategy to conserve and protect the desert tortoise, the Mohave ground squirrel, and nearly 100 other sensitive plants and animals and the natural communities of which they are a part, and (2) provides a streamlined program for complying with the requirements of the California and federal Endangered Species Acts. Other agencies did not adopt the HCP proposed in the WMP to cover their jurisdictions, and therefore the adopted plan only applies to BLM lands.<sup>9</sup>

**b. City of Lancaster General Plan**

The City’s General Plan includes the Plan for the Natural Environment, which identifies natural resources suitable for certain levels of protection, provides a management program for those resources consistent

<sup>7</sup> CDFG, sec. 3511, 4700, 5050, and 5515.

<sup>8</sup> The California Desert Conservation Area (CDCA) consists of resource-rich desert lands totaling 25 million acres in southern California. The CDCA Plan was adopted in 1980, with subsequent amendments, and covers about 10 million acres of the CDCA which are administered by Bureau of Land Management (BLM). The CDCA Plan provides the framework for subsequent plans for specific resources and uses, and for development of site-specific programs or project actions, and is responsive to specific land-use requests.

<sup>9</sup> DOI, BLM, California State Office, “Report to the California State OHV Commission,” November 16, 2014, accessed June 2020, [http://ohv.parks.ca.gov/pages/1140/files/09-blm\\_ohv\\_commission\\_dec\\_2014.pdf](http://ohv.parks.ca.gov/pages/1140/files/09-blm_ohv_commission_dec_2014.pdf).

with community values, and ensures the City as an active participant in the management of the Antelope Valley's resources.<sup>10</sup> The General Plan recognizes the Antelope Valley as a unique biological environment on the edge of the Mojave Desert and adjacent to the San Gabriel Mountains whose biological resources will face ongoing and increased pressures from existing and increasing urbanization. The General Plan states that in the past, federal, State, and local policies have been directed toward protecting individual plant or animal species, rather than the biological system in which they live. The following objectives, policies, and actions are applicable to the Proposed Project.

- Objective 3.4: Identify, preserve and maintain important biological systems within the Lancaster sphere of influence, and educate the general public about these resources, which include the Joshua Tree-California Juniper Woodlands, areas that support endangered or sensitive species, and other natural areas of regional significance.
- Policy 3.4.2: Preserve significant desert wash areas to protect sensitive species that utilize these habitat areas.
- Policy 3.4.4: Ensure that development proposals, including City-sponsored projects, are analyzed for short- and long-term impacts to biological resources and that appropriate mitigation measures are implemented.
- Specific Action 3.4.4(a): Regularly monitor and review developments proposed within or adjacent to the City's sphere of influence but outside of the City limits. The purpose of this review will be to assess potential impacts on local biological resources, and to recommend measures that the appropriate agency can implement to mitigate the impacts
- Specific Action 3.4.4(b): Require that development occurring adjacent to biologically sensitive areas provide appropriate mitigation for potential impacts.
- Specific Action 3.4.4(c): In accordance with the provisions of the Lancaster Municipal Code, assess the required City Biological Impact Fee on all development projects on vacant land to address cumulative biological impacts.

### **c. City of Lancaster Municipal Code**

Lancaster Municipal Code (LMC) Chapter 15.66, Biological Impact Fee, establishes a biological impact fee to mitigate long-term incremental impacts of new development on biological resources on a regional basis. The fee is based upon expected regional effects from new development and fees necessary to contribute

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<sup>10</sup> City of Lancaster, General Plan, July 2009.

to the City's "fair share" to mitigate impacts on a regional basis. The fee applies to all new development on vacant land which has not been previously developed. This includes land subdivisions, new development approvals, and requests for extension.

### 5.3.3 ENVIRONMENTAL IMPACTS

#### 5.3.3.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with biological resources. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant biological impact if it would:

- Threshold BIO-1**      **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.**
  
- Threshold BIO-2**      **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.**
  
- Threshold BIO-3**      **Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**
  
- Threshold BIO-4**      **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.**
  
- Threshold BIO-5**      **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**
  
- Threshold BIO-6**      **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.**

#### 5.3.3.2 Methodology

The majority of the following analysis stems from the *Habitat and Natural Resources Assessment for the Lancaster Health District* prepared by BRC, included as Appendix C: Biological Resources Study of this EIR.

### **a. Literature and Database Review**

Standard database searches and reports from previous surveys of the project site were conducted to obtain pertinent information regarding potential special-status species and sensitive natural communities that could occur within the vicinity. The following resources were reviewed:

- CNDDDB *Rarefind 5* data within the US Geological Survey *Lancaster West* and surrounding 7.5-minute topographic quadrangles<sup>11</sup>
- California Native Plant Society's (CNPS) online *Inventory of Rare and Endangered Plants* containing species-specific habitat requirements for plant species<sup>12</sup>
- USFWS database of designated Critical Habitat
- *The Jepson Manual*, second edition
- *A Manual of California Vegetation*
- *eBird* website<sup>13</sup>

Using information from the various listed sources, the potential for special-status species to occur within the project site was assessed as High, Medium, or Low based on the following criteria:

- High: CNDDDB or other documented occurrences have been recorded within one mile of the project site area and suitable habitat is present; or, individuals were observed during field surveys.
- Medium: CNDDDB or other documented occurrences have been recorded within five miles of the project site and suitable habitat is present. Individuals were not observed during field surveys but have potential to occur during breeding season.
- Low: Habitat is not present or marginal habitat may occur in the survey area but no CNDDDB records exist for the species within five miles of the project site; or, the species in question was potentially misidentified for CNDDDB reporting; or, individuals of the species were not observed during field surveys and are not anticipated to be present.

### **b. Biological Field Surveys**

On July 20, 2016, BRC conducted a reconnaissance-level natural resources survey of the project site and surrounding area. The survey area totaled approximately 288 acres and included the entire approximately 272.4-acre project site and approximately 15 acres of the adjacent Amargosa Creek to the west and that

11 California Department of Fish and Wildlife (CDFW), California Natural Diversity Database (CNDDDB), "Maps and Data," <https://www.wildlife.ca.gov/Data/CNDDDB>.

12 California Native Plant Society, CNPS Inventory of Rare Plants, 2015, <https://www.cnps.org/rare-plants/cnps-inventory-of-rare-plants>.

13 The Cornell Lab of Ornithology. <https://ebird.org/home>.

bisects the southern portion of the project site. The area was methodically surveyed on foot to document the existing conditions as well as wildlife and plant species present and to map plant communities.

The objective of the field survey was to determine the likelihood of occurrence of any special-status plant or wildlife species based on the presence/absence of suitable habitat and other natural history elements that might predict their occurrence.

The survey conditions and timing of the survey were deemed suitable for determining potential biological constraints for the Proposed Project. The biologist recorded all dominant plant species encountered during the field surveys. Scientific nomenclature follows the Jepson Interchange *List of Currently Accepted Names of Native and Naturalized Plants of California*. Surveys for wildlife species included searching for and identifying species' diagnostic sign (e.g., audible calls, prints, scat, nests, skeletal remains, burrows, etc.) and habitat features (i.e. rock or debris piles, cavities, and rock outcrops) that may attract and/or support special-status species.

#### **c.           Vegetation Mapping**

Vegetation communities were determined by identifying the dominant and co-dominant plant species. Once the dominant and co-dominant species were determined, the community boundary was delineated and mapped for the project site. The delineated boundary was hand-drawn onto field maps and representative GPS coordinates were taken along the boundary to provide reference points for subsequent GIS mapping of vegetation community polygons. The vegetation communities were defined to an alliance and association level based on the guidelines within the *Manual of California Vegetation: Second Edition*.

#### **d.           Wetlands and Waters**

A preliminary delineation of the extent of potentially jurisdictional wetland and nonwetland Waters of the United States pursuant to the federal CWA and that of lakes, rivers, or streambeds and associated riparian vegetation pursuant to the CFGC was conducted at the project site. The survey focused on the US ACOE three mandatory criteria (hydric soils, hydrology, and hydrophytic vegetation), to determine the need for further analysis based on the routine on-site delineation method described in the *US Army Corps of Engineers Wetland Delineation Manual*, and in accordance with the methods identified in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual Arid West Region*.

The boundaries of aquatic resources potentially subject to regulation by the CDFW were delineated using agency-issued guidance under the CFGC, related CDFW guidance materials, and standard practices by CDFW personnel. CDFW jurisdiction was delineated by measuring the outer boundaries of the greater of either the top of bank measurement or the extent of associated riparian or wetland vegetation.

### 5.3.3.3 Project Impacts

**Threshold BIO-1**      **Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?**

Survey associated with the *Habitat and Natural Resources Assessment for the Lancaster Health District* prepared for the Proposed Project observed a total of 25 plant species, including 15 native and 10 nonnative species, and seven wildlife species. Only one special status species, Joshua trees, were identified on site. Additionally, no sensitive or designated critical habitats were found to be present at the project site. Based on the absence of suitable habitat for special-status plant species within the project site, all other documented potential special-status plant species were determined to have a low likelihood to occur.

Nine Joshua trees (*Yucca brevifolia*) are present in the southwestern portion of the project site. Joshua trees were recently designated as a candidate species under the CESA and receive the same protections as a threatened or endangered species while undergoing formal review. Accordingly, implementation of the Proposed Project would result in a potentially significant impact to the species. Implementation of Mitigation Measure MM BIO-1, which requires preconstruction surveys to determine the health of the Joshua tree to mitigate direct impacts of construction associated with each individual development within the undeveloped portions of the project site. The potential impacts of the Proposed Project would be mitigated to less than significant with incorporation of MM BIO-1.

Joshua tree woodland are considered a significant resource in the City. However, the limited number of Joshua trees on site are isolated in their location and do not exhibit characteristics of Joshua tree woodland habitat as indicated in the *Habitat and Natural Resources Assessment for the Lancaster Health District*. Additionally, as individual development projects are proposed within vacant and undeveloped property, they would be subject to the City's Biological Impact Fee which mitigates the City's fair share of biological impacts on a regional basis.

While no special-status wildlife species were observed during site reconnaissance surveys, based on the presence of suitable habitat within the project area and nearby documented occurrences within a 5-mile radius, the *Habitat and Natural Resources Assessment for the Lancaster Health District* determined that three special-status wildlife species have a likelihood to occur, Blainville's horned lizard (*Phrynosoma blainvillii*), Loggerhead shrike (*Lanius ludovicianus*), and burrowing owl (*Athene cunicularia*).

Additionally, while no nesting birds were observed during the project survey, the trees, shrubs, and undeveloped areas at the project site provide suitable nesting, roosting and perching habitat for migratory birds or raptors. It is anticipated that nesting birds protected by the MBTA and CDFW, fully protected species, and species of special concern could nest at the project site. Further, while the likelihood of a burrowing owl to be present on site was determined to be low, it is possible that the species could migrate onto the project site prior to construction.

Further, in accordance with the provisions of the LMC, applicants of future development would pay the Biological Impact Fee identified by the City for all development on vacant land. Regardless, future construction of the Proposed Project could directly impact habitat for Blainville's horned lizard due to vegetation removal and compaction and indirectly impact the species due to potential elevated noise levels and vibration associated with future construction development. If Blainville's horned lizards are present on the project site during grading activities, implementation of the proposed project would result in a potentially significant impact to the species. Implementation of Mitigation Measure MM BIO-2 would require a preconstruction survey for Blainville's horned lizards by a qualified biologist and halting of work in the vicinity should the species be encountered. With adherence to MM BIO-2, impacts of the Proposed Project on Blainville's horned lizard would be reduced to less than significant.

Additionally, future development permitted by the Proposed Project could directly impact nesting special-status and nesting birds, including loggerhead shrike, burrowing owls as a result of ground squirrel activity within the vacant land within the project site, and raptors, through the loss of suitable foraging, roosting, and potential nesting habitat during construction. Construction activities could indirectly affect these species due to potential elevated noise levels and vibration, possibly resulting in the abandonment of nests, eggs, or young. If loggerhead shrike, burrowing owls, or raptors are present on the project site during grading activities, implementation of the Proposed Project would result in a potentially significant impact to the species. Implementation of Mitigation Measure MM BIO-3, which requires preconstruction surveys for burrowing owls during nesting season to mitigate direct impacts of construction associated with each individual development, and MM BIO-4, requires preconstruction nesting surveys for loggerhead shrike and raptor species prior to each individual development. The potential impacts of the Proposed Project would be mitigated to less than significant with incorporation of MM BIO-1 through MM BIO-4.

### **Mitigation Measures**

The following mitigation measures would be implemented to reduce potentially significant impacts to less than significant.

- MM BIO-1** A detail survey of the Joshua trees on the project site shall be prepared and submitted to both the City of Lancaster and the California Department of Fish and Wildlife. This report shall include detailed information regarding each of the Joshua trees including GPS coordinates, height, width, general health, and tree specific photographs. In the event that the Joshua trees cannot be preserved on the project site through construction and occupancy, the developer shall obtain an Incidental Take Permit for the Joshua trees prior to the issuance of any grading/construction permits and removal of the trees
- MM BIO-2** Prior to the issuance of any construction-related permits for an individual project, the applicant shall have a permitted biologist conduct a preconstruction survey for Blainville's horned lizard within 72 hours prior to site disturbance and submit the written results to the Development Services Department. If lizards are not found during the preconstruction survey, work can commence. If lizards are observed, no work shall commence until the individuals have left the area or have been relocated by a qualified biologist in accordance with California Department of Fish and Wildlife (CDFW) protocols.
- MM BIO-3** Prior to the issuance of any construction-related permits for an individual project, the applicant shall have a qualified, permitted biologist determine the suitability of habitat and availability of burrows within the individual projects disturbance area and submit the written results to the Development Services Department. If suitable habitat and borrows are determined within the individual project site, then a permitted biologist shall conduct protocols related to burrowing owls as identified in the Staff Report on Burrowing Owl Mitigation prepared by the CDFW on March 7, 2012.
- MM BIO-4** Prior to the issuance of any construction-related permits for an individual project, the applicant shall have a qualified biologist conduct nesting bird surveys of the property no more than three days prior to the removal of any vegetation or structures with the potential to support nesting birds, including loggerhead shrike, and shall submit the written results to the Development Services Department. If a loggerhead shrike nest is found, a 300-foot buffer shall be established in which construction activities are prohibited until all young have fledged; for Migratory Bird Treaty Act (MBTA)-listed and raptor species, this buffer shall be expanded to 500 feet.

### Level of Significance

Implementation of MM BIO-1 would require preconstruction survey of the Joshua tree to determine the health and status of each individual tree that would be potentially affected. Implementation of MM BIO-2 would require a preconstruction survey for Blainville's horned lizards by a qualified biologist and halting



of work in the vicinity should the species be encountered. MM BIO-3 would require preconstruction surveys for burrowing owls during nesting season for each individual project, and MM BIO-4 would require preconstruction nesting bird surveys. With adherence to MM BIO-1, MM BIO-2, MM BIO-3, and MM BIO-4, the Proposed Project's impacts to sensitive species would be mitigated to less than significant.

**Threshold BIO-2      Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?**

The project site is characterized by a majority of urban, developed uses with vacant parcels interspersed. Vacant parcels contain scrub vegetation communities, including Fourwing Saltbush Scrub and Mediterranean Grass/Russian Thistle Scrub. None of these communities are considered sensitive. Further, no riparian habitat was identified within the project site. In addition, no natural nonwetland waters of the U.S. regulated by the USACOE pursuant to Section 404 of the CWA were present at the project site. However, Amargosa Creek is regulated by CDFW as defined in Section 1602 of the CFGC and by the Lahontan Regional Water Quality Control Board (RWQCB). Amargosa Creek forms the southwestern boundary and traverses the extreme southern portion of the project site. This drainage is cement-lined to naturally lined with high banks and is bounded by a chain link fence. and the cement-lined portion of the creek does not constitute riparian habitat or house sensitive plant or wildlife communities. Moreover, potential development could be proposed adjacent to the Amargosa Creek that could impact Amargosa Creek. Accordingly, potentially significant impacts to riparian habitat or other sensitive natural communities would result from the development of the Proposed Project.

**Mitigation Measures**

The following mitigation measure would be implemented to reduce potentially significant impacts to less than significant.

**MM BIO-5**      Prior to construction work in jurisdictional waters, applications for Clean Water Act (CWA) Section 404 and CFGC (CFGC) 1602 permits shall be prepared and submitted to the regulatory agencies and the permits shall be obtained by the applicant of each individual project. Mitigation shall be proposed at a 1:1 ratio, or as required by the permitting agencies, to preserve similar ephemeral, streambed and associated riparian, and swales for no net loss of jurisdictional aquatic resources.

### Level of Significance

Implementation of MM BIO-5 would require each applicant to obtain permit(s) from the USACOE and CDFW when construction activities impact potential jurisdictional waters of the U.S. and waters of the State. With adherence to MM BIO-5, the Proposed Project's impacts to riparian habitat or other sensitive natural communities would be mitigated to less than significant.

**Threshold BIO-3**      **Would the project have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

The *Habitat and Natural Resources Assessment for the Lancaster Health District* prepared for the Proposed Project did not identify any areas meeting the three mandatory criteria (hydrophytic vegetation, hydrology and hydric soils) for wetland waters of the U.S. or waters of the State within the project site. However, Amargosa creek is a water of the State that is regulated by CDFW. The project site is bounded by Amargosa Creek on its southwestern boundary that follows a northwest/southwest direction.<sup>14</sup> Additionally, an east-west branch bisects the project site approximately 930 feet south of Avenue J-8 and proceeds out of the project site. The channel is alternately cement-lined to naturally lined with high banks. Because Amargosa Creek is regulated by CDFW and Lahontan RWQCB, construction activities associated with individual projects that could potentially impact Amargosa Creek. In accordance with MM BIO-5, each applicant would be required to obtain permit(s) from the USACOE and CDFW when construction activities impact potential jurisdictional waters of the U.S. and waters of the State. With adherence to MM BIO-5, impacts would be mitigated to less than significant.

### Mitigation Measures

Mitigation Measure MM BIO-5 shall be implemented to reduce potential impacts to jurisdictional waters of the U.S. and waters of the State.

### Level of Significance

With adherence to MM BIO-5, the Proposed Project's impacts to State or federally protected wetlands would be mitigated to less than significant.

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<sup>14</sup> County of Los Angeles Department of Public Works, *Los Angeles County Storm Drain System*, interactive map, accessed June 2020, <https://pw.lacounty.gov/fcd/StormDrain/index.cfm>.

**Threshold BIO-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

There are no natural water bodies on the project site that could support fish; therefore, there is no potential for the proposed project to interfere with the movement of fish. Due to the predominantly developed and disturbed nature of the project site, there are no native wildlife nurseries on the project site; therefore, there is no potential for the proposed project to impede the use of a native wildlife nursery site. As such, no impact would occur. Although wildlife could move through or within the project site, the project site is not an established native resident or migratory wildlife corridor; therefore, implementation of the proposed project would have no potential to interfere with an established native resident or migratory wildlife corridor.

**Mitigation Measures**

No mitigation measures would be required.

**Level of Significance**

No impacts would occur.

**Threshold BIO-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

The City's General Plan identifies the management of biological resources as a critical part of establishing and maintaining a unique character and identity for the City, and outlines the protection and preservation of biological resources, especially the biological systems in which they live, as a major goal.<sup>15</sup>

As mentioned previously, nine Joshua trees (*Yucca brevifolia*) are located in the southwestern portion of the project site. As stated in General Plan Objective 3.4, the City recognizes Joshua tree woodland as a sensitive habitat and emphasizes the need for their protection. However, the limited number of Joshua trees on site are isolated in their location and do not exhibit characteristics of Joshua tree woodland habitat.

Consistent with the City's General Plan Policy 3.4.4 and related Specific Actions 3.4.4(a) through (c), this EIR represents a review of short- and long-term impacts to biological resources on a site-specific and cumulative scale. Mitigation measures have been identified where appropriate to ensure impacts to

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<sup>15</sup> City of Lancaster, General Plan 2030, *Plan for the Natural Environment*, 2009.

biological resources are reduced to the greatest extent feasible. Accordingly, the Proposed Project would be consistent with the intent of the City's General Plan related to the management of biological resources.

Further, according to LMC Chapter 15.66, Biological Impact Fee, the applicants within the project would be required to pay a biological impact fee for the purpose of mitigating biological impacts on a regional basis for all development within vacant and previously undeveloped land. The Proposed Project would not conflict with any City policies or ordinances relating to the protection of biological resources. Therefore, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

### **Threshold BIO-6      Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?**

The CDCA Plan and WMP are both Natural Community Conservation Plan/Habitat Conservation Plans (NCCP/HCP) adopted by the BLM. However, neither plan has been adopted by the City; therefore, the plans only apply to BLM lands<sup>16</sup>. No other adopted HCP, NCCP, or other approved local, regional, or State HCP is in effect for the City or the project site. Accordingly, no impacts would occur.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

No impacts would occur.

### **5.3.3.4 Cumulative Impacts**

This cumulative impact analysis for biological resources considers development of the Proposed Project in conjunction with other development projects in the vicinity of the project site as well as full General Plan buildout in the City of Lancaster and surrounding jurisdictions.

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16 DOI, BLM, California State Office, "Report to the California State OHV Commission," November 16, 2014, accessed June 2020. [http://ohv.parks.ca.gov/pages/1140/files/09-blm\\_ohv\\_commission\\_dec\\_2014.pdf](http://ohv.parks.ca.gov/pages/1140/files/09-blm_ohv_commission_dec_2014.pdf).

As with the Proposed Project, related projects within the City would be subject to the LMC Chapter 15.66, Biological Impact Fee, for development within vacant and previously undeveloped land. Accordingly, projects would be required to pay a biological impact fee for the purpose of mitigating biological impacts on a regional basis. Further, as discussed previously, potentially significant impacts of the Proposed Project related to special-status species, including Joshua trees, Blainville's horned lizard, and loggerhead shrike, would be mitigated to a less than significant level by adherence to MM BIO-1, MM BIO-2, and MM BIO-4, respectively. Potentially significant impacts to burrowing owl and nesting sites of MBTA- and State-protected bird species would also be reduced to less than significant levels by adherence to MM BIO-3 and MM BIO-4, respectively. Potentially significant impacts to waters of the U.S. and waters of the State would also be reduced to less than significant levels by adherence to MM BIO-5. Related projects would similarly undergo CEQA review and determinations regarding the significance of impacts of the related projects on biological resources would be made on a case-by-case basis. If necessary, the applicants of the related projects would be required to implement appropriate mitigation measures. Therefore, implementation of related projects and other anticipated growth in the Antelope Valley would not combine with the Proposed Project to result in cumulatively considerable impacts on biological resources.

Impacts of the Proposed Project in combination of related projects would not be cumulatively considerable.

### **Level of Significance**

Cumulative impacts would be less than significant.

### **5.3.4 SUMMARY OF SIGNIFICANCE**

Implementation of MM BIO-1 would require preconstruction survey of the Joshua tree to determine the health and status of each individual tree that would be potentially affected. Implementation of MM BIO-2 would require a preconstruction survey for Blainville's horned lizards by a qualified biologist and halting of work in the vicinity should the species be encountered. With adherence to MM BIO-2, potentially significant impacts to Blainville's horned lizard would be reduced to a less than significant level. MM BIO-3 would require written verification of suitable habitat for burrowing owls, and if necessary, preconstruction surveys for burrowing owls to further mitigate direct impacts of the Proposed Project, and MM BIO-4 would require preconstruction breeding surveys for loggerhead shrike and raptor species. MM BIO-5 would require applicants of individual projects that could potentially impact waters of the U.S. or waters of the State, including State or federally protected wetlands, obtain permits from USACOE and CDFW. With adherence to MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, and MM BIO-5, the impacts of the Proposed Project would be mitigated to a less than significant level.

## 5.4 CULTURAL RESOURCES

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This section of this Environmental Impact Report (EIR) evaluates the Proposed Project's potential to affect cultural resources within the project site and in the immediate surrounding area. Cultural resources include places, objects, and settlements that reflect group or individual religious, archaeological, or architectural activities. Such resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. Information from the following study of the project site, as well as the City's consultation efforts with Native American tribes (refer to Section 5.16: Tribal Cultural Resources of this EIR), are incorporated into this section:

- *Archaeological Resources Assessment for the Lancaster Health District Project, City of Lancaster, Los Angeles County, California, September 5, 2016, BCR Consulting LLC.*

A complete copy of the *Archaeological Resources Assessment* is included in the Appendices to this EIR as Appendix D: Archaeological Resources Assessment.

### 5.4.1 ENVIRONMENTAL SETTING

#### 5.4.1.1 Existing Conditions

##### *a. Regional and Local Setting*

##### **Cultural Setting**

##### ***Prehistoric Background***

The prehistoric cultural setting of the Mojave Desert has been organized into many chronological frameworks, although there is no definitive sequence for the region. The difficulties in establishing cultural chronologies for the Mojave are a function of its enormous size and the small amount of archaeological excavations conducted there. Moreover, throughout prehistory many groups have occupied the Mojave and their territories often overlap spatially and chronologically resulting in mixed artifact deposits. Due to dry climate and capricious geological processes, these artifacts rarely become integrated in-situ. Lacking a milieu hospitable to the preservation of cultural midden, Mojave chronologies have relied upon temporally diagnostic artifacts, such as projectile points, or upon the presence/absence of other temporal indicators, such as groundstone. Such methods are instructive but can be limited by prehistoric occupants' concurrent use of different artifact styles, or by artifact reuse or resharpening, as well as researchers' mistaken diagnosis, and other factors.

### **Paleoindian and Lake Mojave Periods (12,000 BP–7,000 BP)**

Climatic warming characterizes the transition from the Paleoindian Period to the Lake Mojave Period. This transition also marks the end of Pleistocene Epoch and ushers in the Holocene. The Paleoindian Period has been loosely defined by isolated fluted (such as Clovis) projectile points, dated by their association with similar artifacts discovered in-situ in the Great Plains. Some fluted bifaces have been associated with fossil remains of Rancholabrean mammals approximately dated to circa 13,300-10,800 before present (BP) near China Lake in the northern Mojave Desert. The Lake Mojave Period has been associated with cultural adaptations to moist conditions, and resource allocation pointing to more lacustrine environments than previous eras. Artifacts that characterize this period include stemmed points, flake and core scrapers, choppers, hammerstones, and crescentics. Projectile points associated with the period include the Silver Lake and Lake Mojave styles. Lake Mojave sites commonly occur on shorelines of Pleistocene lakes and streams, where geological surfaces of that epoch have been identified.

### **Pinto Period (7,000 BP–4,000 BP)**

The Pinto Period has been largely characterized by desiccation of the Mojave. As formerly rich lacustrine environments began to disappear, the artifact record reveals more sporadic occupation of the Mojave, indicating occupants' recession to the more hospitable fringes. Pinto Period sites are rare and characterized by surface manifestations that usually lack significant in-situ remains. Artifacts from this era include Pinto projectile points and a flake industry similar to the Lake Mojave tool complex, though use of Pinto projectile points as an index artifact for the era has been disputed. Milling stones have also occasionally been associated with sites of this period.

### **Gypsum Period (4,000 BP–1,500 BP)**

A temporary return to moister conditions during the Gypsum Period is postulated to have encouraged technological diversification afforded by the relative abundance of resources. Lacustrine environments reappear and begin to be exploited during this era. Concurrently a more diverse artifact assemblage reflects intensified reliance on plant resources. The new artifacts include milling stones, mortars, pestles, and a proliferation of Humboldt Concave Base, Gypsum Cave, Elko Eared, and Elko Corner-notched dart points. Other artifacts include leaf-shaped projectile points, rectangular-based knives, drills, large scraper planes, choppers, hammer stones, shaft straighteners, incised stone pendants, and drilled slate tubes. The bow and arrow appears around 2,000 BP, evidenced by the presence of a smaller type of projectile point, the Rose Spring point.

### **Saratoga Springs Period (1,500 BP–800 BP)**

The history of the Native American communities before the mid-1700s was largely reconstructed through later mission-period and early ethnographic accounts. During the Saratoga Springs Period regional cultural diversifications of Gypsum Period developments are evident within the Mojave. Basketmaker III (Anasazi) pottery appears during this period and has been associated with turquoise mining in the eastern Mojave Desert. Influences from Patayan/Yuman assemblages are apparent in the southern Mojave and include buff and brown wares often associated with Cottonwood and Desert Side-notched projectile points. Obsidian becomes more commonly used throughout the Mojave and characteristic artifacts of the period include milling stones, mortars, pestles, ceramics, and ornamental and ritual objects. More structured settlement patterns are evidenced by the presence of large villages, and three types of identifiable archaeological sites (major habitation, temporary camps, and processing stations) emerge. Diversity of resource exploitation continues to expand, indicating a much more generalized, somewhat less mobile subsistence strategy.

### **Shoshonean Period (800 BP–Contact)**

The Shoshonean period is the first to benefit from contact-era ethnography, as well as be subject to its inherent biases. Interviews of living informants allowed anthropologists to match artifact assemblages and particular traditions with linguistic groups, and plot them geographically. During the Shoshonean Period continued diversification of site assemblages, and reduced Anasazi influence both coincide with the expansion of Numic (Uto-Aztecan language family) speakers across the Great Basin, Takic (Uto-Aztecan language family) speakers into southern California, and the Hopi across the Southwest. Hunting and gathering continued to diversify, and the diagnostic arrow points include desert side-notch and cottonwood triangular. Ceramics continue to proliferate, though are more common in the southern Mojave during this period. Trade routes have become well established across the Mojave, particularly the Mojave Trail, which transported goods and news across the desert via the Mojave River, to the east of the current project site. Trade in the western Mojave was more closely related to coastal groups than others.

### **Ethnographic Setting**

The Uto-Aztecan “Serrano” people occupied the western Mojave Desert periphery. Kroeber applied the generic term “Serrano” to four groups, each with distinct territories: the Kitanemuk, Tataviam, Vanyume, and Serrano.<sup>1</sup> Only one group, in the San Bernardino Mountains and West-Central Mojave Desert, ethnically claims the term “Serrano.” Bean and Smith indicate that the Vanyume, an obscure Takic population, was found along the Mojave River at the time of Spanish contact.<sup>2</sup> The Kitanemuk lived to the

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1 See Appendix D of this EIR.

2 See Appendix D of this EIR.



north and west, while the Tataviam lived to the west. The Serrano lived mainly to the south. All may have used the western Mojave area seasonally. Historical records are unclear concerning precise territory and village locations. It is doubtful that any group, except the Vanyume, actually lived in the region for several seasons yearly.

### **Historical Setting**

Post-contact history for the State of California is generally divided into three periods: the Spanish Period (1769–1821), Mexican or Rancho Period (1821–1848), and American Period (1848–Present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American Period when California became a territory of the United States.

#### ***Spanish Period (1769–1821)***

The first European to pass through the area is thought to be a Spaniard called Father Francisco Garces. Having become familiar with the area, Garces acted as a guide to Juan Bautista de Anza, who had been commissioned to lead a group across the desert from a Spanish outpost in Arizona to set up quarters at the Mission San Gabriel in 1771 near what today is Pasadena. This is the first recorded group crossing of the Mojave Desert and, according to Father Garces' journal, they camped at the headwaters of the Mojave River, one night less than a day's march from the mountains. Today, this is estimated to have been approximately 11 miles southeast of Victorville. Garces was followed by Alta California Governor Pedro Fages, who briefly explored the western Mojave region in 1772. Searching for San Diego Presidio deserters, Fages had traveled north through Riverside to San Bernardino, crossed over the mountains into the Mojave Desert, and then journeyed westward to the San Joaquin Valley.

#### ***Mexican Period (1821–1848)***

In 1821, Mexico overthrew Spanish rule and the missions began to decline. By 1833, the Mexican government passed the Secularization Act, and the missions, reorganized as parish churches, lost their vast land holdings, and released their neophytes.

#### ***American Period (1848–Present)***

The American Period, 1848–Present, began with the Treaty of Guadalupe Hidalgo. The Gold Rush had attracted huge numbers of American settlers and in 1850, California was accepted into the Union. The cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period

land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. However, beginning about 1855, the demand for beef began to decline due to imports of sheep from New Mexico and cattle from the Mississippi and Missouri Valleys. When the beef market collapsed, many California ranchers lost their ranchos through foreclosure. A series of disastrous floods in 1861–1862, followed by a significant drought diminished the economic impact of local ranching. This decline combined with ubiquitous agricultural and real estate developments of the late 19th century, set the stage for diversified economic pursuits that have continued to proliferate to this day.

### **Historical Resources**

The City can trace its origins to the Southern Pacific Railroad, which entered the area in 1876. The railroad brought speculators that used artesian wells to establish an early local agricultural and horticultural economy. A newspaper was established in 1884, and grammar schools and a local post office soon followed. Parcels within the new town were originally settled near today’s Avenue I and Sierra Highway. Although farming was initially successful, it took place at the mercy of desert rainfall that varied dramatically and caused a downturn during the early 20th century. Continued well drilling managed to revive local agriculture and by the 1910s and 1920s local mining and the continued influence of the railroad resulted in a local economic resurgence. Municipal advancements included paved streets in 1916, the formation of a local Los Angeles County Waterworks district in 1919, a fire department in 1921, and electric service brought by Southern California Edison in 1923. Although the economy slowed again during the Great Depression and World War II, the founding of the Muroc Lake Bombing and Gunnery Range (now Edwards Air Force Base) in 1933 compensated somewhat for the losses, and mining and alfalfa farming remained locally viable. The post war years brought an economic boom to Lancaster, punctuated by the opening of the first local ready-mix plant, and the Antelope Valley Freeway plan. By 1970, the City’s population had expanded to 40,609 persons. The City was finally incorporated in 1977 and has since developed into a community in support of the greater Los Angeles area, in addition to remaining a hub for transportation.

#### **b. Project Site**

The approximately 272.4-acre project site is located entirely within the City in the southwestern portion of the Mojave Desert. A majority of the project site is developed with urban uses and the vacant, undeveloped parcels that are interspersed with development on the site are also highly disturbed due to alteration from compaction of soil, dumping and excavation, off-road vehicle use, and other man-made disturbances.

As indicated in the *Archeological Resources Assessment for the Lancaster Health District Project*, 60 previous cultural resource studies have taken place and 15 archaeological resources have been recorded within one mile of the project site. Of the previous studies, eight have assessed portions of the project site, and 10 archaeological resources have been previously recorded within its boundaries. Of the 10 archaeological resources previously recorded within the project site, eight have been destroyed by building and parking lot construction.

No known historical resources are recorded within the project site boundaries, including any resources listed on the National or California Register of Historic Places (National or California Register).

### 5.4.1.2 Regulatory Setting

#### a. Federal

##### Archaeological Resources Protection Act

The intent of the Archaeological Resources Protection Act of 1979 (ARPA) is to ensure preservation and protection of archaeological resources on public and Native American lands.<sup>3</sup> ARPA places primary emphasis upon a federal permitting process in order to control the disturbance and investigation of archaeological sites on these lands. In addition, ARPA's protective provisions are enforced by civil penalties for violation of the ARPA.

Under this regulation, the term “archaeological resources” includes but is not limited to:

*pottery, basketry, bottles, weapons, weapon projectiles, tools, structures or portions of structures, pit houses, rock paintings, rock carvings, intaglios, graves, human skeletal materials, or any portion or piece of any of the foregoing items. Nonfossilized and fossilized paleontological specimens, or any portion or piece thereof, shall not be considered archaeological resources, under the regulations under this paragraph, unless found in an archaeological context. No item shall be treated as an archaeological resource under regulations under this paragraph unless such item is at least 100 years of age.*<sup>4</sup>

ARPA mandates consultation procedures before initiation of archaeological research on Native American lands or involving Native American archaeological resources. Section 4(c) requires Native American tribes be notified of possible harm to, or destruction of, sites having religious or cultural significance to that group. The federal land manager must notify affected tribes before issuing the permit for archaeological work. Section (g)(2) specifies that permits to excavate or remove archaeological resources from Indian lands require consent of the Native American or Native American tribe owning or having jurisdiction over

3 16 United States Code (USC). sec. 470aa–470mm, Archaeological Resources Protection Act of 1979, Public Law (PL) 96-95, as amended, accessed June 2020, available at [https://www.nps.gov/history/local-law/FHPL\\_ArchRsrcsProt.pdf](https://www.nps.gov/history/local-law/FHPL_ArchRsrcsProt.pdf).

4 16 USC sec. 470aa–470mm, Archaeological Resources Protection Act of 1979, Public Law 96-95, as amended, sec. 3.

such lands. The permit, it is also stipulated, must include such terms and conditions as may be requested by the affected Native Americans.

Concerning the custody of archaeological resources, ARPA stipulates that any exchange or ultimate disposition of archaeological resources excavated or removed from Native American lands must be subject to the consent of the Native American or Native American tribe that owns or has jurisdiction over such lands. Refer to Section 5.16 of this EIR for additional information regarding the City's consultation with local Native American tribes.

### **National Historic Preservation Act**

The 1966 National Historic Preservation Act (NHPA) authorized formation of the National Register and coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. Buildings, districts, sites, and structures may be eligible for listing in the National Register if they possess significance at the national, State, or local level in American history, culture, architecture, or archaeology and, in general, are more than 50 years old. Significance is measured against the following established criteria (National Register Bulletin 16):

- Are associated with events that have made a significant contribution to the broad patterns of our history; or
- Are associated with the lives of persons significant in our past; or
- Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Yield, or may be likely to yield, information important in prehistory or history.

Section 106 (Protection of Historic Properties) of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. A Section 106 Review refers to the federal review process designed to ensure that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation (ACHP), an independent federal agency, administers the review process, with assistance from the State Historic Preservation Offices (SHPOs). If any impacts are identified, the agency undergoing the project must identify the appropriate SHPO to consult with during the process.

The ACHP includes requirements for consultation with Native American tribes when federal agencies are undertaking an activity that could cause harm to a historic resource or a potential historic resource under Title 36 of the Code of Federal Regulations, Part 800, Protection of Historic Properties, which became effective January 11, 2001.

## National Register of Historic Places

The National Register was established by the NHPA, as “an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment.”<sup>5</sup> The National Register recognizes properties that are significant at the federal, State, and/or local levels.

To be eligible for listing in the National Register, a property must be at least 50 years of age (unless the property is of “exceptional importance”) and possess significance in American history and culture, architecture, or archaeology. A property of potential significance must meet one or more of the following four established criteria:<sup>6</sup> (a) Associated with events that have made a significant contribution to the broad patterns of our history; (b) Associated with the lives of persons significant in our past; (c) Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or (d) Possess potential to yield information important in prehistory or history.

### **b. State**

#### **California Public Resources Code**

Archaeological and historical sites are protected pursuant to a wide variety of State policies and regulations enumerated under the California Public Resources Code (PRC). In addition, cultural resources are recognized as a nonrenewable resource and, therefore, receive protection under the PRC and California Environmental Quality Act (CEQA).

As part of the determination made pursuant to PRC Section 21080.1, the lead agency shall determine whether the project may have a significant effect on archaeological resources (PRC Section 21083.2). PRC Section 21083.2(b) provides the following guidance on how to mitigate or avoid the significant effects that a project may have on unique archeological resources, stating:

*If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:*

1. *Planning construction to avoid archaeological sites.*

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5 36 Code of Federal Regulations (CFR), pt. 60.2.

6 36 CFR, pt. 60.4.

2. *Deeding archaeological sites into permanent conservation easements.*
3. *Capping or covering archaeological sites with a layer of soil before building on the sites.*
4. *Planning parks, greenspace, or other open space to incorporate archaeological sites.*

As defined within PRC Section 21083.2(g), “unique archaeological resource” means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality, such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

As defined in PRC Section 21083.2(h), “nonunique archaeological resource” means an archaeological artifact, object, or site that does not meet the criteria in subdivision (g). A nonunique archaeological resource need be given no further consideration other than the simple recording of its existence by the lead agency, if it so elects. Pursuant to PRC Section 21083.2(i), as part of conditions imposed for mitigation, a lead agency may make provisions for archaeological sites accidentally discovered during construction. These provisions may include an immediate evaluation of the find. If the find is determined to be a unique archaeological resource, contingency funding and a time allotment sufficient to allow recovering an archaeological sample or to employ one of the avoidance measures may be required under the provisions set forth in this section. Construction work may continue on other parts of the building site while archaeological mitigation takes place.

If additional archaeological resources are discovered during excavation, grading, or construction activities, work shall cease in the area of the find until a qualified archaeologist has evaluated the find in accordance with federal, State, and local guidelines, including those set forth in PRC Section 21083.2.

Personnel of the project shall not collect or move any archaeological materials and associated materials. Construction activity may continue unimpeded on other portions of the project site. The found deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in PRC Section 21083.2:

- Distinctive features, finishes, and construction techniques or examples of skilled craftsmanship which characterize an historic property shall be preserved.

- Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive historic feature, the new feature shall match the old in design, color, texture, and other visual qualities, and where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
- Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
- Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
- New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

State regulations mandate protection of paleontological resources on public lands, and CEQA requires evaluation of impacts to paleontological sites. Refer to Section 5.6: Geology and Soils, for a discussion of potential impacts to paleontological resources.

### **California Register of Historical Resources**

The California Register is the authoritative guide to the State's significant archaeological and historical resources. It closely follows the eligibility criteria of the National Register but deals with State- and local-level resources. The California Register serves to identify, evaluate, register, and protect California's historical resources. For purposes of CEQA, a historical resource is any building, site, structure, object, or historic district listed in or eligible for listing in the California Register (PRC Section 21084.1). As stated in the PRC, a resource is considered eligible for listing in the California Register if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history (PRC Section 5024.1[c]).

In addition to significance, resources must have integrity for a period of significance—the date or span of time within which significant events transpired or significant individuals made important contributions. Important archaeological resources classified on the California Register are required to have had sufficient time be passed since a resources’ period of significance to “obtain a scholarly perspective on the events or individuals associated with the resources.”<sup>7</sup> “Integrity is the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.” Simply put, resources must “retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.”<sup>8</sup>

### California Environmental Quality Act

CEQA and the CEQA Guidelines have specific provisions relating to the evaluation of a project’s impact on historical and unique archaeological resources.

PRC Section 21084.1 and Section 15064.5 of the CEQA Guidelines together establish the prevailing test for determining whether a resource can or must be considered a historical resource under CEQA. First, a resource is considered a historical resource for purposes of CEQA if it is listed or “deemed eligible for listing” in the California Register by the State Historical Resources Commission (SHRC).<sup>9</sup> Second, it will be considered a historical resource, based on a presumption of significance, if it is either (1) listed in a local register of historic resources as defined in PRC Section 5010.1.4, or (2) identified in a local survey of historic resources meeting the criteria set forth in PRC Section 5024.1.5. If a resource meets either of these criteria, the lead agency must treat the resource as historically significant unless the “preponderance of the evidence” indicates that the resource is not historically significant. Third, a lead agency may find a resource to be a historical resource even though it is not formally listed in the California Register, listed in a local register, or identified in a local survey.<sup>10</sup> Any such determination must be based on substantial evidence in light of the whole record.

CEQA also provides further guidance with respect to historical resources of an archeological nature and unique archaeological resources. A unique archeological resource is defined in PRC Section 21083.2(g) as:

*[A]n archaeological artifact, object or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:*

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7 California Code of Regulations, Section 4852(d)(2).

8 Secretary of the Interior’s Standards and Guidelines, Archeology and Historic Preservation, 1983.

9 PRC sec. 21084.1 and 15064.5

10 PRC sec. 21084.1; sec. 15064.5(a)(3)(4)



- (1) contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information,*
- (2) has a special and particular quality such as being the oldest of its type or best available example of its type, and*
- (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.*

According to the CEQA Guidelines Section 15064.5(b): “A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” This section of the guidelines defines historical resources as including both the built environment and archaeological resources.

A substantial adverse change is defined in the CEQA Guidelines Section 15064.5(4)(b)(1), as “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.” The significance of an historical resource is materially impaired, according to the CEQA Guidelines Section 15064.5(4)(b)(2), when a project:

- A. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or*
- B. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of the evidence that the resource is not historically or culturally significant; or*
- C. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.*

The CEQA Guidelines provide that “generally,” a project that follows the Secretary’s Standards “shall be considered as mitigated to a level of less than a significant impact on the historical resource.”

At the same time, however, a failure to precisely conform to the Secretary’s Standards in all respects does not necessarily mean that a project necessarily has a significant adverse impact on historical resources. There are circumstances where a project impacting historical resources may fail to conform to the Secretary’s Standards, and yet the lead agency can conclude based on substantial evidence that the overall impact is insignificant because the project does not “materially impair” the historical resource within the meaning of Section 15064.5(b).

CEQA Guidelines Section 15064.5 subsection (c) addresses impacts on archaeological sites. That section provides as follows:

- (1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).*
- (2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code and this section, Section 15126.4 of the CEQA Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.*
- (3) If an archaeological site does not meet the criteria defined in subsection (a) but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c–f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.*

For historical resources of an archaeological nature, “preservation in place is the preferred manner of mitigating impacts to archaeological sites.”<sup>11</sup> “When recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provisions for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken.” In practice, the California Office of Historic Preservation (OHP) has

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11 CEQA Guidelines Section 15126.4(b)(3)(A).

consistently determined that excavation, coupled with implementation of a data recovery plan, does not result in a significant environmental impact on a historical resource of an archaeological nature.

If a project would cause “damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state...To the extent that unique archaeological resources are not left in an undisturbed state, mitigation measures shall be required as provided in this subdivision.”<sup>12</sup> CEQA Guidelines Section 15064.5(f) provides that “a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction.”

CEQA also requires the lead agency to consider whether there is a significant effect on unique archaeological resources that are not eligible for listing in the California Register. As defined in CEQA, a unique archaeological resource is:

*an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:*

- 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.*
- 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.*
- 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.*

If an archaeological resource is found eligible for listing in the California Register, then it is considered under CEQA to be a historic resource that needs to be protected. This may also apply to unique archaeological resources. If a historic resource may be impacted by activity, under CEQA, avoidance and preservation in place is the preferred alternative. If that is not possible, then a data recovery plan will need to be created and enacted to lessen impacts to the environment to a less than significant level. If the archaeological resource is not eligible for listing in the California Register, and it is not a unique archaeological resource, then no further action is required to protect or mitigate possible impacts to it.

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12 PRC Section 21083.2(b) and (c).

CEQA Guidelines Section 15064.5(d) specifies a process for evaluating human remains, and this issue is identified in the CEQA Guidelines, Appendix G—Environmental Checklist as an issue for evaluation in environmental documents.

### **State Health and Safety Code**

If human remains are encountered unexpectedly during implementation of a project, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98.<sup>13</sup>

If the remains are determined to be of Native American descent, the following procedure must be observed:

- a) The immediate vicinity must be secured according to generally accepted cultural or archaeological standards or practices.
- b) The coroner has 24 hours to notify the Native American Heritage Commission (NAHC).
- c) The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the Project Applicant, inspect the site of the discovery of the Native American remains and may recommend means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods.
- d) The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the Project Applicant to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. The area must not be damaged or disturbed by further development activity until the Applicant has discussed and conferred with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.
- e) If the Project Applicant or his or her authorized representative rejects the recommendation of the MLD, the Project Applicant or MLD may request mediation per subdivision (k) of PRC Section 5097.94.
- f) If the NAHC is unable to identify an MLD, or the MLD identified fails to make a recommendation, or the mediation provided for in subdivision (k) of PRC Section 5097.94, if invoked, fails to provide reasonable treatment, then the human remains and items associated with Native American human remains must be interred with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.

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13 California Health and Safety Code, Sections 7050.5 and 5097.98.

**c. Local**

**City of Lancaster General Plan**

The City's General Plan includes a Plan for Active Living which focuses on the components of the community's shelter, culture, and lifestyle. Objectives, policies, and specific actions are identified to protect significant cultural resources in the area. The following policies and specific actions are applicable to the Proposed Project:

- Policy 12.1.1: Preserve features and sites of significant historical and cultural value consistent with their intrinsic and scientific values.
- Specific Action 12.1.1(a): As part of the CEQA review process, require site-specific historical, archaeological, and/or paleontological studies when there exists a possibility that significant environmental impacts might result or when there is a lack of sufficient documentation on which to determine potential impacts.
- Specific Action 12.1.1(b): Include a condition of approval on all development projects that addresses State and federal regulations with respect to the disposition of cultural resources.
- Specific Action 12.1.1(c): Process requests for inclusion in State and federal historic registers those historic and prehistoric sites and features which meet State or federal criteria.

## 5.4.2 ENVIRONMENTAL IMPACTS

### 5.4.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with cultural resources. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant impact to a cultural resource if it would:

- Threshold CUL-1**      **Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5.**
- Threshold CUL-2**      **Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.**
- Threshold CUL-3**      **Disturb any human remains, including those interred outside of formal cemeteries.**

### 5.4.2.2 Methodology

The majority of the analysis that follows is from the *Archeological Resources Assessment for the Lancaster Health District Project* prepared by BCR Consulting LLC, included as Appendix D: Archaeological Resources Assessment of this EIR. The methodology for the report consists of research and field survey components.

Prior to fieldwork, a records search was conducted using information from the South-Central Coastal Information Center (SCCIC) located at California State University, Fullerton. This archival research reviewed the status of all recorded historic and prehistoric cultural and paleontological resources, and survey and excavation reports completed within one mile of the study area. Additional resources reviewed included the National Register, the California Register, and documents and inventories published by the California OHP. These include the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures. Limited research was also conducted for the project site through local repositories and internet resources.

An intensive-level archaeological resources field survey of the vacant land located in the project site was conducted on August 1, 2, and 31, 2016. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across the project site. Preparation for the field survey involved a thorough review of modern and historic aerial photos and topographic maps, and field checks and updates for previously identified archaeological resources. The survey was completed pursuant to the requirements of CEQA, PRC Chapter 2.6, Section 21083.2, and California Code of Regulations (CCR) Title 14, Chapter 3, Article 5, Section 15064.5. The pedestrian archaeological resources survey was intended to locate and

document previously recorded and new archaeological sites, features, and isolates that exceed 45 years in age within defined project site boundaries.

Digital photographs were taken at various points within the project site. Archaeological resources were recorded per the California OHP's *Instructions for Recording Historical Resources* in the field using:

- Detailed note taking for entry on DPR Forms
- Hand-held Global Positioning Systems for mapping purposes
- Digital photography of all archaeological resources

### 5.4.2.3 Project Impacts

**Threshold CUL-1            Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?**

A majority of the project site is developed with urban uses; the vacant, undeveloped parcels that are interspersed with development on the site are also highly disturbed due to alteration from compaction of soil, dumping and excavation, off-road vehicle use, and other man-made disturbances. The nearest California Register or National Register properties within the City are located approximately 0.9 miles northeast of the most northeastern project site boundary.<sup>14</sup> As such, the Proposed Project would not affect the historic status of these properties. Additionally, no known historical resources are recorded within the project site boundaries, including any resources listed on the National or California Registers. The City has not enacted a local historic preservation ordinance, conducted a citywide historical resources survey, or implemented any other systematic historic preservation program, nor does the City maintain an official register of local historic properties.

The Proposed Project involves the potential redevelopment of the developed areas within the project site. Demolition or substantial alteration of existing structures and/or properties within the project site could potentially alter the historic significance of these properties. Although none of the existing structures and/or properties are historically significant, the demolition of these structures would represent a potentially significant impact. Implementation of Mitigation Measure MM CUL-1 would require written documentation to determine the potential historic significance of existing structures and would mitigate potentially significant impacts to unknown historic properties to less than significant.

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<sup>14</sup> City of Lancaster 2030 General Plan, Master Environmental Assessment, April 2009, Table 11-1.

## Mitigation Measures

The following mitigation measures would be implemented to reduce potentially significant impacts on historic resources.

**MM CUL-1** Prior to the issuance of any construction-related permits for an individual project that would modify a structure over 50 years, the applicant shall retain a qualified consultant to determine the potential historical significance of the structure and submit the written results to the Development Services Department. If the structure is determined to be of potential historic significance, then the applicant shall have a qualified consultant ensure that complete Historic American Building Survey (HABS) level documentation will be prepared for structures that will be demolished prior to commencement of demolition. The intent is to preserve an accurate record of historic property that can be used in research and other preservation activities. HABS documentation shall provide the appropriate level of visual documentation and written narrative based on the importance of the resource, as determined in consultation with Development Services Department.

## Level of Significance

With implementation of documentation prior to demolition activities identified in MM CUL-1, the Proposed Project's impacts related to previously unknown historical resources would be mitigated to less than significant.

**Threshold CUL-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

The Mojave Desert is an area with limited prehistoric resources although the region has supported a long and occasionally dense prehistoric population. Evidence of villages and camps, burials, quarries, rock features, and bedrock mortars has been documented at archaeological sites across the desert, some of which contain evidence of a lengthy prehistoric time period. The prehistoric cultural sequence for the western Mojave Desert began at the end of the Pleistocene, represented by the fluted point tradition. Although early archaeological remains are not frequently found, when they are, it is generally along the margins of former pluvial lakes or in areas of dune deflation. In contrast, artifacts on the desert floor may be sparse, widely scattered, and mixed with the desert pavements. The general cultural chronology sequence includes the Paleo Indian Period, the Pinto Period, the Gypsum Period, the Saratoga Springs Period, and the Ethnohistoric Period. The Project area is located in what is traditionally the homeland of the Kitanemuk, a small tribe (no more than 500 to 1,000 members) principally located on the southern and western flanks of the Tehachapi Mountains.



As previously discussed under 5.4.1.1 Existing Conditions, records searches of the project area indicated that 60 previous cultural resource studies have taken place and 15 archaeological resources have been recorded within one mile of the project site. Of the previous studies, eight have assessed portions of the project site, and 10 archaeological resources have been previously recorded within its boundaries. Further, the scope of the records search included a review of all recorded historic resources, including those listed in federal and State registers, documents, and inventories. Additionally, local research was conducted. An intensive-level archaeological resources field survey of the vacant land located in the project site was conducted on August 1, 2, and 31, 2016. Of the 10 Sec identified archaeological resources, eight have been destroyed by building and parking lot construction and could not be relocated. The two remaining archaeological resources were visited by archaeologists.

One site had been subjected to grading for fire suppression, rerouting of a former channel, and construction and maintenance activities. Based upon further examination of the site and the disturbances, this site was destroyed. Additionally, the site was evaluated against California Register criterion to determine eligibility for listing. Based on review of the criterion, this site did not meet the California Register criterion, as well as the lack of integrity of the site, and is not potentially eligible for listing. Thus, it is not recommended as a historic resource pursuant to CEQA.

The other archaeological site was also visited and evaluated against California Register criterion to determine eligibility for listing. Similar to the site above, the site did not meet the four California Register criterion for listing due to past disturbances to the site. The site does retain a measure of integrity of location and materials; however, the site lacks integrity of setting, design, workmanship, feeling, and association. As such, this site does not meet the integrity criteria and is not potentially eligible for listing. Thus, it is not recommended as a historic resource pursuant to CEQA.

However, due to the previous identification of numerous archaeological resources in the immediate vicinity, it is possible that ground-disturbing activities could reveal the presence of previously unknown resources, including those of historical value. As such, construction of the Proposed Project could result in a substantial adverse change to a previously unknown historical resource. Implementation of Mitigation Measures MM CUL-2 through MM CUL-7 would require training, alerting field personnel to the possibility of encountering buried prehistoric or historic cultural deposits, halting work in the vicinity of a discovered resource, notifying the City, and retaining a qualified cultural resource monitor and/or archaeologist prior to proceeding. In the event of a new find, salvage excavation and reporting would be required.

As discussed previously, 10 archaeological resources have been previously recorded within its boundaries. Of these 10 sites, only two were identified during field surveys. The other eight sites were destroyed from building and parking lot construction. Of the two previously identified archaeological resources, it was

determined that they do not exhibit any integrity of location, setting, design, materials, workmanship, feeling, or association. Because of the failure to meet any of the above criteria combined with a lack of integrity, they were determined ineligible for the California Register, and therefore not recommended as a resource pursuant to CCR Section 15064.5.

No archaeological resources pursuant to Section 15064.5 are located within the project site. However, due to the previous identification of numerous archaeological resources within the project site boundaries, it is possible that ground-disturbing activities associated with each individual project could reveal the presence of previously unknown archaeological resources. Accordingly, construction of the Proposed Project could potentially result in a substantial adverse change in the significance of a previously unknown archaeological resource pursuant to Section 15064.5. Implementation of MM CUL-2 through MM CUL-7, identified previously, would reduce potentially significant impacts to previously unknown historical resources.

### **Mitigation Measures**

The following mitigation measures would be implemented to reduce potentially significant impacts on archaeological resources, including tribal cultural resources.

**MM CUL-2** Prior to the initiation of ground-disturbing activities associated with each individual project, a Worker Education Training and Awareness Program shall be developed to discuss the Proposed Project's potential for impacting cultural resources. The training shall be presented by the qualified archaeologist in conjunction with representatives from the San Manuel Band of Mission Indians, the Morongo Band of Mission Indians and the Fernandeano Tataviam Band of Mission Indians. This education/training program shall discuss the types of artifacts and features that may be encountered, the procedures to be followed if cultural materials are unearthed at the project site, contact information for Lead Agency and Tribal personnel, and the regulatory requirements for the protection of cultural resources. This education program shall be provided to all construction personnel (e.g., contractors, earthmoving personnel, etc.) prior to any work being done on the project site.

**MM CUL-3** Prior to the initiation of ground-disturbing activities associated with each individual project, a Monitoring, Avoidance, and Treatment Plan that is reflective of the project mitigation in this section shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Morongo Band of Mission Indians, and the Fernandeano Tataviam Band of Mission Indians. Once all parties review and approve the

plan, it shall be adopted by the Lead Agency. This plan shall be finalized and adopted prior to the issuance of any construction-related permits (grading, building, etc.) associated with the Proposed Project. Any and all findings shall be subject to the protocol detailed within the Monitoring and Treatment Plan.

**MM CUL-4** Due to the heightened cultural sensitivity of the Proposed Project area, an archaeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within each individual Project area including, but not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation (benches, signage, boulders, walls, seat walls, fountains, etc.), and archaeological work. A sufficient number of archaeological monitors shall be present each workday to ensure that simultaneously occurring ground-disturbing activities receive thorough levels of monitoring coverage.

**MM CUL-5** Due to the heightened cultural sensitivity of the Project area, Tribal monitors representing the San Manuel Band of Mission Indians, the Morongo Band of Mission Indians, and the Fernandeano Tataviam Band of Mission Indians shall be present for all ground-disturbing activities that occur within each individual Project area including, but not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation (benches, signage, boulders, walls, seat walls, fountains, etc.), and archaeological work. A sufficient number of Tribal monitors shall be present each workday to ensure that simultaneously occurring ground-disturbing activities receive thorough levels of monitoring coverage.

**MM CUL-6** If a precontact cultural resource is discovered during Project implementation, ground-disturbing activities shall be suspended 60 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Morongo Band of Mission Indians, the Fernandeano Tataviam Band of Mission Indians, the Archaeological Monitor/applicant, and the Lead Agency shall confer regarding treatment of the discovered resource, as detailed within the Monitoring and Treatment Plan. A research design shall be developed and will include a plan to evaluate the resource for significance under CEQA criteria. The research design shall also acknowledge that, regardless of significance under CEQA, all finds are subject, if feasible, to avoidance/preservation in place as treatment.

Should any resource(s) not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the above listed tribes, unless otherwise decided by said tribes. All plans for analysis shall be reviewed and approved by the Applicant, Lead Agency and listed Tribes prior to implementation, and all removed material shall be temporarily curated on site. It is preferred that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by the identified tribes, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the Project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to the Lead Agency, CHRIS, and the identified Tribes. All reburials are subject to a reburial agreement that shall be developed between the landowner and the identified Tribes outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts (vis-à-vis Project plans, conservation/preservation easements, etc.).

Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with identified tribes to identify an American Association of Museums (AAM) accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the project developer/applicant to pay for those fees.

All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency

and identified Tribes for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and identified Tribes.

**MM CUL-7** In the event that any human remains are discovered within the Project area, ground-disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately notify the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Morongo Band of Mission Indians, the Fernandeño Tataviam Band of Mission Indians, the Applicant/developer, and the Lead Agency. The Lead Agency and the Applicant/developer shall then immediately contact the County Coroner regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code Section 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code Section 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code Section 5097.98.

Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code Section 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The Applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties.

It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act.

The Coroner, Parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code Section 6254 (r).

### **Level of Significance**

With implementation of protocols related to ground-disturbing activities identified in MM CUL-2 through MM CUL-7, Proposed Project impacts associated with archaeological resources would be less than significant.

### **Threshold CUL-3: Would the project disturb any human remains, including those interred outside of formal cemeteries?**

No human remains were found in the project site during the surveys. The likelihood of ethnographic resource discovery would decrease as distance from the presence of the ancient lakeshore increases. However, based on the cultural sensitivity of the area there is the potential to find human remains during subsurface grading activities. As previously discussed, construction of the Proposed Project would require ground-disturbing activities, including grading and excavation, which could result in the discovery of previously unrecorded human remains, including Native American burials.

In the event human remains are encountered during site disturbance, compliance with the State Health and Safety Code Sections 7050.5 through 7055 would be required and have been included as MM CUL-7. These requirements state that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC and provide appropriate recommendations for the treatment and disposition of the remains. Following compliance with State regulations, which are also reflected in MM CUL-7, which detail the appropriate actions necessary in the event human remains are encountered, potential impacts to human remains would be less than significant.

### **Mitigation Measures**

MM CUL-7 incorporates the State Health and Safety Code and PRC Section 5097.98.

### **Level of Significance**

Impacts would be less than significant in accordance with State Health and Safety Code and PRC Section 5097.98. Additionally, MM CUL-7 ensures that local Native American tribes are identified and further reduces the less than significant impact.

#### **5.4.2.4 Cumulative Impacts**

Similar to the Proposed Project, ground-disturbing activities would have the potential to uncover previously unknown historical resources, archeological resources, and/or human remains. The analysis of cumulative impacts to historic resources is based on whether impacts of the Proposed Project and related projects, when taken as a whole, substantially diminish the number of historic resources within the same or similar context or property type. The Proposed Project, in combination with cumulative development, could contribute to the loss of undeveloped land, which could potentially contain historical or archaeological resources. Determinations regarding the significance of impacts of the related projects on historical or archaeological resources would be made on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement appropriate mitigation measures. Furthermore, the Proposed Project's potential impacts to historical and archaeological resources would be less than significant with implementation of MM CUL-1 through MM CUL-7. As discussed previously, the Proposed Project would not significantly impact any historic resources, archaeological resources, or human remains. Therefore, the Proposed Project would have less than significant cumulative impacts related to cultural resources.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

## **5.4.3 SUMMARY OF SIGNIFICANCE**

With implementation of protocols related to ground disturbing activities identified in MM CUL-1 through MM CUL-7, impacts associated with historical and archaeological resources would be less than significant. With adherence to existing regulations and standards and MM CUL-7, impacts associated with human remains would be less than significant. The Proposed Project's cumulative impacts would also result in less than significant impacts to cultural resources.

## 5.5 ENERGY

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This section of the Environmental Impact Report (EIR) provides the content and analysis required by Public Resources Code (PRC), Section 21100(b)(3) and described in Appendix F to the Guidelines for the Implementation of the California Environmental Quality Act (CEQA Guidelines) (14 California Code of Regulations [CCR] Section 15000 et seq.). This section analyzes the potential impacts of the Proposed Project related to energy resources, focusing on the following three resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). This section also evaluates the demand for energy resources attributable to the Proposed Project during construction and operation, and makes a determination regarding the Proposed Project's use and conservation of energy resources. This section demonstrates whether the planned electrical, natural gas, and petroleum-based fuel supplies are adequate to meet the Proposed Project's forecasted energy consumption. The information presented herein is based in part on supporting calculations for the Proposed Project's energy use included in Appendix E: Energy Forecasts, which were based on the California Emissions Estimator Model (CalEEMod) outputs as calculated for Section 5.2: Air Quality and Section 5.7: Greenhouse Gas Emissions, included as Appendix B: Air Quality Model Output and Appendix F: GHG Model Outputs in this EIR.

### 5.5.1 ENVIRONMENTAL SETTING

#### 5.5.1.1 Existing Conditions

##### *a. Electricity*

According to the California Energy Commission's (CEC) California Energy Consumption Database, the State of California consumed 288,614 gigawatt hours (GWh) of electricity in 2017,<sup>1</sup> with electricity demand projected to rise to 339,160 GWh in 2030,<sup>2</sup> the furthest year of currently available projections. The project site and City are located within the Southern California Edison (SCE) planning area, an area encompassing 15 million people and 50,000 square miles of central, coastal and Southern California. The SCE planning area used approximately 102,518 GWh of electricity in 2017.<sup>3</sup>

Electric power service to the City is provided by Lancaster Choice Energy (LCE), a Community Choice Aggregator (CCA) commissioned by the Lancaster City Council, which conveys power to City consumers via SCE distribution infrastructure. SCE's facilities include high-voltage transmission lines, which range up to 115 kilovolts (kv) in the City; and lower voltage distribution lines, typically gauged at about 12 kv in the

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1 California Energy Commission (CEC), California Energy Consumption Database, "Electricity Consumption by County," accessed June 2020, <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

2 California Energy Commission, Demand Analysis Office, "California Energy Demand 2018-2030 Revised Forecast", January 22, 2018, accessed June 2020, available at <http://www.energy.ca.gov/>, January 2017.

3 California Energy Commission (CEC), California Energy Consumption Database, "Electricity Consumption by Planning Area," accessed June 2020, <http://ecdms.energy.ca.gov/elecbyplan.aspx>.



City and sphere of influence (SOI), which provide electricity to individual residences and other users. Power lines consist of lower voltage distribution lines interspersed throughout the project site.<sup>4</sup> Lower voltage (12 kV) distribution lines are primarily located in the vicinity of the developed uses within the project site, including in the area of the Antelope Valley Hospital; commercial uses within the northeast, south, and west; and residential uses within the east and towards the center of the project site. Major roadways bordering and transecting the project site are lined by 12 kV power distribution infrastructure, including Avenue J, 15th Street West, and 20th Street West.

The 272.4-acre project site is largely developed and currently occupied by the Antelope Valley Hospital and commercial, office, medical office, and residential uses. In addition, approximately 110 acres of vacant, undeveloped land is interspersed with the existing development across the site. Based on industry standards, the existing uses were estimated to consume approximately 30,096,010 kilowatt hours (kWh) of electricity in 2019.<sup>5</sup> The vacant areas are assumed to not currently consume electricity.

### **b. Natural Gas**

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network and, therefore, resource availability is typically not an issue. Natural gas satisfies almost one-third of the State's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as transportation fuel. Natural gas is measured in terms of cubic feet (cf).

The State consumed approximately 5,734 million cf (MMcf) of natural gas per day in 2017,<sup>6</sup> with Statewide annual gas requirements projected to decline to 5,511 MMcf per day by 2040.<sup>7</sup> Gas service to the City and project site is provided by the Southern California Gas Company (SoCalGas). The SoCalGas service area reaches 21.8 million consumers through 5.9 million gas meters in more than 500 communities, covering an area of approximately 24,000 square miles throughout Central and Southern California. The SoCalGas

4 County of Los Angeles, "Electricity Transmission Lines – Southern California Edison," *Distributed Energy Resource Interconnection Map (DERiM)*, interactive map, accessed June 2020, <https://www.arcgis.com/home/webmap/viewer.html?webmap=e62dfa24128b4329bfc8b27c4526f6b7>.

5 See Appendix F of this EIR.

6 California Public Utilities Commission, *2016 California Gas Report*, pg. 13, accessed June 2020, <https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf>.

7 California Public Utilities Commission, *2018 California Gas Report*, pg. 21, accessed June 2020, <https://www.sdge.com/sites/default/files/regulatory/2018%20California%20Gas%20Report.pdf>. 2040 value was interpolated from 2030 and 2035 values.

planning area required approximately 2,681 MMcf of natural gas in 2017;<sup>8</sup> natural gas consumption within SoCalGas' planning area is anticipated to be approximately 2,316 MMcf per day in 2040.<sup>9</sup>

The nearest high pressure natural gas distribution line to the project site runs north/south along 10th Street West, approximately 915 feet east of the project site, with another east/west line along Avenue I, approximately 1 mile north of the project site.<sup>10</sup> Lower pressure distribution lines are anticipated to be located along local roadways within and in the vicinity of the project site.

Based on industry standard data, the existing uses within the project site are estimated to consume approximately 39,652,135 thousand British thermal units (kBtu) of natural gas in 2019, or approximately 38.9 MMcf.<sup>11,12</sup> The vacant areas within the project site do not currently consume natural gas.

### **c. Petroleum-Based Fuels**

Crude oil is a mixture of hydrocarbons that exists as a liquid in underground geologic formations and remains a liquid when brought to the surface.<sup>13</sup> Petroleum products are produced from the processing of crude oil and other liquids and include transportation-related fuels such as gasoline and diesel. Petroleum is a worldwide commodity. The Organization of the Petroleum Exporting Countries (OPEC) forecasts the worldwide supply and demand in its *2018 World Oil Outlook* publication. The projected buildout year for the Proposed Project is 2040. The OPEC forecast for 2040 projects a worldwide oil demand of 111.7 million barrels per day (mb/d), an increase of 14.5 mb/d from 2017, and a worldwide oil supply of 111.9 mb/d, an increase of 15.5 mb/d from 2017.<sup>14</sup>

According to the CEC, transportation accounts for nearly 40 percent of California's total energy consumption. In 2017, the most recent year of publicly available data, California consumed approximately 584,996,000 barrels (24,569,832,000 gallons, or 42 gallons per barrel) of petroleum for transportation.<sup>15</sup> Petroleum-based fuels accounted for 90 percent of California's transportation energy sources as recently

8 California Public Utilities Commission, *2016 California Gas Report*, pg. 96, accessed June 2020, <https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf>.

9 California Public Utilities Commission, *2018 California Gas Report*, pg. 103, accessed June 2020, <https://www.sdge.com/sites/default/files/regulatory/2018%20California%20Gas%20Report.pdf>. 2040 value was interpolated from 2030 and 2035 values.

10 Southern California Gas Company (SoCalGas), *Natural Gas Pipeline Map, Los Angeles County*, interactive map, accessed June 2020, <http://socalgas.maps.arcgis.com/apps/webappviewer/index.html?id=c85ced1227af4c8aae9b19d677969335>.

11 See Appendix F of this EIR.

12 The conversion of kBtu to cubic feet uses the factor of 1 cf to 1.037 kBtu. 1 MMcf equals 1,000,000 cf.

13 US Energy Information Administration, "Frequently Asked Questions," last updated: December 26, 2018, accessed June 2020, <https://www.eia.gov/tools/faqs/faq.php?id=40&t=6>.

14 Organization of the Petroleum Exporting Countries (OPEC), *2018 World Oil Outlook*, September 2018, accessed June 2020, available for download at <https://woo.opec.org/pdf-download/>.

15 US Energy Information Administration, "Independent Statistics & Analysis," Table F16: Total Petroleum Consumption Estimates, 2017, [https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep\\_fuel/html/fuel\\_use\\_pa.html&sid=US](https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US), accessed June 2020.

as 2016-2017.<sup>16</sup> However, the State is now working on developing flexible strategies to reduce petroleum use. Incentive programs, such as the CEC’s Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP), are helping the State to reduce its dependency on gasoline. For example, the ARFVTP is predicted to use approximately 313.5 million less gallons of gasoline and diesel per year by year 2025.<sup>17</sup> Several regulations adopted by California to reduce greenhouse gas (GHG) emissions, such as Senate Bill (SB) 375, have the added benefit of reducing the State’s demand on petroleum-based fuels by requiring reductions in vehicle miles traveled (VMT) and by reducing the carbon intensity of transportation fuels. Accordingly, gasoline consumption in California has declined by 6 percent since 2008.<sup>18</sup> The CEC predicts that the demand for gasoline will continue to decline over the next ten years, and there will be an increase in the use of alternative fuels.<sup>19</sup>

### 5.5.1.2 Regulatory Setting

#### a. Federal

##### Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act to serve the nation’s energy demands and promote feasibly attainable conservation methods. This act established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. The Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the “maximum feasible level” with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.<sup>20</sup>

In response to the *Massachusetts v. Environmental Protection Agency* ruling,<sup>21</sup> the George W. Bush administration issued Executive Order (EO) 13432 in 2007, directing USEPA, the U.S. Department of Transportation (USDOT), and the U.S. Department of Energy (USDOE) to establish regulations that reduce

16 California Energy Commission, 2016-2017 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, March 2016.

17 California Energy Commission, 2016-2017 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, draft staff report, CEC-600-2014-014-SD, October 2015, <https://ww2.energy.ca.gov/2015publications/CEC-600-2015-014>.

18 State Board of Equalization, Economic Perspective, Discussion of Recent Economic Developments, Publication 329, Volume XIX, Number 1, February 2013.

19 California Energy Commission, 2015 Integrated Energy Policy Report.

20 For more information on the CAFE Standards, refer to <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>.

21 *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438, 2007.

GHG emissions from motor vehicles, nonroad vehicles, and nonroad engines by 2008.<sup>22</sup> In 2009, the NHTSA issued a final rule regulating fuel efficiency for and GHG emissions from cars and light-duty trucks for model year 2011; in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.<sup>23</sup>

In 2010, President Obama issued a memorandum directing the USEPA, USDOT, USDOE, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles.<sup>24</sup> The proposed standards are projected to achieve 163 grams per mile of carbon dioxide (CO<sub>2</sub>) in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and the USEPA issued future standards for Model Year (MY) 2022 through 2025 following direction from the Obama Administration.<sup>25</sup> The agencies developed the second phase of the coordinated National Program for GHG emissions and fuel efficiency standards following the successful adoption of the first phase for MY 2012–2016 light-duty vehicles in April 2010. Under the second phase standards, CO<sub>2</sub> emission limits would decrease from 250 grams per mile (g/mi) in MY 2016 to 163 g/mi in MY 2025 for a combined fleet of cars and light trucks, equivalent to 54.5 mpg if this level were achieved solely through fuel efficiency improvements. If all of the necessary emission reductions were made from fuel economy improvements, then the standards would correspond to a combined fuel economy of 40.3–41 mpg in 2021 for the first phase of NHTSA rulemaking action and 48.7–49.7 mpg in 2025 for the second phase. In August 2018, the Trump Administration released a notice of proposed rulemaking, the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule), which proposes to freeze these fuel-efficiency requirements and lock in MY 2020 standards through 2026.<sup>26</sup>

22 US Government Publishing Office, Administration of George W. Bush, May 14, 2007, 631, accessed June 2020, <https://www.gpo.gov/fdsys/pkg/WCPD-2007-05-21/pdf/WCPD-2007-05-21-Pg631.pdf>.

23 US Environmental Protection Agency (USEPA), “Regulations for Greenhouse Gas Emissions from Commercial Trucks & Buses,” accessed June 2020, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks>.

24 USEPA, “Presidential Announcements and Letters of Support related to Greenhouse Gas Emissions”, August 28, 2017, accessed June 2020, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/presidential-announcements-and-letters-support-related>.

25 U.S. Environmental Protection Agency (USEPA), *Regulations for Emissions from Vehicles and Engines*, “Final Rule for Model Year 2017 and Later Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards,” October 15, 2012, accessed June 2020, <https://www.gpo.gov/fdsys/pkg/FR-2012-10-15/pdf/2012-21972.pdf>.

26 USEPA, “The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks,” August 24, 2018, accessed June 2020, <https://www.gpo.gov/fdsys/pkg/FR-2018-08-24/pdf/2018-16820.pdf>.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2016, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2018–2027 (for certain trailers) and 2021–2027 (for semitrucks, large pickup trucks, vans, and all types and sizes of buses and work trucks). The final standards are expected to lower CO<sub>2</sub> emissions by approximately 1.1 billion metric tons, save vehicle owners fuels costs of about \$170 billion, and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.<sup>27</sup>

### **Energy Policy Act of 2005**

The Energy Policy Act of 2005 addresses energy production in the US, including (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) tribal energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology. The act includes provisions such as increasing the amount of biofuel that must be mixed with gasoline sold in the US and loan guarantees for entities that develop or use innovative technologies that avoid the by-production of GHGs.

### **Energy Independence and Security Act**

The Energy Independence and Security Act of 2007 (EISA) facilitates the conservation of energy resources by requiring the following:<sup>28</sup>

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of renewable fuel in 2022, with at least 16 billion gallons from cellulosic biofuels and a cap of 15 billion gallons for corn-starch ethanol;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

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27 USEPA, “Final Rule for Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2,” accessed June 2020, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-greenhouse-gas-emissions-and-fuel-efficiency>.

28 Energy Independence and Security Act of 2007, Public Law 110–140, December 19, 2007.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green jobs.”<sup>29</sup>

## **b. State**

### **Senate Bill 1389**

Senate Bill (SB) 1389 (PRC Sections 25300–25323; SB 1389) requires the development of an integrated plan for electricity, natural gas, and transportation fuels. The CEC must adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report every two years. The CEC prepares updates to these assessments and associated policy recommendations in alternate years (PRC Section 25302[d]). Preparation of the Integrated Energy Policy Report involves close collaboration with federal, State, and local agencies and a wide variety of stakeholders in an extensive public process to identify critical energy issues and develop strategies to address those issues. The most recently approved report and update, the 2018 Integrated Energy Policy Report Update, addresses the State’s implementation of SB 350, integrated resource planning, distributed energy resources, transportation electrification, electricity system resilience and efficiency, barriers faced by disadvantaged communities, demand response, renewable energy, natural gas supplies, preliminary transportation energy demand forecast, and climate adaptation and resiliency.<sup>30</sup>

### **Renewable Portfolio Standard**

As amended by SB 350 (De León, 2015), California’s Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 40 percent of total retail sales by 2024, 45 percent of total retail sales by 2027, and 50 percent of total retail sales by 2030. SB 100, signed September 10, 2018, is the 100 Percent Clean Energy Act of 2018. SB 100 updates the goals of California’s RPS and SB 350 to the following: achieve 50 percent renewable resources target by December 31, 2026 and achieve a 60 percent target by December 31, 2030. SB 100 also requires that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.

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29 A green job, as defined by the United States Department of Labor, is a job in business that produce goods or provide services that benefit the environment or conserve natural resources.

30 California Energy Commission, *2018 Integrated Energy Policy Report Update, Volume II*, Publication Number: 100-2018-001-V2-CMF, adopted February 20, 2019.

### **California Code of Regulations Title 13, Section 2449(d)(3) and 2485**

The California Air Resources Board (CARB) is responsible for enforcing CCR Title 13 Sections 2449(d)(3) and 2485, which limit idling from both on-road and off-road diesel-powered equipment to no greater than 5 minutes at any location. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by the vehicle.

### **California’s Energy Efficiency Standards for Residential and Nonresidential Buildings**

Title 24, Part 6 of the CCR regulates the design of building shells and building components. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The CEC adopted the 2016 Building Energy Efficiency Standards (2016 Building Standards), effective January 1, 2017. The 2019 California Building Standards Code (Cal. Code Regs., Title 24) was published July 1, 2019, with an effective date of January 1, 2020.<sup>31</sup>

In addition to the CEC’s efforts, in 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (Part 11 of Title 24), commonly referred to as CALGreen, establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality.<sup>32</sup> CALGreen is periodically amended; the most recent 2019 standards became effective on January 1, 2020.

The CEC periodically amends and enforces Appliance Efficiency Regulations contained in Title 20 of the CCR. The regulations establish water and energy efficiency standards for both federally regulated appliances and non-federally regulated appliances. The most current Appliance Efficiency Regulations, dated January 2016, cover 23 categories of appliances (e.g., refrigerators; plumbing fixtures; dishwashers; clothes washer and dryers; televisions, etc.) and apply to appliances offered for sale in California. The standards are developed with industry, energy efficiency advocates, and others through an open, transparent process.<sup>33</sup> To ensure manufacturers comply, the Energy Commission issues monetary penalties to manufacturers and retailers that sell appliances that are not certified to the Energy Commission as compliant with the efficiency standards. At the time of adoption, compliance dates are required by statute to be set at least one year in the future to allow manufacturers time to comply.

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31 California Energy Commission, 2019 Building Energy Efficiency Standards, accessed June 2020, <https://www.energy.ca.gov/title24/2019standards/>.

32 Guide to the 2016 California Green Building Standards Code, Nonresidential, accessed June 2020: <https://www.dgs.ca.gov/bsc/CALGreen>.

33 California Energy Commission, “Appliance Efficiency Standards Scheduled to Take Effect in 2019,” December 31, 2018, <http://calenergycommission.blogspot.com/2018/12/appliance-efficiency-standards.html>.

### **Assembly Bill 32**

Assembly Bill (AB) 32 (Health and Safety Code Sections 38500–38599), also known as the California Global Warming Solutions Act of 2006, commits the State to achieving year 2000 GHG emission levels by 2010 and year 1990 levels by 2020. To achieve these goals, AB 32 tasked the California Public Utilities Commission (CPUC) and the CEC with providing information, analysis, and recommendations to the CARB regarding ways to reduce GHG emissions in the electricity and natural gas utility sectors. GHG emission reduction efforts are often directly tied to energy conservation efforts as more energy and fuel efficient vehicles and appliances ultimately utilize less energy resources.

### **Assembly Bill 1493/Pavley Regulations**

AB 1493 (Pavley, 2002) required CARB to adopt regulations to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks for model years 2009–2016. In September 2004, and pursuant to AB 1493, CARB approved regulations (which are often referred to as the Pavley standards) to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. In September 2009, CARB adopted amendments to the Pavley standards to reduce GHG emissions from new motor vehicles through the 2016 model year. CARB obtained a waiver from the USEPA that allows for implementation of these regulations notwithstanding possible federal preemption concerns.<sup>34</sup> As previously mentioned, GHG reduction efforts are directly tied to, and often reliant upon, energy conservation efforts as vehicles with greater fuel economy help reduce petroleum-based fuel consumption.

### **Executive Order S-03-05**

Executive Order S-03-05 mandates that California emit 80 percent fewer GHGs in 2050 than it emitted in 1990. Energy efficiency and reduced VMT would play important roles in achieving this goal. As previously mentioned, GHG reduction efforts increase energy efficiency which also reduces the consumption of petroleum-based fuels.

### **California Air Resources Board**

In 2012, CARB approved the Advanced Clean Cars (ACC) program, an emissions-control program for passenger vehicles and light-duty trucks for model years 2017–2025, thereby continuing the regulatory framework established under the Pavley standards beyond model year 2016. The program combines the control of smog, soot, and GHG emissions with requirements for greater numbers of zero-emission vehicles. The components of the Advanced Clean Cars program include the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and

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34 California Air Resources Board (CARB), Clean Car Standards – Pavley, Assembly Bill 1943, last reviewed January 11, 2017, [www.arb.ca.gov/cc/ccms/ccms.htm](http://www.arb.ca.gov/cc/ccms/ccms.htm).



the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.<sup>35</sup> Consistent with the other State reduction policies geared to reducing GHG emissions, the efforts to speed up integration of ZEVs and PHEVs would reduce the consumption of petroleum based fuels.

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13, CCR Division 3, Chapter 10, Section 2435) was adopted to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. This section applies to diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by this class of vehicles.

The Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles (Title 13, CCR Division 3, Chapter 1, Section 2025) was adopted to reduce emissions of diesel particulate matter, oxides of nitrogen (NOx) and other criteria pollutants from in-use diesel-fueled vehicles. This regulation is phased, with full implementation by 2023 with compliance resulting in this class of vehicles using petroleum-based fuel in a more efficient manner thereby reducing diesel fuel consumption.

### **Sustainable Communities Strategy**

SB 375 (Steinberg, 2008), the Sustainable Communities and Climate Protection Act, coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through better-integrated regional transportation, land use, and housing planning that provides easier access to jobs, services, public transit, and active transportation options. These actions achieve their objectives in part through increased energy efficiency. Specific to energy conservation, electric vehicles, natural gas vehicles, transit/rail; more compact development patterns that reduce vehicle travel also demand less energy per capita. Reducing vehicle travel also reduces energy related to producing and distributing fuels and vehicles as well as the construction and maintenance of roads.

### **California Environmental Quality Act**

In accordance with Appendix F: Energy Conservation and Appendix G of the CEQA Guidelines and in order to ensure that energy implications are considered in project decisions, EIRs are required to include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (PRC Section

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35 CARB, *California's Advanced Clean Cars Program*, last reviewed January 18, 2017, [www.arb.ca.gov/msprog/acc/acc.htm](http://www.arb.ca.gov/msprog/acc/acc.htm).

21100(b)(3)). The 2019 update to Appendix G of the CEQA Guidelines now provides that if a project would result in potentially significant environmental effects due to wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with or obstruct a State or local plan for renewable energy or energy efficiency, then an EIR shall be prepared for the project that includes mitigation measures for that energy use. The EIR's analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project as further described below under Appendix F of the CEQA Guidelines.

Appendix F of the CEQA Guidelines provides a list of energy-related topics that may be discussed in an EIR, where topics are applicable or relevant to the project, including:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
2. The effects of the project on local and regional energy supplies and on requirements for additional capacity;
3. The effects of the project on peak and base period demands for electricity and other forms of energy;
4. The degree to which the project complies with existing energy standards;
5. The effects of the project on energy resources;
6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

### ***c. Regional and Local***

#### **Southern California Association of Governments**

As discussed in Section 5.10: Land Use of this EIR, SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) presents a long-term transportation vision through the year 2040 for the six-county region of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties.<sup>36</sup> The 2016 RTP/SCS includes land use strategies that focus on urban infill growth and walkable, mixed-use communities in existing urbanized and opportunity areas. More mixed-use, walkable, and urban infill development would be expected to accommodate a higher proportion of growth in more energy-efficient housing types like townhomes, apartments, and smaller single-family homes, as well as more compact

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<sup>36</sup> SCAG, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, April 2016.

commercial building types. More compact development patterns that reduce vehicle travel also demand less water per capita and reduce conversion of natural and working lands. Furthermore, the 2016 RTP/SCS includes transportation investments and land use strategies that encourage carpooling, increase transit use, active transportation opportunities, and promote more walkable and mixed-use communities, which would potentially help to reduce vehicle travel, ultimately reducing the consumption of petroleum-based fuels and the energy demands necessary for producing and distributing fuels and vehicles, as well as the construction and maintenance of roads. Similarly, SCAG adopted the 2020-2045 RTP/SCS, also known as *Connect SoCal*, on May 7, 2020. The 2020—2045 RTP/SCS focuses on a more prosperous mobile approach through implementing planning strategies that focus on transportation networks.<sup>37</sup> The 2020—2045 RTP/SCS core vision centers on maintaining and better managing the transportation network for moving people and goods, while expanding mobility choices by locating housing, jobs and transit closer together and increasing investment in transit and complete streets.<sup>38</sup> On May 7, 2020, SCAG’s Regional Council adopted *Connect SoCal* and certified the EIR for federal transportation conformity purposes only. In light of the COVID-19 pandemic, the Regional Council considered approval of *Connect SoCal* in its entirety and for all other purposes on September 3, 2020. Currently, SCAG has sent the GHG reduction targets associated with the 2020—2045 SCS to CARB for concurrence.

### City of Lancaster General Plan

The City’s General Plan was adopted on July 14, 2009. The General Plan includes a Plan for the Natural Environment, which addresses energy resources. The objective, policies, and specific actions that are applicable to the Proposed Project include:<sup>39</sup>

Objective 3.6: Encourage efficient use of energy resources through the promotion of efficient land use patterns and the incorporation of energy conservation practices into new and existing development, and appropriate use of alternative energy.

Policy 3.6.1: Reduce energy consumption by establishing land use patterns which would decrease automobile travel and increase the use of energy efficient modes of transportation.

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37 Southern California Association of Governments (SCAG), *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Draft*, “Chapter 1,” <https://www.connectsocial.org/Pages/Connect-SoCal-Draft-Plan.aspx>, Accessed on May 2020.

38 Complete streets ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians, and transit riders, as well as motorists.

39 City of Lancaster, *General Plan 2030* (2009), accessed June 2020, available at <https://www.cityoflanasterca.org/home/showdocument?id=9323>.

- Specific Action 3.6.1(a): Require the inclusion, where feasible, of provisions for energy efficient modes of transportation and fixed facilities which establish transit, bicycle, equestrian, and pedestrian modes as desirable alternatives.
- Specific Action 3.6.1(b): Through appropriate zoning, encourage mixed-use development to locate in proximity to transit connections and facilities in order to promote walking, bicycling and increased transit use.
- Policy 3.6.2: Encourage innovative building, site design, and orientation techniques which minimize energy use.
- Policy 3.6.3: Encourage the incorporation of energy conservation measures in existing and new structures.
- Policy 3.6.4: Support state and federal legislation that would eliminate wasteful energy consumption in an appropriate manner.
- Policy 3.6.6: Consider and promote the use of alternative energy such as wind energy and solar energy.
- Specific Action 3.6.6(a): Work with utility companies and private enterprises in their efforts to incorporate alternative energy resources including, but not limited to, wind and solar energy.

### **City of Lancaster Municipal Code**

The 2019 California Building Codes, including the Building Code, Residential Code, Electrical Code, Mechanical Code, Plumbing Code, Energy Code, Fire Code, and the Green Building Standards Code, became mandatory throughout the State of California on January 1, 2020. Lancaster has amended these codes and adopted them as the Lancaster Codes for Buildings and Construction through Ordinance Number 1067, adopted November 12, 2019..

### **City of Lancaster Climate Action Plan**

The City's Climate Action Plan (CAP), dated March 2017, documents the City's GHG emissions baseline inventory (2010) and current emissions (as of 2015). The CAP also documents the progress made through

alternative energy and sustainability programs and identifies projects that would enhance the City and further reduce GHG emissions.<sup>40</sup>

As mentioned previously, GHG emission reduction efforts are often directly tied to energy conservation efforts as more energy and fuel-efficient building methods, vehicles, and programs, among others, ultimately utilize less energy resources.

## 5.5.2 ENVIRONMENTAL IMPACTS

### 5.5.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with energy resources. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant impact related to energy resources if it would:

**Threshold E-1**                      **Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.**

**Threshold E-2**                      **Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.**

### 5.5.2.2 Methodology

#### **a. Construction**

Electricity usage associated with the supply and conveyance of water used for dust control during construction was calculated using CalEEMod. Developed by the California Air Pollution Control Officers Association (CAPCOA), CalEEMod is a Statewide land use emissions computer model that estimates construction and operational emissions from a variety of land use projects.<sup>41</sup> This section utilizes the air quality worksheets and CalEEMod output data found in Appendix B. Electricity used to power lighting, electronic equipment, and other construction activities necessitating electrical power would be temporary, limited, and would cease upon the completion of construction. Accordingly, electricity usage associated with construction activities was assumed to be negligible. In terms of natural gas, construction activities typically do not involve the consumption of natural gas, and as such, natural gas consumption associated with construction activities was assumed to be negligible.

<sup>40</sup> City of Lancaster, *Climate Action Plan*, March 2017.

<sup>41</sup> California Air Pollution Control Officers Association, *CalEEMod* (2017), accessed June 2020, <http://www.caleemod.com>.

Fuel consumption from on-site off-road heavy-duty construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files included in Appendix B of this EIR. The total horsepower was then multiplied by fuel usage estimates per horsepower-hour included in Table A9-3-E of the South Coast Air Quality Management District's (SCAQMD) CEQA Air Quality Handbook.<sup>42</sup> Fuel consumption from construction worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the CalEEMod construction output files. Total VMT was then calculated for each type of construction-related trip and divided by the corresponding county-specific miles per gallon factor using CARB's EMFAC 2014 model, which provides the total annual VMT and fuel consumed for each vehicle type. Consistent with CalEEMod, construction worker trips were assumed to include 50 percent light duty gasoline automobiles and 50 percent light duty gasoline trucks. Construction vendor and delivery/haul trucks were assumed to be heavy-duty diesel trucks. Refer to Appendix E of this EIR for detailed calculations.

### ***b. Operation***

The Proposed Project's potential energy consumption analyzed the anticipated future demand of the Master Plan. The proposed Master Plan's anticipated electricity and natural gas demands during operation are based in the CalEEMod output data found in Appendix B and Appendix F. The proposed Master Plan's potential petroleum impacts are based on an analysis of estimated net petroleum demand. Potential petroleum impacts are associated with operational vehicle trips. Daily trip generation used in this analysis was based on the air quality worksheets and CalEEMod output data found in Appendix B and Appendix F. Because CalEEMod does not directly estimate fuel consumption, fuel rate and VMT data from CARB's EMFAC 2014 model were used to develop fuel-efficiency factors for gasoline and diesel fuel, in units of miles per gallon. Based on the Proposed Project's annual VMT forecast, gasoline and diesel consumption rates were calculated using the AVAQMD-specific miles per gallon based on the EMFAC 2014 model. Trip rate and trip length data from CalEEMod were used to estimate the total VMT of on-road motor vehicles that would occur from operational uses. The fuel-efficiency factors were applied to the estimated VMT to determine the quantity of gasoline and diesel that would be used annually. The vehicle fleet mix for vehicles anticipated to visit the project site was calculated based on the EMFAC 2014 model for the Antelope Valley portion of the Mojave Desert Air Basin and was anticipated to be 91 percent gasoline and 9 percent diesel fuel. Supporting calculations are provided in Appendix E of this EIR. These calculations

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42 The Antelope Valley Air Quality Management District (AVAQMD) has purview for regulating stationary sources of air pollution within the Antelope Valley portion of the Mojave Desert Air Basin. AVAQMD does not have an equivalent rate for fuel usage estimate. Based on relevance and applicability, SCAQMD's rate was used.

were used to determine if the proposed Master Plan would cause the wasteful, inefficient and/or unnecessary consumption of energy as required by Appendix F of the CEQA Guidelines.

### 5.5.2.3 Project Impacts

**Threshold E-1                      Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.**

#### ***Construction***

As mentioned in Section 3.0: Project Description, new development enabled by the Proposed Project would include the re-development of the hospital, new development on vacant lots, and potential redevelopment of existing structures within the project site.

During construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control, and on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. As discussed below, construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment within the project site, construction worker travel to and from the project site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities).

As shown in Table 5.5-1: Summary of Energy Use During Construction, a total of 748,019 kWh of electricity, 3,149,894 gallons of diesel fuel, and 1,529,337 gallons of gasoline is estimated to be consumed during construction. The Proposed Project's construction schedule would depend on market conditions and the business needs of future developer(s) and is expected to be completed by 2040.

**Table 5.5-1  
Summary of Energy Use During Construction**

<b>Fuel Type</b>	<b>Quantity</b>
<b>Electricity</b>	<b>748,019 kWh</b>
<b>Diesel</b>	
Off-Road Construction Equipment <sup>a</sup>	947,296 gallons
On-Road Construction Equipment <sup>b</sup>	2,202,599 gallons
<b>Total</b>	<b>3,149,894 gallons</b>
<b>Gasoline</b>	
Off-Road Construction Equipment <sup>a</sup>	0 gallons
On-Road Construction Equipment <sup>b</sup>	1,529,337 gallons
<b>Total</b>	<b>1,529,337 gallons</b>

Source: Refer to Appendix E for detailed calculations.

<sup>a</sup> Off-road construction equipment encompasses construction equipment on the project site (e.g., excavators, cranes, forklifts, etc.).

<sup>b</sup> On-road construction equipment encompasses construction worker trips, vendor trips, and haul trips.

## **Electricity**

During construction, electricity would be consumed to supply and convey water for dust control and, on a limited basis, may be used to power lighting, electronic equipment, and other construction activities necessitating electrical power. Electricity would be supplied to the project site by the LCE via SCE distribution infrastructure and would be obtained from existing substations and electrical lines in and around the project site. As shown in Table 5.5-1, a total of approximately 748,019 kWh of electricity is anticipated to be consumed during construction. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. The estimated construction electricity usage represents approximately 1.4 percent<sup>43</sup> of the Proposed Project's estimated annual operational demand, which, as discussed below, would be within the supply and infrastructure service capabilities of LCE/SCE.

43 The percentage is derived by taking the total amount of electricity usage during construction (748,019 kWh) and dividing that number by the total amount of new electricity during operation (54,477,875 kWh) to obtain 1.4 percent.



## **Natural Gas**

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would likely not be needed to support construction activities; thus, there would be little to no demand generated by construction.

## **Petroleum-Based Fuels**

The petroleum-based fuel use summary provided in Table 5.5-1 represents the amount of transportation energy that could potentially be consumed during construction based on a conservative set of assumptions. As shown, on- and off-road vehicles would consume an estimated 1,529,337 gallons of gasoline and approximately 3,149,894 gallons of diesel fuel throughout the Proposed Project's construction period. As the construction would be taking place until buildout in 2040, the totals above would result in approximately 76,467 gallons of gasoline and approximately 157,495 gallons of diesel consumed annually. It should be noted that the annual fuel consumption would fluctuate throughout the construction timeline based on the demands specific to each construction phase and market conditions. For purposes of comparison, the Antelope Valley portion of the Mojave Desert Air Basin is projected to consume approximately 59,799,015 gallons of gasoline and approximately 24,566,211 gallons of diesel annually by 2040.<sup>44</sup> The Proposed Project would account for approximately 0.13 percent of the projected annual gasoline use and 0.6 percent of the projected annual diesel fuel use in 2040.

## ***Operation***

During operation of the Proposed Project, energy would be consumed for multiple purposes associated with medical, commercial, office, hotel, and residential uses, including, but not limited to, heating/ventilating/air conditioning (HVAC); refrigeration; lighting; and the use of electronics, equipment, and machinery. Energy would also be consumed during operation of the Proposed Project in the form of water usage, solid waste disposal, and vehicle trips, among others. As shown in Table 5.5-2: Summary of Annual Energy Use During Operation, the Proposed Project's new energy demand would be approximately 54,477,875 kWh of electricity per year and 131,877,180 kBtu of natural gas per year. Further, the Proposed Project's uses would consume 1,103,054 gallons of diesel fuel per year and 2,795,867 gallons of gasoline per year. These calculations incorporate regulatory requirements established by the 2019 CBC related to water and energy conservation, water quality, and green building practices. Further, the Master Plan's landscape guidelines would incorporate sustainable site design practices and focus on enhancing and improving landscaping features throughout the project site and would emphasize the use of native species and replenishment of groundwater.

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44 See Appendix E of this Draft EIR.

Additionally, the project site is located approximately 2 miles from the Lancaster Metrolink train station, and as such, would also reduce VMT associated with the project's trips; however, for purposes of analysis, this is assumed to be negligible.

**Table 5.5-2  
Summary of Annual Energy Use During Operation**

Source	Units	Quantity
<b>Electricity</b>		
Apartments	kWh/yr	5,724,530
Single-Family Residential	kWh/yr	2,052,070
Office	kWh/yr	7,794,000
Commercial	kWh/yr	6,055,240
Hotel	kWh/yr	2,495,340
Hospital	kWh/yr	21,919,430
Congregate Care	kWh/yr	1,619,270
<i>Building Subtotal</i>	<i>kWh/yr</i>	<i>48,513,480</i>
<i>Water Subtotal</i>	<i>kWh/yr</i>	<i>5,964,395</i>
<b>Electricity Total</b>	<b>kWh/yr</b>	<b>54,477,875</b>
<b>Natural Gas</b>		
Apartments	kBTU/yr	22,058,700
Single-Family Residential	kBTU/yr	6,868,650
Office	kBTU/yr	6,246,000
Commercial	kBTU/yr	21,246,840
Hotel	kBTU/yr	7,894,220
Hospital	kBTU/yr	62,204,470
Congregate Care	kBTU/yr	5,358,470
<b>Natural Gas Total</b>	<b>kBTU/yr</b>	<b>131,877,180</b>
<b>Mobile</b>		
Diesel	Gallons/yr	1,103,054
Gasoline	Gallons/yr	2,795,867
<b>Fuel Total</b>	<b>Gallons/yr</b>	<b>3,898,921</b>

Source: Refer to Appendix E: Energy Forecasts for detailed calculations.

Notes: kWh/yr = kilowatt-hours per year; kBTU/yr = thousand British Thermal Units per year.

Electricity and Natural Gas for the Proposed Project is total yearly operational usage. Mobile gasoline and diesel usage were calculated using CalEEMod output data found attached as Appendix F. Energy calculations are attached as Appendix E.

## **Electricity**

As shown in Table 5.5-2, with compliance with 2019 Title 24 standards and applicable CALGreen requirements, buildout of the proposed Master Plan would result in a projected increase in the on-site demand for electricity, totaling 54,477,875 kWh per year. In addition to complying with Title 24 and CALGreen, the Proposed Project would provide means for indirect energy savings, such as permitting individual solar panels to be applied to existing parking lot shade structures; the use of deciduous trees planted within open spaces, and buildings with south and west orientation.

As mentioned previously, LCE conveys power to City consumers via SCE infrastructure. LCE supplies power to homes and businesses via different plan options, including a base 35 percent renewable energy option; a 100 percent renewable energy option; and a 100 percent solar/wind net metering program for solar/wind customers.<sup>45</sup> The current sources procured by LCE include wind, solar, and geothermal sources, with a goal of incorporating locally generated power. These represent the available off-site renewable sources of energy that would help meet the Proposed Project's energy demand. Additional underground electrical distribution lines would be constructed within the Master Plan Area to service new buildings. SCE undertakes system expansions and secures the capacity to serve their service area, taking into consideration general growth and development, including that envisioned by the City's General Plan.

## **Natural Gas**

As shown in Table 5.5-2, with compliance with 2019 Title 24 standards and applicable 2019 CALGreen requirements (and future California Building Standards), buildout of the proposed Master Plan is projected to generate a new increase in the on-site demand for natural gas totaling 131,877,180 kBtu/year or 374,676 cf/day (0.37 MMcf/day).<sup>46</sup> Based on the 2018 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SoCalGas' planning area will be approximately 2,316 MMcf per day in 2040.<sup>47</sup> The Proposed Project would account for less than 0.02 percent of the 2040 daily forecasted consumption in SoCalGas' planning area.<sup>48</sup> In addition, and as previously mentioned, future developments proposed under the Master Plan would incorporate a number of passive energy conservation measures to reduce energy usage.

Building efficiency would also help alleviate natural gas demand. Therefore, it is anticipated that SoCalGas' planned natural gas supplies would be sufficient to support the Proposed Project's increase in demand for

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45 Lancaster Choice Energy, "Your Options," accessed June 2020, <https://www.lancasterchoicenergy.com/your-options/>.

46 The conversion of kBtu to cubic feet uses the factor of 1 cf to 1.037 kBtu. Based on 365 days per year.

47 California Public Utilities Commission, *2018 California Gas Report*, pg. 103, accessed June 2020, <https://www.sdge.com/sites/default/files/regulatory/2018%20California%20Gas%20Report.pdf>. 2040 value was interpolated from 2030 and 2035 values.

48  $0.37 \text{ MMcf} / 2,316 \text{ MMcf} = 0.0002$ .

natural gas. Additional underground natural gas supply and service lines would be constructed within the Master Plan Area to service new buildings. SoCalGas undertakes system expansions and secures the capacity to serve their service area, taking into consideration general growth and development, including that envisioned by the City's General Plan.

### **Petroleum-Based Fuels**

During operation, traffic associated with the Proposed Project would result in the consumption of petroleum-based fuels due to vehicular travel to and from the project site. Implementation of the Proposed Project would result in a increase in 104,749,872 annual VMT. Assuming a fleet mix of 91 percent auto and 9 percent diesel with lower mpg, implementation of the uses associated with the proposed Master Plan would consume 3,898,921 gallons of petroleum (1,103,054 gallons of diesel and 2,795,867 gallons of gasoline) per year for vehicular trips to and from the Master Plan Area. By comparison, the broader AVAQMD area would consume approximately 84,365,226 gallons of total petroleum fuel in 2040. The Proposed Project's combined estimated annual fuel consumption would represent approximately 4.6 percent of total consumption for the AVAQMD.<sup>49</sup> Thus, the use of such resources would be on a relatively small scale when compared to regional consumption.

Vehicular, bicycle, and pedestrian access to the Master Plan area, as described in Section 3.0, is proposed via new roadway connections to the arterial roadway network surrounding and traversing the Master Plan. Primary internal street network connections include the extensions of 18th Street West and 13<sup>th</sup> Street West to provide north-south connectivity, and Avenue J-5 to provide east-west connectivity. All internal roadways would include two-lane facilities with bike lanes and pedestrian walkways. The Master Plan Area's location also takes advantage of existing transportation alternatives in the vicinity that could reduce energy consumption (gasoline, electric, or natural gas, depending on the mode of travel) for transportation needs. A number of public transit options are within reasonable walking distance (less than one-quarter mile) of the Master Plan Area. Antelope Valley Transit Authority (AVTA) routes 1, 7, 11 and 12 directly serve the project site; AVTA provides local bus service to take children to school, employees to work, and residents to local stores and malls. AVTA also provides commuter bus service to downtown Los Angeles, Century City/West Los Angeles, and the San Fernando Valley. These routes operate during the work week only and depart from the bus station at Lancaster City Park, located approximately 1.25 miles southeast of the project site. The Lancaster Metrolink station is located approximately 1 miles northeast of the project site and provides commuter rail service to downtown Los Angeles, as well as transfers to a number of local and regional bus routes (Amtrak, AVTA, Eastern Sierra Transit Authority, and Kern Transit). As such, the Master Plan Area provides access for employees, residents, and visitors.

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<sup>49</sup> 3,898,921 gallons of petroleum divided by 84,365,226 gallons of petroleum = 4.6 percent.

In terms of transportation-related energy usage, the Proposed Project would be consistent with the energy efficiency policies emphasized by the 2016-2040 RTP/SCS. Refer to Section 5.10: Land Use for further discussion regarding the Proposed Project's consistency with the 2016-2040 RTP/SCS. Specifically, the proposed Master Plan would promote equitable land use decisions that result in fewer vehicle trips by providing increased employment opportunities in proximity to residential areas, destinations, and other neighborhood services. The Master Plan Area is also located in an area served by existing public transit provided by AVTA and is proximate to alternative transportation methods. Further, the Proposed Project would enable mixed-use development in targeted areas and facilitate the design of a pedestrian-oriented, walkable medical campus to encourage walkability and minimize the necessity of automobile trips and VMT. These features would serve to reduce VMT and associated transportation fuel consumption. In addition, during construction activities of individual projects, vehicles would be required to comply with CARB anti-idling regulations and the In-Use Off-Road Diesel Fleet regulations which indirectly reduces the consumption of petroleum based fuels. During the operational lifetime of the Proposed Project, newer vehicles sold on the market would be required to comply with CAFE fuel economy standards expected to incrementally take effect. Accordingly, fuel consumption is anticipated to decrease each year through 2040 (buildout of the Master Plan) through implementation of regulation that require higher energy efficiencies and higher efficient and alternative fueled vehicles.

### **Conclusion**

As discussed in this section, the Proposed Project's energy requirements during construction or operation would not constitute wasteful, inefficient, or unnecessary consumption of energy. Further, the Proposed Project's energy requirements represent a small portion of regional demand relative to existing levels of consumption and would not significantly affect local and regional supplies or capacity. The Proposed Project's energy usage would also be consistent with electricity and natural gas future projections for the region. Electricity generation capacity and supplies of natural gas and transportation fuels would also be sufficient to meet the needs of Proposed Project-related construction and operations with compliance with existing regulatory requirements, such as CALGreen. For the reasons discussed above, the Proposed Project would not cause wasteful, inefficient, and unnecessary consumption of energy during construction or operation. Construction and operation impacts of the Proposed Project related to energy use would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

The Proposed Project's energy consumption impacts would be less than significant.

**Threshold E-2                      Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.**

As discussed previously, the energy conservation policies and plans relevant to the Proposed Project include the California Title 24 energy standards, the 2019 CALGreen building code, the Lancaster Codes for Buildings and Construction, the City's General Plan, and the City's CAP. The City's CAP provides a framework for attaining the City's goals related to climate change adaptation through energy efficiency and renewable energy. Further, SCAG's 2016-2040 RTP/SCS contains goals, objectives, and policies directly and indirectly related to energy conservation, such as encouraging energy efficiency where possible and encouraging land use and growth patterns that facilitate transit and active transportation, respectively.

The Proposed Project is an infill development consisting of medical, commercial, office, hotel, and residential uses in an area served by transit. Furthermore, a major design component of the Proposed Project is the development of a pedestrian-oriented and walkable medical campus focused around a new Antelope Valley Hospital and supporting uses. Moreover, future individual development projects enabled by the proposed Master Plan would be required to comply with the provisions of the CALGreen building code and implement various conservation measures by design to reduce energy usage and water conservation. Water conservation efforts are closely related to energy conservation as water usage expends some form of energy through water heating, irrigation control, and other means. Accordingly, conserving water is mutually beneficial to energy conservation. The Proposed Project's landscape guidelines would emphasize the use of native species and replenishment of groundwater. All future individual projects developed pursuant to the Master Plan would also be constructed in compliance with the City of Lancaster's Landscaping Installation and Maintenance Practices (Lancaster Municipal Code [LMC] Chapter 8.5). Los Angeles County Waterworks Districts (LACWD), District 40 provides retail water service to the City, including the project site. LACWD District 40 will continue to implement programs to emphasize and educate customers on water conservation measures through incentives and outreach.

Title 24 and the 2019 CALGreen buildings codes are mandatory State conservation policies amended and adopted under the City's Codes for Buildings and Construction. Future individual development projects enabled by the Master Plan would be required to comply with these provisions. Further, as discussed in Section 5.7, the Proposed Project would result in a per capita reduction of GHG emissions and VMT and the proposed mix of land uses would be consistent with the 2016-2040 RTP/SCS. In terms of transportation-related energy conservation, the Proposed Project would be consistent with the energy efficiency policies emphasized by both the City's CAP and the 2016-2040 RTP/SCS. Specifically, the Master Plan would provide for mixed-use development in targeted areas and cluster places of work, living, and enjoyment. These land use patterns heighten the efficient use of land resources by clustering uses and reducing the necessity of automobile trips and resultant VMT. Moreover, the design of the project site is

transportation-oriented, offering internal pedestrian and bicycle linkages, interfacing with surrounding mobility networks, and being located proximate to public transportation. During the operational lifetime of the Proposed Project, newer vehicles sold on the market would be required to comply with CAFE fuel economy standards expected to incrementally take effect.

Based on the above, the Proposed Project would not conflict with adopted energy conservation plans or violate federal or State energy standards. Therefore, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

No significant impacts would occur.

#### **5.5.2.4 Cumulative Impacts**

The geographic context for the cumulative analysis of electricity is LCE/SCE's service area and the geographic context for the cumulative analysis of natural gas is SoCalGas service area. While the geographic context for transportation-related energy use is more difficult to define, it is meaningful to consider the Proposed Project in the context of the Antelope Valley Air Quality Management District area. Growth within these geographies is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure, such as new or expanded energy facilities. Overall demand is expected to grow more slowly as regional growth is offset by improvements in efficiency and more interest in renewable energy.<sup>50</sup>

#### ***a. Wasteful, Inefficient, and Unnecessary Use of Energy***

##### **Electricity**

Buildout of the proposed Master Plan, related projects, and additional forecasted growth in LCE/SCE's service area would cumulatively increase the demand for electricity supplies and infrastructure capacity. As mentioned previously, the SCE planning area used approximately 102,518 GWh of electricity in 2017. The SCE estimates that electricity consumption within SCE's planning area will be approximately 129,000 GWh annually by 2030;<sup>51</sup> and electricity consumption could increase to an estimated 141,792 GWh by 2040, when the Proposed Project would be fully built out. Based on the Proposed Project's estimated new electrical consumption of 54,477,875 kWh per year, the Proposed Project would account for approximately

50 Southern California Edison, "Who We Are," accessed June 2020, <https://www.sce.com/wps/portal/home/about-us/who-we-are>.

51 California Energy Commission, Demand Analysis Office, "California Energy Demand 2018-2030 Revised Forecast" (April 19, 2018), pg. 97, accessed June 2020, available at <https://efiling.energy.ca.gov/getdocument.aspx?tn=223244>.

0.04 percent of SCE's total demand in the first year of operation.<sup>52</sup> Although development of the Master Plan would result in the use of renewable and nonrenewable electricity resources during construction and operation, which could limit future availability, the use of such resources would be on a relatively small scale when compared to regional consumption, and would be reduced through compliance with the latest CALGreen code requirements at the time of each individual project proposed under the Master Plan. Furthermore, as with the Proposed Project, during construction and operation, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and State energy standards under Title 24, and incorporate energy design features, as necessary. Therefore, the Proposed Project's contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of electricity would not be cumulatively considerable and, thus, cumulative construction and operation-related electricity impacts would be less than significant.

### Natural Gas

Buildout of the Master Plan, related projects, and additional forecasted growth in SoCalGas service area would cumulatively increase the demand for natural gas supplies and infrastructure capacity. Based on the 2018 California Gas Report, the California Energy and Electric Utilities estimate natural gas consumption within SoCalGas' planning area will be approximately 2,316 MMcf per day in 2040.<sup>53</sup> Buildout of the Master Plan is projected to generate a increase in the on-site demand for natural gas of approximately 131,877,180 kBtu/year or 374,676 cf/day (0.37 MMcf/day).<sup>54</sup> As such, the Proposed Project would account for less than 0.02 percent of the 2040 daily forecasted consumption in SoCalGas' planning area.<sup>55</sup> SoCalGas forecasts take into account projected population growth and development based on local and regional plans. Although development of the Proposed Project would result in the use of natural gas resources, which could limit future availability, the use of such resources would be on a relatively small scale, would be reduced by measures rendering the Proposed Project more energy efficient, and would be consistent with regional and local growth expectations for SoCalGas service area. Furthermore, future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and State energy standards under Title 24, and incorporate mitigation measures, as necessary. Therefore, the Proposed Project's contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of natural gas would not be cumulatively considerable

52 54,477,875 kWh equals 54.48 GWh.  $54.48/141,792 = 0.04$  percent

53 California Public Utilities Commission, *2018 California Gas Report*, pg. 103, accessed June 2020, <https://www.sdge.com/sites/default/files/regulatory/2018%20California%20Gas%20Report.pdf>.

54 The conversion of kBtu to cubic feet uses the factor of 1 cf to 1.037 kBtu. Based on 365 days per year.

55  $0.21 \text{ MMcf} / 5,511 \text{ MMcf} = 0.00004 \text{ MMcf/day}$ .



and, thus, cumulative construction and operation-related natural gas consumption impacts would be less than significant.

### **Petroleum-Based Fuels**

Buildout of the Master Plan, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the State and region. As summarized in Table 5.5-2, the Proposed Project's estimated petroleum-based fuel usage would be approximately 2,795,867 gallons of gasoline per year and approximately 1,103,054 gallons of diesel fuel per year, for a total of approximately 3,898,921 gallons of fuel. By comparison, the AVAQMD area is anticipated to consume a total of approximately 84,365,226 gallons of fuel in 2040. The anticipated increase in consumption associated with one year of the Master Plan operation represents approximately 4.6 percent of consumption across the AVAQMD area. Thus, the use of such resources would be on a relatively small scale when compared to regional consumption.

As described above, petroleum currently accounts for 90 percent of California's transportation energy sources; however, over the last decade the State has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector which reduces VMT and indirectly would reduce reliance on petroleum fuels. Further, total gasoline consumption per capita has declined by 6 percent since 2008. The CEC predicts that the demand for gasoline will continue to decline over the next 10 years and there will be an increase in the use of alternative fuels such as natural gas, biofuels, and electricity. As with the Proposed Project, other future development projects would be expected to reduce VMT by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions. During the operational lifetime of the Proposed Project and other related projects, newer vehicles sold on the market would be required to comply with CAFE fuel economy standards expected to incrementally take effect.

Furthermore, the Proposed Project would be consistent with the energy efficiency policies emphasized by the 2016-2040 RTP/SCS. Specifically, the Master Plan would promote equitable land use decisions that result in fewer vehicle trips by clustering employment opportunities with residential areas, commercial uses, destinations, and other neighborhood services. The Master Plan Area is also located in an area served by existing public transit provided by AVTA and is proximate to the Lancaster Metrolink station. These features would serve to reduce VMT and associated transportation fuel consumption. By its very nature, the 2016-2040 RTP/SCS is a regional planning tool that addresses cumulative growth and resulting environmental effects. Since the Proposed Project is consistent with the 2016-2040 RTP/SCS as discussed in Section 5.10 of this EIR, its contribution to cumulative impacts related to wasteful, inefficient, and

unnecessary use of transportation fuel would not be cumulatively considerable and, thus, would be less than significant.

## **Conclusion**

Based on the analysis provided above, the Proposed Project's contribution to cumulative impacts related to energy consumption (i.e., electricity, natural gas, and petroleum-based fuel) would not result in a cumulatively considerable effect related to the wasteful, inefficient, and unnecessary consumption of energy during construction or operation. As such, the Proposed Project's impacts would not be cumulatively considerable; therefore, cumulative energy impacts are concluded to be less than significant.

### ***b. Conflict with or obstruction of a State or local plan for renewable energy or energy efficiency***

#### **Electricity**

Electricity infrastructure is typically expanded in response to increasing demand, and system expansion and improvements by SCE are ongoing. SCE would continue to expand delivery capacity as needed to meet demand increases within its service area at the lowest cost and risk consistent with SCE's environmental priorities and reliability standards. The Renewables Portfolio Standard Procurement Plan takes into account future energy demand, advances in renewable energy resources and technology, energy efficiency, conservation, and forecast changes in regulatory requirements. Related projects in the City would be anticipated to utilize electricity sourced by LCE. Through its base plan, LCE delivers electricity that is 35 percent renewable, with options to receive higher proportions of renewable electricity. The base plan is anticipated to grow in its sourced renewable electricity content in the coming years. Development projects within the SCE service area would also be anticipated to incorporate site-specific infrastructure improvements, as necessary. Each of the related projects would be reviewed by SCE to identify necessary power facilities and service connections to meet the needs of their respective projects. Project Applicants would be required to provide for the needs of their individual projects, thereby contributing to the electrical infrastructure in the Master Plan Area. Therefore, the Proposed Project's contribution to cumulative impacts with respect to electricity infrastructure would not be cumulatively considerable and, thus, would be less than significant.

#### **Natural Gas**

As discussed previously, the Proposed Project would be required to comply with the latest Title 24 standards, latest CALGreen requirements (and future California Building Standards), and the City's Buildings and Construction codes. As with the Proposed Project, related projects would be required to

meet the same energy consumption standards. Therefore, there would be no significant cumulative impacts with regard to consistency with energy conservation plans.

### **Conclusion**

Based on the analysis provided above, the Proposed Project's required compliance with the latest Title 24 standards, latest CALGreen requirements (and future California Building Standards), and the City's Buildings and Construction codes would not result in a cumulatively considerable effect. Further, all related projects in the City would be required to comply with these same State and local requirements. As such, the Proposed Project's impacts would not be cumulatively considerable; therefore, cumulative impacts related to conflict with a State or local plan for renewable energy or energy efficiency would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Cumulative impacts would be less than significant.

### **5.5.3 SUMMARY OF SIGNIFICANCE**

The Proposed Project would result in less than significant impacts to electricity, natural gas, and petroleum-based fuels. Cumulative impacts would also result in less than significant impacts related to energy resources. Furthermore, the Proposed Project would be consistent with State and local plans for renewable energy or energy efficiencies.

## 5.6 GEOLOGY AND SOILS

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This section of the Environmental Impact Report (EIR) addresses the potential to result in or expose people or property to adverse geologic conditions or hazards. It considers the existing soil conditions, along with the geologic hazards, such as faulting, seismic ground shaking, landslides, and liquefaction. Various federal, State, regional, and local programs and regulations related to anticipated geologic hazards are also discussed in this section. Potential impacts related to geology and soils that would result from the Proposed Project are identified, along with any measures to mitigate the significant effects of the Proposed Project, if required.

### 5.6.1 ENVIRONMENTAL SETTING

#### 5.6.1.1 Existing Conditions

##### *a. Regional*

##### **Geology**

Eight structural provinces within California are classified by predominant regional fault trends and similar fold structure. These provinces are in turn divided into blocks and sub-blocks that are defined by “major Quaternary faults” and exhibit similar structural features. Within this framework, the project site is located within Structural Province III, which is controlled by the dominant northwest trend of the San Andreas fault and is divided into two blocks, the Mojave and the Tehachapi. The Mojave Block, on which the project site is located, is characterized by a series of parallel, northwest trending faults that exhibit vertical and right lateral dip-slip movement. These faults are terminated by the Garlock fault zone to the northwest and the Pinto Mountain fault zone to the southeast. The Mojave Block is bound on the east by the Ludlow fault zone and on the west by the San Andreas fault zone.

The Antelope Valley is an arid valley in the western corner of the Mojave Desert. The Mojave Desert is a wedge-shaped block bounded by the San Andreas Fault Zone on the southwest, the Garlock Fault Zone on the northwest, and the Colorado River on the east. Uplifts of the San Gabriel and Tehachapi Mountains isolated the Mojave Desert from the Pacific Coast and created the interior drainage basins of the western Mojave Desert, such as the Antelope Valley. The Antelope Valley is surrounded by the Tehachapi Mountain range in the north and northwest, and the San Gabriel, Sierra Pelona and Liebre Mountains to the south and southwest. The topography of the City and surrounding area generally slopes up to the southwest, with elevations ranging from approximately 2,300 feet above mean sea level (amsl) in the northeast to 3,500 feet amsl in the southwest. The overall topography of the City is somewhat flat. Major topographic features include Quartz Hill located in the southern portion of the City and surrounding area, and the Fairmont and Antelope Buttes located west of 110th Street West.

## Soils

Most of the Mojave Desert region is a high basin that includes remnants of older earth materials that occur as scattered buttes. The alluvial fans and terrace region in the western and southwestern parts of Antelope Valley are made up of deposited stream materials. The upland region consists of foothills, mountains, ridges, fault scarps, and associated valley floors of the nearby San Gabriel Mountains. Generally, the soils within the City and surrounding area have resulted from the uplift of the San Gabriel Mountains and their subsequent erosion. The alluvial deposits found within the foothill region consist of coarse-grained sediment intermingled with organic matter with depositions of finer-grained silts and clays in areas further from the mountains.

The City's Master Environmental Assessment (MEA) examines the geological process that created existing geology, physiography, and topography of the Antelope Valley. Certain soils within the City are prone to shrink-swell potential, which is defined as the relative measure of the propensity of the soil to swell when wet and shrink when dry. The locations of these shrink-swell potential area occur primarily west of State Route (SR) 14 and north of Lancaster Boulevard.<sup>1</sup> Furthermore, the Southern California region is seismically active and commonly experiences strong ground shaking resulting from earthquakes along active faults. The nearest active fault is the San Andreas Fault zone and the Hitchbrook Fault located south of the City. Other nearby active faults include the Garlock Fault zone which branches off the San Andreas Fault north of the City and defines the northern boundary of the Antelope Valley.<sup>2</sup>

### **b. Project Site**

#### **Geology**

The City lies within a seismically active area referred to as the Mojave Desert Geomorphic Province of California and is located at the western edge of a moving plate in the earth's crust. Defining the boundary of this area is the San Andreas Fault, where the Pacific Plate and the North American Plate meet.

The project site is located in the Antelope Valley portion of the Mojave Desert Geomorphic Province of California. The majority of the project site is mapped with Holocene-age to Late Pleistocene-age younger alluvial fan deposits at the surface, which consist of clay-rich silty fine sand. The project site consists of both developed land interspersed with vacant/undeveloped lots. As shown in Figure 4.0-1: Vacant and Undeveloped Lots in Section 4.0: Environmental Setting of this EIR, the vacant/undeveloped lots are located northeast of the intersection of Avenue J-8 and 20th Street West (Vacant Lot 1); southwest of the intersection of Avenue J-8 and 15th Street West (Vacant Lot 2); and southeast of intersection of Avenue J-

1 City of Lancaster, *General Plan 2030 Master Environmental Assessment, April 2009*, Figure 2-3, accessed June 19, 2020, <https://www.cityoflancasterca.org/home/showdocument?id=11352>.

2 City of Lancaster, *Master Environmental Assessment, April 2009*, Figure 2-5.

2 and 15th Street West (Vacant Lot 3). The southeastern portion of Vacant Lot 2 is also mapped with late Holocene wash deposits, which consist of fine to medium-grained sand with some coarse sands, gravel, and silt.<sup>3</sup>

## Soils

As previously discussed, the project site consists of both developed land interspersed with vacant/undeveloped lots. The project site is generally flat, and the vacant/undeveloped lots consist of exposed soil vegetated with weeds and grasses. However, the eastern portion of Vacant Lot 2 contains fill soil that has been graded approximately 6 to 7 feet higher in elevation than the adjoining portion of the lot, suggesting imported fill placement.<sup>4</sup> The remainder of the vacant/undeveloped lots are generally flat. Additionally, as evidenced in the City's MEA, the project site is in a location that contains desert soils, including Hesperia-Rosamond-Cajon, Pond-Tray Oban, and Sunrise-Merrill.<sup>5</sup>

The project site is located within the Antelope Valley Groundwater Basin, consisting primarily of Pleistocene and Holocene age unconsolidated alluvial and lacustrine deposits of sand, silt, clay, and gravel in its water-bearing units. Groundwater was measured at depths ranging from approximately 61 to 62 feet below ground surface (bgs). Direction of groundwater flow was reported to the north-northwest.<sup>6</sup>

## Other Geologic Features

The project site consists of alluvium type soil that contains low shrink-swell potential.<sup>7</sup> The nearest active faults to the project site are the Hitchbrook Fault and San Andreas Fault zone, which are located over six miles southwest of the project site and are in the vicinity of the Portal Ridge, which includes other faults that could produce damaging earthquakes including the Sierra Madre–San Fernando, Garlock, Sierra Nevada (Owens Valley), and White Wolf faults.<sup>8</sup> Thus, the project site is subject to ground shaking during an earthquake. The only portion of the project site that is potentially subject to liquefaction is Amargosa Creek that borders the western project site boundary and bisects the southern portion of the project site and parcels south of Avenue J-8 and west of 15th Street West, as illustrated on Figure 5.6-1: Potential Seismic Hazard Zones: Liquefaction Zones.<sup>9</sup>

3 California Geological Survey, *Mojave Desert Geomorphic Province*, 2015.

4 Refer to Appendix G of this EIR. Leighton Consulting, Inc, *Phase I Environmental Site Assessment, Lancaster Health District Vacant Parcels*, June 2017.

5 City of Lancaster, *Master Environmental Assessment*, April 2009, Figure 2-2.

6 Leighton Consulting, Inc, *Phase I Environmental Site Assessment, Lancaster Health District Vacant Parcels*, June 2017.

7 City of Lancaster, *Master Environmental Assessment*, April 2009, Figure 2-3.

8 City of Lancaster, *Master Environmental Assessment*, April 2009, Figure 2-5.

9 California Department of Conservation, "Earthquake Zones of Required Investigation," <https://maps.conservation.ca.gov/cgs/EQZApp/>, accessed November 2020.

### 5.6.1.2 Regulatory Setting

#### *a. Federal*

##### **Earthquake Hazards Reduction Act**

The US Congress passed the Earthquake Hazards Reduction Act in 1977, amended in 2004, to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of a National Earthquake Hazards Reduction Program based on federal, State, local, and private research, decision-making and contributions. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives. Objectives of this program include education of the public, the development of technologically and economically feasible design and construction methods, and implementation of practicable model building codes in moderate or high seismic risk zones.

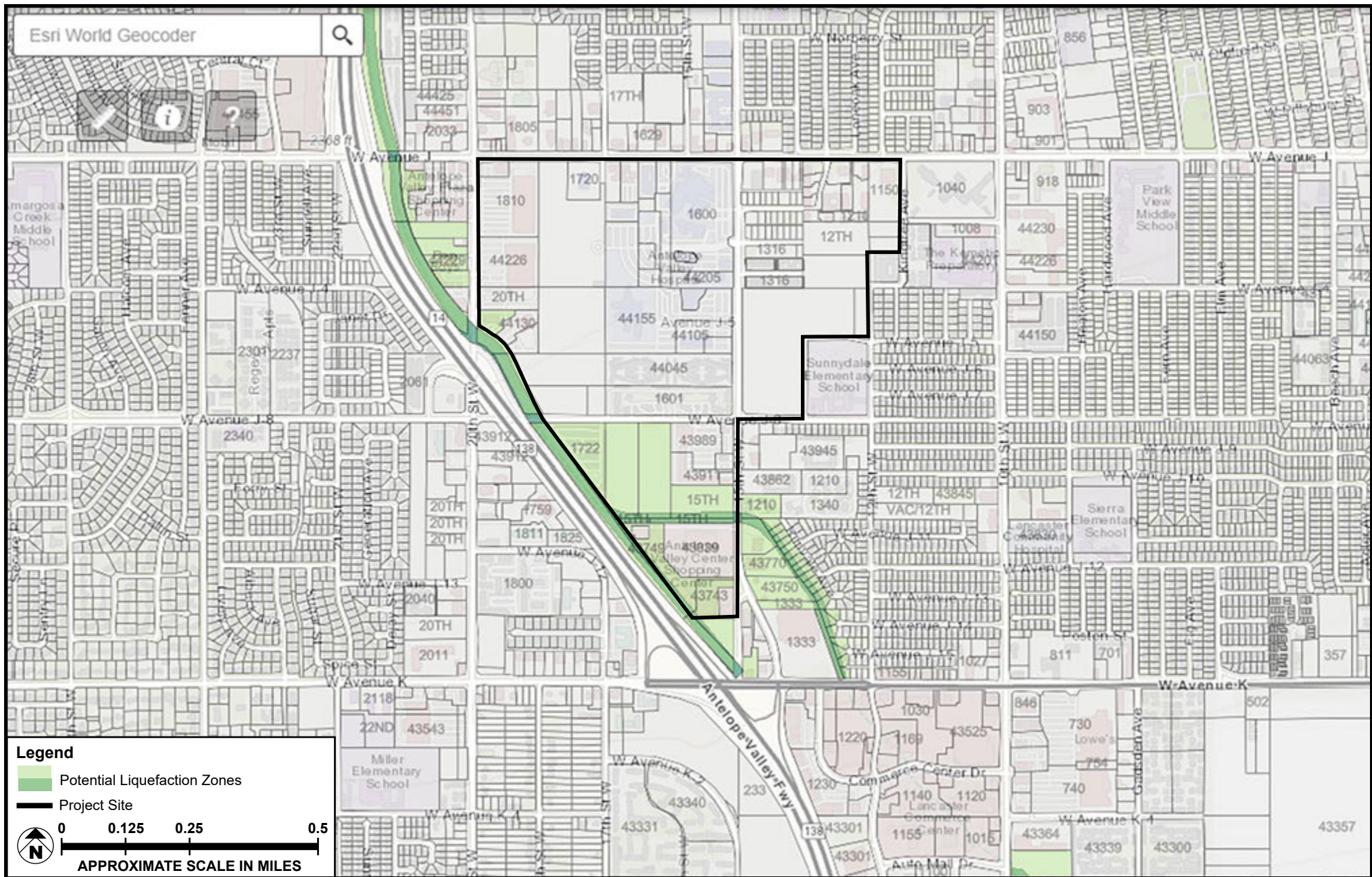
##### **National Pollutant Discharge Elimination System**

The National Pollutant Discharge Elimination System (NPDES) is a program created in accordance with the Clean Water Act (CWA). The provision of the CWA applicable to geology and soils is CWA Section 402, which applies to all construction sites of over one acre in size and, in part, serves to control the potential impacts of erosion. CWA Section 402 authorizes the NPDES permit program that covers point sources of pollution discharging to a water body. In November 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that establish requirements for specific categories of industries, including construction projects that encompass greater than or equal to 5 acres of land. The NPDES program requires operators of construction sites one acre or larger to prepare a Stormwater Pollution Prevention Plan (SWPPP) and obtain authorization to discharge stormwater under an NPDES construction stormwater permit. The Phase II Rule became final in December 1999, expanding regulated construction sites to those greater than or equal to 1 acre, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. The regulations require that stormwater and nonstormwater runoff associated with construction activity discharging either directly to surface waters or indirectly through municipal separate storm sewer systems (MS4) must be regulated by an NPDES permit.

##### **Soil and Water Resources Conservation Act**

The Soil and Water Resources Conservation Act of 1977, as amended (RCA), provides the United States Department of Agriculture (USDA) broad strategic assessment of planning authority for the conservation, protection, and enhancement of soil, water, and related natural resources.





SOURCE: California Department of Conservation, Lancaster West Quadrangle, Seismic Hazard Zones Map, February 11, 2005

FIGURE 5.6-1



## **b. State**

### **Alquist-Priolo Earthquake Fault Zoning Act**

The purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to identify hazards associated with surface fault ruptures and to prevent the construction of buildings on active faults.<sup>10</sup> The State Geologist is required to establish and map zones around the surface traces of active faults, which are then distributed to county and city agencies to be incorporated into their land use planning and construction policies. Proposed development needs to be proven through geologic investigation to not be located across active faults before a city or county can permit the implementation of projects. If an active fault is found, development for human occupancy is prohibited within a 50-foot setback from the identified fault. Alquist-Priolo Special Studies Zones are now commonly known as State of California Earthquake Fault Zones.

### **Seismic Hazards Mapping Act**

The purpose of the Seismic Hazards Mapping Act is to protect the public from the effects of nonsurface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, or other ground failure caused by earthquakes. The Seismic Hazards Mapping Act requires delineated maps to be created by the State Geologist to reflect where potential ground shaking, liquefaction, or earthquake-induced landslides may occur.<sup>11</sup> Cities and counties are required to obtain approval for development on nonsurface fault rupture hazard zones and mitigate seismic hazards.

### **California Building Standards Code, California Code of Regulations**

The California Building Standards Code (CBC) is administered by the California Building Standards Commission (CBSC).<sup>12</sup> The CBC governs all development within the State of California, as amended and adopted by each local jurisdiction. These regulations include provisions for site work, demolition, and construction, which include excavation and grading, as well as provisions for foundations, retaining walls, and expansive and compressible soils. The CBC provides guidelines for building design to protect occupants from seismic hazards. The most recent version of the code adopted by the California Building Standards Commission is the 2019 CBC, which went into effect on January 1, 2020.<sup>13</sup>

### **State Water Resources Board**

The State Water Resources Control Board (SWRCB) adopts Statewide water quality control plans and its nine Regional Water Quality Control Boards (RWQCBs) are required to develop and adopt regional water

10 Alquist-Priolo Earthquake Fault Zoning Act, California Public Resources Code (PRC), sec. 2621.5.

11 Seismic Hazards Mapping Act, PRC sec. 2690–2699.6.

12 California Building Standards Commission (CBSC), “California Building Standards Commission,” accessed June 19, 2020, <http://www.dgs.ca.gov/bsc>.

13 California Building Standards Code, 24 California Code of Regulations (CCR).

quality control plans that conform to State water quality policy. The project site is within the purview of the Lahontan RWQCB. Water quality standards and control measures for surface and ground waters of the Lahontan Region are contained in the Water Quality Control Plan for the Lahontan Region (also known as the Basin Plan). The Basin Plan is applicable to the Proposed Project.

**c. Regional and Local**

**Antelope Valley Air Quality Management District**

The purpose of Antelope Valley Air Quality Management District (AVAQMD) Rule 403, Fugitive Dust, is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

**City of Lancaster General Plan**

The primary goal of the City's Plan for Public Health and Safety is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from natural and human-induced hazards. The Plan for Public Health and Safety specifically addresses geology and seismicity, flooding and drainage, hazardous materials, and disaster preparedness. The type and location of hazards are identified, as well as policies and programs to minimize impacts. Additionally, the Plan for the Natural Environment evaluates the natural and human-induced environments within the City. Policies and specific actions pertaining to soils are included in this element. The following policies and specific actions are applicable to the Proposed Project:

Policy 3.5.1 Minimize erosion problems resulting from development activities.

Specific Action 3.5.1(a) Concurrent with the submittal of a grading plan, require the submittal and approval by the appropriate City departments of erosion control plans prior to the approval of the grading plan.

- Erosion control plans shall be prepared and shall cover all areas impacted by the proposed grading.
- The erosion control plans shall address methods of control (i.e., detention basins, check dams, sandbagging, etc.), and interim storm drain construction if required.

Specific Action 3.5.1(e) Require that grading plans include appropriate and feasible measures to minimize fugitive dust. Potential measures include:

- Regular watering of cleared areas.

- Minimizing the extent of cleared areas at any given time.
- Establishing of vegetative cover as soon as possible after grading is completed.
- Using soil tackifiers, soils stabilization mulches, and/or oil emulsions, where feasible.

Policy 3.5.2 Since certain soils in the Lancaster study area have exhibited shrink-swell behavior and a potential for fissuring, and subsidence may exist in other areas, minimize the potential for damage resulting from the occurrence of soils movement.

Specific Action 3.5.2(a) As part of the environmental review process, require the applicant to prepare geotechnical/soils studies evaluating the shrink-swell potential of soils and the potential for fissuring or subsidence. If necessary, require implementation of appropriate mitigation measures.

Policy 4.1.1 Manage potential seismic hazards resulting from fault rupture and strong ground motion to facilitate rapid physical and economic recovery following an earthquake through the identification and recognition of potentially hazardous conditions and implementation of effective standards for seismic design of structures.

Specific Action 4.1.1(b) Require that all new developments comply with the most recent California Building Code seismic design standards and such other supplemental design criteria.

Specific Action 4.1.1(c) Implement the provisions of Title 24 of the State Building Code pertaining to siting, seismic design, and review of Critical, Sensitive, and High-Occupancy structures.

### **City of Lancaster Master Environmental Assessment 2030 General Plan**

The City's MEA was developed as part of the City's General Plan update. The purpose of the MEA is to provide existing baseline conditions within the City of Lancaster General Plan study area. The MEA includes a discussion of soil resources, seismic setting, influence of local and regional faults, and hazards related to geologic conditions within the City.<sup>14</sup>

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14 City of Lancaster, Master Environmental Assessment, April 2009.15  
Assessment, April 2009.

City of Lancaster, *Master Environmental*

## City of Lancaster Municipal Code

The City of Lancaster Municipal Code (LMC) Title 15, Chapter 15.08, Building Code, is the presiding building code that applies in the City for purposes of regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversions, occupancy, height, area maintenance of all structures, and certain equipment therein. The Building Code also provides penalties for violations.

Section 15.08.010, California Building Code provisions, adopts by reference volumes 1 and 2 of the 2019 California Building Code, including Appendix C; Appendix F; Appendix G; Appendix H; Appendix I; and Appendix J; incorporating by adoption the latest edition of the International Building Code with necessary California amendments, all published by the International Conference of Building Officials, as the Lancaster Building Code.

Section 8.16.030, Disturbing Surface of Land or Causing Wind Erosion Prohibited, prohibits the disturbance of land, depositing of soil on land, or any act that contributes to dust erosion or wind erosion of the land. Further, no person should cause or aggravate an existing dust or wind erosion condition.

## 5.6.2 ENVIRONMENTAL IMPACTS

### 5.6.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with geology and soils. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant impact to geology and soils resources if it would:

**Threshold GEO-1**      **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

- (i)      **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**
- (ii)     **Strong seismic ground shaking?**
- (iii)    **Seismic-related ground failure, including liquefaction?**
- (iv)     **Landslides?**

**Threshold GEO-2**      **Result in substantial soil erosion or the loss of topsoil?**

- Threshold GEO -3** Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- Threshold GEO-4** Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- Threshold GEO-5** Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
- Threshold GEO-6** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

### 5.6.2.2 Methodology

This analysis uses the thresholds in Appendix G of the State CEQA Guidelines to make a significance determination.

Baseline information was compiled from a review of published geologic maps and reports, as well as information from the City's MEA specific to geologic conditions and geologic hazards in the areas that could potentially be affected by the Proposed Project.<sup>15</sup> For geology and soils, the areas that could potentially be affected by the Proposed Project related to geology and soils are generally site-specific.

Independent of the CEQA process, there is a comprehensive regulatory framework implemented at the State and City level to mitigate potential hazards associated with geological and soil conditions. The design-controllable aspects of building foundation support, protection from seismic ground motion, and soil instability are governed by existing regulations. Compliance with these regulations is required. Any proponent of a development project must demonstrate compliance by incorporating the regulations in the project's design before permits for project construction are issued. The analysis presented herein assumes compliance with all applicable laws, regulations, and standards, as part of the initial CEQA baseline and future conditions.

The impact analysis for geology and soil addresses impacts within the entire project site. It was based on the proposed land uses, the existing geological conditions and hazards, and thresholds for geology and soils.

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<sup>15</sup> City of Lancaster, *Master Environmental Assessment*, April 2009.

### 5.6.2.3 Project Impacts

**Threshold GEO-1(i)      Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

The State of California, under the guidelines of the Alquist-Priolo Earthquake Fault Zoning Act, classifies faults as active, potentially active, or not active. The nearest active faults to the project site are the Hitchbrook Fault and San Andreas Fault zone located over six miles southwest of the project site bordering the mountain ranges of the Portal Ridge East.<sup>16</sup> Because there are no known earthquake faults that underlie the project site, there is no potential for the Proposed Project to expose people or structures to potential substantial adverse effects associated with rupture of a known earthquake fault and no fault rupture impacts would occur with implementation of the Proposed Project.

#### Mitigation Measures

No mitigation measures are required.

#### Level of Significance

No impacts to the Proposed Project would occur from surface rupture of a known earthquake fault.

**Threshold GEO-1(ii)      Strong seismic ground shaking?**

The project site is located in a seismically active region of southern California and is expected to experience moderate to severe ground shaking associated with earthquakes during the lifetime of the Proposed Project. This risk is not considered substantially different than the risk to other similar properties throughout the southern California region. As a mandatory condition of project approval, structures on the project site would be required to be constructed in accordance with the City of Lancaster Building Code which is based on the CBC with local amendments. The CBC and Chapter 15.08 of the LMC provide standards that must be met to safeguard life or limb, health, property, and public welfare by controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures, and have been specifically tailored for California earthquake conditions. Thus, compliance with the LMC would ensure that all critical structures, major structures, and other sites containing earthquake-sensitive earth materials and/or sites that would expose people or structures to substantial adverse effects, including loss, injury, or death involving strong seismic ground shaking, be

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16 California Department of Conservation. <https://maps.conservation.ca.gov/cgs/fam/>. Accessed June 18, 2020.

properly designed to meet the most recent seismic design standards. The Proposed Project's impacts from strong seismic ground shaking would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Strong seismic ground-shaking impacts on future development within the project site would be less than significant.

### **Threshold GEO-1(iii) Seismic-related ground failure, including liquefaction?**

As discussed above under Existing Conditions and illustrated on Figure 5.6-1, Amargosa Creek borders the western project site boundary and bisects the southern portion of the project site. This area and the parcels generally south of Avenue J-8 and west of 15th Street West are designated as being in a liquefaction zone. This is due to the nature of the young alluvial soil composition of the project site and the potential for strong seismic ground shaking. Liquefaction usually occurs when loose, cohesionless, and water-saturated soils (generally fine-grained sand and silt) are subjected to strong seismic ground motion, either from a single, sudden motion or through repeated cyclic durations; this tends to occur within the upper 50 feet of the ground surface. As discussed in the Phase I Environmental Site Assessment for the Proposed Project (refer to Appendix G), groundwater within the northern portion of the project site was measured at depths ranging from approximately 61 to 62 feet bgs.

As identified in Section 3.0: Project Description of this EIR, the area proposed along Amargosa Creek would be designated for the development of greens, paseos, parks, open space areas, and a variety of urban housing choices in medium to large footprint buildings could be developed between Amargosa Creek, Avenue J-8, and 15th Street West. Because development would be potentially located within liquefaction zone, implementation of Mitigation Measure MM GEO-1 would be incorporated to reduce the potential for seismic related ground failure, including liquefaction. MM GEO-1 would require any future developments to conduct a geotechnical investigation report by a registered design professional prior to the approval of the proposed development plan. If risk for seismic ground failure and liquefaction in and around the future development site is identified, special design and construction provisions for the structures would be implemented, as necessary.

Incorporation of MM GEO-1 and compliance with existing regulations and programs, including the most up to date California Building Code and the City's most recent Building and Safety Code would reduce

potential impacts associated with seismic-related ground failure, including liquefaction, to less than significant.

### **Mitigation Measures**

The following mitigation measure would be implemented to reduce potential seismic-related ground failure, including liquefaction, to less than significant.

**MM GEO-1** Prior to the issuance of any construction-related permits for an individual project in an identified liquefaction zone, a geotechnical investigation report shall be prepared by a registered design professional and the written results submitted to the Development Services Department. The geotechnical investigation report shall define the scope of the investigation, including the number and types of borings or soundings, the equipment used to drill or sample, the in-situ testing equipment and laboratory testing program. If risk for seismic ground failure and liquefaction in and around the proposed development site is identified, special design and construction provisions shall be incorporated into the design of the proposed development project, as necessary.

### **Level of Significance**

Impacts would be less than significant with the incorporation of MM GEO-1.

### **Threshold GEO-1(iv) Landslides?**

The project site is relatively flat, with a gentle slope, and is not located near a natural or man-made hillside. There are no hillsides or steep slopes on the project site or in the immediate vicinity. The Proposed Project would not result in the creation of any new slopes. As previously stated, no areas of potential slope instability exist within the project site. Accordingly, no impacts would occur.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

No impacts would occur.



**Threshold GEO-5      Result in substantial soil erosion or the loss of topsoil?****Construction**

Given that construction would involve grading of the project site, soil would be exposed and could be subject to erosion, especially during times of heavy rainfall or high wind periods. The soils that compose the project site are not considered to generate high rates of runoff; thus, potential erosional hazards would be minimal.

A General Permit for Storm Water Discharges Associated with Construction Activities is required because the construction activities involved with the Proposed Project would occur over an area larger than 1 acre. Pursuant to the requirements of the SWRCB, each project applicant is required to obtain a NPDES permit for construction activities greater than 1 acre in size, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. In accordance with NPDES, each project applicant would be required to develop and implement a SWPPP that would employ Best Management Practices (BMPs) to prevent both the erosion of on-site soils and the discharge off site of on-site soils. A monitoring program is required as part of the SWPPP to ensure that BMPs are implemented appropriately and are effective at controlling discharges of pollutants that are related to stormwater, including erosion of on-site soils. Furthermore, the LMC requires the submittal separate plans for temporary drainage and erosion control measures.<sup>17</sup>

In compliance with AVAQMD Rule 403, any truck-hauling activities would require bulk material to be watered or treated to minimize loss of materials to wind erosion. Additionally, visible roadway dust created from construction vehicles traveling to and from the project site would be required to utilize measures such as wheel washing and track-out grates at each egress point, soil binders, chemical soil stabilizers, mulching, or dust suppressants. Compliance with the SWRCB for construction activities, with AVAQMD Rule 403, and Chapter 8.16 of the LMC would ensure that potential soil erosion impacts, and the loss of top soil, would be less than significant.

**Operation**

Following construction, wind and water erosion on the project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces and drainage would be controlled through the storm drain system. Additionally, the Proposed Project contains specific components that are intended to reduce the potential impacts from stormwater-related erosion during project operation. The development of the Proposed Project would result in the installation of permanent paved surfaces, as well as landscaping, which would reduce the potential for wind erosion to occur during

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<sup>17</sup> City of Lancaster, *Grading General Notes*, Note 35.

Proposed Project operation. Additionally, as a result of adherence to City's Code for sediment and erosion control and AVAQMD Rule 403, soil erosion impacts would be less than significant.

Therefore, implementation of the Proposed Project would not result in substantial erosion or loss of topsoil during long-term operation. Thus, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold GEO-6      Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

The relatively flat topography of the project site and surrounding off-site areas precludes both stability problems and the potential for lurching, which is earth movement at right angles to a cliff or steep slope during ground shaking. Due to the relatively flat topography, the potential for seismically induced slope failure or landslides is low at the project site; however, there would be the potential for lateral spreading to occur. For lateral spreading to occur, a liquefiable zone must be continuous, unconstrained laterally, and free to move along gently sloping ground toward an unconfined area. If lateral containment is present for those zones, then no significant risk of lateral spreading would be present. However, the permanent structures on the project site would be required to adhere to the California Building Code and the City's Building and Safety Code with respect to proper design for landslide, lateral spreading, subsidence, or collapse as a result of the Proposed Project. For more information regarding development within the liquefaction zone, please refer to Threshold GEO-1(iii). Accordingly, potential laterally induced spreading impacts would be reduced to less than significant.

Under certain conditions, strong ground shaking can cause the densification of soils, resulting in local or regional settlement of the ground surface. During strong shaking, soil grains become more tightly packed due to the collapse of voids and pore spaces, resulting in a reduction of the thickness of the soil column. The project site is comprised of soils with alluvial deposits, making it susceptible to seismically induced settlement. All structures would be required to adhere to the City's Building and Safety Code as it relates to settlement, and impacts would be reduced to less than significant.

The soil at the project site consists mostly of younger alluvial fan deposits at the surface, which consist of clay-rich silty fine sand, which is not considered to be an expansive or collapsible soil with a low potential for erosional hazards. As previously discussed, structures would be subject to the City's Building and Safety Code for expansive soils. Accordingly, expansive impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

### **Threshold GEO-7      Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

Expansive soils are typically associated with fine-grained clayey soils that have the potential to shrink and swell with repeated changes in the moisture content. The ability of clayey soil to change volume can result in uplift or cracking to foundation elements or other rigid structures such as slabs on-grade, rigid pavements, sidewalks, or other slabs or hardscape founded on these soils. According to the City's MEA, the alluvial soils underlying the project site and surrounding area are considered to have a low expansion potential.<sup>18</sup> Compliance with the City's Building and Safety Code, which incorporates the most current CBC by reference, would ensure that construction of the proposed Health District buildings and structures on the project site would reduce expansive soil-related risks to property. Therefore, impacts related to expansive soils would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

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18 City of Lancaster, *Final General Plan 2030 Master Environmental Assessment*, April 2009.

**Threshold GEO-8      Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

Septic tanks would not be used in the Proposed Project as the Proposed Project would connect to and use the existing sewage conveyance system. It is not anticipated that major upgrades to the existing infrastructure would be required. Therefore, no impacts would occur.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

No impacts associated with the use of alternative waste water disposal systems would occur.

**Threshold GEO-9      Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Paleontological resources are valued for the information they yield about the history of the earth and its past ecological settings. According to the City's MEA, no known fossil localities have been previously recorded within the City boundaries. However, surface deposits consisting of younger Quaternary alluvial soils near the project site have recovered faunal remains from small vertebrates such as gopher snake (*Pituophis sp.*), kingsnake (*Lampropeltis sp.*), leopard lizard (*Gambelia sp.*), cottontail rabbit (*Sylvilagus sp.*), pocket mouse (*Chaetodipus sp.*), kangaroo rat (*Dipodomys sp.*), and pocket gopher (*Thomomys sp.*).<sup>19</sup> Based on the results of the City's MEA record search, and the history of excavation discoveries, excavations into intact Quaternary-age alluvial sediments in the project area have a high potential to encounter significant vertebrate fossil remains.

The proposed improvements associated with the Proposed Project would require some excavation and grading. Most of the project site has been previously disturbed and/or consists of fill that does not have a high probability of uncovering significant vertebrate fossil remains; thus, any paleontological resources that may have existed at one time at these levels have likely been previously disturbed. However, the fill is likely underlain by older Pleistocene age alluvium, which has the potential to contain fossil remains and disturbance of these deposits would have the potential to impact significant paleontological resources.

Therefore, while the discovery of paleontological resources in the project site is considered unlikely in the highly disturbed areas of the project site, during construction of the Proposed Project Mitigation Measure

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<sup>19</sup> City of Lancaster, *Master Environmental Assessment, April 2009.*

MM GEO-2 would be implemented, which requires all earth-disturbing work to be temporarily suspended or redirected in the event of a paleontological discovery until a qualified paleontologist has evaluated the nature and significance of the resources, in accordance with federal, State, and local guidelines.

### **Mitigation Measures**

The following mitigation measure would be implemented to reduce potentially significant impacts on paleontological resources.

**MM GEO-2** Prior to the initiation of any excavation activities for an individual project, field personnel shall be alerted to the possibility of fossil remains. In the event fossil remains are encountered during excavation activities associated with each individual project, the contractor shall cease all earth-disturbing activities within a 60-foot radius of the area of discovery, notify the City's Development Services Director, and, with direction from the City's Development Services Director, shall retain a qualified paleontologist to evaluate the significance of the find and recommend an appropriate course of action. Any fossils recovered shall be deposited in an accredited and permanent scientific institution for the benefit of current and future generations. Work within the area of discovery shall resume only after the resource has been appropriately mitigated.

### **Level of Significance**

With implementation of MM GEO-2, the Proposed Project's impacts related to undiscovered paleontological resources would be mitigated to less than significant.

#### **5.6.2.4 Cumulative Impacts**

Geology and soil hazards are related to conditions and circumstances that are considered site specific. Therefore, the geographic context for the analysis of potential cumulative geology and soils impacts consists of individual development sites. That is, issues including fault rupture, strong seismic ground shaking, liquefaction, landslides and expansive soils, would involve effects to (and not from) the proposed development and are specific to on-site conditions. Accordingly, addressing these potential hazards for the proposed development would involve using measures to conform to existing requirements, and/or site-specific design and construction efforts that have no relationship to, or impact on, off-site areas. Although cumulative development in the City may include numerous projects with geologic and soil impacts, these impacts would affect each individual project, rather than resulting in an additive cumulative effect. Mitigation measures would be taken on a project-by-project basis and be specific to each site.

Portions of the City and surrounding areas may contain soils that have erosion potential. Construction of the cumulative projects could facilitate soil erosion and loss of topsoil. Grading activities leave soils exposed to rainfall and wind conditions that result in erosion. The geotechnical characteristics of each cumulative project site would be evaluated on a project-by-project basis, and appropriate mitigation measures would be required, as necessary, in addition to federal and State requirements for mitigating erosion. Therefore, as the cumulative projects are required to implement project specific mitigation measures, cumulative soil erosion and loss of topsoil impacts would be less than significant.

Additionally, erosion and loss of topsoil as a result of wind (fugitive dust) would be minimized with compliance to AVAQMD Rule 403 and Chapter 8.16 of the LMC. Thus, the Proposed Project would not contribute to cumulative impacts and impacts would be less than significant.

Additionally, all projects would be designed in accordance with the current City building and grading standards to reduce seismic-related risks and potential erosion impacts during construction and operation to less than significant levels. Accordingly, cumulative development would result in a less than significant cumulative impact related to geology and soil hazards. The Proposed Project's potential liquefaction and paleontological resource impacts would be less than significant with mitigation, and as such, would not contribute to cumulative impacts and would not be cumulatively considerable in this regard.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Cumulative impacts would be less than significant.

### **5.6.3 SUMMARY OF SIGNIFICANCE**

Impacts related to the project site's geology and soils would be less than significant as the Proposed Project would not expose people or structures to substantial adverse effects from seismic hazards; soil erosion or the loss of top soil; be located on a geologic unit or unit that would become unstable as a result of the Proposed Project; expansive soil; or soils inadequate of septic systems. The Proposed Project's potential liquefaction impacts during construction would be less than significant with MM GEO-1. The Proposed Project's impacts to undiscovered paleontological resources during construction would be less than significant with MM GEO-2. Cumulative impacts would be less than significant.

## 5.7 GREENHOUSE GAS EMISSIONS

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This section of the Environmental Impact Report (EIR) describes the environmental setting for global climate change and greenhouse gas (GHG) emissions and addresses the potential GHG emissions that would be generated by the Proposed Project. A quantified forecast of GHG emissions is included which accounts for GHG emissions generated during both Proposed Project construction and operation. This section also includes a discussion of existing regulations, plans, and policies pertaining to global climate change and the reduction of GHG emissions. Modeling datasheets for GHG emissions are included in Appendix F: GHG Model Outputs.

### 5.7.1 ENVIRONMENTAL SETTING

#### 5.7.1.1 Science of Global Climate Change

Emissions of carbon dioxide (CO<sub>2</sub>) are a leading cause of global warming, with other pollutants such as methane (CH<sub>4</sub>), nitrous dioxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) also contributing. (See Health and Safety Code [HSC], Section 38505(g).) The magnitude of GHG impacts on global warming differs because each GHG has a different global warming potential (GWP), i.e., certain compounds have, on a pound-for-pound basis, greater contributions to global warming than others. The effect of each GHG is measured as a combination of the volume of its emissions and its GWP, using 1 pound of CO<sub>2</sub> as the common equivalent measure of GWP. (CO<sub>2</sub> has the greatest impact on global warming because of the relatively large quantities of CO<sub>2</sub> emitted into the atmosphere.) Thus, GHG emissions are typically measured in terms of megagrams or metric tonnes of CO<sub>2</sub> (MTCO<sub>2</sub>e).<sup>1</sup>

In the context of California Environmental Quality Act (CEQA), “GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.”<sup>2</sup> Further, because climate change is occurring on a global scale, it is not meaningfully possible to quantify the scientific effect of new GHG emissions caused by a single project.<sup>3</sup>

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1 In this analysis, a “tonne” refers to a metric ton, i.e., 1,000 kilograms (2,204.6 pounds).

2 CAPCOA, CEQA & Climate Change (January 2008), p. 35. See also SCAQMD, *CEQA Guide*, February 2016, p. 6-1 [“from the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative”]; SJVAPCD, *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*, December 2009, p. 4 [“effects of project specific GHG emissions are cumulative”]; California Natural Resources Agency, *Final Statement of Reasons for Regulatory Action*, December 2009.

3 SCAQMD, *CEQA Guide*, February 2016, p. 6-10 [“there is no known level of emissions that determines if a single project will substantially impact overall GHG emission levels in the atmosphere”]; SJVAPCD, *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*, December 2009, p. 3 [“existing science is inadequate to support quantification of impacts that project specific GHG emissions have on global climatic change”].

### **a. Potential Effects of Human Activity on Global Climate Change**

Globally, climate change has the potential to impact numerous environmental resources through anticipated, though uncertain, impacts related to future air temperatures and precipitation patterns. At the international level, the Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change. At the national level, the United States Environmental Protection Agency (USEPA) is the agency that researches the health and environment effects of climate change.

Scientific modeling completed by the IPCC predicts that the continued emission of GHGs at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century.<sup>4</sup> At the end of the 21st century, global surface temperature change is likely to exceed 1.5 degrees Celsius (°C) or 2.7 degrees Fahrenheit (°F), relative to 1850–1900, in all of the IPCC’s four assessed climate model projections but one.<sup>5</sup>

The understanding of the role that GHG emissions plays on global climate trends is complex and involves varying uncertainties and a balance of different effects. In addition to uncertainties about the extent to which human activity rather than solar or volcanic activity is principally responsible for increased warming, there also is evidence that some human activity has cooling, rather than warming, effects, as discussed in publications by the IPCC. Nonetheless, when all effects and uncertainties are considered together, there is general scientific consensus that human activity contributes significantly to global warming.

Acknowledging uncertainties regarding the rate at which anthropogenic (i.e., human-caused) GHG emissions may continue to increase,<sup>6</sup> as well as the impact of such emissions on climate change, the IPCC devises emission scenarios that utilize various assumptions about the rates of economic development, population growth, and technological advancement over the course of the next century. For the IPCC’s 2014 synthesis report (referred to as AR5), a set of four new scenarios, denoted Representative Concentration Pathways (RCPs), were developed. RCPs are based on a combination of integrated assessment models, simple climate models, atmospheric chemistry and global carbon cycle models. The four RCPs include a mitigation scenario, two stabilizing scenarios, and one scenario with very high GHG

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4 The IPCC is the leading international and intergovernmental body for the assessment of climate change and was established in 1988 by the United National Environment Program and World Meteorological Organization to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.

5 IPCC, *Special Report: Global Warming of 1.5°C*, October 2018, accessed August 2020, available at <https://www.ipcc.ch/sr15/>.

6 These uncertainties are attributable to various factors under human control, such as future population growth and the locations of that growth; the amount, type, and locations of economic development; the amount, type, and locations of technological advancement; adoption of alternative energy sources; legislative and public initiatives to curb emissions; and public awareness and acceptance of methods for reducing emissions.



emissions. While the projected effects of global warming on weather and climate are uncertain and likely to vary regionally, the following effects are expected by the IPCC based on the latest RCPs:

- It is very likely that the Arctic sea ice cover will continue to shrink and thin, with the Northern Hemisphere spring snow cover and global glacier volume also decreasing.
- It is virtually certain that there will be more frequent hot and fewer cold temperature extremes over most land areas on daily and seasonal timescales, with heat waves occurring at a higher frequency and duration.
- Global surface temperature change for the end of the 21st century is likely to exceed 1.5°C relative to 1850 to 1900 for all RCP scenarios except the mitigation scenario. It is likely to exceed 2°C for the highest GHG emission scenario and one stabilizing scenario, and more likely than not to exceed 2°C for the remaining stabilizing scenario. Warming will continue beyond 2100 under all RCP scenarios except the mitigation scenario.
- The global ocean will continue to warm during the 21st century, with heat penetrating from the surface to the deep ocean and affecting ocean circulation.
- Further uptake of carbon by the ocean will increase ocean acidification.
- Changes in the global water cycle in response to the warming over the 21st century will not be uniform. The contrast in precipitation between wet and dry regions and between wet and dry seasons will increase, although there may be regional exceptions.

Most aspects of climate change will persist for many centuries even if GHG emissions cease entirely.

Potential secondary effects from global warming also include a global rise in sea level; impacts to agriculture and water supply; changes in insect-borne diseases; and changes in habitat and biodiversity.

Global GHG emissions due to human activities have grown since pre-industrial times. As reported by the USEPA, global carbon emissions from fossil fuels increased by over 16 times between 1900 and 2008 and by about 1.5 times between 1990 and 2008. In addition, in the Global Carbon Budget 2018 report, published in December 2018, atmospheric CO<sub>2</sub> concentrations in 2017 were found to be 46 percent above the concentration at the start of the Industrial Revolution.<sup>7</sup> Global increases in CO<sub>2</sub> concentrations are due primarily to fossil fuel use, with land use change providing another significant but smaller contribution. With regard to emissions of non-CO<sub>2</sub> GHG, these have also increased significantly since 1990.<sup>8</sup> In particular,

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7 C. Le Quere, et al., Global Carbon Budget 2018, (Earth System Science Data, 2018, doi:10.5194/essd-10-2141-2018).

8 USEPA, Global Greenhouse Gas Emissions Data, <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>, accessed June 2020.

studies have concluded that it is very likely that the observed increase in CH<sub>4</sub> concentration is predominantly due to agriculture and fossil fuel use.<sup>9</sup>

**b. *Potential Effects on Global Climate Change on the State of California***

According to the California Air Resources Board (CARB), which has the authority over GHG emissions, some of the potential California-specific impacts of global warming may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years.

To protect the State’s public health and safety, resources, and economy, the California Natural Resources Agency, in coordination with other State agencies, has updated the *2009 California Climate Adaptation Strategy* with the *2014 Safeguarding California: Reducing Climate Risk* plan. Additionally, in March 2016, the California Natural Resources Agency released *Safeguarding California: Implementation Action Plans*, a document that shows how California is acting to convert the recommendations contained in the *2014 Safeguarding California* plan into action. The *2016 Action Plans* document is divided by ten sectors.<sup>10</sup> It shows the path forward by presenting the risks posed by climate change; the adaptation efforts underway; and the actions that will be taken to safeguard residents, property, communities, and natural systems. The California Natural Resources Agency will continue to update the Statewide strategy summarizing climate change impacts and preparing reports to the Governor regarding the ongoing implementation of the Statewide strategy. The California Natural Resources Agency also has produced climate change assessments which detail the anticipated impacts of global warming in California.<sup>11</sup>

Several recent studies have attempted to explore the possible negative consequences that climate change, left unchecked, could have in California.<sup>12</sup> These reports acknowledge that scientists’ understanding of the complex global climate system, and the interplay of the various internal and external factors that affect climate change, remains too limited to yield scientifically valid conclusions on a localized scale. And, while substantial work has been done at the international and national levels to evaluate climatic impacts, far less information is available on regional and local impacts. In addition, projecting regional impacts of climate change and variability relies on large-scale scenarios of changing climate parameters, using information that is typically at too general a scale to make accurate regional or local assessments.

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9 USEPA, *Atmospheric Concentrations of Greenhouse Gas*, updated June 2015.

10 The ten sectors are agriculture; biodiversity and habitat; emergency management; energy; forestry; land use and community development; oceans and coastal resources and ecosystems; public health; transportation; and water.

11 State of California Department of Justice, Attorney General, *Climate Change Impacts in California*, <https://oag.ca.gov/environment/impact>, accessed June 2020.

12 California EPA, *Climate Change Research Plan for California*, February 2015; California Natural Resources Agency, California Energy Commission, Governor’s Office of Planning and Research, *California’s Fourth Climate Assessment*, August 2018.

## 5.7.1.2 Regulatory Setting

### a. Federal

#### Federal Clean Air Act

The US Supreme Court ruled in *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438 (2007), that CO<sub>2</sub> and other GHGs are pollutants under the federal Clean Air Act (CAA), which the USEPA must regulate if it determines they pose an endangerment to public health or welfare. The US Supreme Court did not mandate that the USEPA enact regulations to reduce GHG emissions. Instead, the Court found that the USEPA could avoid taking action if it found that GHGs do not contribute to climate change or if it offered a “reasonable explanation” for not determining that GHGs contribute to climate change.

On April 17, 2009, the USEPA issued a proposed finding that GHGs contribute to air pollution that may endanger public health or welfare. On April 24, 2009, a proposed rule was published in the Federal Register under Docket ID No. EPA-HQ-OAR-2009-0171. The USEPA stated that high atmospheric levels of GHGs “are the unambiguous result of human emissions and are very likely the cause of the observed increase in average temperatures and other climatic changes.” The USEPA further found that “atmospheric concentrations of GHGs endanger public health and welfare within the meaning of Section 202 of the Clean Air Act.” The final rule was effective on January 14, 2010.<sup>13</sup> While these findings alone did not impose any requirements on industry or other entities, this action was a prerequisite to regulatory actions by the USEPA, including but not limited to GHG emissions standards for light-duty vehicles.

#### Corporate Average Fuel Economy (CAFE) Standards

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the George W. Bush administration issued Executive Order (EO) 13432 in 2007, directing the USEPA, the U.S. Department of Transportation (USDOT), and the U.S. Department of Energy (USDOE) to establish regulations that reduce GHG emissions from motor vehicles, nonroad vehicles, and nonroad engines by 2008.<sup>14</sup> In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency for and

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13 United States Environmental Protection Agency, Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Section 202(a) of the Clean Air Act. <https://www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a-clean>, accessed June 2020.

14 US Government Publishing Office, Administration of George W. Bush, “Executive Order 13432—Cooperation Among Agencies in Protecting the Environment With Respect to Greenhouse Gas Emissions From Motor Vehicles, Nonroad Vehicles, and Nonroad Engines,” 631, May 14, 2007, <https://www.gpo.gov/fdsys/pkg/WCPD-2007-05-21/pdf/WCPD-2007-05-21-Pg631.pdf>.

GHG emissions from cars and light-duty trucks for model year 2011; in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.<sup>15</sup>

In 2010, President Obama issued a memorandum directing the USEPA, USDOT, USDOE, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles.<sup>16</sup> The proposed standards projected to achieve 163 grams/mile of CO<sub>2</sub> in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022 – 2025 in a future rulemaking. On April 2, 2018 the USEPA signed the Mid-term Evaluation Final Determination, which finds that the model year 2022–2025 greenhouse gas standards are not appropriate and should be revised.<sup>17</sup> The Final Determination serves to initiate a notice to further consider appropriate standards for model year 2022–2025 light duty vehicles. On August 24, 2018, the USEPA and NHTSA published a proposal to freeze the model year 2020 standards through model year 2026 and to revoke California’s waiver under the Clean Air Act to establish more stringent standards.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2016, the USEPA and NHTSA finalized Phase 2 standards for medium and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. If implemented, the Phase 2 standards would be expected to lower CO<sub>2</sub> emissions by approximately 1.1 billion metric tons (MT), save vehicle owners fuels costs of about \$170 billion.<sup>18</sup> But as discussed above, the USEPA and NHTSA have proposed to roll back GHG and fuel economy for cars and light-duty trucks, which suggest a similar rollback of Phase 2 standards for medium and heavy-duty vehicles may be pursued.

### USEPA Actions

In response to the mounting issue of climate change, USEPA has taken the following two actions to regulate, monitor, and potentially reduce GHG emissions.

15 USEPA, “Regulations for Greenhouse Gas Emissions from Commercial Trucks & Buses”, December 27, 2017, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks>.

16 USEPA, “Presidential Announcements and Letters of Support related to Greenhouse Gas Emissions”, August 28, 2017, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/presidential-announcements-and-letters-support-related>.

17 Federal Register, *Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022 – 2025 Light-Duty Vehicles*, April 13, 2018, accessed June 2020, <https://www.federalregister.gov/documents/2018/04/13/2018-07364/mid-term-evaluation-of-greenhouse-gas-emissions-standards-for-model-year-2022-2025-light-duty>.

18 USEPA, *EPA and NHTSA Adopt Standards to Reduce GHG and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond*, August 2016.

### ***Mandatory GHG Reporting Rule***

On September 22, 2009, the USEPA issued a rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement provides USEPA with accurate and timely GHG emissions data from facilities that emit 25,000 MT or more of CO<sub>2</sub> per year and allows the operators of these facilities to track their own emissions, compare them to similar facilities, and aid in identifying cost-effective opportunities to reduce emissions in the future. An estimated 85 percent of the total US GHG emissions from approximately 10,000 facilities are covered by this rule.

### ***Endangerment and Cause or Contribute Findings for GHGs under the CAA***

On December 7, 2009, USEPA adopted its Proposed Endangerment and Cause or Contribute Findings for GHGs under Section 202(a) of the Compliance Certification Application (Endangerment Finding). These include:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to GHG pollution, which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the proposed USEPA GHG standards for light-duty vehicles. These standards were jointly proposed by USEPA and the NHTSA, and the final rule became effective January 14, 2010. In collaboration with the NHTSA, USEPA finalized emission standards for light-duty vehicles (2012–2016 model years) in May 2010 and for heavy-duty vehicles (2014–2018 model years) in August 2011. Furthermore, the agencies finalized standards to extend the light-duty vehicle GHG National Program for model years 2017–2025. The standards are estimated to cut GHG emissions from cars and light trucks in half by 2025, reducing emissions by 6 billion MT over the life of the program—more than the total amount of CO<sub>2</sub> emitted by the United States in 2010.

### **Energy Independence and Security Act**

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:<sup>19</sup>

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19 USEPA, “Summary of the Energy Independence and Security Act,” <https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act>.

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of renewable fuel in 2022, with at least 16 billion gallons from cellulosic biofuels and a cap of 15 billion gallons for corn-starch ethanol;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks; and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks, and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green jobs.”<sup>20</sup>

## **b. State**

### **Executive Order S-3-05**

EO S-3-05, issued in June 2005 by then-governor Arnold Schwarzenegger, proclaimed that California is vulnerable to the impacts of climate change. It declared that increased temperatures could reduce the Sierra snowpack, further exacerbate California’s air quality problems, and potentially cause a rise in sea levels. To combat those concerns, EO S-3-05 established the following total GHG emission targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

### **Executive Order B-30-15 and B-55-18**

In April 2015, Governor Brown signed EO B-30-15, which established a new interim Statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030. EO B-30-15 also directed all State agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the new interim 2030 target, as well as the preexisting, long-term 2050 target identified in EO S-3-05. Additionally, EO S-3-05 directed CARB to update its Scoping Plan to address the 2030 target. EO B-55-18,

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<sup>20</sup> A green job, as defined by the United States Department of Labor, is a job in business that produce goods or provide services that benefit the environment or conserve natural resources.

issued by Governor Brown on September 10, 2018, directs the State to achieve carbon neutrality no later than 2045 and achieve and maintain net negative emissions thereafter.

### ***Assembly Bill 32 and 2017 CARB Climate Change Scoping Plan***

In September 2006, Assembly Bill (AB) 32 was signed into law by Governor Schwarzenegger (codified in Health and Safety Code [HSC], Division 25.5, California Global Warming Solutions Act of 2006). AB 32 focused on achieving GHG emissions equivalent to 2000 levels by 2010 and to 1990 levels by 2020, pursuant to EO-S-3-05. Under HSC Division 25.5, CARB has the primary responsibility and authority for reducing GHG emissions. CARB is required to establish a quantified emissions cap; institute a schedule to meet the cap; implement regulations to reduce Statewide GHG emissions from stationary sources; and develop tracking, reporting, and enforcement mechanisms to ensure reductions are achieved. The law further requires that reduction measures be technologically feasible and cost-effective and requires CARB to adopt, implement, and enforce regulations to ensure the required GHG emission reductions occur.

CARB developed a Scoping Plan (2008 Scoping Plan)<sup>21</sup> that contains strategies to achieve the 2020 emissions cap. This Scoping Plan, which was developed by CARB in coordination with the Climate Action Team, was first adopted in October 2008. The 2008 Scoping Plan proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce the State's dependence on oil, diversify the State's energy sources, save energy, create new jobs, and enhance public health. Moreover, it accommodated the State's projected population growth and called for coordinated planning of growth, including encouraging local governments to site facilities near transportation infrastructure, including public transit.<sup>22</sup>

An important component of the plan is the Cap-and-Trade program which covers 85 percent of the State's emissions.

As required by AB 32, CARB must update its Scoping Plan every 5 years to ensure that California remains on the path toward a low carbon future. To assess the scope of reductions needed to return to 1990 emissions levels, CARB first estimated the 2020 business-as-usual (BAU) GHG emissions in the 2008 Scoping Plan. These are the GHG emissions that would be expected to result if there were no GHG emissions reduction measures and the State were to proceed on its pre-AB 32 GHG emissions track. After estimating that Statewide 2020 BAU GHG emissions would be 596 metric tonnes, the 2008 Scoping Plan

21 CARB, *Climate Change Scoping Plan: A Framework for Change*, 2008 Scoping Plan, December 2008.

22 CARB, 2008 Scoping Plan, December 2008, p. 24, 48.

then identified recommended GHG emissions reduction measures that would reduce BAU GHG emissions by approximately 174 MT by 2020.<sup>23</sup>

CARB released the first update to the Scoping Plan in May 2014 (Updated 2014 Scoping Plan). In the Updated 2014 Scoping Plan, CARB generally described the actions required to achieve the 2050 target: (1) energy demand reduction through efficiency and activity changes; (2) large-scale electrification of on-road vehicles; (3) efficiency in buildings and industrial machinery; (4) decarbonizing electricity and fuel supplies; and (5) rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately.<sup>24</sup> The Updated 2014 Scoping Plan “lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.”<sup>25</sup>

CARB adopted a Scoping Plan in November 2017 to reflect targets set by EO B-30-15 and codified by Senate Bill (SB) 32. This update calls for strategies that cap the State’s GHG emissions at 260 million MTCO<sub>2</sub>e by 2030, which would represent an approximately 40 percent reduction from 1990 levels. As shown in Table 5.7-1: Statewide Emission Reductions Needed to Meet SB 32 Objectives in 2030, these reductions are to come from a variety of sectors, including energy, transportation, high-global warming potential (GWP) sources, waste, and the State’s Cap-and-Trade program. Nearly all reductions are to come from sources that are controlled at the Statewide level by State agencies, including the CARB, California Public Utilities Commission (CPUC), High-Speed Rail Authority, and California Energy Commission (CEC). The few actions that are directly or indirectly associated with local government control are in the transportation sector.

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23 CARB, *Climate Change Scoping Plan*, Table 2: Recommended Greenhouse Gas Reduction Measures.

24 CARB, *First Update to the Climate Change Scoping Plan: Building on the Framework*, May 2014, p. 32.

25 CARB, *First Update to the Climate Change Scoping Plan*, p. 4.



**Table 5.7-1**  
**Statewide Emission Reductions Needed to Meet SB 32 Objectives in 2030**

Sector	1990 Inventory (MMTCO <sub>2</sub> e)	2030 Scoping Plan Ranges <sup>a</sup>	% Change from 1990
Agriculture	26	24–25	-8 to -4
Residential / Commercial	44	38–40	-14 to -9
Electric Power	108	30–53 <sup>b</sup>	-72 to -51
High-GWP	3	8–11 <sup>c</sup>	267 to 367
Industrial	98	83 – 90 <sup>d</sup>	-15 to -8
Recycling and Waste	7	8 – 9 <sup>e</sup>	14 to 29 <sup>f</sup>
Transportation (Including Transportation Communications and Utilities)	152	103 – 111	-32 to -27
Natural Working Lands Net Sink	-7 <sup>g</sup>	TBD	TBD
Sub Total	431	294 – 339	-32 to -21
Cap-and-Trade Program	N/A	34 – 79	N/A
Total	431	260	-40

Source: California Environmental Protection Agency, “California’s 2017 Climate Change Scoping Plan” (November 2017), [https://ww3.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf).

Note: N/A = not available; MMTCO<sub>2</sub>e = million metric tons of carbon dioxide equivalents.

- <sup>a</sup> Unless otherwise noted, the low end of the sector ranges is the estimated emissions from the Scoping Plan scenario and the high end adjusts the expected emissions by a risk factor that represents sector underperformance.
- <sup>b</sup> The high end of the Electric Power sector range is represented by the Scoping Plan scenario, and the low end by enhancements and additional sector measures, such as deployment of additional renewable power, greater behind-the-meter solar photovoltaic, and additional energy efficiency. The Electric Power sector range provided will be used to help inform CARB’s setting of the SB 350 Integrated Resource Plan GHG reduction planning targets for the sector. CARB, CPUC, and CEC will continue to coordinate on this effort before final IRP targets are established for the sector, load-serving entities, and publicly owned utilities. State agencies will investigate the potential for and appropriateness of deeper sector reductions in light of the overall needs of the Scoping Plan to cost-effectively achieve the Statewide GHG goals. Concurrently, CEC and CPUC are proceeding with their respective IRP processes using this range.
- <sup>c</sup> Emissions for this sector are anticipated to increase by 2030. As such, the high end of the sector range is the estimated emissions from the Scoping Plan scenario, and the low end adjusts the expected emissions by a risk factor that represents sector over performance.
- <sup>d</sup> This estimate does not account for the reductions expected in this sector from the Cap-and-Trade program. The Cap-and-Trade line item includes reductions that will occur in the Industrial sector.
- <sup>e</sup> CARB. 2016. AB 32 Scoping Plan Public Workshops.
- <sup>f</sup> The SLCP will reduce emissions in this sector by 40 percent from 2013 levels. However, the 2030 levels are still higher than the 1990 levels as emissions in this sector have grown between 1990 and 2013.
- <sup>g</sup> This number reflect net results and is different than the intervention targets discussed in Chapter 4 of the 2017 Climate Change Scoping Plan.

## 2015 State of the State Address

In his January 2015 inaugural address, Governor Brown identified key climate change strategy pillars, including (1) reducing today’s petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency

savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farm and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the State’s climate adaptation strategy.

### ***Center for Biological Diversity v. California Department of Fish and Wildlife***

The California Supreme Court’s decision published on November 30, 2015, in *Center for Biological Diversity v. California Department of Fish and Wildlife* (Case No. 217763) (the Newhall Ranch case) reviewed the methodology used to analyze GHG emissions in an EIR prepared for a project that proposed 20,885 dwelling units with 58,000 residents on 12,000 acres of undeveloped land in unincorporated Los Angeles County, adjacent to the City of Santa Clarita. The EIR used the BAU methodology to determine whether the project would impede the State of California’s compliance with statutory emissions reduction mandate established by the AB 32 Scoping Plan. The Court did not invalidate the BAU approach entirely but did hold that the EIR failed to demonstrate that the reduction from BAU on a project level was comparable to the Statewide level-of-reduction effort from BAU under the AB 32 Scoping Plan.<sup>26</sup>

The California Supreme Court suggested regulatory consistency as a pathway to compliance, by stating that a lead agency might assess consistency with AB 32’s goal in whole or part by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities. The Court recognized that to the extent a project’s design features comply with or exceed the regulations outlined in the Scoping Plan, and adopted by CARB or other State agencies, a lead agency could appropriately rely on their use as showing compliance with performance-based standards adopted to fulfill a Statewide plan for the reduction or mitigation of GHG emissions. This approach is consistent with CEQA Guidelines Section 15064, which provides that a determination that an impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including plans or regulations for the reduction of GHG emissions. Importantly, the California Supreme Court also suggested “a lead agency may rely on existing numerical thresholds of significance for GHG emissions” (brightline threshold approach).

### ***Senate Bill 32 and Assembly Bill 197***

Enacted in 2016, SB 32 (Pavley, 2016) codifies the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that Statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. The reduction of GHG emissions is a priority for development projects throughout the State and is achieved through a combination of policies, planning, direct regulations, market approaches, incentives,

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<sup>26</sup> *Center for Biological Diversity et al. v. California Department of Fish and Wildlife*, 2015, (62 Cal.4th 204, 195 Cal.Rptr.3d 247, 361 P.3d 342).

and voluntary efforts. Generally speaking, the focus of GHG emission reductions is on energy production and motor vehicles.

SB 32 was coupled with a companion bill: AB 197 (Garcia, 2016). Designed to improve the transparency of CARB's regulatory and policy-oriented processes, AB 197 created the Joint Legislative Committee on Climate Change Policies, a committee with the responsibility to ascertain facts and make recommendations to the Legislature concerning Statewide programs, policies and investments related to climate change. AB 197 also requires CARB to make certain GHG emissions inventory data publicly available on its website; consider the social costs of GHG emissions when adopting rules and regulations designed to achieve GHG emission reductions; and include specified information in all Scoping Plan updates for the emission reduction measures contained therein.

## **Energy Sources**

### ***Renewables Portfolio Standard***

As amended by SB 350 (De León, 2015), California's Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 40 percent of total retail sales by 2024, 45 percent of total retail sales by 2027, and 50 percent of total retail sales by 2030. SB 100 raises California's RPS requirement to a 50 percent renewable resources target by December 31, 2026, and to achieve a 60 percent target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030.

### ***Building Energy Efficiency Standards***

Title 24, Part 6 of the California Code of Regulations (CCR) regulates the design of building shells and building components. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The CEC adopted the 2019 Building Energy Efficiency Standards, effective January 1, 2020. Two key areas specific to nonresidential development in the 2019 standards focus on nonresidential ventilation requirements and nonresidential lighting requirements.<sup>27</sup> Under the 2019 standards, nonresidential buildings will be 30 percent more energy-efficient compared to the 2016 standards.

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27 California Energy Commission (CEC), *2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings*, <https://www.energy.ca.gov/title24/2019standards/>, accessed June 2020.

The CPUC, CEC, and CARB also have a shared, established goal of achieving Zero Net Energy (ZNE) for new construction in California. The key policy timelines include (1) all new residential construction in California will be ZNE by 2020, and (2) all new commercial construction in California will be ZNE by 2030.

The ZNE goal generally means that new buildings must use a combination of improved efficiency and renewable energy generation to meet 100 percent of their annual energy need, as specifically defined by the CEC:

*A ZNE Code Building is one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building, at the level of a single “project” seeking development entitlements and building code permits, measured using the [CEC]’s Time Dependent Valuation (TDV) metric. A ZNE Code Building meets an Energy Use Intensity value designated in the Building Energy Efficiency Standards by building type and climate zone that reflect best practices for highly efficient buildings.<sup>28</sup>*

In addition to the CEC’s efforts, in 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (Part 11 of Title 24), commonly referred to as CALGreen, establish voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality.<sup>29</sup> CALGreen is periodically amended; the most recent 2019 standards became effective on January 1, 2020.

### ***Appliance Standards***

The CEC periodically amends and enforces Appliance Efficiency Regulations contained in Title 20 of the CCR. The regulations establish water and energy efficiency standards for both federally regulated appliances and non–federally regulated appliances. The most current Appliance Efficiency Regulations, dated July 2015, cover 23 categories of appliances (e.g., refrigerators; plumbing fixtures; dishwashers; clothes washer and dryers; televisions, etc.) and apply to appliances offered for sale in California.

### **Mobile Sources**

#### ***Sustainable Communities Strategy Plan***

SB 375 (Steinberg, 2008), the Sustainable Communities and Climate Protection Act, coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through better-integrated regional transportation, land use, and housing planning that provides

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28 CEC, 2015 Integrated Energy Policy Report, 2015, p. 41.

29 *Guide to the 2019 California Green Building Standards Code, Nonresidential*, accessed June 2020: <https://www.dgs.ca.gov/bsc/CALGreen>.

easier access to jobs, services, public transit, and active transportation options. SB 375 specifically requires the Southern California Association of Governments (SCAG) to include a Sustainable Communities Strategy (SCS) in its Regional Transportation Plan (RTP) that will achieve GHG emission reduction targets set by CARB by reducing vehicle miles traveled (VMT) from light-duty vehicles through the development of more compact, complete, and efficient communities.

For the area under SCAG's jurisdiction, including the project site, CARB adopted regional targets for the reduction of mobile source-related GHG emissions by 8 percent for 2020 and by 13 percent for 2035.

### ***Pavley Regulations***

AB 1493 (Pavley, 2002) required CARB to adopt regulations to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks for model years 2009–2016. In September 2004, and pursuant to AB 1493, CARB approved regulations (which are often referred to as the Pavley standards) to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. In September 2009, CARB adopted amendments to the Pavley standards to reduce GHG emissions from new motor vehicles through the 2016 model year. CARB obtained a waiver from the USEPA that allows for implementation of these regulations notwithstanding possible federal preemption concerns.

### ***Low Carbon Fuel Standard***

EO S-1-07, as issued by Governor Schwarzenegger, called for a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB by 2020.<sup>30</sup> In response, CARB approved the Low Carbon Fuel Standard (LCFS) regulations in 2009, which became fully effective in April 2010. Thereafter, a lawsuit was filed challenging CARB's adoption of the regulations; in 2013, a court order was issued compelling CARB to remedy substantive and procedural defects of the LCFS adoption process under CEQA.<sup>31</sup> However, the court allowed implementation of the LCFS to continue pending correction of the identified defects. In July 2017, CARB readopted the LCFS regulations. With regard to the lawsuit, the Attorney General is currently defending against the lawsuit and the case is back in trial court for resolution of the plaintiff's remaining claims.<sup>32</sup>

### ***Advanced Clean Cars Regulations***

In 2012, CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for vehicle model years 2017–2025. The program combines the control of smog, soot, and GHGs with

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30 Carbon intensity is a measure of the GHG emissions associated with the various production, distribution and use steps in the "lifecycle" of a transportation fuel.

31 *POET, LLC v. CARB*, 2013, 217 Cal.App.4th 1214.

32 State of California Department of Justice, Attorney General, Defending California's Climate Change Program, <https://oag.ca.gov/environment/climate-change>, accessed June 2020.

requirements for greater number of zero-emission vehicles. By 2025, when the rules will be fully implemented, automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.<sup>33</sup>

### **Zero Emissions Vehicles**

Zero-emission vehicles (ZEVs) include plug-in electric vehicles (EVs), such as battery EVs, plug-in hybrid EVs, and hydrogen fuel cell EVs.

In 2012, Governor Brown issued EO B-16-2012, which calls for the increased penetration of ZEVs into California’s vehicle fleet in order to help California achieve a reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. In furtherance of that Statewide target for the transportation sector, the EO also calls on CARB, the CEC, and the CPUC to establish benchmarks that will (1) allow more than 1.5 million ZEVs to be on California roadways by 2025, and (2) provide the State’s residents with easy access to ZEV infrastructure.

In furtherance of those goals, in February 2013, the Governor’s Interagency Working Group on ZEVs issued the *2013 ZEV Action Plan: A Roadmap Toward 1.5 Million Zero-Emission Vehicles on California Roadways by 2025*.<sup>34</sup> Additionally, in May 2014, the National Renewable Energy Laboratory issued the *California Statewide Plug-In Electric Vehicle Infrastructure Assessment*<sup>35</sup> (Infrastructure Assessment Report) prepared at the request of the CEC. In the Infrastructure Assessment Report, the CEC noted that “can’t miss” ZEV charging locations are residential and workplace areas.

California is incentivizing the purchase of ZEVs through implementation of the Clean Vehicle Rebate Proposed Project (CVRP), which is administered for CARB by the nonprofit Center for Sustainable Energy. The CVRP currently subsidizes the purchase of passenger near-ZEVs and ZEVs as follows:

- Hydrogen Fuel Cell EVs: \$5,000;
- Battery EVs: \$2,500;
- Plug-In Hybrid EVs: \$1,500; and
- Neighborhood Electric Vehicles and Zero-Emission Motorcycles: \$900.

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33 CARB, The Advanced Clean Cars Program (January 18, 2018), <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>.

34 Office of Governor Edmund G. Brown Jr., *2013 ZEV Action Plan: A Roadmap toward 1.5 Million Zero-Emission Vehicles on California Roadways by 2025* (February 2013), accessed June 2020, [http://opr.ca.gov/docs/Governors\\_Office\\_ZEV\\_Action\\_Plan\\_\(02-13\).pdf](http://opr.ca.gov/docs/Governors_Office_ZEV_Action_Plan_(02-13).pdf).

35 National Renewable Energy Laboratory, *California Statewide Plug-In Electric Vehicle Infrastructure Assessment* (May 2014), Accessed June 2020, <https://www.nrel.gov/docs/fy15osti/60729.pdf>.

Finally, in its 2014 First Update, CARB recognized that the light-duty vehicle fleet “will need to become largely electrified by 2050 in order to meet California’s emission reduction goals.”<sup>36</sup> Accordingly, CARB’s ACC program requires about 15 percent of new cars sold in California in 2025 to be a plug-in hybrid, battery electric, or fuel cell vehicle.<sup>37</sup>

### ***CARB In-Use Off-Road & On-Road Regulations***

CARB’s in-use off-road diesel vehicle regulation (Off-Road Diesel Fleet Regulation) requires the owners of off-road diesel equipment fleets to meet fleet average emissions standards pursuant to an established compliance schedule. CARB’s in-use on-road heavy-duty vehicle regulation (Truck and Bus Regulation) applies to nearly all privately and federally owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds.<sup>38</sup>

### **Solid Waste Diversion**

The California Integrated Waste Management Act of 1989, as modified by AB 341 (Chesbro, 2011), requires each jurisdiction’s Source Reduction and Recycling Element to include an implementation schedule that shows (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; (2) diversion of 50 percent of all solid waste on and after January 1, 2000; and (3) source reduction, recycling and composting of 75 percent of all solid waste on or after 2020, and annually thereafter. The California Department of Resources Recycling and Recovery (CalRecycle) is required to develop strategies including source reduction, recycling, and composting activities to achieve the 2020 goal.

CalRecycle published a discussion document, *California’s New Goal: 75 Percent Recycling*, which identified concepts that would assist the State in reaching the 75 percent goal by 2020. Subsequently, in August 2015, CalRecycle released the *AB 341 Report to the Legislature*, which identifies five priority strategies for achievement of the 75 percent goal: (1) moving organics out of landfills; (2) expanding recycling/manufacturing infrastructure; (3) exploring new approaches for State and local funding of sustainable waste management programs; (4) promoting State procurement of post-consumer recycled content products; and, (5) promoting extended producer responsibility.

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36 CARB, *First Update to the Climate Change Scoping Plan*, 48.

37 CARB, *First Update to the Climate Change Scoping Plan*, 47.

38 CARB, “Truck and Bus Regulation: On-Road Heavy Duty Diesel Vehicles (In-Use) Regulation,” <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>, accessed June 2020.





Policy 3.2.2	Consider the potential impact of new development projects on the existing water supply.
Specific Action 3.3.2(a)	As part of the CEQA review process, evaluate potential water consumption of proposed uses considering ways in which water usage can be reduced and applying appropriate mitigation measures.
Policy 3.6.1	Reduce energy consumption by establishing land use patterns which would decrease automobile travel and increase the use of energy efficient modes of transportation.
Specific Action 3.6.1(a)	Require the inclusion, where feasible, of provisions for energy efficient modes of transportation and fixed facilities which establish transit, bicycle, equestrian, and pedestrian modes as desirable alternatives.
Policy 14.4.3	Encourage bicycling as an alternative to automobile travel for the purpose of reducing vehicle miles traveled (VMT), fuel consumption, traffic congestion, and air pollution by providing appropriate facilities for the bicycle riders.
Specific Action 14.4.3(c)	Through the adoption and implementation of a Master Plan of Trails, require bikeways to link residential neighborhood areas with parks, scenic areas, and other points of interest. These bikeways also should be designed to encourage intra-city travel to employment areas, civic and commercial areas, and schools.

### City of Lancaster Climate Action Plan

The City adopted their Final Climate Action Plan (CAP) in March 2017.<sup>40</sup> A greenhouse gas emissions inventory for the City was developed which consisted of both community-wide emissions and emissions from government operations for future years based on demographic growth. This would allow the City to document progress made through alternative energy and sustainability programs and identify projects that would enhance the City and further reduce GHG emissions. The CAP also identifies projects that would enhance the City's ability to further reduce GHG emissions. A total of 61 projects across eight sectors were identified, which include: (1) traffic; (2) energy; (3) municipal operations; (4) water; (5) waste; (6) built environment; (7) community; (8) and land use. The forecasts do not account for any new federal, State, regional, or local policies that may be implemented after 2015, nor does it assume that any policies

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<sup>40</sup> City of Lancaster, *Final Climate Action Plan*, March 2017.

in place in 2015 will become more stringent. Forecasts for both community and government operations were prepared for 2020, 2030, 2040, and 2050. Under all scenarios assessed, the City meets the 2020 target and makes substantial progress towards achieving the post-2020 reductions.

### **City of Lancaster Zero Net Energy Ordinance**

On February 14, 2017, the City adopted the Zero Net Energy Home Ordinance (No. 1020), which took into effect on January 1, 2018. The Ordinance mandates the installation of a solar system equivalent to two watts per square foot for each new home built. The City provides three options by which homebuilders can comply with this regulation: (1) providing a solar component on each new home; (2) offer mitigation fees in lieu of a solar component; or (3) arranging for a combination of both option one and two.

The first option, which is to install a solar component comprising of two watts per square foot, based on the size of each home constructed, generates a zero-balance energy bill for the homeowner. The second option allows builders to pay a Zero Net Energy mitigation/in lieu fee equal to \$1.40 per square feet of each constructed home. The homeowner receives credits for the new Lancaster Choice Energy (LCE) ZNE Home Rate, which provides the homeowner with a 50 percent discount on the energy generation portion of their LCE bill for 20 years. The third option combines the two methods listed above, permitting the installation of only a two-kilowatt (2,000 watt) solar system on each new home of 1,000 square feet or less. Homeowners of larger homes receive the ZNE mitigation/in lieu fee of \$1.40 for the remaining square footage exceeding 1,000 square feet. As with option two, the homeowner also receives the LCE ZNE Home Rate of 50 percent off their generation rate for the next 20 years. This ordinance was made obsolete with the 2019 Building Code which became effective on January 1, 2020 and requires ZNE for all new residential construction.

### **5.7.1.3 Existing Greenhouse Gas Emissions**

#### ***a. Existing Statewide GHG Emissions***

In 2017, California produced 424.10 million metric tons of carbon dioxide equivalents (MMTCO<sub>2e</sub>), including imported electricity and excluding combustion of international fuels and carbon sinks or storage. The major source of GHGs in California is transportation, contributing to 40 percent of the State's total GHG emissions. Industrial generation is the second largest source, contributing to 21 percent of the State's GHG emissions. The Statewide inventory of GHGs by sector is shown in Table 5.7-2: California GHG Inventory 2008–2017.

**Table 5.7-2**  
**California GHG Inventory 2008–2017**

Main Sector	Emissions (MMTCO <sub>2</sub> e)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Transportation <sup>a</sup>	177.35	170.20	165.13	161.76	161.31	160.91	162.53	166.18	168.76	169.86
Industrial <sup>b</sup>	90.54	87.90	91.50	90.17	91.08	93.69	94.02	91.48	89.49	89.40
Electric power	120.14	101.37	90.34	87.97	95.52	89.40	88.46	83.82	68.59	62.39
Commercial / residential	44.37	44.48	45.92	46.37	43.76	44.42	38.25	38.82	40.62	41.14
Agriculture	35.09	32.85	33.68	34.34	35.46	33.99	35.06	33.75	33.51	32.42
High GWP <sup>c,d</sup>	11.65	12.29	13.52	14.53	15.54	16.75	17.73	18.60	19.26	19.99
Recycled waste and	8.11	8.27	8.37	8.47	8.49	8.52	8.59	8.73	8.81	8.89
Total Emissions	487.25	457.35	448.46	443.61	451.16	447.69	444.65	441.37	429.04	424.10

Source: California Air Resources Board (CARB), 2018,

[https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg\\_inventory\\_scopingplan\\_sum\\_2000-17.pdf](https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_sum_2000-17.pdf)

Note: MMTCO<sub>2</sub>e = million metric tons carbon dioxide equivalents.

a Includes equipment used in construction, mining, oil drilling, industrial and airport ground operations.

b Reflects emissions from combustion of natural gas, diesel, and lease fuel plus fugitive emissions.

c These categories are listed in the Industrial sector of CARB's GHG Emission Inventory sectors.

d This category is listed in the Electric Power sector of CARB's GHG Emission Inventory sectors.

## **b. Existing Communitywide GHG Emissions**

A greenhouse gas emissions inventory for the City was developed for community-wide emissions to track progress as a result of projects and programs that have already been implemented. Community-wide sectors include: (1) residential energy use; (2) commercial/industrial energy use; (3) transportation; (4) waste; (5) off-road equipment; and (6) water and wastewater. The City's community-wide GHG emissions in 2015 totaled 777,350 MTCO<sub>2</sub>e,<sup>41</sup> as shown in Table 5.7-3: Comparison of Community-Wide Greenhouse Gas Emissions (2010–2015). This is a reduction of 12 percent from 2010 GHG emissions which totaled 885,210 MTCO<sub>2</sub>e. The reduction is a result of more intense drought conditions and water regulations.<sup>42</sup> A slowdown in construction growth also lead to a 40 percent decrease in lawn and garden and construction sectors. Emissions from transportation decreased due to certain factors such as increased walkability; however, no definitive explanation has been established. Emissions within the City are expected to increase by 2050, as shown in Table 5.7-4: Community-Wide Greenhouse Gas Emissions Forecast (2015–2050). Commercial and industrial energy use is projected to have the slowest growth of all sectors in the

41 City of Lancaster, Climate Action Plan, June 2016, Table 3-5.

42 City of Lancaster, *Final Climate Action Plan*, March 2017.

community inventory. Residential energy and off-road equipment are expected to experience the largest growth.

**Table 5.7-3**  
**Comparison of Community-Wide Greenhouse Gas Emissions (2010–2015)**

Emission Source	2010 Emissions	2015 Emissions	Percent Change (%)
	MTCO <sub>2</sub> e		
Transportation	425,140	352,930	-17
Residential Energy	235,450	224,510	-5
Commercial/Industrial energy	134,850	135,730	1
Waste	37,700	35,680	-5
Water	39,300	20,670	-47
Off-Road Equipment	9,500	5,700	-40
Wastewater	3,270	2,130	-35
<b>Total</b>	<b>885,210</b>	<b>777,350</b>	<b>-12</b>

Notes: City of Lancaster, Final Climate Action Plan (March 2017), Table 3-5.

**Table 5.7-4**  
**Community-Wide Greenhouse Gas Emissions Forecast (2015–2050)**

Sector	2015	2020	2030	2040	2050	Percentage Change (%) (2015–2050)
	MTCO <sub>2</sub> e					
Transportation	352,930	351,780	386,680	432,900	493,560	40
Residential Energy	224,510	246,340	272,840	307,120	351,390	57
Commercial/Industrial Energy	135,730	144,210	153,370	166,370	184,070	36
Waste	35,680	37,320	41,020	45,930	52,360	47
Water	20,670	21,620	23,770	26,600	30,330	47
Off-Road Equipment	5,700	6,250	6,930	7,800	8,920	56
Wastewater	2,130	2,230	2,450	2,740	3,130	47
<b>Total</b>	<b>777,350</b>	<b>809,750</b>	<b>887,060</b>	<b>989,460</b>	<b>1,123,760</b>	<b>45</b>

Notes: City of Lancaster, Final Climate Action Plan (March 2017), Table 3-8.

### c. Existing Estimated Project Site GHG Emissions

The project site currently contains the 342-bed Antelope Valley Hospital (414,930 square feet (sf)) with a 78-bed Woman and Infant Facility (277,000 sf) for a total of 420 beds within 691,930 sf. The project site

also contains 59 single family attached units and 376 multi-family units for a total of 435 housing units and a total of 1,040,430 sf of office and commercial space and approximately 230,000 sf of medical office space. The project area has been organized into three planning sub-areas defined by the centerlines of Avenue J-8 and 15th Street West, as well as the overall project site boundaries.

GHG emissions from the operation of the existing uses are estimated in Table 5.7-5: Existing Operational GHG Emissions. The most current California Air Pollution Control Officers Association (CAPCOA) air quality model software, California Emissions Estimator Model (CalEEMod), was used to estimate existing GHG generation. As shown, current GHG emissions at the project site are approximately 57,981 MTCO<sub>2e</sub> per year for the project site.

**Table 5.7-5  
Existing Operational GHG Emissions**

<b>Emission Source</b>	<b>MTCO<sub>2e</sub>/year</b>
Area	664
Energy	10,108
Mobile	43,123
Solid waste generation	2,513
Stationary	32
Water consumption	1,541
<b>Total</b>	<b>57,981</b>

*Notes:*

*Refer to Appendix F.1 Existing (Annual) Section 2.2 Overall Operational.*

*Abbreviations: MTCO<sub>2e</sub> = metric tons of carbon dioxide equivalents.*

## 5.7.2 ENVIRONMENTAL IMPACTS

### 5.7.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with GHG emissions. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant GHG emission impact if it would:

**Threshold GHG-1      Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**

**Threshold GHG-2      Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.**

Amendment to CEQA Guidelines Section 15064.4 was adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. This section recommends certain factors to be considered that may be used in the determination of significance (i.e., extent to which the project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHGs). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and that they should be analyzed in the context of CEQA's requirements for cumulative impact analysis.<sup>43</sup>

The AVAQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines<sup>44</sup> establishes an annual emissions threshold for GHG emissions of 100,000 metric tons of CO<sub>2</sub> equivalent (MTCO<sub>2</sub>e) per year and 548,000 pounds per day. A project is considered significant if it triggers or exceeds this annual threshold. Note that the emission thresholds are given as a daily value and an annual value, so that a multi-phased project (such as a project with a construction phase and a separate operational phase) with phases shorter than one year can be compared to the daily value. A project that cannot be mitigated to a level that is not significant must incorporate all feasible mitigation.

In addition, this analysis focuses on the Proposed Project's consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigation GHG emissions. This evaluation of consistency with such plans, specifically the City's CAP, is the sole basis for determining the significance of the Proposed Project's GHG-related impacts on the environment. Notwithstanding, for informational purposes, the analysis calculates the amount of the GHG emissions that would be attributable to the Proposed Project using recommended air quality models, such as CalEEMod. The primary purpose of quantifying the Project's GHG emissions is to satisfy State CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions.

43 California Natural Resources Agency, *Final Statement of Reasons for Regulatory Actions*, December 2009, pp. 11–13, 14, 16, accessed June 2020, [http://resources.ca.gov/ceqa/docs/Final\\_Statement\\_of\\_Reasons.pdf](http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf).

44 Antelope Valley AQMD, CEQA and Federal Conformity Guidelines, August 2016, accessed June 2020, <https://avaqmd.ca.gov/files/e5b34d385/AV+CEQA+Guides+2016.pdf>.

## 5.7.2.2 Methodology

### **a. Methodologies for Evaluating Significance**

The analysis of the Proposed Project's GHG emissions consists of a quantitative analysis of the GHG emissions generated by the Proposed Project and a qualitative analysis of the proposed Master Plan's consistency with adopted GHG-related legislation, plans, and policies. This approach is in accordance with CEQA Guidelines Section 15064.4(a), which affirms the discretion of a lead agency to determine, in the context of a particular project, whether to use quantitative and/or qualitative methodologies to determine the significance of a project's impacts.

### **b. Emissions Inventory Modeling**

The California Emissions Estimator Model, known as CalEEMod, is the CARB-approved computer program model recommended by AVAQMD for use in the quantification of air quality emissions, including GHG emissions. CalEEMod utilizes widely accepted models for emissions estimates combined with appropriate data that can be used if site-specific information is not available. For example, CalEEMod incorporates USEPA-developed emission factors; CARB's on-road and off-road equipment emission models, such as EMFAC and OFFROAD;<sup>45</sup> and studies commissioned by other California agencies, such as the CEC and CalRecycle. Proposed Project development would generate GHG emissions from a number of individual sources during both construction and postconstruction (operational) use of the buildings and related activities (e.g., landscape maintenance, etc.). These individual sources collectively are hereafter referred to as the Proposed Project's GHG emissions inventory.

CalEEMod version 2016.3.2 was used to quantify the Proposed Project's GHG emissions. CalEEMod provides a platform to calculate both construction emissions and operational emissions from a land use development project. The following GHG emission sources covered by CalEEMod model include:

- One-time construction emissions associated with site preparation, demolition, grading, utility installation, building, application of architectural coatings (i.e., paint), and paving from emission sources that include both off-road construction equipment and on-road mobile equipment associated with workers, hauling, and the delivery of construction materials to the project site. Construction emissions associated with dust control and disposal of waste at landfills were also included.

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<sup>45</sup> EMFAC is an emissions factor model used to calculate emissions rates from on-road vehicles (e.g., passenger vehicles; haul trucks). OFFROAD is an emissions factor model used to calculate emission rates from off-road mobile sources (e.g., construction equipment, etc.). CalEEMod version 2016.3.2 utilizes CARB's 2014 version of EMFAC.

- Operational emissions associated with the occupancy of development, such as on-road mobile vehicle traffic generated by the land uses;<sup>46</sup> off-road emissions from landscaping equipment; energy (i.e., electricity and natural gas) and water usage in the buildings; and vegetation removal.

### 5.7.2.3 Project Impact Analysis

**Threshold GHG-1      Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**

CEQA Guidelines Section 15064.4(a) requires the lead agency to calculate or estimate the amount of GHG emissions resulting from a project; Section 15064.4(b)(1) provides that the lead agency should consider the extent to which a project increases or reduces GHG emissions as compared to the existing environmental setting.

#### **Construction**

The forecasting of construction-related GHG emissions requires assumptions regarding the timing of construction as the emission factors for some of the Proposed Project's construction-related GHG emission sources decline over time.

Construction activities for the Proposed Project would include the use of heavy-duty construction equipment. The vast majority of construction equipment (e.g., backhoes, rubber-tired loaders, scrapers, and haul trucks, etc.) rely on fossil fuels, primarily diesel, as an energy source. The combustion of fossil fuels in construction equipment results in GHG emissions of CO<sub>2</sub> and smaller amounts of CH<sub>4</sub> and N<sub>2</sub>O. Emissions of GHG would also result from the combustion of fossil fuels from haul trucks and vendor trucks delivering materials, and from construction worker vehicles commuting to and from the project site. Typically, light-duty and medium-duty automobiles and trucks would be used for worker trips, and heavy-duty trucks would be used for vendor trips. The vast majority of motor vehicles used for worker trips rely on gasoline as an energy source, while motor vehicles used for vendor trips would primarily rely on diesel as an energy source. The Proposed Project would result in short-term emissions of GHGs during construction—that is, the emissions would occur only during active construction and would cease after the Proposed Project is built.

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<sup>46</sup> As previously discussed, in APR–2025, SJVAPCD concluded that “all GHG emission increases resulting from the combustion of any fuel produced, imported and/or delivered in California are mitigated under Cap-and-Trade... Therefore, GHG emission increases caused by fuel use (other than jet fuels) are determined to have a less than significant impact on global climate change under CEQA.” Nonetheless, this analysis quantifies all Proposed Project-related emissions and conservatively assumes that they are not otherwise reduced to levels of insignificance via CARB's Cap-and-Trade program.



### Construction Debris

GHG emissions associated with the disposal of construction-related solid waste were based on the quantity of construction debris calculated in Section 5.17.3: Solid Waste of this EIR. Specifically, solid waste generation for the Proposed Project's construction activities was determined using rates provided by the USEPA and is based on the types of uses and the amount of new construction that would occur under the Proposed Project. The total amount of solid waste generated was then divided by the duration of Proposed Project construction and adjusted for diversion rates. Emissions from construction debris disposal were then calculated using CalEEMod. As shown in Table 5.17.3-2: Proposed Project Construction and Demolition Waste Generation of this EIR, it is anticipated that construction is expected to result in a total of 89,719.36 tons of debris, 65 percent of which would be recycled and/or salvaged for reuse, thus resulting in 31,401.78 tons of debris to be disposed of in landfills. Construction debris disposal is expected to result in a total of 15,792 MTCO<sub>2e</sub> or 526 MTCO<sub>2e</sub> amortized over 30 years.<sup>47</sup> Refer to Section 5.17.3: Solid Waste of this EIR for more details regarding construction debris.

### Construction Water (Dust Control)

Dust-generating construction activities (e.g., demolition, excavation, and grading, etc.) require the use of water to control fugitive dust. GHG emissions related to water usage are generated based on the amount of electricity required for water treatment and conveyance. The number of gallons of water per year required for dust control was calculated based on a minimum control efficiency of 66 percent (i.e., application of water three times daily), with an application rate of 3,020 gallons per acre per day.<sup>48</sup> GHG emissions from the conveyance and treatment of water used for dust control were then calculated using CalEEMod. Water consumption from fugitive dust control measures would result in a total of 257 MTCO<sub>2e</sub>, or 9 MTCO<sub>2e</sub> amortized over 30 years.

### Total Construction Emissions

As shown in Table 5.7-6: Total Construction-Related GHG Emissions, construction of the Proposed Project is estimated to generate a total of 722 MTCO<sub>2e</sub> per year. Per industry standards, the total GHG construction emissions were amortized over the 30-year lifetime of a project<sup>49</sup> to determine the Proposed Project's annual GHG emissions inventory.<sup>50</sup> A complete listing of the construction equipment by on-site

<sup>47</sup> Per industry standards, the lifetime of a project is defined as 30 years.

<sup>48</sup> The total number of gallons calculated for dust control was based on the net new construction and replacement square footage proposed by the Proposed Project, the application rate per acre per day, and the number of construction days in a year.

<sup>49</sup> Total construction emissions were divided by 30 to determine an annual construction emissions estimate that can be added to the Proposed Project's operational emissions.

<sup>50</sup> SCAQMD, Agenda Item No. 31, *Staff Proposal for an Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*, (December 5, 2008). Available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2). Accessed June 2020.

and off-site activities, duration, and emissions estimation model input assumptions used in this analysis is included with the emissions calculation worksheets that are provided in Appendix F of this EIR.

**Table 5.7-6  
Total Construction-Related GHG Emissions**

Sub-Area	Total	Amortized
	MTCO <sub>2</sub> e	
Total Construction Emissions	5,608	187
Construction Debris	15,792	526
Construction Water (Dust Control)	257	9
<b>Total</b>	<b>21,657</b>	<b>722</b>

*Source: CalEEMod Emissions calculations are provided in Appendix F.2 Proposed Buildout (Annual) and Appendix F.3 Construction Debris and Water (Annual).*

*Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations. Abbreviation: MTCO<sub>2</sub>e = metric tons of carbon dioxide emissions.*

## Operation

Total GHG emissions are classified in terms of individual GHG sectors along with the Proposed Project sources related to each sector. The GHG emissions sources associated with the Energy sector include electricity and natural gas; the Water sector include indoor and outdoor water use; the Solid Waste sector includes material deposited at landfills; the Area sector includes landscaping equipment; the Mobile sector includes the Proposed Project's annual VMT. Operational emissions of buildout of each GHG sector is provided below.

### Area Sources

The area source GHG emissions included in this analysis result primarily from natural gas fireplaces with additional emissions from landscaping-related fuel combustion sources, such as lawn mowers. GHG emission due to natural gas combustion in buildings other than from fireplaces are excluded from area sources since they are included in the emissions associated with building energy use.

Consumer products are various solvents used in non-industrial applications which emit Reactive Organic Gases (ROGs) during their product use. Consumer products include cleaning supplies, kitchen aerosols, cosmetics, and toiletries. All buildings were assumed to be repainted at a rate of 10 percent of area per year in accordance with standard industry practices. However, CalEEMod does not consider architectural coatings and consumer products to be sources of GHG.

The GHG emissions for the Proposed Project were calculated using CalEEMod. CalEEMod defaults were used for landscape maintenance emissions. Area source emissions are shown in Table 5.7-7: Area Source Greenhouse Gas Emissions. As shown in Table 5.7-7, Project emissions would result in 897 MTCO<sub>2</sub> per year from area sources.

**Table 5.7-7  
Area Source Greenhouse Gas Emissions**

Source	Unmitigated MTCO <sub>2</sub> e per year
Architectural Coating	0
Consumer Products	0
Hearth	872
Landscaping	25
<b>TOTAL</b>	<b>897</b>

*Source: CalEEMod Emissions calculations are provided in Appendix F.2 Proposed Buildout (Annual).*

### Energy Sources

GHGs are emitted as a result of activities in buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits CO<sub>2</sub> and other GHGs directly into the atmosphere; when this occurs in a building, it is a direct emission source associated with that building. GHGs are also emitted during the generation of electricity from fossil fuels. When electricity is used in a building, the electricity generation typically takes place off-site at the power plant; electricity use in a building generally causes emission in an indirect manner.

Estimated emissions from the combustion of natural gas and other fuels from the implementation of the Proposed Project are calculated using the CalEEMod emissions inventory model, which multiplies an estimate of the energy usage by applicable emissions factors chosen by the utility company. GHG emissions from electricity use are directly dependent on the electricity utility provider. In this case, GHG intensity factors for Southern California Edison were selected in CalEEMod. Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building, such as plug-in appliances. CalEEMod calculates energy use from systems covered by Title 24 (e.g., heating, ventilation, and air conditioning [HVAC] system, water heating system, and lighting system); energy use from lighting; and energy use from office equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting.

Energy source emissions are shown in Table 5.7-8: Energy Source Greenhouse Gas Emissions. As shown in Table 5.7-8, the Proposed Project would result in 15,512 MTCO<sub>2</sub>e per year for electricity and 7,079

MTCO<sub>2</sub>e per year for natural gas. Therefore, the total energy source emissions for the Proposed Project would be 22,592 MTCO<sub>2</sub>e per year.

**Table 5.7-8  
Energy Source Greenhouse Gas Emissions**

Land Use	Electricity	Natural Gas
	Unmitigated MTCO <sub>2</sub> e per year	Unmitigated MTCO <sub>2</sub> e per year
Apartments	1,830	1,184
Congregate Care	518	288
General Office	2,492	335
High Turnover (Sit Down Restaurant)	1,284	1,127
Hospital	7,009	3,339
Hotel	798	424
Regional Shopping Center	652	13
Single Family Housing	656	369
Parking Structure	273	0
<b>TOTAL</b>	<b>15,512</b>	<b>7,079</b>

Source: CalEEMod Emissions calculations are provided in Appendix F.2 Proposed Buildout (Annual).

### Mobile Source Emissions

Vehicle trips generated by growth within the project site vicinity would result in operational emissions through the combustion of fossil fuels. CO<sub>2</sub> emissions were determined based on the ITE trip rates from the proposed land uses. The trip rate takes into account internal and external trips. The City is served by multiple transit operators, specifically within the vicinity of the project site, with networks connecting different communities within and outside of City boundaries. The Antelope Valley Transit Authority (AVTA) provides local bus service to the project area with Routes 1, 7, 11, and 12. In the vicinity of the project site, local bus stops are located along Avenue J near 20th Street West, 17th Street West, 15th Street West and Kingtree Avenue, as well as along 15th Street West near Avenue J, Avenue J-3, Avenue J-5, Avenue J-8, Meadow View Lane, and the High Desert Plaza shopping center. The AVTA also provides weekday commuter bus service to downtown Los Angeles, Century City/West Los Angeles, and the San Fernando Valley, departing from Lancaster City Park, approximately 1.25 miles southeast of the project site. Furthermore, Metrolink provides rail service from the Antelope Valley to Santa Clarita, the San Fernando Valley and Los Angeles basin cities, with the Antelope Valley Line providing 9 weekday departures and arrivals, and 6 weekend departures and arrivals. The Metrolink Station is located at Lancaster Boulevard and Sierra Highway, approximately 1 miles northeast of the project site. The proposed Master Plan would

provide a potential AVTA hub within the project site at the southeastern corner of Avenue J and 20th Street West. This hub could bring AVTA routes to stops closer into the project site, making arrival by bus from Palmdale and other parts of Lancaster more feasible for employees, visitors, and residents. As shown in Appendix F, the Project’s mobile source emissions would result in 37,333 MTCO<sub>2</sub>e per year.

**Solid Waste Emissions**

Solid waste generation and associated emissions are calculated based on the square footage of the Project Area, using default data found in CalEEMod for the proposed land uses. Disposal of organic waste in landfills can lead to the generation of CH<sub>4</sub>, a potent GHG. By generating solid waste, the Proposed Project would contribute to the emission of fugitive CH<sub>4</sub> from landfills, as well as CO<sub>2</sub> and N<sub>2</sub>O from the operation of trash collection vehicles. As shown in Table 5.7-9: Solid Waste Source Greenhouse Gas Emissions, GHG emissions resulting from solid waste would be 2,574 MTCO<sub>2</sub>e per year.

**Table 5.7-9  
Solid Waste Source Greenhouse Gas Emissions**

Land Use	Unmitigated MTCO <sub>2</sub> e per year
Apartments	312
Congregate Care	184
General Office Building	281
High Turnover (Sit Down) Restaurant	545
Hospital	975
Hotel	50
Regional Shopping Center	80
Single Family Housing	147
<b>TOTAL</b>	<b>2,574</b>

Source: CalEEMod Emissions calculations are provided in Appendix F.2 Proposed Buildout (Annual).

**Water Consumption and Wastewater Emissions**

California’s water conveyance system is energy intensive, with electricity used to pump and treat water. The Proposed Project would result in indirect GHG emissions due to water consumption and wastewater generation. Water consumption and wastewater generation, and their associated emissions, are calculated based on the square footage of the project site, using CalEEMod data. As shown in Table 5.7-10: Water Source Greenhouse Gas Emissions, the Proposed Project’s water and wastewater GHG emissions would be 2,474 MTCO<sub>2</sub>e per year.

**Table 5.7-10  
Water and Wastewater Source Greenhouse Gas Emissions**

<b>Land Use</b>	<b>Unmitigated MTCO<sub>2</sub>e per year</b>
Apartments	683
Congregate Care	202
General Office Building	821
High Turnover (Sit Down) Restaurant	159
Hospital	370
Hotel	27
Regional Shopping Center	86
Single Family Housing	126
<b>TOTAL</b>	<b>2,474</b>

*Source: CalEEMod Emissions calculations are provided in Appendix F.2 Proposed Buildout (Annual).*

### Total Emissions

As shown in Table 5.7-11: Operational Greenhouse Gas Emissions, the Proposed Project would result in 65,870 MTCO<sub>2</sub>e per year and not would exceed AVAQMD's significance threshold of 100,000 MTCO<sub>2</sub>e per year. It is important to note, the Project would incorporate energy and water efficiency design features to enhance efficiency in all aspects of the buildings' life cycle. These designs would increase the structures' energy efficiency, water efficiency, and overall sustainability. The Proposed Project would meet Title 24 energy requirements consistent with residential and commercial features. Through this compliance the Proposed Project's GHG emissions would be reduced by increasing energy-efficiency, reducing indoor and outdoor water demand, installing energy-efficient equipment, and complying with California Title 24 Building Energy Efficiency Standards, as amended by the City.

As shown in Table 5.7-4, the community-wide greenhouse gas emission forecast for the year 2040 is expected to be 989,460 MTCO<sub>2</sub>e with transportation and energy related GHG emission sources accounting for approximately 92 percent of community-wide GHG emissions. The Proposed Project would account for approximately 7 percent of the forecasted community-wide GHG emissions for the year 2040 and would be consistent with the transportation and energy related distribution of GHG emissions, of which the Proposed Project's transportation and energy GHG emission sources would account for approximately 91 percent of total Proposed Project GHG emissions. Additionally, the Proposed Project's transportation and air quality related mitigation measures would also indirectly reduce GHG emissions.

Furthermore, the Proposed Project characteristics listed below are consistent with the CAPCOA guidance document, *Quantifying Greenhouse Gas Mitigation Measures*. Measures applicable to the Proposed Project and a brief description of the Proposed Project’s relevance to the measure is provided.

- **CAPCOA Measure SDT-3 – Implement a Neighborhood Electric Vehicle Network:** The Proposed Project would be required to adhere to zoning requirements regarding installation of EV charging stations by providing required EV parking spaces consistent with City Zoning Code for each specific use.
- **CAPCOA Measure WUW-3 – Design Water-Efficient Landscapes:** The landscaping utilized for the Proposed Project draws from the natural context of the City using low-water-use plant materials. The Proposed Project would provide landscaping that complements and is responsive to Lancaster’s climate and natural environment, and that minimize consumption of non-renewable resources. The landscape would be designed to maximize water efficiency while maintaining a pleasing environment for visitors to the project site. The proposed Master Plan’s landscape guidelines would incorporate sustainable site design practices and focus on enhancing and improving landscaping features throughout the project site. The landscape guidelines would emphasize the use of native species. Specific projects developed pursuant to the proposed Master Plan would also be developed in compliance with the City’s landscaping installation and maintenance requirements (Lancaster Municipal Code [LMC], Chapter 8.5)

As such, impacts related to direct and indirect emissions of GHG emissions would be less than significant.

**Table 5.7-11  
Total Operational GHG Emissions**

<b>Emission Sources</b>	<b>Proposed (MTCO<sub>2</sub>e per year)</b>
Area	897
Energy	22,592
Mobile	37,333
Waste	2,574
Water	2,474
<b>Total</b>	<b>65,870</b>
Exceeds Threshold? 100,000 MTCO <sub>2</sub> e per year	<b>No</b>

Source: CalEEMod Emissions calculations are provided in Appendix F.2 Proposed Buildout (Annual).

Notes: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Abbreviations: MTCO<sub>2</sub>e = metric tons of carbon dioxide emissions.

## ***Mitigation Measures***

No mitigation measures are required.

## ***Level of Significance***

Proposed Project GHG emissions at buildout would fall below the AVAQMD threshold and impacts would be less than significant.

**Threshold GHG-2      Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**

As reflected in Threshold GHG-2, CEQA Guidelines Section 15064(h)(3) provides that the City, as lead agency, consider the Proposed Project's consistency with applicable regulatory plans and policies to reduce GHG emissions.

The following provides an analysis of Proposed Project consistency with City, regional, and State policies that address GHG emissions. A number of the policies identified below would be implemented by various public agencies. For many of these policies, the analysis addresses the Proposed Project's role in supporting the implementation of these policies by the responsible public agencies.

## ***Consistency of Lancaster CAP***

The City adopted the Final CAP on March 2017. The CAP documents the City's GHG emissions inventories and the progress the City has made through its alternative energy and sustainability programs. The CAP identifies projects that would enhance the City's ability to further reduce GHG emissions. The CAP also outlines how the City would meet the State GHG reduction targets for 2020 and make substantial progress towards achieving the post-2020 targets. Project consistency with the applicable CAP measures are described below.

## **Transportation Measures**

### ***Measure 4.1.2a: Roundabouts***

As discussed in Section 3.0: Project Description the proposed Master Plan includes a mobility plan which identifies the conceptual vehicular circulation and street layout to serve the development. Traffic calming measures are also proposed throughout the site including roundabouts, to slow traffic and eliminate the idling time typical of signalized intersections. Thus, the Proposed Project would be consistent with CAP Measure 4.1.2a.



**Measure 4.1.2b: Bike Lanes**

The proposed Master Plan incorporates a network of bikeways to serve the Proposed Project which would incorporate bikeways identified in the City’s Master Plan of Trails and Bikeways. Bicycle and pedestrian access throughout the plan area would be via new roadway connections to the arterial roadway network surrounding and traversing the project site. All internal roadways would be two-lane facilities with bike lanes and sidewalks. The design of the proposed development’s interface with the public realm environment would be specifically focused toward healthy, active living by creating a comfortable, safe, and efficient environment for walking and biking, and physical activity by way of shaded sidewalks, trails and bike facilities, parks, playgrounds, and flexible gathering places, a variety of health-related events, including farmer’s markets, health and fitness classes, and many others.

Class II or buffered bike lanes would be incorporated on Avenue J between 15th Street West and 25th Street West, resulting in a reduction from six vehicular travel lanes to four. Existing Class II bike lanes along Avenue J-8 would be widened from 5 feet to 6 feet between 15th Street West and 25th Street West. For north–south routes, Class II bike lanes are proposed along 17th Street West between J and Avenue J-8 and 7-foot-wide buffered bike lanes would be added to 15th Street West between Avenue J and Avenue J-8, consistent with City plans. Lastly, a future Class I bike path is envisioned by the Master Plan to follow Amargosa Creek, consistent with the Master Plan of Trails of Bikeways. Thus, the Proposed Project would be consistent with CAP Measure 4.1.2b.

**Measure 4.1.2c: Pedestrian Amenities**

A central component of the proposed Master Plan is creating an urban district of walkable scale, with activated street frontages and enhanced streetscapes that encourage pedestrian activity. Consistent with City policy, all streetscapes in the Master Plan Area would balance the circulation needs of all modes of travel, and emphasize pedestrian safety, comfort, and experience. Amenities such as landscaping and tree plantings in the public realm, street furniture, outdoor light fixtures, and other features would enhance the pedestrian experience, while crosswalks and traffic-slowing measures such as roundabouts and curb bulb-outs would heighten pedestrian visibility and safety. Further, consistent with the City’s Master Plan of Trails and Bikeways, the Master Plan provides design standards for Avenue J that emphasize streetscape and landscape improvements, including the construction of a minimum 5-foot-wide sidewalk, street trees, a landscaped median, lane narrowing, and enhanced buffered Class II Bike Lanes. Thus, the Proposed Project would be consistent with CAP Measure 4.1.2c.

**Measure 4.1.2e: Roadway Right Sizing**

The proposed Master Plan includes a mobility plan which identifies the Proposed Project’s conceptual network of vehicular, pedestrian, and bicycle facilities. This network is subject to modification to

accommodate the final placement of the hospital and other uses within the plan area. The Proposed Project's vehicular, pedestrian, and bicycle facilities would be subject to compliance with the City's design standards, including those identified in the City's Master Plan of Trails and Bikeways and Complete Streets Master Plan. Thus, the Proposed Project would be consistent with CAP Measure 4.1.2e.

#### ***Measure 4.1.3a: Bike Sharing***

The proposed Master Plan provides a structural framework that organizes the project site into a network of public spaces, including streets, greens, plazas, paseos, and playgrounds. In the project site, the design of the proposed development's interface with the public realm environment would be specifically focused toward healthy, active living by creating a comfortable, safe, and efficient environment for walking and biking, and physical activity by way of shaded sidewalks, trails and bike facilities, parks, playgrounds, and flexible gathering places, a variety of health-related events, including farmer's markets, health and fitness classes, and many others. Thus, there are opportunities for the incorporation of bike sharing facilities within the project site and the Proposed Project would be consistent with CAP Measure 4.1.3a.

### **Water Measures**

#### ***Measure 4.4.1a: Recycled Water Line Expansion***

Recycled water helps provide the Antelope Valley a beneficial reuse of treated wastewater. Lancaster Water Reclamation Plant (Lancaster WRP) is the wastewater treatment plant serving the area that would provide tertiary treated water to supply recycled water demands. As stated in the 2015 UWMP, the LACWD No. 40 does not currently use or project to use recycled water, although recycled water is used and sold by others within the service area.

Infrastructure improvements such as water, sewer, drainage, and flood retention systems for proposed developments within the plan area would be determined on a project by project basis. Any needed backbone infrastructure would be installed by the City at the time of the major roadway improvements. Thus, there is the opportunity for Sanitation Districts of Los Angeles County No. 14 and the City to extend and provide, once available, recycled water to future development within the project site. Thus, the Proposed Project would be consistent with CAP Measure 4.4.1a.

### **Built Environment Measures**

#### ***Measure 4.6.1a: Zero Net Energy Housing***

In compliance with the 2019 Building Code, each individual project that incorporates housing units would be required to meet the provisions of the City's latest Building Code. Measures for compliance include the installation of rooftop solar, electric vehicle charging stations, and/or small scale wind turbines. As

mentioned above, the developers would have three options available to comply with the City's Building Code requirement: a solar component, mitigation fees in lieu of a solar component, or a combination of both. The houses constructed as a result of the proposed Master Plan would comply with all of these regulations and would not conflict or obstruct a state or local plan for renewable energy or energy efficiency. Thus, the Proposed Project would be consistent with CAP Measure 4.6.1a.

## **Community Measures**

### ***Measure 4.7.2d: Local Shopping/Vendor Programs***

As indicated in Table 3.0-1: Proposed Project Buildout Development in Section 3.0 of the EIR, up to 1,090,000 sf of new commercial/office/retail and 75,000 sf of hospitality uses would be permitted that would serve the community and further the City's goal of creating new shopping opportunities to encourage residents to shop locally. Thus, the Proposed Project would be consistent with CAP Measure 4.7.2d.

### ***Measure 4.7.3a: Xeriscaping***

The proposed Master Plan incorporates Street Landscape Standards and Design Guidelines which limit turf areas are limited to active recreation and play areas. The proposed Master Plan also identifies a plant palette which incorporates native drought-tolerant trees, shrubs, and groundcover. Thus, the Proposed Project would be consistent with CAP Measure 4.7.3a.

### ***Measure 4.7.4c: Conservation Habitat Acquisition***

Lancaster Municipal Code Chapter 15.66, Biological Impact Fee, establishes a fee to mitigate biological impacts on a regional basis. As discussed in Section 5.3: Biological Resources of this EIR, each individual project applicant for development within vacant and undeveloped area would be required to pay the applicable fee to mitigate regional impacts to biological resources. Payment of this fee would contribute to the acquisition of additional conservation habitat to preserve the unique biological resources of the Antelope Valley and consequently offset the creation of greenhouse gases. Thus, the Proposed Project would be consistent with CAP Measure 4.7.4c.

## **Land Use Measures**

### ***Measure 4.8.1b: TOD Zone Expansions***

Transit-oriented development is a type of community development that includes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation.

Specifically, the proposed Master Plan would emphasize mixed-use development in targeted areas and cluster places of work, living, and recreation. These land use patterns heighten the efficient use of land resources by clustering uses and reducing the necessity of automobile trips and resultant VMT. As discussed in Section 5.15: Transportation and Traffic, the proposed Master Plan would further reduce total vehicle miles traveled by approximately 0.5 percent when compared to buildout without the Proposed Project in the Antelope Valley. Moreover, the design of the project site is transportation-oriented, offering internal pedestrian and bicycle linkages, interfacing with surrounding mobility networks, and being located proximate to public transportation.

The Master Plan Area's location also takes advantage of existing transportation alternatives in the vicinity that could reduce energy consumption (gasoline, electric, or natural gas, depending on the mode of travel) for transportation needs. A number of public transit options are within reasonable walking distance (less than one-quarter mile) of the Master Plan Area. AVTA Routes 1, 7, 11 and 12 directly serve the project site; AVTA provides local bus service to take children to school, employees to work, and residents to local stores and malls. AVTA also provides commuter bus service to downtown Los Angeles, Century City/West Los Angeles, and the San Fernando Valley. These routes operate during the work week only and depart from the bus station at Lancaster City Park, located approximately 1.25 miles southeast of the project site. The Lancaster Metrolink station is located approximately 1 mile northeast of the project site and provides commuter rail service to downtown Los Angeles, as well as transfers to a number of local and regional bus routes (Amtrak, AVTA, Eastern Sierra Transit Authority, and Kern Transit). As such, the Master Plan Area provides access for employees, residents, and visitors. Thus, the Proposed Project would be consistent with CAP Measure 4.8.1b.

***Measure 4.8.1d: Infill Development Opportunities***

As described in Section 3.0: Project Description, the primary objective of the proposed Master Plan is to surround the Antelope Valley Hospital with a variety of health and wellness related uses, supporting and expanding the hospital's medical facilities and treatment capabilities while accommodating the needs of patients and their families, staff, and the community.

The mixed-use characteristics of the district and centralization of regional medical facilities would result in the capture of trips within the project area and reduction of regional trip lengths. The proposed Master Plan is a policy-based document containing VMT reduction measures through building design and orientation, land use, streetscape improvements, and multi-modal connectivity. As such, it is also anticipated that VMT would be reduced with improved transit access to the facilities in the project area, a connected network of sidewalks, and shared bike lanes that all serve to reduce the need to drive between facilities within the project site, as well as clustered uses and, proximate building orientation,

and activated ground floors that encourage residents, employees, and visitors to park their cars and walk within the vicinity. These measures and features are consistent with existing recommendations to reduce GHG emissions. Thus, the Proposed Project would be consistent with CAP Measure 4.8.1d.

### ***SCAG RTP/SCS 2016–2040***

The 2016 RTP/SCS is expected to help SCAG reach its GHG reduction goals, as identified by CARB, with reductions in per capita passenger vehicle GHG emissions of 9 percent by 2020 and 16 percent by 2035.<sup>51</sup> Furthermore, although there are no per capita GHG emission reduction targets for passenger vehicles set by CARB for 2040, the 2016 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2040.<sup>52</sup>

The 2016 RTP/SCS would result in an estimated 8 percent decrease in per capita passenger vehicle GHG emissions by 2020, 18 percent decrease in per capita passenger vehicle GHG emissions by 2035, and 21 percent decrease in per capita passenger vehicle GHG emissions by 2040. In March 2018, CARB adopted updated targets requiring a 19 percent decrease in VMT for the SCAG region by 2035. As the CARB targets were adopted after the 2016 RTP/SCS, it is expected that the updated targets will be incorporated into the next RTP/SCS. The 2016 RTP/SCS and/or the next RTP/SCS are expected to fulfill and exceed SB 375 compliance with respect to meeting the State’s GHG emission reduction goals.

In addition to demonstrating the region’s ability to attain and exceed the GHG emission-reduction targets set forth by CARB, the 2016 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. Thus, successful implementation of the 2016 RTP/SCS would result in more complete communities with a variety of transportation and housing choices, while reducing automobile use. With regard to individual developments, such as those proposed under the Master Plan, strategies and policies set forth in the 2016 RTP/SCS can be grouped into the following two categories: (1) integrated growth forecast; and (2) reduction of vehicle trips and VMT.

### **Integrated Growth Forecast**

The 2016 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG’s Regional Council, are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review. According to the SCAG estimates, the 2020 forecast population within the City would be 167,400 residents and 51,700 employment opportunities and the 2040 forecast population

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51 CARB, *Regional Greenhouse Gas Emission Reduction Targets Pursuant to SB 375, Resolution 10-31*.

52 SCAG, *Final 2016–2040 RTP/SCS*, April 2016, p. 153.

within the City would be 209,900 residents and 59,600 employment opportunities. The forecast also projects a total of 22,138,800 residents and 9,871,500 jobs within the SCAG region in 2040, which results in additional 2,475,800 residents and 1,457,500 employment opportunities being added to the SCAG region between 2020 and 2040.

For the City as forecasted by SCAG, the population, housing, and employment growth forecast between 2020 and 2040 projects a total of 167,400 residents in 2020 and 209,900 residents within the City in 2040, which results in additional 42,500 residents or an increase of approximately 22 percent, being added to the City between 2020 and 2040. As discussed in Section 5.12: Population and Housing in the EIR, the City is forecasted to have 52,400 households in 2020 and 65,300 households in 2040, which results in an additional 12,900 households being added in the City between 2020 and 2040. The City is also forecasted to have 51,700 jobs in 2020 and 59,600 jobs in 2040, an increase of 7,900 jobs between 2020 and 2040.

It is estimated that approximately 5,120 residents would be anticipated to reside within the project site. Similarly, for conservative purposes all new jobs within the project site will be considered as new residents and thus, approximately 6,447 new jobs would generate the same number of residents within the City. At Proposed Project buildout, it is anticipated that the net new population added within the City would be approximately 11,597 residents. The Proposed Project's estimated 11,597 new direct and indirect residents relate to population growth within the City associated with buildout of the Proposed Project. This level of population growth represents approximately 8.3 percent of the General Plan's forecasted growth in new residents by 2030; or approximately 11.8 percent of the forecasted growth between 2019 and 2030.<sup>53</sup> Therefore, the Proposed Project would not induce substantial population growth because it would account for only a small portion of forecasted population growth, rather than exceeding the population growth forecast for the City.

### **Consistency with VMT Reduction Strategies and Policies**

The SCS's goals and policies to reduce VMT focus on transportation and land use planning that include building mixed use projects, locating residents closer to where they work and play, and designing communities so there is access to high quality transit service. The SCS identifies transportation network actions and strategies that are outside the City's jurisdiction and control, such as expanding the use of transit modes in sub regions (e.g., bus rapid transit (BRT), rail, limited-stop service, and point-to-point express service utilizing the high-occupancy vehicle (HOV) and high-occupancy toll (HOT) lane networks, etc.) In areas without quality transit, the SCS identifies land use strategies to promote development patterns that result in fewer vehicles miles travelled and thus lower GHG emissions. Such land use

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53 Anticipated growth within the City is 140,280 residents between 2000 and 2030 and 98,092 residents between 2019 and 2030. The Proposed Project's approximately 11,597 residents would account for 8.3 percent of the General Plan's anticipated population growth within the City between 2000 and 2030 and 11.8 percent between 2019 and 2030.

strategies including local government adoption of updated zoning codes, General Plans, and other regulatory policies that promote neighborhood-oriented development, suburban villages, and revitalized main streets consistent with the 2016 RTP/SCS.

The proposed Master Plan would emphasize mixed-use development in targeted areas and cluster places of work, living, and recreation. These land use patterns heighten the efficient use of land resources by clustering uses and reducing the necessity of automobile trips and resultant VMT. As discussed in Section 5.15: Transportation and Traffic, the proposed Master Plan would further reduce total vehicle miles traveled by approximately 0.5 percent when compared to buildout without the Proposed Project in the Antelope Valley. Moreover, the design of the project site is transportation-oriented, offering internal pedestrian and bicycle linkages, interfacing with surrounding mobility networks, and being located proximate to public transportation.

In addition, Mitigation Measure MM AQ-3 would provide incentives for employees working at the proposed commercial and retail uses to use public transportation, carpooling, or rideshare programs. These measures would discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking and biking. Such incentives include new employee orientation of trip reduction and alternative mode options, event promotions and publications, flexible work schedule for all employees, transit subsidies, parking cash-out or priced parking, shuttles, emergency ride home, and improved on-site amenities.

The proposed Master Plan characteristics listed below are consistent with the CAPCOA guidance document, *Quantifying Greenhouse Gas Mitigation Measures*, which identifies the VMT and vehicle trips reductions for the project site. Measures applicable to the proposed Master Plan are provided below followed by a brief description of the Master Plan's relevance to the measure.

- **CAPCOA Measure LUT-1 – Increase Density:** Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduced emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies, such as enhanced transit services.
- **CAPCOA Measure LUT-3 – Increase Diversity of Urban and Suburban Developments:** The Proposed Project would introduce new uses at the site, including high-quality, health related and residential uses with a range of housing opportunities that are compatible in character with the existing surrounding neighborhoods. As mentioned previously, design of the proposed development's interface with the public realm environment would be specifically focused toward healthy, active living by creating a comfortable, safe, and efficient environment for walking and biking, and physical activity by way of shaded sidewalks, trails and bike facilities, parks, playgrounds, and flexible gathering places, a variety of health-related events, including farmer's markets, health and fitness classes, and many others.

- **CAPCOA Measure SDT-1 – Provide Pedestrian Network Improvements:** The Proposed Project would improve the pedestrian network by extending, connecting and improving the surrounding roadway network, and providing a network of walkable and bikeable neighborhood streets.

The analysis of project consistency with the RTP/SCS goals shows that adoption and implementation of the Proposed Project would support the goals of the RTP/SCS. Section 5.10: Land Use, presents the Proposed Projects consistency with the RTP/SCS. Guiding policies in the RTP/SCS focus on SCAG’s priorities for investment and strategies to preserve, maintain and optimize the transportation system. Thus, they do not apply to the Proposed Project. However, the analysis of project consistency with the RTP/SCS goals shows that adoption and implementation of the Proposed Project would support the goals of the RTP/SCS.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Less than significant.

#### **5.7.2.4 Cumulative Impacts**

To achieve Statewide goals, CARB is continuing its ongoing process of updating, establishing and implementing regulations to reduce Statewide GHG emissions. Currently, no applicable quantitative significance thresholds or specific reduction targets exist at the State level to assist in determining significance at the project or cumulative level. Additionally, currently no generally accepted methodology exists to determine whether GHG emissions associated with a specific project represent new emissions or existing and/or displaced emissions. Therefore, consistent with CEQA Guidelines Section 15064h(3), the City as a lead agency, has determined that the Proposed Project’s contribution to cumulative GHG emission and global climate change would be less than significant if the Proposed Project is consistent with the applicable regulatory plans and polices to reduce GHG emissions. Accordingly, the analysis above took into account the potential for the proposed Master Plan to contribute to the cumulative impact of global climate change. As stated above, the Proposed Project would result in a less than significant impact because it could be consistent with the applicable regulations, plans, and policies. Additionally, the Proposed Project’s GHG emissions would fall below the AVAQMD’s GHG thresholds, and as such, the Proposed Project’s impacts would not be cumulatively considerable and cumulative impacts would be less than significant.

Related projects would generate both construction and operational GHG emissions during the life of each project and thus would contribute to a potentially significant cumulative impact. Each related project



would be required to undergo environmental review and, if necessary, would implement mitigation measures to reduce GHG emissions.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Less than significant.

### **5.7.3 SUMMARY OF SIGNIFICANCE**

As identified above, the proposed Master Plan provides a framework for future development that is transit oriented and would not exceed the AVAQMD's GHG emissions thresholds. As such, Proposed Project development would not conflict with any adopted and applicable City or State plans, policies, or regulations to reduce GHG emissions in 2020, 2030, and/or 2050, all of which utilize non-zero targets (and thereby allow for some level of emissions for land use developments to accommodate Proposed Projected growth) to reduce the State's cumulative contribution to global climate change. Therefore, the Proposed Project's GHG emissions would be less than significant. The Proposed Project's cumulative impacts with regard to GHG emissions would also be less than significant.

## 5.8 HAZARDS AND HAZARDOUS MATERIALS

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This section of the Environmental Impact Report (EIR) evaluates potential environmental impacts on human health and the environment due to exposure to hazards and hazardous materials present or potentially present on the project site. This section also evaluates the potential effects on the surrounding area as a result of the implementation of the Proposed Project. This section incorporates information from the following studies of the project site:

- *Phase I Environmental Site Assessment, Lancaster Health District Vacant Parcels*, prepared by Leighton Consulting, Inc., June 2017.
- *The EDR Radius Map Report with GeoCheck, Health District Master Plan*, prepared by EDR, April 10, 2020.

A complete copy of the Phase I Environmental Site Assessment (Phase I ESA) and a copy of the updated EDR Radius Map Report with GeoCheck (EDR Report) are included as Appendix G: Supporting Hazardous Materials Technical Documentation of this EIR.

### 5.8.1 ENVIRONMENTAL SETTING

#### 5.8.1.1 Definitions

##### **a. Hazardous Materials**

“Hazardous materials” generally refers to hazardous substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials are used in products (e.g., household cleaners, industrial solvents, paint, pesticides, etc.) and in the manufacturing of products (e.g., electronics, newspapers, plastic products, etc.). Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agricultural, commercial, and industrial uses; businesses, hospitals, and households. Accidental releases of hazardous materials have a variety of causes, including highway incidents, warehouse fires, train derailments, shipping accidents, and industrial incidents.

The term “hazardous materials” as used in this section includes all materials defined in the California Health and Safety Code (HSC):

*A material that, because of its 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. “Hazardous materials” include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the unified program agency has a reasonable basis for*

*believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.*<sup>1</sup>

The term includes chemicals regulated as hazardous materials, wastes, or substances by the US Department of Transportation (USDOT), the US Environmental Protection Agency (USEPA), the California Department of Toxic Substances Control (DTSC), the California Governor’s Office of Emergency Services (Cal OES), and other agencies.

“Hazardous waste” is any hazardous material that has been discarded, except those materials specifically excluded by regulation.<sup>2</sup> Both hazardous materials that have been intentionally disposed of and inadvertently disposed of are broadly characterized by their ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity. Federal and State hazardous waste definitions are similar but distinct enough that separate classifications are in place for federal Resource Conservation and Recovery Act (RCRA) hazardous wastes and State non-RCRA hazardous wastes. Hazardous wastes require special handling and disposal because of their potential to impact public health and the environment. Some materials are designated “acutely” or “extremely” hazardous under relevant statutes and regulations.

**b. *Recognized Environmental Conditions***

The term “recognized environmental conditions” (RECs) refers to the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into the structures on the property or into the ground, groundwater, or surface water of the property. Additionally, controlled recognized environmental conditions (CRECs) are RECs that resulted from a past release that have been addressed to the satisfaction of the applicable regulatory authority.

**c. *Historical Recognized Environmental Condition***

The term “historical recognized environmental condition” (HREC) is defined as “environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently.” The American Society for Testing and Materials (ASTM)<sup>3</sup> further defines a historical recognized environmental condition by stating “[i]f a past release of any hazardous substances or petroleum products has occurred in connection with the property and has been remediated, with such remediation accepted by the responsible regulatory agency... this condition shall be considered a historical recognized environmental condition.”

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1 California Health and Safety Code (HSC), div. 20, ch. 6.95, art. 1, Section 25501(o).

2 HSC, div. 20, ch. 6.5, art. 8, Section 25124.

3 ASTM was organized in 1989 and specializes in developing standards for a broad spectrum of industries, governments, academia, trade groups, consumers, and other groups/products.

### 5.8.1.2 Existing Conditions

#### *a. Project Site*

The project site consists of land developed with a variety of medical facilities, commercial, industrial, retail, and residential dwelling units, as well as vacant, undeveloped land containing native and nonnative vegetation. The existing Antelope Valley Hospital is located in the north-central portion of the project site. The Amargosa Creek generally forms the western boundary of the project site and bisects the southern portion of the project site. The project site is surrounded by developed areas and has been disturbed from compaction of soil, dumping and excavation, off-road vehicle use, and other man-made disturbances.

The Phase I ESA, included in Appendix G, addresses the project site for three separate vacant lots located northeast of the intersection of Avenue J-8 and 20th Street West (Vacant Lot 1); southwest of the intersection of Avenue J-8 and 15th Street West (Vacant Lot 2); and southeast of intersection of Avenue J-2 and 15th Street West (Vacant Lot 3), as shown on Figure 5.8-1: Vacant Lot Locations. Vacant Lot 2 has an eastern portion where fill soil has been graded approximately 6 to 7 feet higher in elevation than the adjoining portion of the lot, suggesting imported fill placement. The two other primarily vacant lots within the project site are generally flat-lying with minimal elevation changes. A fire hydrant was observed during site reconnaissance on the vacant site southeast of the intersection of Avenue J-2 and 15th Street (Vacant Lot 3). Avenue J-2 and Avenue J-3 were paved at the northwestern portion of Vacant Lot 3 to accommodate previous residential dwellings (refer to Appendix G).

Site reconnaissance observations of the project site indicated no hazardous substances, storage tanks, waste disposal, pesticide use, discolored soil, corrosion, nor unusual odors. There was evidence of small piles of miscellaneous household and construction refuse, and the possibility of polychlorinated biphenyls (PCB's) that may be present in coolants or oils in the three electrical transformers that were observed within the vacant lots on the project site. The first electrical transformer is located along the south side of Avenue J, west of the Antelope Valley Hospital Outpatient Surgery Center. The second electrical transformer is also located along the south side of Avenue J, adjacent to the Antelope Valley Hospital Outpatient Surgery Center. The third electrical transformer is located north and adjacent to a residential complex surrounding Avenue J-4. All transformers appeared to be in good condition with no staining observed beneath or surrounding the transformers (Appendix G).

Based on aerial photographs, it has been determined that there were changes in land use based on the interpreted site. Prior to 1928, the land use was unknown as no aerial photographs were found. From 1928 to 1953, the land use was vacant, undeveloped land and agricultural uses. From 1953 to 1979 the land was vacant and undeveloped. Starting around 1979 to 2012, the land was vacant and undeveloped

with some residential development, and beginning in 2012 to the present, the land was vacant and undeveloped.

Some structures within the project site were built prior to 1978, and as such, have the potential to contain hazardous materials such as asbestos containing material, lead-based paint (LBP) and other potentially hazardous building materials in some form as part of the building materials, such as PCBs, mercury, or chlorofluorocarbons (CFCs) in fluorescent lighting and electrical switches.

**b. Environmental Conditions**

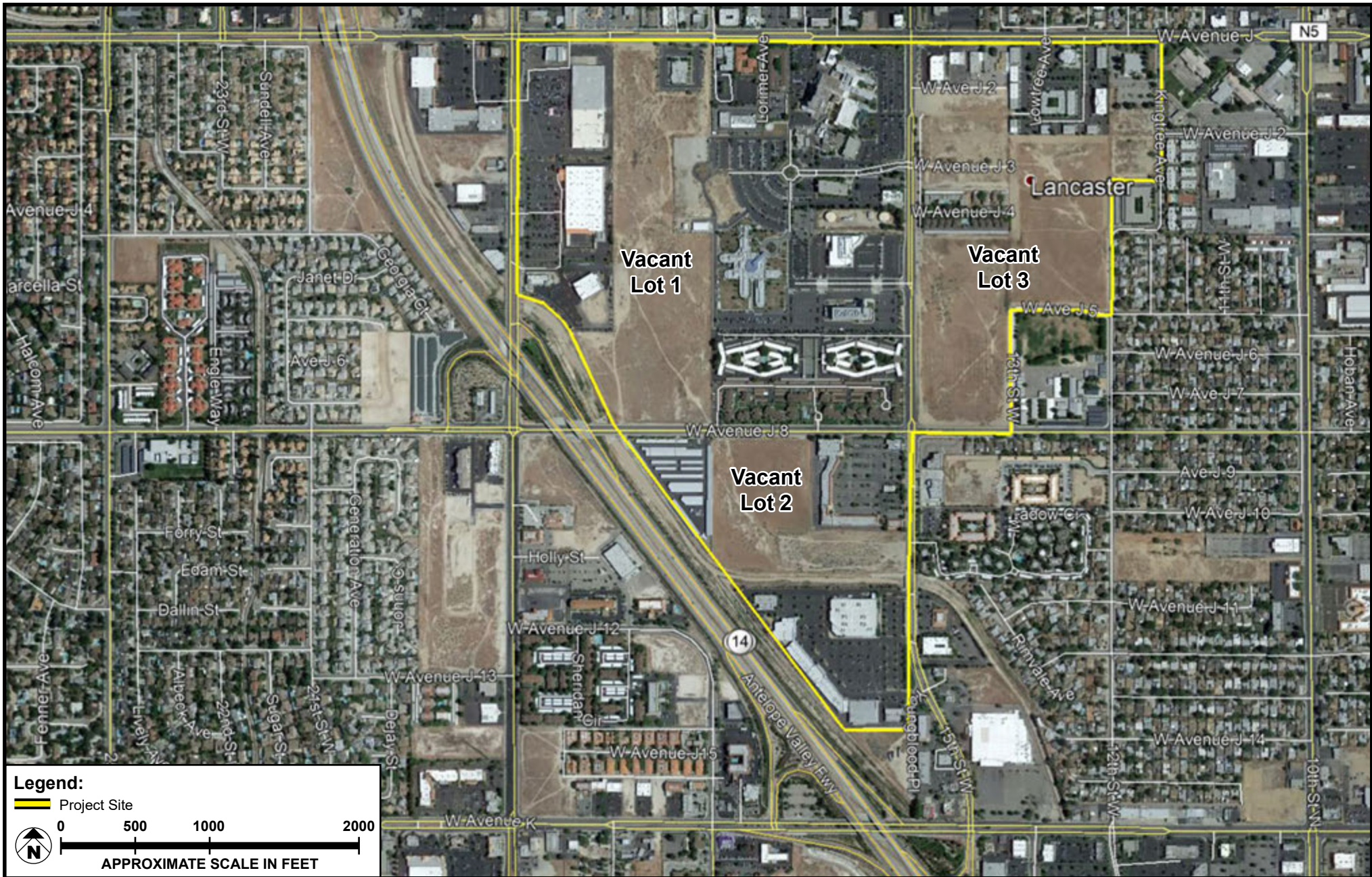
Current and past land uses within the vacant portions of the project site were identified to present concerns relative to the potential presence of hazards and/or handling of hazardous materials for the Proposed Project. The existence of RECs, HRECs, and CRECs on the vacant portions of the project site due to prior and current on-site activities is addressed below.

**Current and Historical Uses of the Vacant Portions of the Project Site**

The project site was primarily vacant, undeveloped with some agricultural land use noted between 1928 and 1953. Between 1953 and 1979, agricultural land use ceased at the site and the site appeared as vacant undeveloped land. Between 1979 and 2012 in the northwestern and northeastern portions of Vacant Lot 3, residential development was observed. Following 2012, the residential developments at Vacant Lot 3 were demolished and all three lots were vacant and undeveloped. Though buildings likely associated with historical agricultural use were noted in the reviews of aerial photographs of the project site; no historical structures were identified in the response from the City of Lancaster, Building and Safety Division for building records pertaining to the vacant sites (refer to Appendix G).

Small piles of miscellaneous household and construction refuse (including clothes, asphalt, concrete, wood, cinder blocks, toys, and a small refrigerator) were observed on all three vacant lots. A rectangular area of soil at the eastern portion of Vacant Lot 2, measuring approximately 250 feet by 850 feet, is elevated by comparison to the remainder of the lot, and soil piles were observed adjacent to the western toe of the elevated portion of the lot. This is an area where suspected imported fill placement and/or grading has occurred as of 1994. No records or documentation were found pertaining to the source of the import fill and/or grading plans. The presence of imported fill is considered a REC as its origin is uncertain.





SOURCE: Google Earth - 2020

FIGURE 5.8-1



A leak of an unknown quantity of chlorinated volatile organic compounds on January 2, 1965, was listed for Silver Hanger Dry Cleaners, located approximately 490 feet east of Vacant Lot 1. However, the cleanup status for the dry cleaner property is listed as “Completed – Case Closed” as of January 31, 2001. A Leaking Underground Storage Tank (LUST) Cleanup property is located at 1354 Avenue J (at the current Rite Aid location). A gasoline leak of unknown quantity was discovered on November 24, 1992; however, the property is listed as “Completed – Case Closed” as of September 7, 2012.

### **Current and Historical Uses**

Historically, the project site was surrounded by a mixture of vacant, undeveloped and agricultural land. In approximately 1953, agricultural land use diminished followed by the gradual growth of residential, commercial, and institutional developments. Currently, the project site is bordered by residential, commercial, and institutional land uses. A LUST cleanup property listed as an “Open – Remediation” LUST property is located approximately 0.18 miles southeast of the project site at 1326 Avenue K. This property is reported to have gasoline impact to groundwater due to a LUST. Groundwater beneath this property was measured on August 12, 2016 at depths ranging from approximately 31 to 32 feet below ground surface (bgs), and the groundwater flow direction beneath this property was interpreted to be to the north-northwest.

### **Database Searches**

Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to compile, maintain, and update specified lists of hazardous material release sites. The California Environmental Quality Act (CEQA (PRC Section 21092.6)0 requires a lead agency to consult the lists compiled pursuant to Government Code Section 65962.5 to determine whether the lead agency's project and any project alternatives are identified on any of the lists.

Federal, State, local, and proprietary databases for hazardous sites are routinely researched during performance of a Phase I ESA to determine if a project site is listed in the database, or whether hazardous sites are present within prescribed distances from the project site. Several private companies provide comprehensive database services that comply with ASTM standards to make such research time efficient and cost effective. Preparation of a Phase I ESA ensures the regulatory obligations for the identification of hazardous material release sites are met for a given project.

The following websites contain databases to assess environmental conditions near the project site as part of the preliminary screening evaluation:

- USEPA NPL (National Priorities List). The NPL lists all sites under the USEPA’s Superfund program, which was established under the Comprehensive Environmental Response, Compensation, and

Liability Act (CERCLA) to fund cleanup of contaminated sites that pose risk to human health and the environment.<sup>4</sup>

- USEPA CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) and Archived Sites. CERCLIS contains 15,000 sites nationally identified as hazardous sites. This also involved a review for archived sites that have been removed from CERCLIS due to No Further Remedial Action Planned (NFRAP) status.<sup>5</sup>
- USEPA RCRIS or RCRAInfo (Resource Conservation and Recovery Act Information System). RCRIS is a national inventory system about hazardous waste handlers. Generators, transporters, handlers, and disposers of hazardous waste are required to provide information for this database.<sup>6</sup>
- DTSC Cortese List. The DTSC maintains the Hazardous Waste and Substances Sites (Cortese) List as a planning document for use by State and local agencies to comply with the CEQA requirements in providing information about the location of hazardous materials release sites. This list includes the Site Mitigation and Brownfields Reuse Program Database (CalSites).<sup>7</sup>

The required lists of hazardous material release sites are commonly referred to as the Cortese List after the legislator who authored the legislation. Because the statute was enacted more than 20 years ago, some of the provisions refer to agency activities that were conducted many years ago and are no longer being implemented; in some cases, the information to be included in the Cortese List does not exist. Those requesting a copy of the Cortese List are now referred directly to the appropriate information resources on websites hosted by the boards or departments referenced in the statute, including DTSC’s online EnviroStor database and the State Water Resources Control Board’s (SWRCB) online GeoTracker database.<sup>8</sup>

- CA HAZNET. DTSC uses this database to track hazardous waste shipments as required by RCRA.<sup>9</sup>
- SWRCB LUSTIS (Leaking Underground Storage Tank Information System). The SWRCB maintains an inventory of USTs and LUSTs that tracks unauthorized releases.<sup>10</sup>
- EnviroStor database. Maintained by the DTSC, EnviroStor identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes federal Superfund sites (National Priorities List), State response sites, voluntary cleanup sites, school investigation and cleanup sites, corrective action sites, and tiered California permit sites. It also includes sites that are being investigated for suspected but unconfirmed contamination.

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4 US EPA, “Superfund: National Priorities List (NPL),” <https://www.epa.gov/superfund/superfund-national-priorities-list-npl>. Accessed June 10, 2020.

5 US EPA, “Search Superfund Site Information,” SEMS database, <https://cumulis.epa.gov/supercpad/CurSites/srchsites.cfm>. Accessed June 10, 2020.

6 US EPA, Envirofacts, RCRAInfo, <https://www3.epa.gov/enviro/facts/rcrainfo/search.html>. Accessed June 10, 2020.

7 DTSC, “DTSC’s Hazardous Waste and Substances Site List—Site Cleanup (Cortese List),” 2010 <https://dtsc.ca.gov/dtscs-cortese-list/>. Accessed June 10, 2020.

8 CalEPA, “Cortese List Data Resources,” <https://calepa.ca.gov/SiteCleanup/CorteseList/>. Accessed on June 10, 2020.

9 DTSC, Hazardous Waste Manifests, <https://dtsc.ca.gov/hazardous-waste-manifest-information/>. Accessed on June 10, 2020.

10 SWRCB, Data and Databases, <https://www.waterboards.ca.gov/losangeles/resources/databases/>.



According to the updated EDR Report, there are thirty-three locations within the project site that are included on the HAZNET database. Eight locations included on the HIST CORTESE were within half-mile of the project site. Information for potentially hazardous waste sites within a quarter mile of the project site can be found in Table 5.8-1: Hazardous Waste Sites Within A Quarter Mile of the Project Site. For ease of readability, this table is included at the end of this section. As indicated in Table 5.8-1, 94 sites are listed on various databases within a quarter mile of the project site. These include, but are not limited to gas stations, dry cleaning facilities, auto shops, and medical uses.

### **5.8.1.3 Regulatory Setting**

The regulations governing the storage and handling of hazardous materials are complex, with a varying degree of overlap associated with existing federal, State, and local programs. In general, applicable laws and regulations are aimed at hazardous materials inventory and emergency response planning, risk planning and accident prevention, employee hazard communication, public notification of potential exposure to specific chemicals, storage of hazardous materials including aboveground storage tanks (AST) and underground storage tanks (UST). A description of the major regulations, policies, and programs regulating hazardous materials storage and handling applicable to activities at the project site is provided below.

#### ***a. Federal***

##### **Regulating Agencies**

##### ***United States Environmental Protection Agency***

The USEPA is the main federal agency responsible for enforcing regulations relating to hazardous materials and wastes, including evaluation and remediation of contamination and hazardous wastes. The agency works collaboratively with other agencies to enforce materials handling and storage regulations and site cleanup requirements. The Occupational Safety and Health Administration (OSHA) and the USDOT are authorized to regulate safe transport of hazardous materials.

Several USEPA programs address the disposal and cleanup of various hazardous waste materials including lead, asbestos, pesticides, and PCBs.<sup>11</sup>

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11 US EPA. Waste, Chemical, and Cleanup Enforcement. <https://www.epa.gov/enforcement/waste-chemical-and-cleanup-enforcement>. Accessed June 11, 2020.

### ***Occupational Safety and Health Administration***

The Occupational Safety and Health Administration (OSHA) is authorized to regulate safe transport of hazardous materials. Specifically, OSHA implements regulations related to materials handling. OSHA requirements are intended to promote worker safety, worker training, and a worker's right to know.

### **Legislation, Regulations, and Programs**

#### ***Comprehensive Environmental Response, Compensation and Liability Act***

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)<sup>12</sup>, better known as Superfund, provides federal funds to clean up uncontrolled or abandoned hazardous waste sites, accidents, spills, discharges, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, USEPA was given authority to seek out those parties responsible for any hazardous release and ensure their cooperation in the cleanup.

#### ***Emergency Planning and Community Right-to-Know Act***

The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986,<sup>13</sup> commonly known as Title III of the Superfund Amendments and Reauthorization Act (SARA), was enacted by Congress as national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. The primary purpose of EPCRA is to inform communities and citizens of chemical hazards in their areas by requiring businesses to report the locations and quantities of chemicals stored on site to state and local agencies. These reports help communities prepare to respond to chemical spills and similar emergencies. Section 313.1 of EPCRA requires manufacturers to report releases to the environment (air, soil, and water) of more than 600 designated toxic chemicals; report off-site transfers of waste for treatment or disposal at separate facilities; implement pollution prevention measures and activities; and participate in chemical recycling. These annual reports are submitted to the USEPA and state agencies. The USEPA maintains and publishes a database that contains information on toxic chemical releases and other waste management activities by certain industry groups and federal facilities. This online, publicly available, national digital database is called the Toxics Release Inventory (TRI) and was expanded by the Pollution Prevention Act of 1990.

To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission (SERC) to coordinate planning and implementation activities associated with hazardous materials. The SERCs were required to divide their states into emergency planning districts and to name a local emergency planning committee (LEPC) for each district. The federal EPCRA program is implemented and

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12 42 US Code (USC) sec. 9601 et seq. 1980.

13 42 USC sec. 11001 et seq., Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986.

administered in California by Cal OES, a SERC, 6 LEPCs, and 83 Certified Unified Program Agencies (CUPAs).<sup>14</sup> Cal OES coordinates and provides staff support to the SERC and LEPCs. Broad representation by fire fighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers ensures that all necessary elements of the planning process are represented.

### ***National Emission Standards for Hazardous Air Pollutants***

The National Emission Standards for Hazardous Air Pollutants (NESHAP) is a USEPA standard that regulates the emissions of hazardous air pollutants produced by corporations, institutions and at all levels of government. The hazardous air pollutants are those pollutants that are known or suspected to cause cancer, serious health effects, or adverse environmental effects.<sup>15</sup> The NESHAP regulates a wide variety of air pollutants that are described within 241 NESHAP Standard Source Categories within Title 40, Code of Federal Regulations (40 CFR).<sup>16</sup>

USEPA conducts inspections of facilities subject to the regulations to determine compliance and sources subject to NESHAPs are required to perform an initial performance test to demonstrate compliance. To demonstrate continuous compliance, sources are generally required to monitor control device operating parameters which are established during the initial performance test. Sources may also be required to install and operate continuous emission monitors to demonstrate compliance. Consistent with USEPA's Clean Air Act Stationary Source Compliance Monitoring Strategy, NESHAP sources that meet the Clean Air Act definition of "major source" generally receive a full compliance evaluation by the State or regional office at least once every two years.<sup>17</sup>

### ***Resource Conservation and Recovery Act***

The 1976 RCRA was the first major federal act regulating the potential health and environmental problems associated with hazardous and nonhazardous solid waste. RCRA and the implementation regulations developed by the USEPA provide the general framework of national hazardous waste management systems. This framework includes the determination of whether hazardous wastes are being generated,

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14 California Governor's Office of Emergency Services, "State Emergency Response commission" (2018), <https://www.caloes.ca.gov/cal-oes-divisions/fire-rescue/hazardous-materials/state-emergency-response-commission/>. Accessed June 10, 2020.

15 Office of Environment, Health, Safety & Security. NESHAP Compliance Monitoring. <https://www.energy.gov/ehss/downloads/national-emission-standards-hazardous-air-pollutants-neshap-compliance-monitoring#:~:text=The%20National%20Emission%20Standards%20for,at%20all%20levels%20of%20government.> Accessed June 11, 2020.

16 US EPA. NESHAP. <https://www.epa.gov/stationary-sources-air-pollution/national-emission-standards-hazardous-air-pollutants-neshap-9>. Accessed June 11, 2020.

17 US EPA. NESHAP. <https://www.epa.gov/compliance/national-emission-standards-hazardous-air-pollutants-compliance-monitoring>. Accessed June 11, 2020.

techniques for tracking wastes to eventual disposal, and the design and permitting of hazardous waste management facilities. RCRA allows individual states to develop their own program for the regulation of hazardous wastes as long as state regulations are at least as stringent as the RCRA.

### ***Toxic Substances Control Act***

The Toxic Substances Control Act of 1976<sup>18</sup> (TSCA) was enacted by Congress to give the USEPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. The USEPA repeatedly screens these chemicals and can require reporting or testing of any that may pose an environmental or human health hazard. It can ban the manufacture and import of chemicals that pose an unreasonable risk. Also, the USEPA has mechanisms in place to track the thousands of new chemicals that industry develops each year with either unknown or dangerous characteristics. It was given the authority to control these chemicals as necessary to protect human health and the environment. Within that authority, TSCA addresses the production, importation, use, and disposal of specific chemicals including PCBs, asbestos, radon, and lead-based paint. The act supplements other federal statutes, including the Clean Air Act and the Toxics Release Inventory under EPCRA.

### ***Lead Renovation, Repair and Painting Program***

USEPA's Lead Renovation, Repair and Painting Rule (RRP Rule) requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, childcare facilities and pre-schools built before 1978 have their firm certified by USEPA (or an USEPA authorized state), use certified renovators who are trained by USEPA-approved training providers and follow lead-safe work practices.

### ***Hazardous Materials Transportation Act***

The USDOT, in conjunction with the USEPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to safe storage and transportation of hazardous materials. The Code of Federal Regulations (CFR) Title 49, Sections 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials. This act applies to this program because contractors will be required to comply with its storage and transportation requirements that would reduce the possibility of spills.

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18 Toxic Substances Control Act of 1976, 15 USC sec. 2601 et seq.

## **b. State**

### **Regulating Agencies**

#### ***California Environmental Protection Agency***

The California Environmental Protection Agency (CalEPA) was created in 1991 with the signing of Executive Order W-5-91 by Governor Pete Wilson. Several State regulatory boards, departments, and offices were placed under the CalEPA umbrella to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of State resources. Among those responsible for hazardous materials and waste management are the Department of Toxic Substances Control (DTSC), Department of Pesticide Regulation, Regional Water Quality Control Board (RWQCB), and Office of Environmental Health Hazard Assessment. CalEPA also oversees the unified hazardous waste and hazardous materials management regulatory program (Unified Program), which consolidates, coordinates, and makes consistent the following six programs:

- Hazardous Materials Release Response Plans and Inventories (Business Plans)
- Underground Storage Tank Program
- Aboveground Petroleum Storage Tank Act
- Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Inventory Statements
- California Accidental Release Prevention (CalARP) Program

#### ***Department of Toxic Substances Control***

The DTSC is authorized by USEPA to administer the hazardous waste laws and oversee remediation of hazardous wastes sites. Regulations require that DTSC “shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (HSC).”<sup>19</sup>

The DTSC regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. Approximately 1,000 scientists, engineers, and specialized support staff ensure that companies and individuals handle, transport, store, treat, dispose of, and clean up hazardous wastes appropriately. Through these measures, DTSC contributes to greater safety for all Californians, and less hazardous waste reaches the environment. DTSC’s role is limited to projects with

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<sup>19</sup> 22 California Government Code, Development Permits for Classes of Projects [65960 - 65964.1], sec. 65962.5.

State funding. DTSC oversight is not required where a State-funded project is statutorily or categorically exempt from CEQA.

The hazardous waste facilities identified in HSC Section 25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under the HSC, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.<sup>20</sup>

### ***Certified Unified Program Agency***

In January 1996, CalEPA adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program).<sup>21</sup> A Certified Unified Program Agency (CUPA) is a local agency certified by CalEPA to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority. A participating agency is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A designated agency is a local agency that has not been certified by CalEPA to become a CUPA but is the responsible local agency that would implement the six Unified Programs until they are certified.

The six program elements of the Unified Program are hazardous waste generators and hazardous waste on-site treatment; underground storage tanks; aboveground storage tanks; hazardous material release response plans and inventories; risk management and prevention programs; and Uniform Fire Code hazardous materials management plans and inventories.

Currently, there are 83 CUPAs in California. The Los Angeles County Fire Department (LACFD) has jurisdiction in all unincorporated and multiple incorporated areas and is the designated CUPA serving the City. The LACFD conducts both CUPA regulatory inspections and Fire Code inspections for all program elements, with the exception of the hazardous waste program. The Los Angeles County CUPA oversees hazardous waste, underground storage tanks, and aboveground tanks.

### ***California Occupational Safety and Health Administration***

The California Occupational Safety and Health Administration (Cal/OSHA) has set forth work requirements for disturbance of asbestos-containing materials, including removal operations for all types of asbestos-containing materials. In addition, the agency has developed standards for general industry and the construction industry hazardous waste operations and emergency response. Cal/OSHA ensures that employers must have controls to reduce and monitor exposure levels of hazardous materials; and oversees an informational program describing any exposure during operations and the inspection of

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20 HSC div. 20, ch. 6.5, art. 8, Enforcement [25180. - 25196.], sec. 25187.5.

21 CalEPA, "Unified Program," <https://calepa.ca.gov/cupa/>. Accessed June 11, 2020.

drums and containers prior to removal or opening. Decontamination procedures and emergency response plans must be in place before employees begin working in hazardous waste operations. Cal/OSHA oversees certain demolition and construction efforts, and issues construction activity permits for:

- Construction of trenches or excavations that are 5 feet or deeper and into which a person is required to descend
- Construction of any building, structure, scaffolding, or falsework more than 3 stories high or the equivalent height (36 feet)
- Demolition of any building or structure, or dismantling of scaffolding or falsework more than 3 stories high or the equivalent height (36 feet)
- Erection or dismantling of vertical shoring systems more than 3 stories high, or the equivalent height (36 feet)

### ***California Office of Emergency Services***

The Cal OES Hazardous Materials (HazMat) Section under the Fire and Rescue Division coordinates Statewide implementation of hazardous materials accident prevention and emergency response programs for all types of hazardous materials incidents and threats. In response to any hazardous materials emergency, the section staff is called on to provide State and local emergency managers with emergency coordination and technical assistance.

## **Legislation and Regulations**

### ***California Accidental Release Prevention Program***

The California Accidental Release Prevention Program (CalARP) is found within the provisions of the California Health and Safety Code.<sup>22</sup> CalARP is implemented at the local level by CUPAs as a strategy to minimize the accidental releases of stationary substances that can cause harm to the general public and environment. Businesses are required to develop Risk Management Plans (RMPs) if more than a threshold quantity of regulated substances is handled.

### ***California Emergency Response Plan***

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the California Emergency Management Agency, which

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22 California Health and Safety Code, div. 2, ch. 4.5.

coordinates the responses of other agencies, including CalEPA, the California Highway Patrol (CHP), RWQCB, and the Los Angeles County Emergency Services Program.

### ***Senate Bill 14: California Hazardous Waste Source Reduction and Management Review Act of 1989***

The California Hazardous Waste Source Reduction and Management Review Act of 1989, also known as SB 14, required large-quantity generators, those that annually produce more than 13.2 tons of hazardous waste or 26.4 pounds of extremely hazardous waste, to periodically conduct a source evaluation of their facilities and develop plans to reduce their volume of hazardous waste through measures such as changes in raw materials production methods, product reformulations, and employee training.<sup>23</sup> The primary objective of the legislation was to reduce the quantity of hazardous waste generated in California and thereby promote public health and improve environmental quality. Generators that exceed the aforementioned waste volume thresholds are required to file waste minimization reports with DTSC every 4 years.

### ***Cal/OSHA Construction Safety Orders***

The California Code of Regulations (CCR) regulates asbestos exposure in all work as defined in Title 8, Section 1502, including demolition or salvage of structures where asbestos is present; removal or encapsulation of materials containing asbestos; construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof that contain asbestos; installation of products containing asbestos; asbestos spill/emergency cleanup; transportation, disposal, storage, containment of, and housekeeping activities involving asbestos or products containing asbestos, on the site or location at which construction activities are performed; and excavation that may involve exposure to asbestos as a natural constituent not related to asbestos mining and milling activities.

### ***Hazardous Waste Control Act***

The Hazardous Waste Control Act (HWCA) is the State equivalent of RCRA and regulates the generation, treatment, storage, and disposal of hazardous waste.<sup>24</sup> This act implements the RCRA “cradle-to-grave” waste management system in California but is more stringent in its regulation of non-RCRA wastes, spent lubricating oil, small-quantity generators, and transportation and permitting requirements, as well as in its penalties for violations. HWCA applies to the project site because contractors will be required to comply with its hazardous waste requirements to reduce the possibility of spills.

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23 California Department of Toxic Substances Control (DTSC), “SB14 Introduction and Overview,” <https://dtsc.ca.gov/sb14/sb14-introduction-and-overview/>. June 11, 2020.

24 DTSC, 2014 California Hazardous Waste and Hazardous Substances Law Code excerpts.



### **Hazardous Materials Management Plans**

State and federal laws require detailed planning (1) to ensure that hazardous materials are properly handled, used, stored, and disposed of; and (2) in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment.

### **California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act)**

The Hazardous Materials Disclosure Program is found within the provisions of the California Health and Safety Code.<sup>25</sup> CUPAs are required to implement this program by reporting and disclosing the storage, use, or handling of hazardous materials on a site as a strategic measure to minimize loss to life and property. In addition, any business that handles more than a threshold quantity of hazardous materials is required to submit a Hazardous Materials Business Plan (HMBP).

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires HMBPs to be prepared and inventories of hazardous materials to be disclosed. An HMBP includes an inventory of the hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee safety and emergency response training.<sup>26</sup>

The Business Plan Act requires preparation of hazardous materials business plans and disclosure of hazardous materials inventories, including an inventory of hazardous materials handled, plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (HSC, Division 20, Chapter 6.95, Article 1).<sup>27</sup> Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the State. Local agencies are responsible for administering these regulations. Several State agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including CalEPA and Cal OES. The CHP and Caltrans enforce regulations specifically related to the transport of hazardous materials. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roadways. The Business Plan Act applies to this program because contractors will be required to comply with its handling, storage, and transportation

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25 California Health and Safety Code, div. 20, ch. 6.95, art. 1.

26 California Health and Safety Code, div. 20, ch. 6.95, art. 1.

27 HSC, art. 1, Business and Area Plans, [https://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.95.&article=1](https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.95.&article=1). Accessed June 11, 2020.

requirements that would reduce the possibility of spills, and to prepare an emergency response plan to respond to accidental spills.

### **Government Code Section 65962.5 (Cortese List)**

The provisions of Government Code Section 65962.5 are commonly referred to as the Cortese List. The Cortese List is a planning document used by the State and local agencies to provide information about hazardous materials release sites. Government Code Section 65962.5 requires CalEPA to develop an updated Cortese List annually. DTSC 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.

### **c. *Regional and Local***

#### **Los Angeles County**

##### ***Department of Public Works***

The County of Los Angeles Department of Public Works, Environmental Programs Division (DPW EPD) through the Underground Storage Tank (UST) Program, permits and inspects underground storage tanks within the unincorporated areas of Los Angeles County and 77 cities, including Lancaster. The UST Program regulates all unauthorized releases from underground storage tanks. Los Angeles County Code (LACC), Title 11, Division 4, established the underground storage tank program in Los Angeles County in 1983. The UST Program's goal is to protect the public, the environment (air, soil and groundwater), and UST owners/operators by ensuring that UST facilities are permitted, designed/installed/modified, operating, and eventually closed in compliance with local/State/federal requirements.

##### ***Hazardous Materials Control Program***

In 1982, the Los Angeles County Board of Supervisors established the Hazardous Materials Control Program in the Department of Health Services (DHS) for the inspection of businesses generating hazardous waste. In 1991, the program merged into the LACFD and it became the Health Hazardous Materials Division (HHMD). In 1997, HHMD became a CUPA to administer the following programs within Los Angeles County: the Hazardous Waste Generator Program, the Hazardous Materials Release Response Plans and Inventory Program, the California Accidental Release Prevention Program (CalARP), the Aboveground Storage Tank Program and the Underground Storage Tank Program. The LACFD, Prevention Services Bureau, HHMD is a CUPA that administer the Hazardous Waste Generator Program, the Hazardous Materials Release Response Plans and Inventory Program, the CalARP, the Aboveground Storage Tank Program, and the Underground Storage Tank Program.

The Los Angeles County Sanitation District and its Household Hazardous Waste and Electronic Collection Program (HWW) provides Los Angeles County residents with a legal way to dispose of unwanted household chemicals that cannot be disposed of in the regular trash.

## **City of Lancaster**

### **General Plan**

The Plan for Public Health and Safety contains an evaluation of natural and manmade conditions which may pose certain levels of health and safety hazards to life and property within Lancaster, along with a comprehensive program to mitigate those hazards to acceptable levels. Inherent in this plan is a determination of “acceptable risk.” Acceptable risk is based on a determination of how safe is safe enough, balancing the cost of hazard mitigation with its benefits. The Plan for Public Health and Safety identifies constraints to urban and rural development which must be considered as part of overall and site-specific development strategies. This plan also addresses existing hazards faced by Lancaster residents and businesses, and provides a program to mitigate those hazards. The objectives, policies, and specific actions identified in the City’s General Plan for hazards and hazardous materials that are applicable to the Proposed Project are provided below.

Objective 4.5: Protect life and property from the potential detrimental effects (short and long term) of the creation, transportation, storage, treatment, and disposal of hazardous materials and wastes within the City of Lancaster.

Policy 4.5.1: Ensure that activities within the City of Lancaster transport, use, store, and dispose of hazardous materials in a responsible manner which protects the public health and safety.

Specific Action 4.5.1(a): Implement the goals and policies of the Los Angeles County Certified Unified Program Agency; Health Hazardous Materials Division by:

- Ensuring the availability of safe and legal options for the management of hazardous waste generated within the City.
- Reviewing all proposals for hazardous waste facility projects within the City for consistency with the adopted Los Angeles County Hazardous Waste Management Plan.
- Ensuring that the requirements of the California Environmental Quality Act, as amended, are enforced for siting, operating and closing a hazardous waste facility, as set forth in state law.

- Ensuring that sites for specified hazardous waste facilities are located as close to the areas of generation as possible and that residual repository facilities are located in more distant areas as far as possible from urbanized, populated, and congested areas.
- Reviewing annually and updating accordingly the City of Lancaster Hazardous Waste Facilities Ordinance No. 560 for compliance with Assembly Bill 2948 (Tanner), and any subsequent pertinent legislation.
- Reviewing legislation as approved by the legislature for its application to the City and implementing it as required by law.

Specific Action 4.5.1(b): Coordinate with Los Angeles County to ensure that commercial and industrial activities comply with all federal, state, county, and local laws regulating hazardous materials and wastes.

Specific Action 4.5.1(c): Any business that uses, generates, processes, stores, treats, emits, or discharges a hazardous material shall submit a Hazardous Materials Business Plan, including a Hazardous Waste Contingency Plan to Los Angeles County as required by law.

Objective 4.7: Ensure that development occurs in a manner that minimizes the risk of structural and wildland fire.

Policy 4.7.1: Ensure that an adequate number of fire stations and adequate firefighting equipment and personnel are provided to protect the citizens and businesses of the City of Lancaster.

Specific Action 4.7.1(c): Involve fire department personnel in the development review process for all new development proposals through participation in the Development Review Committee and by referring development requests to the Los Angeles County Fire Department for review and comment.

Policy 4.7.2: Ensure that the design of new development minimizes the potential for fire.

### **Lancaster Collection Centers**

The City operates a joint partnership with the City of Palmdale to collect household hazardous waste and electronic waste for free. The Antelope Valley Environmental Collection Center (AVECC) is located in the City of Palmdale and provides a safe, efficient, and convenient method for all Antelope Valley residents

to drop off household hazards and electronic waste. Additional partners to this collection center include California Integrated Waste Management Board, Los Angeles County, and Waste Management.<sup>28</sup>

Additionally, the City of Lancaster maintains a recycling center at 615 Avenue H which allows residents to drop off electronic waste, batteries, paint, used motor and cooking oil, antifreeze, and mattresses for free.

### ***Lancaster Hazard Mitigation Plan***

The *2017 City of Lancaster Hazard Mitigation Plan* (Hazard Mitigation Plan) provides a list of activities designed to assist the City in reducing risk and preventing losses from future hazard events. The strategies address multi-hazard issues, as well as hazard specific activities for windstorms, earthquakes, fires, flooding, landslide, and terrorism.

### ***Lancaster Emergency Operations Plan***

The *Emergency Operations Plan* (EOP) addresses the City's planned response and short-term recovery to emergencies and disaster situations. It provides an overview of operational concepts, identifies components of the City's emergency management organization within the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS), and describes the overall responsibilities of the Federal, State and County entities and the City for protecting life and property and assuring the overall well-being of the population.

### ***Codes for Buildings and Construction***

New construction in the City must adhere to "Lancaster Codes for Buildings and Construction" (see City of Lancaster Ordinance No. 1067), which adopts the 2019 edition of the California Building Code. The 2019 Building Code went into effect on January 1, 2020 and includes various amendments to the 2016 California Building Codes, including the existing Building Code, Standard Code, Plumbing Code, Energy Code, Historical Building Code, Fire Code, Green Building Standards Code, and the International Property Maintenance Code. The Lancaster Codes for Buildings and Construction contain various requirements to ensure safety in new construction.

## **5.8.2 ENVIRONMENTAL IMPACTS**

### **5.8.2.1 Thresholds of Significance**

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with hazards and hazardous materials. In order to assist in determining whether a project would have a

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28 City of Lancaster. *Hazardous Materials And Electronic Waste Disposal*. <https://www.cityoflanasterca.org/about-us/sustainability/green-practices/illegal-dumping-proper-waste-disposal/hazardous-materials-and-electronic-waste-disposal>. Accessed June 11, 2020.

significant effect on the environment, the City finds a project may be deemed to have a significant hazard or hazardous material impact if it would:

- Threshold HAZ-1**      **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**
  
- Threshold HAZ-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 HAZ-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 HAZ-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, would it create a significant hazard to the public or the environment.**
  
- Threshold HAZ-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, would the project result in a safety hazard or excessive noise for people residing or working in the project area.**
  
- Threshold HAZ-6**      **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**
  
- Threshold HAZ-7**      **Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.**

### 5.8.2.2 Methodology

The majority of the following analysis stems from the Phase I ESA prepared by Leighton and the updated EDR Radius Map Report with GeoCheck performed in April 2020. The Phase I ESA and updated EDR Report are included as Appendix G. The following was conducted for the preparation of the Phase I ESA:

- A reconnaissance-level visit of the vacant lots within the project site for evidence of the release(s) of hazardous materials and petroleum products and to assess the potential for on-site releases of hazardous materials and petroleum products;
- Records review (including review of previous environmental reports, selected governmental databases, and historical review); and
- Interviews.

The site reconnaissance consisted of observing and documenting existing conditions on the vacant portions of the project site and nature of the neighboring land uses.

The records review consists of physical setting source maps, environmental record sources, and historical use information on the property. A search of selected government databases was conducted using the *EDR Radius Map Report* environmental database report system. Details of the database search along with descriptions of each database researched are provided in the EDR Radius Map Report included in the Phase I ESA. The report meets the government records search requirements of ASTM E1527-13 Standard Practice for Environmental Property Assessments: Phase I Environmental Property Assessment Process. The database listings were reviewed within the specified radii established by the ASTM E1527-13. In addition, an updated EDR Report was included to supplement the prior EDR Report provided in the Phase I ESA.

The Phase I ESA reviewed selected historical information on the project site. These references were reviewed for evidence of activities, which would suggest the presence of RECs at the project site and to evaluate the potential for the project site to be impacted by off-site sources of contamination. Based on aerial photograph references, it has been determined that there were changes in how land use was used based on the interpreted site. Interviews regarding City owned parcels within the project site were conducted post completion of the Phase I ESA. As found in the questionnaire from the owner of the City of Lancaster, Lancaster Housing Authority, there was no hazardous waste or materials within or adjacent to the City owned parcels within the project Site.<sup>29</sup>

### 5.8.2.3 Project Impacts

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

#### ***Construction***

The Proposed Project may involve the activities outlined below and/or use of hazardous substances during construction that may adversely impact the environment. Activities that may take place within the project site include:

- Demolition of existing buildings within the project site for redevelopment, including the Antelope Valley Hospital;
- Construction of new physical structures and buildings;
- Upgrade and expansion of existing facilities;
- Installing public spaces, support facilities, utilities, and landscapes; and

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29 Elizabeth Brubaker from Lancaster Housing Authority, Phase I ESA Owner/Site Contact Interview Form, June 2017.

- Implementing multi-modal facilities.
- Construction of internal roadway network by City as shown in Figure 3.0-6: Circulation in Section 3.0 Project Description and Figure 5.15-2: Focused Area Study Intersections in Section 5.15: Transportation.

Existing proposals for development, redevelopment, and other construction activities are anticipated to use typical, although potentially hazardous, construction materials, including vehicle fuels, paints, mastics, solvents, and other acidic or alkaline solutions that would require special handling, transport, and disposal. Additionally, the demolition of existing structures within the project site would have the potential to involve hazardous materials such as ACM, LBP and other potentially hazardous building materials in some form as part of the building materials, such as PCBs, mercury, or CFCs in fluorescent lighting and electrical switches. In accordance with local, State, and federal regulations, an evaluation of hazardous building materials would be performed prior to the start of demolition of any building to determine if remediation and abatement of ACM and LBP is required. The ACM, LBP containing hazardous waste and debris encountered/generated during demolition activities would be disposed of in accordance with applicable local, State, and federal regulations. Other waste such as fluorescent bulbs, ballast, thermostats, electrical switches, and batteries would also be disposed of in accordance with applicable local, State and federal regulations. Through compliance with applicable local, State and federal regulations, the proposed Project impacts related to the routine transport, use, or disposal of hazardous materials during building demolition would be less than significant.

During excavation, underground features such as USTs, vaults, or soil impacted with hazardous materials, may be encountered. The on-site construction workers and off-site receptors may be exposed to such impacted soil via direct contact and/or indirect exposures during excavation/grading, loading, and transportation. However, such underground features and impacted soil would be managed in accordance with a Soil Management Plan (SMP) and Health & Safety Plan (HASP) required by applicable local, State, and federal laws and regulations that pertain to the use, storage, transportation and disposal of hazardous materials and waste. Therefore, Proposed Project impacts during subsurface excavation would be less than significant.

All potentially hazardous materials used during construction would be used and stored in compliance with applicable federal, State, and local regulations. As the use and transport of these hazardous materials would be used on a limited basis, in terms of volume and duration, these materials are not considered a significant hazard to the public or environment. Additionally, the LACFD would have the authority to perform inspections and enforce federal and State laws governing the storage, use, transport, and disposal of hazardous materials and wastes.



Furthermore, any spills or leakages encountered during construction would be required to be remediated in accordance with the State and local regulations for hazardous waste cleanup. The potential for construction materials to cause contamination would be reduced through the implementation of a stormwater pollution prevention plan (SWPPP), in accordance with the National Pollutant Discharge Elimination System (NPDES) (refer to Section 5.9: Hydrology and Water Quality). Impacts would be less than significant.

Based on the identification of the environmental conditions at the project site described previously, as well as the use of hazardous substances during construction of the Proposed Project, there is the potential for an adverse impact to the environment and other sensitive receptors through the routine transport, use, or disposal of hazardous materials. However, during proposed Project construction, all activities that relate to existing on-site environmental conditions would be subject to applicable local, State, and federal regulations relating to the routine transport, use, and disposal of hazards and hazardous materials which appropriately address all of the environmental conditions that are present at the project site. In addition, individual projects proposed within the project area would be subject to City and LACFD project review and the plan check approval process. As such, through regulatory compliance, the proposed Project would not result in adverse impact related to the routine transport, use, and disposal of hazards and hazardous materials during construction and impacts would be less than significant.

### ***Operation***

Similar to the current operation of the existing facilities, the types and amounts of hazardous materials that would be used in connection with the Proposed Project would be typical of those used in mixed-use districts, such as cleaning solutions, solvents, pesticides for landscaping, painting supplies, and petroleum products. Thus, the use of hazardous materials associated with the Proposed Project would be similar to those of existing uses within the project site.

Operation of the Proposed Project, specifically the medical facilities within the project site, would involve use of hazardous chemicals such as medicines, sterilants, disinfectants, laboratory chemicals, pesticides, compressed gases, and chemotherapy drugs; and would generate wastes containing such chemicals. Hazardous chemicals would be used and disposed of in compliance with existing regulations and guidelines of OSHA, Cal/OSHA, NIOSH, USDOT, the EPA, the California Department of Public Health, and LACFD.

Operation of the proposed medical facilities would also involve use of biohazardous substances such as biotherapy agents, human tissues or organs, human blood, and microbiological cultures and specimens. Proposed Project operation would also generate five categories of biohazardous wastes of concern (human tissues, organs, or body parts; human blood and other body fluids; microbiological waste; sharps;

and isolation waste) associated with the hospital and other medical facilities/uses. The use of biohazardous substances and the storage and transport of biohazardous wastes would be conducted in compliance with existing regulations and guidelines, including the Medical Waste Management Act, AB 333, SB 225, CCR Title 8 Section 5193, and OSHA and National Institute for Occupational Safety and Health (NIOSH) guidelines. When used and disposed of correctly and in compliance with existing laws and regulations, biohazardous substances would not result in a significant hazard to employees, patients, visitors, or residents.

Furthermore, a variety of State and federal laws govern the generation, treatment, and disposal of hazardous wastes. The LACFD has the authority to inspect on-site uses and to enforce State and federal laws governing the storage, use, transport, and disposal of hazardous materials and wastes. In addition, the existing facilities within the project site would continue to properly dispose of all hazardous waste in accordance with existing laws and regulations. With implementation and compliance with existing laws and regulations, operational impacts through the routine transport, use, or disposal of hazardous materials would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts relating to the routine transport, use, and disposal of hazards and hazardous materials would be less than significant.

**Threshold HAZ-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?**

### **Construction**

The project site does not contain any unidentified soil contamination and disturbance; therefore, grading and excavation activities would not result in a significant hazard to the public or environment.<sup>30</sup> Construction activities within the project site would not occur within a hazardous site, nor would construction activities expose workers to hazardous substances present in the project site.

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30 Leighton Consulting, Phase I ESA, *Phase I Environmental Site Assessment, Lancaster Health District Vacant Parcels*. June 2017.

### **Polychlorinated Biphenyls**

PCBs were once used as industrial chemicals whose high stability contributed to both their commercial usefulness and their long-term deleterious environmental and health effects. PCBs can be present in coolants or as lubricating oils used in older electrical transformers, hydraulic systems, and other similar equipment. Three electrical transformers were observed during the field visit performed by Leighton Consulting for the Phase 1 ESA. Figure 5.8-1 depicts the location and identification of each vacant lot within the project site. At Vacant Lot 1, a pole-top mounted electrical transformer was observed at the northwestern boundary of the lot along Avenue J and a pad-mounted electrical transformer was observed at the northeastern boundary of the lot near Avenue J, adjacent to the Antelope Valley Hospital Outpatient Surgery Center. At Vacant Lot 3, a pole-mounted transformer was observed in the northwestern portion of the lot near a residential complex along Avenue J-3. The transformers appeared to be in good condition and no staining was observed beneath or surrounding the transformers (Appendix G). The updated EDR Report indicated no new transformers containing PCB were recorded within the project site. The data was pulled from the PCB Transformer database managed by U EPA and was last updated on September 13, 2019.

One site was identified for potentially containing PCB at the address of 44045 15th Street West. A clean up was in progress as of 2014; however, completion of the clean-up has not yet been recorded as of December 24, 2019 (See Appendix G).

Removal of any equipment containing PCB-laden oil could result in a potential release into the environment and exposure of construction workers and nearby building occupants to this substance. While the existing transformers that are located throughout the perimeter of the project site are not anticipated to contain PCBs, there may be various insulating materials (electrical equipment, cable, and thermal), oil-based paints, and plastics associated with original construction of the site that could contain PCBs. Removal, if required, must comply with local, State, and federal regulations and a hazardous waste study should be conducted prior to any development or redevelopment approval and issuance of construction related permits as outlined in Mitigation Measure MM-HAZ 1. With the incorporation of MM-HAZ 1 and compliance with existing laws, regulations, plans, and programs, project impacts with foreseeable releases of PCB into the environment would be less than significant.

### **Asbestos-Containing Materials**

Demolition of existing structures and remodels that require partial demolition could result in the release of asbestos-containing materials. A majority of the on-site structures were built prior to 1970 and there is potential for exposure to asbestos-containing materials on the project site and surrounding residential community. Demolition may expose asbestos-containing materials that may have been used in prior

construction including, but not limited to, drywall systems, vinyl flooring materials, flooring mastics, thermal insulation, acoustic ceiling materials, stucco, window putty, piping, pipe fittings, and roofing materials. Federal and State regulations govern the renovation and demolition of structures where asbestos-containing materials are present. All demolition that could result in the release of asbestos-containing materials must be conducted according to federal and State standards.

The National Emission Standards for Hazardous Air Pollutants (NESHAP) mandates that building owners conduct an asbestos survey to determine the presence of asbestos-containing materials prior to the commencement of any remedial work, including demolition. Regardless of the date of the building construction and because of potential unknown renovations, AVAQMD Rule 1403 (d)(1)(A) requires an asbestos survey report prior to demolition to determine and verify the absence or presence of asbestos. If asbestos-containing materials are found, the abatement of asbestos would be required prior to any demolition activities.

According to the updated EDR Report, 10 sites within the project site have recorded presence of asbestos, which are listed below:

- 1150 West Avenue J
- 43747 West 15th Street
- 1303-1336 West Avenue J-2
- 1311-1335 West Avenue J-3
- 1347 West Avenue J-3
- 44245 Kingtree Avenue
- 44259 Kingtree Avenue
- 1300 West Avenue J-2
- 1305 West Avenue J-3
- 1642 West Avenue J

Asbestos is commonly found in structures built before the 1980s as the material is often used in building materials such as floor tiles, ceiling tiles, roof shingles and flashing, siding, insulation, and more. Some newer houses and buildings may contain asbestos as well. Future individual development projects would contact the seller to obtain informational records regarding the generation of the asbestos containing waste existing and disposed of onsite. In addition, additional asbestos containing material evaluations would be conducted for future redevelopment projects within the project site to determine asbestos contents onsite and an Asbestos Removal Work Plan would be implemented, as necessary. As such,

implementation of Mitigation Measure MM HAZ-2 requires the evaluation of asbestos-containing materials by a licensed asbestos abatement contractor for each individual project that involves demolition or physical alteration of existing structures within the project site and the preparation of an Asbestos Removal Work Plan, as necessary. With the incorporation of MM HAZ-2 and compliance with existing laws, regulations, plans, and programs, Proposed Project impacts with foreseeable releases of asbestos into the environment would be mitigated to less than significant.

### **Lead Exposure**

Similar to the potential for asbestos containing materials, older building materials commonly include lead-based paints (LBP) or other coating substances. Two sites were identified for lead presence onsite as part of the updated EDR Report. The two sites are located at 1356 Avenue J and 1810 Avenue J. Since several buildings that were built prior to 1977 would be demolished, there is a potential for demolition workers to be exposed to lead that may be contained in lead-based building materials.

In the event that lead is found during construction, materials containing lead would be removed in accordance with regulatory requirements and regulations for the proper removal and disposal of lead containing materials prior to demolition. Examples of procedural requirements include the use of respiratory protection devices while handling lead-containing materials on the project site or at locations. All consultants and contractors conducting lead removal activities must be properly certified lead abatement professionals as outlined in Mitigation Measure MM HAZ-3. As a precautionary measure, any lead-containing materials found during inspection would be safely removed or stabilized in accordance with Cal/OSHA, DTSC, and LACFD regulations.

A lead inspection would need to be conducted for any individual projects proposed within the project site notably for projects involving demolition of buildings that are constructed prior to 1977 which are most at risk for containing lead based building materials and LBP. Future individual projects proposed would also be required to follow any federal, State, regional, or local regulations, guidelines, and programs pertaining to lead exposure and removal. As such, with the implementation of Mitigation Measure MM HAZ-3, impacts with foreseeable releases of lead into the environment would be less than significant.

### **Soil and Groundwater Contamination**

The construction and demolition activities associated with the Proposed Project would generate construction debris and disturb onsite soil. Portions of the project site were used for agricultural purposes until roughly 1953, with the potential of residual organochlorine pesticides or herbicides remaining within the soils of the former agricultural sites. The potential presence of organochloride is considered a REC. Therefore, grading activities within vacant parcels of the project site have the potential to expose

construction workers to organochlorine pesticides or herbicides. Implementation of Mitigation Measure MM HAZ-4 requires representative soil sampling and analytical testing to assess for the presence of residual organochlorine pesticides or herbicides be performed prior to the commencement of construction efforts within the vacant parcels within the project site.

In addition, records pertaining to the placement, environmental profiling, and/or origin of the suspected imported fill located on the eastern portion of Vacant Lot 2 were not found. Therefore, the suspected imported fill area, which measures approximately 250 feet by 850 feet with a thickness of 6 to 7 feet, is also considered a REC. As a general practice, all imported fill should be environmentally profiled prior to placement at a site to ensure that imported fill containing hazardous substances and/or petroleum products have not been introduced to a site. Representative soil sampling and analytical testing should be performed to evaluate for the potential presence of hazardous substances and/or petroleum products in the fill. Observations should be made during future property development for areas of possible contamination such as, but not limited to, the presence of underground facilities, buried debris, waste drums, and tanks, stained soils or odorous soils. Further investigation analysis may be necessary if such materials should be found. As such, implementation of MM HAZ-5 is needed to ensure impacts would reduce impacts to less than significant.

Grading and excavation of sites for future development associated with the Lancaster Health Master Plan may expose construction workers and the public to potentially unknown hazardous substances present in the soil or groundwater. If any unidentified sources of contamination are encountered during grading or excavation, the removal activities required could pose health and safety risks such as the exposure of workers, materials handling personnel, and the public to hazardous materials or vapors. Such contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances. In addition, unforeseeable exposure to contaminants could occur if the contaminants migrated from the contaminated zone to surrounding areas either before or after the surrounding areas were developed, or if contaminated zones were disturbed by construction activities. If exposed to hazardous substances, this would result in a significant hazard to the public. MM HAZ-6 would be implemented to address any unforeseeable encounter with onsite contamination by future construction activities within the project site.

With incorporation of MM HAZ-4, MM HAZ-5, MM HAZ-6 and compliance with existing laws, regulations, plans, and programs, project impacts with releases of soil and groundwater contaminants into the environment would be less than significant.

## **Conclusion**

### **Construction**

All hazardous materials would be properly handled and stored per manufacturer instructions and subject to applicable health and safety requirements. Compliance with existing laws, regulations, plans, and programs, combined with the incorporation of Mitigation Measures MM HAZ-1 through MM HAZ-6 would reduce the potential for foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction to less than significant.

### **Operation**

The Proposed Project is expected to use/store quantities of hazardous materials such as fuel, paints, and other chemicals that would have the potential to be released into the environment if not properly handled and stored. The handling of small amounts of hazardous materials, such as cleaning solutions, solvents, pesticides for landscaping, painting supplies, and petroleum products would continue on the project site. The proper use, storage, and handling of these hazardous materials would continue to be subject to federal, State, and local regulations.

There are approximately six sites within a quarter mile of the project site which are listed as closed cases.<sup>31</sup> Since remediation has taken place on these sites and contaminants have been removed from the existing parcels, these sites would not be considered a potential concern at the project site.

As discussed above, the potential for an accidental release of hazardous materials in the environment from on-site activities or the project site being affected by off-site hazardous materials would be less than significant.

## **Mitigation Measures**

The following mitigation measures would be implemented to reduce potentially significant hazards or hazardous waste impacts to less than significant during construction.

**MM HAZ-1** Prior to the issuance of any construction related permits for individual projects, the applicant shall confirm the presence or absence of polychlorinated biphenyls (PCBs) and submit the written results to the Development Services Department. If PCBs are determined to occur within the individual project site, development shall undergo site characterization and remediation per applicable Federal, State, and/or local standards and guidelines set by the applicable regulatory agency.

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31 EDR. The EDR Radius Map Report with GeoCheck- Health District Master Plan, April 10, 2020.

**MM HAZ-2** Prior to the issuance of any construction related permits for an individual project, all buildings to be demolished, redeveloped, or otherwise altered as part of each individual project shall be surveyed and sampled for asbestos-containing building materials by a licensed asbestos abatement contractor and written results shall be submitted to the Development Services Department. If asbestos-containing building materials are determined to be present in the structures to be demolished, an Asbestos Removal Work Plan shall be prepared and all asbestos-containing materials must be removed under acceptable engineering methods and work practices by the licensed asbestos abatement contractor prior to demolition. These practices include, but are not limited to, containment of the area by plastic, negative air filtration, wet removal techniques and personal respiratory protection and decontamination. The process shall be designed and monitored by a California Certified Asbestos Consultant. The abatement and monitoring plan shall be developed and submitted for review and approval by the appropriate regulatory agencies (currently the City of Lancaster Building Official and Antelope Valley Air Quality Management District) and must include all on-site structures with asbestos-containing materials (ACMs).

**MM HAZ-3** Prior to the issuance of construction related permits, each individual project with proposed demolition and/or alteration of buildings within the project site shall first complete a lead inspection to determine if lead based paint or other lead containing materials are present at the future development site and shall submit written results to the Development Services Department. If necessary, all lead containing materials, including lead based paint shall be removed and disposed of by a licensed and certified lead abatement contractor, in accordance with local, state, and federal regulations.

**MM HAZ-4** Prior to the issuance of any construction related permits for individual projects located on vacant sites within the project site, the applicant shall require representative soil sampling and analytical testing to assess for the presence of residual organochlorine pesticides or herbicides be performed prior to the commencement of construction efforts. If presence of residual organochlorine pesticides or herbicides are found above acceptable levels a Remediation Action Plan would be prepared to address the removal of contaminated soil onsite prior to construction efforts.

**MM HAZ-5** The suspected imported fill area located on the eastern portion of Vacant Lot 2 shall be further assessed. Representative soil sampling and analytical testing should be performed to evaluate for the potential presence of hazardous substances and/or petroleum products in the fill. The applicant shall submit written results to the Development Services



Department. If hazardous substances are identified, they shall be removed in accordance with State and federal regulations.

**MM HAZ-6** In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction within the Lancaster Health District Master Plan area, construction activities in the immediate vicinity of the contamination must cease immediately. If contamination is encountered, a Risk Management Plan must be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures must include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements must be prepared and implemented prior to commencement of work in any contaminated area.

### Level of Significance

With implementation of Mitigation Measures MM HAZ-1 through MM-HAZ-6, construction-related impacts would be reduced to a less than significant. As discussed above, the potential for an accidental release of hazardous materials in the environment from on-site activities or the project site being affected by off-site hazardous materials would be less than significant.

**Threshold HAZ-3** **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.**

The nearest existing schools to the project site are Desert Sands Charter High School which is located at 44130 20th Street West and Sunnysdale Elementary School which is located at 1233 Avenue J-8.<sup>32</sup> There are additional schools within a quarter mile, including the Accelerated Learning Academy, and Lancaster Alternative & Virtual Academies.

Due to the close proximity of proposed construction activities and school operations, there would be potential for students, teachers, campus staff, and visitors to be exposed to health and safety hazards throughout the projected construction schedule.

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32 Google Earth Pro 2019.

Proposed Project buildout would result in increased usage and storage of hazardous materials on site and increased transportation of hazardous materials to and from the site. Thus, Proposed Project construction could subject people on and near the site, including at Desert Sands Charter High School and Sunnydale Elementary School, to increased hazards from hazardous materials. However, as discussed above, federal, State, and local regulations identify extensive policies, programs, and procedures to ensure the safe handling of hazardous materials. Compliance with these regulations and guidelines would reduce hazards from hazardous materials to the public and the environment to less than significant levels.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts of hazards or hazardous materials within a quarter mile of the project site would be less than significant.

**Threshold HAZ-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, would it create a significant hazard to the public or the environment.**

The project site is not located on a list of hazardous material site complied pursuant to Government Code Section 65962.5. The project site consists of land developed with a variety of commercial, industrial, retail, and medical facilities, as well as vacant, undeveloped land containing native and nonnative vegetation. As previously discussed, four sites were identified on the HIST CORTESE list located within the project site or within a half mile of the project site. Of the four sites listed, all have been deemed completed – Case Closed.<sup>33</sup> There are six recorded LUST sites within a quarter mile of the project site, all six have been deemed completed- Case Closed.<sup>34</sup> Based the status of the recorded sites within one quarter mile of the project site, these properties are not anticipated to pose a significant impact. As such, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

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<sup>33</sup> EDR. The EDR Radius Map Report with GeoCheck- Health District Master Plan, April 10, 2020.

<sup>34</sup> EDR. The EDR Radius Map Report with GeoCheck- Health District Master Plan, April 10, 2020.

**Threshold HAZ-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, would the project result in a safety hazard or excessive noise for people residing or working in the project area.

The Palmdale Regional Airport is located approximately 4 miles to the southeast of the project site, and the General William J. Fox Airfield is located approximately 3 miles northwest of the project site. The project site does not lie within an airport land use plan, or within two miles of a public airport or public use airport. Accordingly, the Proposed Project would not result in a safety hazard associated with aircraft operations associated with an airport land use plan or a public airport or public use airport within two miles of the project site. As such, no impact would occur.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

No impacts would occur.

**Threshold HAZ-6** Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Although routes to be used for an evacuation would depend on the location of an incident, generally evacuation routes would include major arterials and regional routes. For the City, all of the major north-south arterials between 50th Street West and 10th Street East are designated as local emergency evacuation routes. The regional evacuation routes for the Lancaster area include SR 14, Sierra Highway, and SR 138. Avenue H, J, K, L, and SR 14 are the closest evacuation routes to the project site. Without additional peripheral or through freeway facilities, regional evacuation routes for the Lancaster area are constrained and in a large-scale evacuation, all major arterials would become congested. As a result, a significant percentage of traffic would leave the City via surface streets which would then become congested during the height of an evacuation.<sup>35</sup>

### **Construction**

During construction and long-term operation, the Proposed Project would be required to maintain adequate access for emergency vehicles. As part of the City's discretionary review process, the applicants of future individual development projects would be required to provide three sets of alternate route

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35 City of Lancaster, City of Lancaster General Plan 2030 Master Environmental Assessment, p. 9.1-11, April 2009.

(detour) plans with a tentative schedule of planned closures prior to the beginning of construction. Further, implementation of Mitigation Measure MM HAZ-7 would ensure that these activities would not impede emergency access. Implementation of MM HAZ-7 would reduce potential impacts in this regard to less than significant.

### **Operation**

The proposed on-site roadways would be required to comply with the LACFD's emergency access standards (e.g., roadway widths and fire truck access routes, etc.) and all other City emergency service standards. The proposed Master Plan's Circulation Plan would also include planning for traffic calming devices that are designed for emergency vehicles, allowing for multiple access routes and interconnected streets and alleys. All road widths and circulation, as well as the placement of fire hydrants and installation of automatic sprinkler systems, would be designed with input from the LACFD. A road system that allows unhindered emergency fire access and maneuvering would also be provided. As part of the proposed Master Plan's Development Plan, structure numbers and street signs would be required to be lighted to City standards so that emergency vehicles including sheriff and ambulances can locate residences in the event of any emergency. All fire hydrants would be installed in accordance with LACFD requirements. Further, the Proposed Project's water system would be designed to maintain a minimum fire flow required by LACFD.

The City would coordinate with the LACFD as part of the building permit stages, for each site plan for future development on a project-by-project basis, which would ensure that adequate emergency access is provided. Therefore, upon compliance with the City's development review process and the Municipal Code, impacts related to emergency response would be reduced to less than significant.

### **Mitigation Measures**

The following mitigation measure shall be implemented to reduce potentially significant emergency evacuation impacts to less than significant during construction.

**MM HAZ-7** Any off-site roadway improvements and lane closures shall be approved by the City's Traffic Division prior to the commencement of construction activities that include lane closure, impede vehicle movement along roadways, and interrupt emergency access. The General Contractor shall notify the Los Angeles County Fire Department and Los Angeles County Sheriff's Department in addition to receiving the approval from the City.

## Level of Significance

Impacts during construction would be less than significant with MM HAZ-7. Operation related impacts would be less than significant.

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

According to CAL FIRE, the project site lies within a Non-Very High Fire Hazard Severity Zone (VHFHSZ).<sup>36</sup> The project site is approximately 274 acres and contains medical use, industrial, commercial, and residential developments interspersed among 110 acres of vacant land within the project site. The vacant land is comprised of disturbed land that is dominated by bare areas and/or by non-native ruderal species. There are no wildlands near or adjacent to the project site and the surrounding area is either developed, bare, or comprised of vegetation that has a fairly low level of combustion due to the type and spacing of the plants. Regardless of the project site's susceptibility to wildland fire risk, the Proposed Project would be required to be constructed in accordance with all applicable fire safety standards. Los Angeles County sets fire flow standards (such as gallons per minute [gpm]) and water duration flows to ensure that adequate water is available in a firefighting situation. All development in the City, including the project site, is required to meet established fire flow requirements. Development within the City also is subject to compliance with all relevant LACFD general requirements, which address adequate ingress and egress access for emergency response, emergency access and fire and life safety requirements during construction, water mains, fire flows and fire hydrant spacing, access roadways to Fire Department apparatus and maintenance of access roads and fire sprinkler systems. The LACFD establishes specific requirements based on the type of land use, including fire flow, fire hydrant location and spacing, access, street and driveway width and length specifications and identification of fire lanes. Developments are required to obtain approval from the LACFD as a condition of approval from the City. Mandatory compliance with LACFD Standard Conditions of Approval related to fire hazards would ensure that the Proposed Project's potential to expose people or structures to substantial risks associated with fire would be less than significant.

In addition, a number of California regulations, including Public Resources Code (PRC) Section 4290-4299 and California Government Code (CGC) Section 51178, also would apply to the project site and would address fire safety. In particular, these sections require minimum state-wide fire safety standards pertaining to: roads for fire equipment access; signage for identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and, fire fuel breaks. In addition, they set

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36 Cal Fire. California Fire Hazard Severity Zone Map. <https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>. Accessed June 11, 2020

fire safety standards for all buildings and structures in, or adjoining, mountainous areas; or forest-, brush- or grass-covered lands; or any land covered with flammable material to protect property from wildland fires. Mandatory compliance with California regulations related to fire hazards would reduce the Proposed Project's potential to expose people or structures to fire hazard risks.

Accordingly, the Proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fire. Thus, no impact would occur.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

No impacts would occur.

## **5.8.2.4 Cumulative Impacts**

While impacts associated with hazards and hazardous materials are typically site-specific and do not cumulatively affect off-site areas, conditions such as contaminated groundwater can affect downgradient properties. As impacts related to the presence of off-site hazardous materials are not anticipated to affect on-site conditions, cumulative impacts with regard to this aspect of hazardous material management would be less than significant. In addition, operation of related projects can reasonably be expected to involve the limited use of potentially hazardous materials typical of those used in commercial and residential developments, including cleaning agents, paints, pesticides, and other materials used for landscaping. However, all future development located within the vicinity of the project site would be subject to the same local, State, and federal regulations described above with regard to hazards and hazardous materials. Thus, any risks associated with these materials would be adequately reduced to less than significant levels through compliance with these standards and regulations. In addition, through the extension of existing programs in regard to on-site conditions and the City of Lancaster with regard to off-site conditions, cumulative impacts with regard to emergency response or evacuation plans would not be cumulatively considerable. As such, cumulative impacts with regard to hazards and hazardous materials from the Proposed Project and related projects would be less than significant.

### **Mitigation Measures**

Implementation of Mitigation Measures MM HAZ-1 to MM HAZ-7 would reduce the Proposed Project's cumulative impacts to less than significant.

### Level of Significance

Impacts would be less than significant.

### 5.8.3 SUMMARY OF SIGNIFICANCE

Implementation of MM HAZ-1 would reduce potential PCB impacts during construction; MM HAZ-2 would reduce potential asbestos impacts during construction; MM HAZ-3 would reduce potential lead containing material impacts during construction; MM HAZ-4 would reduce potential pesticide/herbicide impacts from past agricultural activities during construction; MM HAZ-5 would reduce potentially unknown hazards or substances and/or petroleum products in the fill located along the eastern portion of Vacant Lot 2 during construction; and MM HAZ-6 would reduce any unforeseeable encounter with onsite contamination during construction to less than significant. Implementation of MM HAZ-7 would reduce potential emergency access impacts during construction less than significant. Cumulative construction and operation impacts would be less than significant.

**Table 5.8-1  
Hazardous Waste Sites Within A Quarter Mile of the Project Site**

Site Name	Address	Databases	Distance (mi)	Notes
15TH STREET SURGICAL CENTER INC	43821 W 15TH ST	FINDS,ECHO,RCRA NONGEN / NLR	0	Transporter of hazardous waste
ALADDIN CLEANERS	2010 W AVE J	DRYCLEANERS,EDR HIST CLEANER,DRYCLEANERS	0.068	Dry Cleaner
ALAMEDA MANAGEMENT CO #525	1301 W AVE K	SWEEPS UST	0.171	
AMERICAN MEDICAL RESPONSE	1055 W AVE J	HWTS,CERS HAZ WASTE,HAZNET,CERS,RCRA NONGEN / NLR	0.114	CA Waste Code: oil/water separation sludge, other organic solids
ANTELOPE VALLEY ANODIZING INC	38950 E 30TH ST	RCRA-SQG,CERS HAZ WASTE,SWEEPS UST,HIST UST,CERS TANKS,FINDS,ECHO,LOS ANGELES CO. HMS,CERS	0	Petroleum storage, chemical storage
ANTELOPE VALLEY HOSPITAL	1600 W AVE J	UST, HWTS, HAZNET, EMI, CERS, RCRA NONGEN / NLR,CIWQS,HIST UST,NPDES,FINDS,ECHO	0	CA Waste Code: laboratory waste chemicals, highly acidic liquids, waste oil and mixed oil, and pharmaceutical waste
ANTELOPE VALLEY RADIATION	44305 LORIMER ST	HWTS,HAZNET	0	CA Waste Code: metal sludge
ANTELOPE VALLEY SURGERY CENTER	44301 N LORIMER AVE	FINDS,EMI,CERS	0	Chemical storage
AUTOZONE #4150	1240 W AVE K	HWTS,CERS HAZ WASTE,HAZNET,CERS,RCRA NONGEN / NLR	0.227	Auto Shop
AV EXPRESS CLEANERS	1312 W AVE J	HWTS,HAZNET	0	Dry Cleaner
AVERY GOLDEN	1150 W AVE J	HWTS,HAZNET	0	CA Waste Code: asbestos containing waste



Site Name	Address	Databases	Distance (mi)	Notes
AVH COMPREHENSIVE C AND R CENTER	44155 W 15TH ST	CIWQS,EMI,FINDS	0	
AVLUBE INC. DBA JIFFY LUBE #2967	43750 W 15TH ST	HWTS,CERS HAZ WASTE,CERS TANKS,HAZNET,CERS,RCRA NONGEN / NLR,AST	0.075	
BALMER JOHN E	1857 W AVE J	EDR HIST AUTO	0.019	Gasoline service station
CAPTAIN KS ONE HR PHOTO	43907 N 15TH ST	HWTS,RCRA-SQG,FINDS,ECHO,HAZNET	0	CA Waste Code: photochemicals, photoprocessing waste
CAREER CARE INSTITUTE INC	43770 W 15TH ST	RCRA NONGEN / NLR	0.052	Non-Generator
CARPET DRY CLEAN	2064 W AVE J	EDR HIST CLEANER	0.119	Dry Cleaner
CARQUEST AUTO PARTS #7305	44215 W 10TH ST	RCRA NONGEN / NLR,CERS HAZ WASTE	0.187	Non-Generator
CASSON & SONS GOODYEAR INC	43729 W 15TH ST	RCRA-SQG,FINDS,ECHO,CERS HAZ WASTE,CERS,RCRA NONGEN / NLR,LUST,HIST CORTESE,CERS,HWTS,SWEEPS UST,CA FID UST,HAZNET	0.02	Case Closed: Auto Shop
CHANGJOO JAY LEE	43747 W 15TH ST	HWTS,HAZNET	0	CA Waste Code: asbestos containing waste
CITY OF HOPE/ANTELOPE VALLEY	44151 W 15TH ST	ECHO,RCRA NONGEN / NLR,HWTS,HAZNET,FINDS,CIWQS	0	CA Waste Code: pharmaceutical waste
CITY OF LANCASTER	1303-1336 W AVE J2	HWTS,HAZNET	0	CA Waste Code: asbestos containing waste
CITY OF LANCASTER	1311-1335 W AVE J3	HWTS,HAZNET	0	CA Waste Code: asbestos containing waste
CITY OF LANCASTER	1347 W AVE J3	HWTS,HAZNET	0	CA Waste Code: asbestos containing waste
CITY OF LANCASTER	44245 KINGTREE AVE	HWTS,HAZNET	0	CA Waste Code: asbestos containing waste

Site Name	Address	Databases	Distance (mi)	Notes
CITY OF LANCASTER	44259 KINGTREE AVE	HWTS,HAZNET	0	CA Waste Code: asbestos containing waste
CITY OF LANCASTER/PUBLIC WORKS	1300 W AVE J2	HWTS,HAZNET	0	CA Waste Code: asbestos containing waste
CITY OF LANCASTER/PUBLIC WORKS	1305 W AVE J3	HWTS,HAZNET	0	CA Waste Code: asbestos containing waste
CLS ENTERPRISES, A.COX & J. LITTLE ETC D	43731 W 15TH ST	DRYCLEANERS,HWTS,HAZNET	0	Dry Cleaner
COBURN, SHARON	44555 LOSTWOOD AVENUE	RCRA NONGEN / NLR	0.21	Non-Generator
CVS PHARMACY # 8522	43839 W 15TH ST	HWTS,HAZNET,RCRA-LQG,FINDS,ECHO,EMI,HAZNET,CERS,FINDS	0	Large Quantity Generator of: pharmaceutical waste, ignitable waste, corrosive waste, chromium, mercury, selenium, M-cresol, Nicotine... etc.
CVS PHARMACY NO 9785	2006 W AVE J	RCRA-LQG,FINDS,ECHO,HWTS,CERS HAZ WASTE,HAZNET	0.039	CA Waste Code: detergent waste chemicals, off-specification, aged or surplus organics, photochemicals photoprocessing waste, highly basic solution
DAVID RASCHIATORE DDS	1306 W AVE J	HWTS,HAZNET	0	Dentistry
DD'S DISCOUNTS #5021	2038 W AVE J	RCRA NONGEN / NLR,CERS HAZ WASTE,CERS	0.076	Chemical Storage Facilities, hazardous waste generator
DRYCLEAN EXPRESS	44260 W 10TH ST	CERS HAZ WASTE,DRYCLEANERS,CERS,HWTS,DRYCLEANERS	0.198	Dry Cleaner

Site Name	Address	Databases	Distance (mi)	Notes
ECONO LUBE N TUNE	2101 W AVE J	SWEEPS UST,CA FID UST,RCRA-SQG,FINDS,ECHO,RCRA NONGEN / NLR,UST,CERS HAZ WASTE,CERS TANKS,CERS	0.129	oil tank, chemical storage facilities, UST, hazardous waste generator
EXTRAM LLC	44415 W 20TH ST	UST,CERS HAZ WASTE,CERS TANKS,LOS ANGELES CO. HMS,CERS	0.066	Chemical Storage Facilities
EXXON CO USA	44350 W 20TH ST	LOS ANGELES CO. HMS	0	Facility closed
FED-MART STORES INC	2033 W AVE J	EDR HIST AUTO,HIST UST,SWEEPS UST,RCRA-SQG,FINDS,ECHO,RCRA NONGEN / NLR,CERS HAZ WASTE,CERS	0.084	Historic: department store, gasoline service station
GEORGE WOOD	1045 W AVE J8	RCRA NONGEN / NLR	0.204	Non-Generator
GOODYEAR TIRE CENTER 1771	1303 W AVE K	HIST UST	0.171	Tire Store
GREEN PASTURES DAIRY	1661-1666 W AVE K	RCRA NONGEN / NLR,LUST,HWTS,CERS HAZ WASTE,SWEEPS UST,CERS TANKS,LOS ANGELES CO. HMS,CERS,UST,HIST CORTESE	0.191	Case Closed: Gasoline Tank
H & E DO-IT-YOURSELF CENTERS	1308 W AVE K	HIST UST,SWEEPS UST,LOS ANGELES CO. HMS	0.203	
HAMILTON RICHARD D	1354 W AVE J	EDR HIST AUTO,LUST,HIST CORTESE,CERS,HIST UST,SWEEPS UST,LOS ANGELES CO. HMS,UST,HWTS,HAZNET	0.003	Case Closed: Gasoline service station/auto repair shop
HARLEY-DAVIDSON OF LANCASTER	1759 W AVE J12	CERS HAZ WASTE,CERS,RCRA NONGEN / NLR	0.117	Chemical storage, hazardous waste generator

Site Name	Address	Databases	Distance (mi)	Notes
HIGH DESERT GASTROENTEROLOGY INC	1753 W AVE J	RCRA NONGEN / NLR	0.045	
HIGH DESERT MEDICAL GRP	1669 W AVE J	RCRA-SQG,FINDS,ECHO	0.024	CA Waste Code: off-specification, aged, or surplus organics
HOME DEPOT #6651	44226 W 20TH ST	HWTS,HAZNET,RCRA NONGEN / NLR,FINDS,ECHO,CIWQS,CERS HAZ WASTE,CERS,EMI	0	CA Waste Code: highly acidic liquids, other organic solids, off-specification, aged or surplus organics, latex waste, unspecified solvent, inorganic solid waste, hydrocarbon solvents, highly basic solutions
KAISER PERMANANTE LANCASTER WOMENS HEALTH MOB	44105 W 15TH ST	HWTS,HAZNET,ECHO,FINDS,RCRA-LQG	0	CA Waste Code: waste oil and mixed oi, off-specification, aged or surplus organics, laboratory waste chemicals, detergent and soap
KINDER FRANCIS J	1505 W AVE J	EDR HIST AUTO	0.025	Gasoline Service Stations
KMART #4367	1810 W AVE J	FINDS,ECHO,SWEEPS UST,LOS ANGELES CO. HMS,HWTS,HAZNET,HIST UST,RCRA-LQG,FINDS,ECHO,CERS HAZ WASTE	0	CA Waste Code: latex waste, off-specification, aged or surplus organics, fuel blending prior to energy recovery at another site, highly basic solutions, unspecified solvent mixture
LA CO FMD LANCASTR SHERIFF STA	1010 W AVE J	SWEEPS UST,LUST,UST,HIST UST	0.167	Case Closed: CA Waste Code: other organic solids,
LA COUNTY - DPW - CONSTRUCTION DIVISION	44205 N 15TH AVE	HWTS,HAZNET,CERS HAZ WASTE,CERS,FINDS,RMP	0	
LACO SHERIFF'S DEPT/ANTELOPE VALLEY STAT	1010 W AVE J-2	RCRA NONGEN / NLR	0.183	Non-Generator
LANCASTER SQUARE CLEANERS	44209 W 10TH ST	DRYCLEANERS,EMI,RCRA NONGEN / NLR	0.187	Dry Cleaner

Site Name	Address	Databases	Distance (mi)	Notes
LANCASTER SQUARE DRY CLEANER	44219 W 10TH ST	DRYCLEANERS	0.187	Dry Cleaner
LIDO CLEANERS (DEST)	44322 15TH ST WEST	LOS ANGELES CO. HMS	0	
MOBIL OIL CORP SERVICE STATION D Y J	2005 W AVE J	RCRA-SQG,FINDS,ECHO,SWEEPS UST,CA FID UST,LOS ANGELES CO. HMS	0.053	
NABIL H HADDAD 14-849-L	44358 N 10TH ST	HIST UST,RCRA-SQG,FINDS,ECHO	0.206	
ONE HOUR COLOR PHOTO	43805 N 15TH ST	HWTS,RCRA-SQG,FINDS,ECHO,HAZNET	0	CA Waste Code: photochemicals/photoprocessing waste, metal sludge (with highly basic solution)
PEP BOYS #78	1859 W AVE J	RCRA-SQG,FINDS,ECHO	0.022	
PEP BOYS STORE#0678	44229 W 20TH ST	RCRA NONGEN / NLR,FINDS,CERS HAZ WASTE,CERS	0.016	Non-Generator
PRECISION AUTO ENG	44140 10TH ST	RCRA-SQG,FINDS,ECHO,CERS HAZ WASTE,CERS	0.197	Auto Shop
PREMIER SELF STORAGE	1722 S AVE J8	CIWQS	0	
PROPOSED ANTELOPE VALLEY ACADEMY	W. 17TH STREET & W. AVENUE J	ENVIROSTOR,SCH	0.014	School investigation, former agricultural site
RICHARD AUTO RPR	44136 W 10TH ST	RCRA-SQG,FINDS,ECHO,RCRA NONGEN / NLR	0.197	Auto Shop
RICHARD ELTON MD INC	44215 W 15TH ST	HWTS,HAZNET,RCRA NONGEN / NLR,HWTS,HAZNET,FINDS,ECHO	0	CA Waste Code: metal sludge

Site Name	Address	Databases	Distance (mi)	Notes
RITE AID NO 5840	1356 W AVE J	RCRA-SQG,FINDS,HWTS,HAZNET,CERS HAZ WASTE,RCRA-LQG,NPDES	0	CA Waste Code: unspecified organic liquid mixture, unspecified solvent mixture, pharmaceutical waste, highly basic solution, other inorganic solid waste, off-specification, aged, or surplus organics
RONS TRANSMISSIONS	44134 N 10TH ST	RCRA-SQG,FINDS,ECHO	0.239	
SHALINI SINGH DDS	44444 W 16TH ST	RCRA NONGEN / NLR	0.103	Dentistry
SHALINISINGH DDS DENTAL CORPORATION	44443 W 16TH ST	RCRA NONGEN / NLR	0.118	Dentistry
SHELL OIL PRODUCTS US	44015 20TH ST	LUST,FINDS,ECHO,CERS,RCRA NONGEN / NLR,HWTS,CERS HAZ WASTE,CERS TANKS,HAZNET,CERS,RCRA NONGEN / NLR,UST,EDR HIST AUTO	0.11	Case Closed. Potential Contaminants of Concern: Benzene, Diesel, Gasoline
SILVERWOOD LAKE SRA CS	43779 W 15TH ST	FINDS,CIWQS	0	
STEPHANIE MONROE	1021 W AVE J6	RCRA NONGEN / NLR	0.192	Non-Generator
TARZANA TREATMENT CENTERS INC	44447 W 10TH ST	RCRA NONGEN / NLR	0.174	Non-Generator
TESORO 9610-1917	1326 W AVE K	RCRA NONGEN / NLR,UST,HIST UST,RCRA NONGEN / NLR,UST,HWTS,CERS HAZ WASTE,CERS TANKS,HAZNET,LOS ANGELES CO. HMS,CERS	0.176	Case Closed: Gas Station

Site Name	Address	Databases	Distance (mi)	Notes
TESORO GASOLINE DIGAS LANCASTER	1333 W AVE K	RCRA-SQG,FINDS,ECHO,LUST,HIST CORTESE,CERS,HWTS,HIST UST,HAZNET	0.17	Case Closed: Small Quantity Generator
TEXACO SERVICE STATION	44358 W 10TH ST	UST,CERS HAZ WASTE,CERS TANKS,CERS,RCRA NONGEN / NLR,SWEEPS UST	0.206	Gas Station
THE SOUTHLAND CORP SS	844 AVENUE J	SWEEPS UST,CA FID UST	0.224	
TOYS"R" US #5615	1335 W AVE K	CERS HAZ WASTE,CERS,RCRA NONGEN / NLR	0.171	
TURNER, ROBERT	1033 W AVE J8	RCRA NONGEN / NLR	0.221	Non-Generator
VALLEY HAVEN HOSPITAL (DEST)	1642 W AVE J	LOS ANGELES CO. HMS,CERS,FINDS	0	CA Waste Code: asbestos containing waste
VALLEY TECHNOLOGICAL SVC	1672 W AVE J	HWTS,HAZNET,CHMIRS	0	CA Waste Code: metal sludge
WALGREENS LANCASTER	44348 20TH ST WEST	CIWQS	0	
WEST AVE J PROFESSIONAL BLDG	1306 W AVE J	LOS ANGELES CO. HMS,HWTS,HAZNET	0	CA Waste Code: metal sludge
WESTERN DENTAL SERVICES INC	1228 W AVE K	RCRA NONGEN / NLR	0.245	Dentistry
	44045 W 15TH ST	CHMIRS	0	Non-Generator, clean up in 2014. Potential PCB content.
	1306 W AVE J8	RCRA NONGEN / NLR	0.009	Non-Generator
	1331 W AVE J STE 202	RCRA NONGEN / NLR	0.025	Non-Generator
	2004 W AVE J	RCRA NONGEN / NLR	0.04	Non-Generator
	44415 W 20TH	RCRA NONGEN / NLR	0.066	Non-Generator

Site Name	Address	Databases	Distance (mi)	Notes
	1040 W AVE J	RCRA NONGEN / NLR	0.092	Non-Generator
	2043 W AVE J	RCRA NONGEN / NLR	0.112	Non-Generator
	44534 LOSTWOOD AVE	RCRA NONGEN / NLR	0.174	Non-Generator

Sources: Refer to Appendix G of this EIR. The EDR Radius Map Report with GeoCheck, April 10, 2020.

Notes: N=North, S=South, E= East, W= West, S=South, NE=Northeast, NW= Northwest, SW= Southwest, SE=Southeast.



## 5.9 HYDROLOGY AND WATER QUALITY

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This section of the Environmental Impact Report (EIR) addresses the potential for the Proposed Project to impact hydrology and water quality conditions in a local and regional context. More specifically, this section evaluates impacts associated with the Proposed Project that may potentially affect the regional and local surface water hydrology, surface water quality, groundwater hydrology, and groundwater quality. The existing surface water and groundwater hydrological conditions present within the project vicinity are described, along with the methodology and the regulatory framework that guided the evaluation pursuant to federal, State, regional, and local programs and regulations. Potential surface and groundwater impacts that would result from the Proposed Project are identified, along with any measures to mitigate the significant effects of the Proposed Project, if required.

### 5.9.1 ENVIRONMENTAL SETTING

#### 5.9.1.1 Existing Conditions

##### *a. Regional Setting*

#### **Geology and Topography**

The Antelope Valley is an arid valley in the western corner of the Mojave Desert. The Mojave Desert is a wedge-shaped block bounded by the San Andreas Fault Zone on the southwest, the Garlock Fault Zone on the northwest, and the Colorado River on the east. Uplifts of the San Gabriel and Tehachapi Mountains isolated the Mojave Desert from the Pacific Coast and created the interior drainage basins of the western Mojave Desert, such as the Antelope Valley.

The Antelope Valley is surrounded by the Tehachapi Mountain range in the north and northwest, and the San Gabriel, Sierra Pelona and Liebre Mountains to the south and southwest. Geologically, the Antelope Valley is part of the Mojave structural block, which is an elevated desert. The topography of the City generally slopes up to the southwest, with elevations ranging from approximately 2,300 feet above mean sea level (amsl) in the northeast to 3,500 feet amsl in the southwest. The overall topography of the City is somewhat flat. Major topographic features include Quartz Hill located in the southern portion of the City, and the Fairmont and Antelope Buttes located west of 110th Street West.

#### **Surface Water Hydrology**

The area currently exhibits an arid climate, with dry, hot summers and cool winters. Rainfall amounts average 7 inches annually in the Antelope Valley. Precipitation usually occurs in the form of winter and spring rain or snow at high elevations, with occasional warm monsoonal showers in late summer.

No rivers or perennial streams exist within the Antelope Valley. Alluvial fans that extend from the San Gabriel Mountains primarily make up the Antelope Valley drainage basin. As the alluvial fans were naturally formed, no well-defined channels exist; therefore, during heavy rainstorms, runoff from the San Gabriel Mountains creates streams (or washes). Melting snowpack from the local mountains is another source of stream flow. Once the streams reach the valley floor, the runoff percolates into the ground and continues on as temporary streams or results in sheet flow. Sheetwashing generally occurs from southeast to northwest throughout the region, and flood channels are often active after summer and winter storms.

### **Groundwater**

The project site is located in the Antelope Valley, which is a desert environment underlain by a closed groundwater basin. The basin is closed, meaning that it has no natural outlet to the ocean, which restricts the removal of runoff to percolation or evaporation. The main water-bearing units in the Antelope Valley are gravel, sand, silt, and clay derived from surrounding mountains. Public water supply wells in the Antelope Valley are completed to depths between 360 and 700 feet, consist of solid casing from the land surface to a depth of 180 to 350 feet, and are screened or perforated below the solid casing.<sup>1</sup>

The Antelope Valley Groundwater Basin (or Basin) is part of the South Lahontan Hydrologic Region. Two main aquifers, a lower and upper aquifer, make up the Antelope Valley Groundwater Basin. The groundwater basin is bounded by the Garlock and San Andreas Fault zones and is recharged by runoff from the local mountains. Most recharge occurs at the foot of the mountains and hills by percolation through the head of the alluvial fan system.<sup>2</sup> Los Angeles County Waterworks District No. 40 (LACWD) extracts groundwater from the Antelope Valley Groundwater Basin; groundwater pumping rates are managed to bring extraction to the safe yield of the basin.

#### **b. Project Site**

The project site consists of developed land characterized by a variety of commercial, retail, and medical facilities with vacant, undeveloped parcels interspersed. Amargosa Creek forms the western and southwestern boundary and intersects the southern portion of the project site. The project site is surrounded by development and consists of highly disturbed soils due to historical uses and human activities. The project site is relatively flat, ranging in elevation from approximately 2,350 to 2,360 feet amsl.

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1 United States Geological Survey (USGS), "Fact Sheet 2012-3033," accessed June 2020, <https://pubs.usgs.gov/fs/2012/3033/pdf/fs20123033.pdf>

2 Los Angeles County Department of Public Works, Waterworks District No. 40: Antelope Valley, *Final 2015 Urban Water Management Plan for District 40, February 2017*,. p. 5-5.

Groundwater was measured at depths ranging from approximately 61 to 62 feet below ground surface (bgs). Direction of groundwater flow was reported to the north-northwest.<sup>3</sup>

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Map Numbers 06037C0410F and 06037C0420F, effective since September 26, 2008, the entirety of the project site outside the drainage channel is not within a designated 100-year flood hazard area.<sup>4</sup> Per the FEMA FIRM Map and as shown in Figure 5.9-1: FEMA Flood Hazard Map, the project site is located in Zone X, which includes areas determined to be outside the 0.2 percent annual chance floodplain. Zone X flood zones are areas outside of the 100 and 500-year floodplains; X-shaded zones are areas that are outside the 100-year floodplain, but within the 500-year floodplain. The drainage channel is located in Zone AE, which includes areas with 1 percent annual chance of flood hazard. However, the FEMA FIRM Map notes that this low hazard is contained within the channel.

### 5.9.1.2 Regulatory Setting

#### a. Federal

##### Clean Water Act

The Clean Water Act (CWA) was first introduced in 1948 as the Federal Water Pollution Control Act. The CWA authorizes the U.S. Environmental Protection Agency (USEPA), in cooperation with other federal agencies, State agencies, and the municipalities and industries involved, to create comprehensive programs for preventing, eliminating or reducing the pollution of navigable waters and ground waters.<sup>5</sup> The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters, with a national goal of "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."<sup>6</sup> As such, the CWA forms the basic national framework for the management of water quality and the control of pollutant discharges, including regulating pollutant and toxic pollutant discharges; providing for water quality that protects and fosters the propagation of fish, shellfish, and wildlife; developing waste treatment management plans; and developing and implementing programs for the control of nonpoint sources of pollution, including the issuance of National Pollutant Discharge Elimination System (NPDES) permits for point-source discharges to surface waters.<sup>7</sup>

3 Leighton Consulting, Inc, *Phase I Environmental Site Assessment, Lancaster Health District Vacant Parcels (June 2017)*.

4 FEMA, FEMA Flood Map Service Center, interactive map, accessed June 2020, <https://msc.fema.gov/portal/search?AddressQuery=city%20of%20lancaster%2C%20california#searchresultsanchor>.

5 Clean Water Act, 33 United States Code (USC) sec. 1252 (a), 1972.

6 33 U.S.C. sec. 1251 (a)(2).

7 Nonpoint sources of pollution are carried though the environment via elements such as wind, rain, or stormwater and are generated by diffuse land use activities (such as runoff from streets and sidewalks or agricultural activities) rather than from an identifiable or discrete facility.

In response to the 1987 amendments to the CWA and as part of Phase I of its NPDES permit program, the USEPA began requiring NPDES permits for (1) municipal separate storm sewer systems (MS4s) generally serving or located in incorporated cities with 100,000 or more people (referred to as municipal permits); (2) 11 specific categories of industrial activity (including landfills); and (3) construction activity that disturbs 5 acres or more of land. Phase II of the USEPA's NPDES permit program, which went into effect in early 2003, extended the requirements for NPDES permits to (1) numerous small MS4s;<sup>8</sup> (2) construction sites of 1 to 5 acres or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres; and (3) industrial facilities owned or operated by small MS4s. In 2009, the USEPA published effluent limitation guidelines and new source performance standards for the construction and development industry that became effective in 2010. The NPDES permit program is typically administered by individual authorized states.

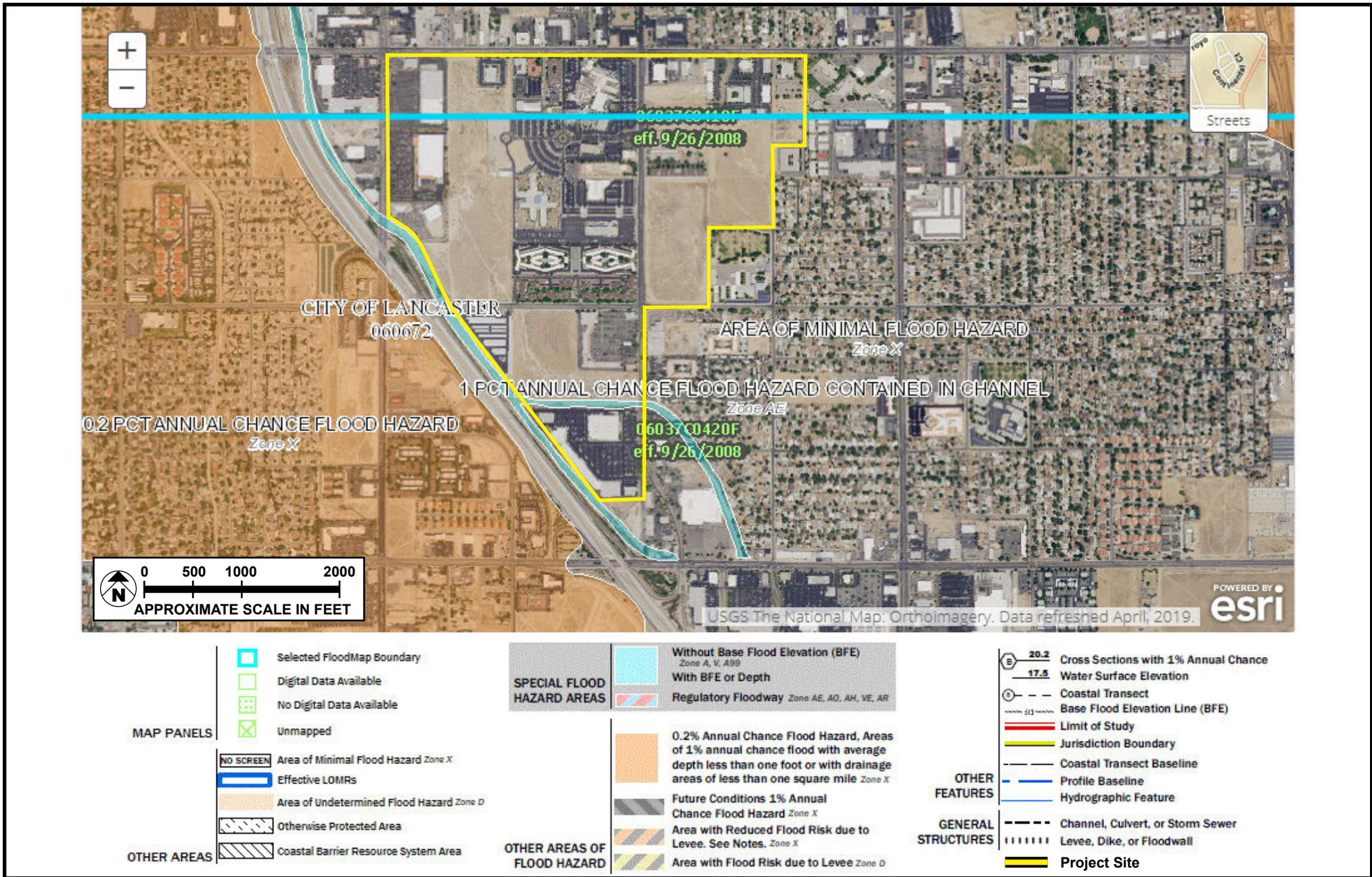
The USEPA delegated the responsibility for administration of portions of the CWA to State and regional agencies, including the State of California. As discussed in more detail below, in California, the NPDES stormwater permitting program is administered by the State Water Resources Control Board (SWRCB). The joint authority of water distribution and water quality protection allows the SWRCB to provide protection for the State's waters through its nine Regional Water Quality Control Boards (RWQCBs). The RWQCBs develop and enforce water quality objectives and implement plans that will best protect California's waters, acknowledging areas of different climate, topography, geology, and hydrology. The RWQCBs develop "basin plans" for their hydrologic areas, issue waste discharge requirements, enforce action against stormwater discharge violators, and monitor water quality.

The project site and the City are located within the Lahontan Region (Region 6), which administers the permit program for regulating storm water from construction activities for projects greater than 1 acre in size in the project areas under the State's General Permit approach, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs 1 or more acres, since urban development and construction-related activities have the potential to impact the quality and quantity of runoff to proximate receiving waters. These potential construction-related impacts are mitigated by implementing a Stormwater Pollution Prevention Plan (SWPPP), in compliance with the Construction General Permit (State Water Resources Control Board Order No. 2009-0009-DWQ, as amended by Order No. 2012-006-DWQ, NPDES No. CAS000002) under the NPDES.

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8 A small municipal separate storm sewer system (MS4) is any municipal separate storm sewer not already covered by the Phase I program as a medium or large MS4. The Phase II Rule automatically covers on a nationwide basis all small MS4s located in "urbanized areas" as defined by the Bureau of the Census (unless waived by the NPDES permitting authority) and, on a case-by-case basis, those MS4s located outside of urbanized areas that the NPDES permitting authority designates.





SOURCE: FEMA - 2020

FIGURE 5.9-1

The SWPPP requires construction sites to develop and implement best management practices (BMPs) in order to mitigate potential runoff contamination from construction activities. Some BMPs include implementing storm drain inlet protection, concrete washout bins, secondary containment, and proper material storage at construction sites. The regulations require that stormwater and nonstormwater runoff associated with construction activity discharging either directly to surface waters or indirectly through MS4 must be regulated by an NPDES permit.

### **National Flood Insurance Program**

FEMA administers the National Flood Insurance Program, which provides subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues FIRMs that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection established by FEMA is the 100-year flood event, also described as a flood that has a 1-in-100 chance of occurring in any given year.

### **b. State**

#### **California Porter-Cologne Act (California Water Code)**

The California Porter-Cologne Act of 1970 is largely responsible for creating the State's extensive regulatory program for water pollution control.<sup>9</sup> As discussed previously, preparation of water quality control plans has been delegated to the individual states by the USEPA. Pursuant to the Porter-Cologne Act, the responsibility for protection of water quality in California rests with the SWRCB. In turn, the SWRCB has delegated the nine RWQCBs to regulate the nine hydrologic basins in the State. The Porter-Cologne Act gives the SWRCB and RWQCB broad powers to protect water quality by regulating waste discharges to water and land and by requiring cleanup of hazardous conditions.

#### **Groundwater Management Act**

On January 1, 1993, California Assembly Bill (AB) 3030, the Groundwater Management Act, was codified into California law. California Water Code Sections 10750 et seq., allow local water agencies to adopt local groundwater management plans. Local public and private entities are encouraged by Water Code Section 10755.2 to adopt and implement a coordinated AB 3030 Plan. On September 16, 2002, the California Legislature passed Senate Bill (SB) 1938. This act amended Water Code Sections 10753.4 and 10795.4; amended and renumbered Sections 10753.7, 10753.8, and 10753.9; and added Sections 10753.1 and 10753.7. Development of an AB 3030 Plan under Water Code Sections 10750, et seq., allows local entities

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<sup>9</sup> California Water Code, Cobey-Alquist Flood Plain Management Act, sec. 13000-14958.

to efficiently manage groundwater supplies, ensure long-term water supplies, and distribute costs, benefits, and water sharing in a locally determined equitable manner.

### **California State Water Quality Control Board**

The State of California is required by Section 303(d) of the CWA<sup>10</sup> to provide the USEPA with a list of water bodies considered by the State to be impaired (i.e., not meeting water quality standards and not supporting their beneficial uses). The list also identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment, typically a total maximum daily load (TMDL). The TMDL specifies the amount of the target pollutant that the water body can sustain on a daily or annual basis and is established by amending the water quality control plan. TMDLs are prepared by the RWQCBs and result in amendments to the Water Quality Control Plan (WQCP), which must be approved by the USEPA. The 303(d) list is used by the USEPA to prepare the biennial federal CWA Section 305(b) *National Water Quality Inventory Report to Congress*.

The SWRCB has jurisdiction throughout California. The SWRCB protects water quality by setting Statewide policy, coordinating and supporting the RWQCBs' efforts, and reviewing petitions that contest RWQCB actions. As noted previously, the nine regional RWQCBs exercise rulemaking and regulatory activities by the nine hydrologic basins.

### **Cobey-Alquist Flood Control Act**

The Cobey-Alquist Flood Control Act states that a large portion of land resources of the State of California are subject to recurrent flooding.<sup>11</sup> The public interest necessitates sound development of land use because (1) land is a limited, valuable, and irreplaceable resource; and (2) the floodplains of the State are a land resource to be developed in a manner that, in conjunction with economically justified structural measures for flood control, will prevent loss of life and economic loss caused by excessive flooding. The primary responsibility for planning, adoption, and enforcement of land use regulations to accomplish floodplain management rests with local levels of government. It is State of California policy to encourage local levels of government to plan land use regulations to accomplish floodplain management and to provide State assistance and guidance.

### **California Drainage Law**

California drainage law is essentially case law. As such, it is complex, but the courts have established the following general principles, which apply in general to development projects:

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10 Clean Water Act, 33 USC sec. 303(d), Water Quality Standard and Implementation Plans, 1972.

11 California Water Code, Cobey-Alquist Flood Plain Management Act, 1965 as amended, Sec. 8400–8401.



- The downstream property owner is obligated to accept and make provision for those waters that are the natural flow from the land above.
- The upstream property owner shall not concentrate water where it was not concentrated before without making proper provision for its disposal without damage to the downstream property owner.
- The upstream property owner may reasonably increase drainage runoff by paving or construction of other impervious surfaces, including buildings, without liability. The upstream property owner may not further increase drainage runoff by diversion of water that previously drained to another area. Reasonableness is often based on prevailing standards of practice in the community or region.
- No property owner shall block, or permit to be blocked, any drainage channel, ditch, or pipe. No property owner shall divert drainage water without properly providing for its disposal.

### **Sustainable Groundwater Management Act**

The Sustainable Groundwater Management Act of 2014 (SGMA), passed in September 2014, is a comprehensive three-bill package that provides a framework for the sustainable management of groundwater supplies by local authorities.<sup>12</sup> The SGMA requires the formation of local groundwater sustainability agencies (GSAs) to assess local water basin conditions and adopt locally based management plans. Local GSAs were required to be formed by June 30, 2017. The SGMA provides 20 years for GSAs to implement plans and achieve long-term groundwater sustainability and protect existing surface water and groundwater rights. The SGMA provides local GSAs with the authority to (1) require registration of groundwater wells; (2) measure and manage extractions; (3) require reports and assess fees; and (4) request revisions of basin boundaries, including establishing new subbasins. Furthermore, under the SGMA, GSAs responsible for high- and medium-priority basins must adopt groundwater sustainability plans within 5 to 7 years of 2015, depending on whether the basin is in critical overdraft. The Department of Water Resources (DWR) issued an updated draft list of critically overdrafted basins in July 2015. The Antelope Valley Groundwater Basin (4-66) is not on the list.

### **c. Regional and Local**

#### **Lahontan Regional Water Quality Control Board**

The SWRCB oversees the nine RWQCBs in the State of California. The City is within the jurisdiction of the Lahontan RWQCB, which oversees the Lahontan Region. The Lahontan Region includes over 700 lakes, 3,170 miles of streams and 1,581 square miles of ground water basins.<sup>13</sup> There are 12 major watersheds (called hydrologic units under the Department of Water Resources' mapping system) in the North

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12 California Department of Water Resources, *2014 Sustainable Groundwater Management Act*, available at <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management>, effective January 1, 2016, revised January 15, 2016.

13 California Water Boards, "About the Lahontan Regional Board," accessed June 2020, [https://www.waterboards.ca.gov/lahontan/about\\_us/overview.html](https://www.waterboards.ca.gov/lahontan/about_us/overview.html).



Lahontan Basin. Among these are the Eagle Lake, Susan River/Honey Lake, Truckee, Carson, and Walker River watersheds. The South Lahontan Basin includes three major surface water systems (the Mono Lake, Owens River, and Mojave River watersheds) and a number of separate closed ground water basins. The City is located within the Antelope-Fremont Valleys watershed.<sup>14</sup>

The Lahontan RWQCB is responsible for establishing water quality standards and objectives that protect the beneficial uses of various waters in their region. The Lahontan RWQCB is also responsible for protecting surface and ground water from both point and nonpoint sources of pollution. Water quality standards and control measures for surface and ground water of the Lahontan Region are contained in the Water Quality Control Plan for the Lahontan Region (Basin Plan). The Basin Plan designates beneficial uses for water bodies and establishes water quality objectives, waste discharge prohibitions, and other implementation measures to protect those beneficial uses.

### **Antelope Valley Integrated Regional Urban Water Management Plan**

The Integrated Regional Urban Water Management Plan for Antelope Valley (IRUWMP) was prepared for a Regional Water Management Group. The Regional Water Management Group includes the Antelope Valley-East Kern Water Agency (AVEK), Antelope Valley State Water Contractors Association, City of Lancaster, City of Palmdale, Littlerock Creek Irrigation District, LACWD No. 40, Palmdale Water District, Quartz Hill Water District, and Rosamond Community Services District. The IRUWMP was developed to address regional concerns about water supply reliability, water quality, flood protection, environmental resources, and land use management in the Antelope Valley. The 2007 Antelope Valley IRWMP provided a mechanism for: (1) coordinating, refining and integrating existing planning efforts within a comprehensive, regional context; (2) identifying specific regional and watershed-based priorities for implementation projects; and (3) providing funding support for the plans, programs, projects and priorities of existing agencies and stakeholders. The IRWMP was most recently updated in 2019.

### **Salt and Nutrient Management Plan for the Antelope Valley**

As a follow-up to the IRUWMP update, a Salt and Nutrient Management Plan (SNMP) was developed in 2014 to address the concern for protecting the beneficial uses of groundwater basins and anticipate impacts of using and storing recycled water within the Antelope Valley groundwater basin. A monitoring plan is included as part of the SNMP and is used to track the water quality within the basin and compare water quality with those predicted in its models. The monitoring program includes 32 municipal water supply wells. Water quality data is reported to the California Division of Drinking Water.

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14 USGS, "Science in Your Watershed: Locate Your Watershed," accessed June 2020, <https://water.usgs.gov/wsc/cat/18090206.html>.

## Los Angeles County Waterworks Districts, 2015 Urban Water Management Plan for District 40

LACWD is a network of public water systems formed pursuant to Division 16, County Waterworks Districts of the California Water Code, and is a division of the Los Angeles County Department of Public Works. There are five Los Angeles County Waterworks Districts providing retail water service to Kagel Canyon, Malibu, Val Verde, Acton, and the Antelope Valley. LACWD No. 40, Antelope Valley, provides retail water service to communities within inland Los Angeles County, including the City of Lancaster (City). Eight regions compose District 40, which serves customers in the cities of Lancaster and Palmdale (Regions 4 and 34), Pearblossom (Region 24), Littlerock (Region 27), Sun Village (Region 33), Rock Creek (Region 39), Northeast Los Angeles County (Region 35), and Lake Los Angeles (Region 38). Regions 4 and 34 are integrated and operated as one system. Similarly, Regions 24, 27, and 33 are also integrated and operated as one system. The various regions were consolidated into a single district on November 2, 1993. LACWD No. 40 encompasses approximately 554 square miles.

The 2015 Urban Water Management Plan (2015 UWMP) for LACWD No. 40 was prepared in accordance with the California Urban Water Management Planning Act of 1983 and was adopted by the County of Los Angeles Board of Supervisors on January 24, 2017. The 2015 UWMP provides water demand and supply projections over the next 20-year planning horizon, assesses water supplies and sources, makes determinations regarding water supply reliability, and discusses water conservation measures pursued by LACWD No. 40. The 2020 UWMP is currently under preparation.

### Antelope Valley Groundwater Cases

Groundwater has been, and continues to be, an important resource within the Antelope Valley region. Prior to 1972, groundwater provided more than 90 percent of the total water supply in the Antelope Valley region; since 1972, it has provided between 50 and 90 percent. Groundwater pumping in the Antelope Valley region peaked in the 1950s, and it decreased in the 1960s and 1970s when agricultural pumping declined because of increased pumping costs from greater pumping lifts and higher electric power costs. The rapid increase in urban growth in the 1980s resulted in an increase in the demand for municipal and industrial (M&I) water and an increase in groundwater use. From the 1990s to the present, agricultural uses have significantly increased groundwater production and exacerbated the drop in groundwater levels across the basin. In 1999, agricultural interests filed litigation seeking to determine rights to groundwater. Subsequently, public water purveyors, including LACWD No. 40, filed a cross-complaint seeking an adjudication of groundwater rights and a physical solution. These lawsuits and others were joined in a coordinated and consolidated action known as the Antelope Valley Groundwater Cases. In December 2015, after a number of trial phases and a settlement reached among the majority of parties, the Court entered judgment. During the trial phases, the Court determined, *inter alia*, the basin boundaries: that the total safe yield of the basin is 110,000 acre feet per year (afy), that the native safe yield of the basin is

82,500 afy, and that the basin has been in a state of overdraft for over 61 years. The judgment allocates rights to pump groundwater, including the pumping rights of the water purveyors, and sets forth a physical solution. The allocations are summarized in Table 5.9-1: Antelope Valley Basin Water Allocations.

**Table 5.9-1**  
**Antelope Valley Basin Water Allocations**

<b>Production Category</b>	<b>Allocation (AFY)</b>
Overlying Production Rights	58,322.23
Non-Overlying Production Rights	12,345.00
Federal Reserved Water Right	7,600.00
Small Pumper Class	3,806.40
California Production Right	207.00
<b>Total</b>	<b>82,280.63</b>

Source: *Antelope Valley Watermaster, Final Antelope Valley Watermaster 2017 Annual Report, Figure 2, July 26, 2018, accessed June 2020, <https://avwatermaster.net/wp-content/uploads/2018/07/Final-2017-Annual-Report-Reduced-size.pdf>.*

Under the judgment, LACWD No. 40 has the right to pump approximately 20,005 afy of groundwater including an allocated right to pump 6,789 afy of the native safe yield, the right to pump 55 percent of the unused portion of the federal reserved right, and imported water return flows. Thirty-nine percent of the previous 5-year average of imported water used by LACWD No. 40 is available for pumping in any given year. The annual return flows do not include imported water stored in the basin (i.e., banked water). Banked water is a supply source that will be used in dry hydrology years where State Water Project (SWP) supplies are not available. Also, under a separate lease agreement, LACWD No. 40 has the right to pump approximately 3,000 afy in groundwater rights allocated to AVEK.<sup>15</sup>

### **Antelope Valley Watermaster**

The Judgment and Physical Solution for the Antelope Valley Groundwater Adjudication represents more than 15 years of complex proceedings among more than 4,000 parties including public water suppliers, landowners, small pumpers and nonpumping property owners, and the federal and State governments. Through four phases, the adjudication defined the boundaries of the Antelope Valley Groundwater Basin, considered hydraulic connection throughout the Basin, established the safe yield, and quantified

15 County of Los Angeles Department of Public Works and Los Angeles County Waterworks Districts, *2015 Urban Water Management Plan for District 40*, February 2017, accessed June 2020, <https://dpw.lacounty.gov/wwd/web/Documents/2015%20Integrated%20Urban%20Water%20Management%20Plan%20for%20the%20Antelope%20Valley.pdf>.

groundwater production. The Judgment identified a state of overdraft, established respective water rights among groundwater producers, and ordered a rampdown of production to the native Basin safe yield. The adjudication provides a framework to sustainably manage the Basin and reduce groundwater level declines and subsidence. To administer the Judgment, the Court-directed appointment of the Watermaster (a five-member board). In 2016, the Watermaster Board and an Advisory Committee (both entities required under the Judgment) were formed. Under the Judgment, the Board finalized hiring of Todd Groundwater as Watermaster Engineer. The Watermaster Engineer has the responsibility of preparing annual reports to the Court. The purpose of the annual report is to document the progress and details regarding implementation of the Judgment including a review of Watermaster activities. Information is provided regarding the operation and management of the groundwater basin and water supplies during the preceding year. The latest report available is the *Final Antelope Valley Watermaster 2018 Annual Report*, issued July 29, 2019.<sup>16</sup>

### **Los Angeles County Flood Control District**

The Los Angeles County Flood Control Act was adopted by the State Legislature in 1915 and established the Los Angeles County Flood Control District, empowering it to provide flood protection, water conservation, recreation, and aesthetic enhancement within its boundaries. The Flood Control District is governed, as a separate entity, by the County of Los Angeles Board of Supervisors. In 1984, the Flood Control District entered into an operational agreement with the Los Angeles County Department of Public Works transferring planning and operational activities to the Department of Public Works. The Flood Control District encompasses more than 2,700 square miles and approximately 2.1 million land parcels within 6 major watersheds. It includes drainage infrastructure within 86 incorporated cities as well as the unincorporated County areas. This includes 14 major dams and reservoirs, 483 miles of open channel, 27 spreading grounds, 3,330 miles of underground storm drains, 47 pump plants, 172 debris basins, 27 sediment placement sites, 3 seawater intrusion barriers and an estimated 82,000 catch basins.

### **City of Lancaster General Plan**

#### ***Plan for the Natural Environment***

The City's General Plan includes a Plan for the Natural Environment which addresses the use and management of natural resources and open space lands, as well as identifies policies related to hydrology and water quality. The following goal, policy, and specific actions that are applicable to the Proposed Project are listed below:

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16 Antelope Valley Watermaster, *Final Antelope Valley Watermaster: 2018 Annual Report*, July 29, 2019.

Objective 3.1	Protect, maintain, and replenish groundwater supplies to meet present and future urban and rural needs.
Policy 3.1.1	Ensure that development does not adversely affect the groundwater basin.
Specific Action 3.1.1(b)	Through the development review process, evaluate proposals under the California Environmental Quality Act (CEQA) to identify potential negative impacts on existing watershed areas, and to ensure inclusion of appropriate mitigation measures.
Specific Action 3.1.1(d)	<p>To ensure that the potential effect on the groundwater basin from proposed land use changes is appropriately evaluated, the applicants for all general plan and zoning ordinance amendments shall provide a factual statement of:</p> <ul style="list-style-type: none"> <li>• <i>Current Water Demand</i>: the amount of water necessary to support development under the existing general plan and zoning designations;</li> <li>• <i>Proposed Water Demand</i>: the amount of water necessary to support development under the proposed general plan and/or zoning designations;</li> <li>• <i>Potential Conservation</i>: the amount of water that can be conserved by application of water conservation techniques in the proposed project; and</li> <li>• <i>Water from New Sources</i>: the amount of water from new sources that can be specifically committed to this project.</li> </ul>

**Plan for Public Health and Safety**

The primary goal of the City’s Plan for Public Health and Safety is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from natural and human-induced hazards. The Plan for Public Health and Safety specifically addresses flooding and drainage, geology and seismicity, hazardous materials, and disaster preparedness. Policies and specific actions pertaining to soils are included in this element. The following policy and specific actions are applicable to the Proposed Project:

Policy 4.2.1 Manage flood hazards to ensure an acceptable level of risk and to facilitate rapid physical and economic recovery following a flood through the identification and recognition of potentially hazardous conditions and implementation of effective standards for location and construction of development.

Specific Action 4.2.1(e) Require, as a prerequisite to development approval, that drainage studies identify the facilities which are required to ensure that proposed development is adequately protected and that such development will not create or increase downstream or upstream flood hazards.

Specific Action 4.2.1(f) Through the development review process, encourage the use of pervious paving materials in hardscape areas; swale designs in landscape or grassy areas which slow runoff and maximize infiltration; and the discharge of roof drainage into pervious, greenbelt and seepage pit areas to reduce increases in downstream runoff resulting from new developments.

Specific Action 4.2.1(g) Require that street and storm drain flood control systems be designed to accommodate identified storm flows.

***Plan for Municipal Services and Facilities***

Many of the municipal services in the City of Lancaster, such as water, sewage treatment, and solid waste management, are provided by other agencies or private companies. The Plan for Municipal Services and Facilities sets forth policies and programs for the rational and cost-efficient provision and extension of public services, infrastructure, and facilities to serve the existing community and support planned development and protect natural resources within the City. The following policy and specific action item related to flood hazards are applicable to the Proposed Project:

Policy 15.1.4 Ensure that mitigation is provided for all development in recognized flood prone areas. Any mitigation of flood hazard in one area shall not exacerbate flooding problems in other areas.

Specific Action 15.1.4(a) As part of the development review process, require individual developments to install sufficient drainage facilities to provide all-weather access and protection as per FEMA requirements.

### **City of Lancaster Master Plan of Drainage**

In 1992, the City adopted its Master Plan of Drainage based on the Antelope Valley Comprehensive Plan, which has since been updated to document updated facilities and drainage fee schedules. The City has a development fee schedule that funds all Master Plan of Drainage facilities through the collection of Drainage Impact Fees and Drainage Maintenance Fees. These fees are used to build regional storm drain facilities; developers are responsible for project-specific drainage facilities. Through this program, the City can ensure that sufficient improved storm drain facilities are in place as new development occurs.

For large projects (equal to or greater than 100 lots), the City's Master Plan of Drainage requires the construction of local retention or detention basins until the regional system can be built. New local flood control facilities are presently built on an individual, project by project basis and are required to be designed for the Capital Flood Protection. Los Angeles County defines the Capital Flood as the runoff produced by a 50-year frequency design storm falling on a saturated watershed (soil moisture and field capacity). A 50-year frequency design storm has a one in 50 probability of being equaled or exceeded in any year. New developments that fall under the Capital Flood Protection criteria are thus required to design their storm drain plan based on a 50-year storm frequency, which frequently require the installation of detention basins. As the regional system is built, these basins may be eliminated or converted to detention basins for peak flows only. The lowest finish floor elevation of all habitable structures is required to be a minimum of 1 foot above maximum water level resulting from a Capital Flood.

For smaller projects (less than 100 residential units/lots, regardless of size), streets are considered the primary storm water conveyance facility. Local streets currently direct much of the storm water flows to the existing improved storm drain structures. Existing City standards are to maintain a 50-year storm within the right-of-way. The City's Master Plan of Drainage calls for containment of 25-year and/or 10- year storm flows within the curbs of the streets. In portions of the City with no Master Plan of Drainage facilities, streets act as the primary local flood control program and new residential structures are usually built two to three feet above street grade.

### **City of Lancaster Storm Water Management Plan**

The City is designated as a regulated Small Municipal Separate Storm System by the USEPA pursuant to 40 CFR 122.322(a)(1). The City filed a Notice of Intent (NOI) to comply with the SWRCB Small MS4 General Permit in lieu of obtaining an individual permit. On April 20, 2003, NPDES General Permit No. CAS000004 was adopted and most recently renewed on May 21, 2013 (NPDES Permit No. PAG133577). The objective of the City's Storm Water Management Plan (SWMP) is to establish ordinances, policies, procedures, and practices to manage and control the quality of storm water runoff in the City.

## City of Lancaster Municipal Code

Lancaster Municipal Code (LMC) Section 15.64.060, Drainage/Flood Control Improvements Fee, imposes a drainage/flood control improvements fee on all new development in the City pursuant to Article II of Chapter 13.04, to mitigate the storm water runoff impacts caused by new development.

Further, LMC Chapter 16.24, Improvements, Dedications, and Reservations, includes provisions related to hydrology and drainage as required components of subdivision projects prior to development. These include, among other provisions, the incorporation of drainage facilities into project design and the preparation of a hydrology study approved by the City engineer that demonstrates the proposed streets and existing downstream streets are designed to carry a 50-year storm, top of curb to top of curb, and one 100-year storm within the right-of-way.

## 5.9.2 ENVIRONMENTAL IMPACTS

### 5.9.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with hydrology and water quality. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant impact related to hydrology and water quality if it would:

- Threshold HYDRO-1**      **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.**
- Threshold HYDRO-2**      **Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.**
- Threshold HYDRO-3**      **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in a substantial erosion or siltation on- or off-site.**
- Threshold HYDRO-4**      **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.**
- Threshold HYDRO-5**      **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition**



**of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.**

**Threshold HYDRO-6** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would impede or redirect flood flows.

**Threshold HYDRO-7** In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

**Threshold HYDRO-8** Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

### 5.9.2.2 Methodology

The analysis below conceptually evaluated the change in surface water runoff patterns and quantity for the project site associated with the buildout of the Proposed Project and the impact of these changes on the existing downstream stormwater system. The following impact analysis related to flooding is based on information from the City and Los Angeles County flood control requirements.

The analysis of surface water quality identifies the types of pollutants associated with construction and operation of the Proposed Project and evaluates their potential effects on surface water quality, considering the proposed BMPs that would be implemented by the Proposed Project.

The analysis of the Proposed Project's potential impacts associated with groundwater was based on a review of existing groundwater levels, conditions, and groundwater uses and an evaluation of the potential impacts for construction and operation of the Proposed Project to affect those uses and groundwater quality. Construction and operational activities evaluated include changes in groundwater recharge based on proposed land use changes and infiltration capacity of the underlying soil. Long-term (operational) groundwater hydrology impacts resulting from changes in groundwater recharge due to the Proposed Project were qualitatively evaluated based on the proposed land use changes.

Because short-term groundwater-quality impacts have the potential to occur during construction of the Proposed Project due to the potential for soil or shallow groundwater to be exposed to construction materials, wastes, or spilled materials, or as a result of construction dewatering, these potential impacts are qualitatively assessed.

Long-term (operational) groundwater-quality impacts associated with the Proposed Project could potentially occur through the handling and storage of hazardous materials, and/or groundwater remediation activities; these potential impacts are qualitatively assessed in the following analysis.

### 5.9.2.3 Project Impacts

**Threshold HYDRO-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.**

The design of the Proposed Project would seek to prevent violations to water quality standards and waste discharge requirements by implementing adequate stormwater management facilities at each stage of development and operation, which are designed to contain Proposed Project-related runoff and prevent discharges into any receiving waters. The future applicants of development projects within the project site would also be required to obtain the appropriate permit approvals that ensure compliance with NPDES and MS4 regulations applicable during construction and operation.

#### **Construction**

Prior to the start of construction, each project applicant of future development projects within the project site must obtain coverage under the State's most current Construction General Permit (CGP), Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ. Compliance with the CGP involves the development and implementation of a project-specific SWPPP designed to reduce potential adverse impacts to surface water quality during the period of construction. The required SWPPP must identify the limits of disturbance during each phase of construction with specific locations where activities would require implementation of stormwater BMPs. Stormwater BMPs refer to a schedule of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent, eliminate, or reduce the pollution of waters of the receiving waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff spillage or leaks. Consistent with the CGP, SWPPP implementation must include good site management (housekeeping), non-stormwater management, erosion control, sediment controls, run-on and runoff controls, along with inspection, maintenance and repair measures. Other relevant requirements of the SWPPP include proper waste management, proper material handling, and storage within the allowable construction limits. As construction progresses, any on-site proposed storm drain inlets that become operational would require temporary protection to prevent sediment or pollutants from entering the on-site storm drain system.

Future construction activities associated with each individual project would also be required to comply with the Antelope Valley Air Quality Management District's (AVAQMD) Rule 403<sup>17</sup>, which requires each individual project applicant to prepare and implement a Fugitive Dust (PM<sub>10</sub>) Control Plan. Implementation of the Fugitive Dust Control Plan primarily pertains to air quality, but also supports water quality protection through the requirement of soil stabilization measures to prevent sediment erosion and track-out. The concurrent implementation of the required SWPPP and Dust Control Plan would prevent potential adverse construction-related impacts to water quality at the project site and its surroundings. Accordingly, the Proposed Project's water quality impacts during construction would be less than significant.

As discussed in Section 5.8: Hazards and Hazardous Materials of this EIR, during on-site grading and building construction, hazardous materials, such as fuels, paints, solvents, and concrete additives, could be used and would therefore require proper management and, in some cases, disposal. The management of any resultant hazardous wastes could increase the opportunity for hazardous materials releases into groundwater. As described in Section 5.8, during Proposed Project construction all activities that relate to existing on-site environmental conditions would be subject to all applicable federal, State, and local regulations concerning the handling, storage, and disposal of hazardous materials which appropriately and adequately address the environmental conditions that are present at the project site. As such, through regulatory compliance, the Proposed Project would not result in an adverse impact related to the routine transport, use, and disposal of hazards or hazardous materials during construction that would release contaminants into groundwater that could affect existing contaminants, expand the area or increase the level of groundwater contamination, or cause a violation of regulatory water quality standards at an existing production well. Therefore, Proposed Project construction impacts on groundwater quality would be less than significant.

### **Operation**

The proposed drainage of the project site would remain generally consistent with the natural drainage course of the existing site, largely flat with runoff conveyed via on-street drainage infrastructure. Infrastructure improvements would be constructed as needed to support the planned land uses, including water, sewer, drainage, and flood retention systems. Improvements will be determined at the time individual building projects are designed. Per the requirements of the LMC 16.24.140, subdivision ordinance shall include a hydrology study to demonstrate that proposed streets and existing downstream streets are designed to carry a 50-year storm, top of curb to top of curb, and one 100-year storm within the right-of-way. LMC 16.24.140 states that the anticipated flow through the subdivisions and/or any

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<sup>17</sup> A dust control plan (DCP) is required for ten acres or more of disturbed surface area for residential developments, or five acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days (Rule 403: Fugitive Dust, subsection D).

potential drainage problems would be mitigated through the installation of drainage structures such as culverts, storm drains, or other improvements. Additionally, the hydrology study would be subject to review and approval by the City engineer. Furthermore, as part of the City's development review process, the City's Capital Engineering Division requires hydrology studies for development projects greater than five acres in size and projects within undeveloped land.

The Proposed Project shall also comply with LMC Section 15.64.060, Drainage/Flood Control Improvements Fee. Per LMC Section 15.64.060, each individual project applicant would be required to pay the City's drainage/flood control improvements fee on all new development in the City pursuant to Article II of Chapter 13.04, to mitigate the storm water runoff impacts caused by new development.

Further, development enabled by the Proposed Project would be required to comply with the prohibited discharge requirements of LMC Title 13, Public Services, Chapter 13.10. The purpose of these requirements are to facilitate the maximum beneficial public use of the City's sewer system while preventing blockages of the sewer lines resulting from discharges of fats, oils, and grease, among other provisions.

Operation of the Proposed Project may have the potential to generate small amounts of pathogens. These pollutants are generally associated with various human activities, but pathogens are also present in natural environments. Types and concentrations of pollutants typically found in urban runoff from residential development tend to be less adverse than other development projects, including restaurants, automotive repair shops, commercial/industrial development, and parking lots. To address the Proposed Project's pollutants of concern, the Proposed Project would incorporate site design measures that include infiltration BMPs, such as retention basins and/or subsurface facilities. As a result, polluted runoff would not leave the project site, preventing it from entering any downstream stormwater conveyance, including streams. Infiltration BMPs have an adequate pollutant removal effectiveness (medium to high) to address the potential pollutants of concern.

Subsurface retention facilities may be utilized as a method to capture and infiltrate on-site runoff. Subsurface retention facilities may vary in system type; one example is a system of perforated pipes which allow water to exit through small holes. The volume resulting from the on-site runoff would be percolated on site, contributing to groundwater recharge.

The Proposed Project would be required to follow State, regional, and local regulations regarding on-site stormwater retention, so that surface waters and the groundwater aquifer are not contaminated with Proposed Project-related pollutants. With the enforcement of the above regulations, the Proposed Project would not violate any water quality standards or waste discharge requirements or degrade surface or

groundwater quality during construction or the operational life of the Proposed Project. Impacts would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Level of Significance

Impacts would be less than significant.

**Threshold HYDRO-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.**

Groundwater has historically been the secondary source of potable water supplies within LACWD No. 40.<sup>18</sup> LACWD is aiming to minimize groundwater drawdown and is currently exploring the use of aquifer storage and recovery (ASR) to store recycled water for use in dry years. Section 5.17: Utilities and Service Systems provides a discussion concerning the Proposed Project's water supplies, including groundwater.

As discussed in Section 5.17, LACWD No. 40 serves the project site. LACWD No. 40 relies, in part, on groundwater to meet water supplies. Although the Proposed Project would increase water demand over existing conditions, the Proposed Project's water demands would not result in a depletion of groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The Basin has recently been adjudicated and the Court determined the total safe yield and the native safe yield of the basin. The judgment allocates rights to pump groundwater, including the pumping rights of the water purveyors, and sets forth a physical solution. Thus, the judgment limits the amount of groundwater that can be pumped to ensure the protection and safe yield of the Basin. As such, the Proposed Project would not substantially deplete groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. Impacts would be less than significant.

The Basin is recharged principally by deep percolation of precipitation and runoff from the surrounding mountains and hills. However, according to the Antelope Valley IRUWMP, little percolation occurs in the Antelope Valley Region other than near the base of the surrounding mountains due to impermeable layers of clay overlying the groundwater basin. Groundwater recharge for the Basin is accomplished through

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18 County of Los Angeles Department of Public Works and Los Angeles County Waterworks Districts, *2015 Urban Water Management Plan for District 40*, February 2017, accessed June 2020, <https://dpw.lacounty.gov/wwd/web/Documents/2015%20Integrated%20Urban%20Water%20Management%20Plan%20for%20the%20Antelope%20Valley.pdf>.

approximately 400 acres of groundwater infiltration basins via the Water Supply Stabilization Project (also known as Westside Water Bank) and 6 acres of groundwater infiltration basins via the Eastside Water Banking and Blending Project. Future development would not remove existing groundwater infiltration basins such that a net deficit in aquifer volume or lowering of the local groundwater table would occur; nor would implementation of the Proposed Project affect operations of the Water Supply Stabilization Project or the Eastside Water Banking and Blending Project. Thus, implementation of the Proposed Project would not involve significant impacts to groundwater recharge and impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold HYDRO-3**     **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in a substantial erosion or siltation on- or off-site.**

### **Construction**

Implementation of the Proposed Project would permit the replacement of existing buildings including the Antelope Valley Hospital and development of a mixed-use, master-planned campus within an approximately 272.4-acre site. The proposed Master Plan encompasses an area that is largely developed with existing urban uses and interspersed with vacant parcels. Existing urban uses within the area are currently connected to an existing storm drain system. The Proposed Project would introduce additional impervious surfaces, including concrete sidewalks, buildings, roadways, etc.; therefore, water would not percolate at the same rate as it does in those portions that are vacant. Amargosa Creek is an existing drainage feature that bounds the project site on the west and bisects the South Campus. Thus, development within the vicinity of Amargosa Creek would potentially alter this existing drainage feature within the project site. However, the Proposed Project would require the implementation of stormwater treatment measures, including infiltration, for each individual project which would reduce the amount of stormwater runoff leaving the site. The containment and control of any potential construction-related erosion and sedimentation would be mitigated through the implementation of the BMPs identified for each individual project in the required SWPPP. The SWPPP is applicable to project sites greater than 1 acre in size, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, and is a required plan that would be submitted to the SWRCB. The purpose of the SWPPP would be to implement BMPs during development of each individual project

proposed through the implementation of the proposed Master Plan to ensure that the runoff or contamination potential does not occur by construction activities; however, the plan would also call out BMPs to mitigate erosion and soils entering the storm drain system. These BMPs include, but are not limited to, storm drain inlet protection, concrete washout bins, covering trash enclosures, using secondary containment, and storing materials properly. These BMP examples are used to ensure that construction activities do not pollute the stormwater runoff. The implementation of the SWPPP would reduce the impacts of waterborne and human-related erosion during development to existing drainage features, including Amargosa Creek. Individual SWPPPs would be required for the construction activities associated with each individual project.

In accordance with AVAQMD Rule 403, a dust control plan is required for ten acres or more of disturbed surface area for residential developments, or five acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. Thus, windborne and human-related erosion would be mitigated during construction activities with the implementation of a dust control plan. The release of fugitive dust during wind events and construction activities may impact water quality by siltation or sedimentation. Each individual project that meets the AVAQMD Rule 403 definition would be required to comply with the regulations of the AVAQMD, which include additional BMPs and maintenance. Some BMPs to reduce fugitive dust include, but are not limited to, watering the site, applying a chemical dust suppressant, using wind fencing around the perimeter of a project, and street sweeping. Mitigating fugitive dust on the project site would ensure that siltation and erosion does not occur during Proposed Project construction. Therefore, Proposed Project construction impacts related to erosion on- or off-site would be less than significant.

### ***Operation***

Development of the Proposed Project would require the construction of on-site stormwater facilities designed in accordance with the current SWRCB Small MS4 General Permit (NPDES General Permit No. CAS000004 and NPDES No. PAG133577). Project improvement plans would include the review and approval of a final water quality management plan. The source control, site design, and treatment control BMPs required for the Proposed Project would ensure that the receiving storm drain system and proximate receiving waters are not adversely impacted by Proposed Project-related erosion.

The Proposed Project would provide for both hardscaped and landscaped areas. These areas would mitigate potential erosion created by the project site by stabilizing the surface with grass, turf, decomposed granite, trees and shrubs. The development of the proposed buildings, as well as the paved

and concrete surfaces, would also decrease the amount of exposed soil located on-site; therefore, decreasing the exposed soil that may cause fugitive dust.

With the implementation of operational BMPs and compliance with the City's Municipal Code, the Proposed Project is not anticipated to result in substantial on- and off-site erosion or siltation. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold HYDRO-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.**

The proposed drainage of the project site would remain generally consistent with the natural drainage course of the existing site, largely flat with runoff conveyed via on-street drainage infrastructure. Infrastructure improvements would be constructed as needed to support the planned land uses as necessary, including water, sewer, drainage, and flood retention systems. Improvements will be determined at the time individual building projects are designed.

Construction and operation of the Proposed Project would control the amount of surface runoff by adhering to the established water quality and stormwater regulations under the regulatory framework of the NPDES under the Clean Water Act during construction and during the life of the Proposed Project. Additionally, implementation of the SWPPP, Fugitive Dust Control Plan, as appropriate, and BMPs would serve to remove trash, debris, sediment, and hydrocarbons, and provide natural filtration of pollutants from the stormwater runoff prior to discharge to the storm drain system.

Furthermore, each applicant for individual projects proposed under the Master Plan would be required to comply with LMC Section 15.64.060, Drainage/Flood Control Improvements Fee, which imposes a drainage/flood control improvements fee on all new development in the City, to mitigate the storm water runoff impacts caused by new development; and LMC Chapter 16.24, which includes provisions related to hydrology and drainage as required components of subdivision projects prior to development. These include, among other provisions, the incorporation of drainage facilities into project design and the



preparation of a hydrology study approved by the City engineer that demonstrates the proposed streets and existing downstream streets are designed to carry a 50-year storm, top of curb to top of curb, and one 100-year storm within the right-of-way. As discussed in Threshold HYDRO-3, the Proposed Project would implement site design, source control, and stormwater treatment measures in accordance with the SWRCB Small MS4 General Permit. With adherence to regulatory requirements, the Proposed Project's on- and off-site flooding impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold HYDRO-5      Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.**

The proposed drainage of the project site would remain generally consistent with the natural drainage course of the existing site, largely flat with runoff conveyed via on-street drainage infrastructure. Infrastructure improvements would be constructed as needed to support the planned land uses as necessary, including water, sewer, drainage, and flood retention systems. Improvements will be determined at the time individual building projects are designed.

Construction and operation of the Proposed Project would control the amount of surface runoff by adhering to the established water quality and stormwater regulations under the regulatory framework of the NPDES under the Clean Water Act during construction and during the life of the Proposed Project. Additionally, implementation of the SWPPP, air district requirements, and BMPs would serve to remove trash, debris, sediment, and hydrocarbons and provide natural filtration of pollutants from the stormwater runoff prior to discharge to the County's storm drain system.

As previously discussed, each individual project would be required to comply with the City's regulations that require the incorporation of drainage facilities into project design and the preparation of a hydrology study approved by the City engineer that demonstrates the proposed streets and existing downstream streets are designed to carry a 50-year storm, top of curb to top of curb, and one 100-year storm within the right-of-way. Drainage and flood control fees associated with each individual development would also contribute to the development of the City's storm drain system and would further mitigate the storm water

runoff impacts caused by new development. With adherence to regulatory requirements, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold HYDRO-6    Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would impede or redirect flood flows.**

Implementation of the Proposed Project would permit the replacement of existing buildings including the Antelope Valley Hospital and development of a mixed-use, master-planned campus within an approximately 272.4-acre site. The proposed Master Plan encompasses an area that is largely developed with existing urban uses and interspersed with vacant parcels. Amargosa Creek is an existing drainage feature that bounds the project site on the west and bisects the South Campus. As shown on Figure 5.9-1, the entirety of the project site outside the drainage channel is not within a designated 100-year flood hazard area. However, small areas of the project site are located outside of the 100-year floodplain, but within the 500-year floodplain. Thus, development within the vicinity of Amargosa Creek could potentially impede or redirect flood flows within the project site.

As previously discussed, each individual project would be required to comply with the City's regulations that require the incorporation of drainage facilities into project design and the preparation of a hydrology study approved by the City engineer that demonstrates the proposed development would be located outside of any potential flood flows and that each individual project would not substantially alter the existing drainage pattern of the site that would redirect flood flows to other areas within the project site or outside of the project site. With adherence to regulatory requirements, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold HYDRO-7 In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation.**

The project site includes approximately 272.4 acres of land that largely consists of urban, developed uses interspersed with vacant parcels. The project site is bounded by Amargosa Creek on its southwestern boundary that follows a northwest/southwest direction.<sup>19</sup> Additionally, an east-west branch of this channel bisects the project site approximately 930 feet south of Avenue J-8 and proceeds out of the project site. The channel is cement-lined to naturally lined with high banks. As shown in Figure 5.9-1, the project site is located in Zone X, which includes areas determined to be outside the 0.2 percent annual chance floodplain. As previously discussed, each individual project would be required to comply with the City's regulations, including but not limited to Section 17.40.150 related to flood damage prevention, that require projects within a potential flood hazard area be designed outside of the flood hazard zone. Additionally, the preparation of a hydrology study approved by the City engineer that demonstrates the proposed development would be located outside of any potential flood flows is required as part of the City's development review process. Thus, future development would not be located within a flood hazard area.

Seiches are oscillations generated in enclosed bodies of water, usually as a result of earthquake-related ground shaking. The project site is not located near any enclosed body of water and is not subject to inundation by seiche. Tsunamis are large ocean waves caused by the sudden water displacement that results from an underwater earthquake, landslide, or volcanic eruption that affect low-lying areas along the coastline. The project site is located more than 70 miles northeast of the Pacific Ocean and is not within a designated tsunami inundation area.

Implementation of the Proposed Project would not risk the release of pollutants in flood hazard, tsunami, or seiche zones and impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

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<sup>19</sup> County of Los Angeles Department of Public Works, *Los Angeles County Storm Drain System*, interactive map, accessed June 2020, <https://pw.lacounty.gov/fcd/StormDrain/index.cfm>

**Threshold HYDRO-8 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.**

The City recognizes that historical overdrafting of the Antelope Valley groundwater basin has occurred, and that it's of beneficial value to the City to seek to protect, maintain, and replenish groundwater supplies to meet present and future urban and rural needs. Although not specified in the Judgement for the Antelope Valley Groundwater Basin, the Antelope Valley Watermaster has reporting requirements under the SGMA for adjudicated basins. Required data on water use, groundwater monitoring, and other information is due to the California Department of Water Resources (DWR) by April 1 of each year (California Water Code Section 10720.8). There is currently no GSA for the Antelope Valley; however, the 2015 Judgment and Physical Solution for the Antelope Valley Groundwater Adjudication provides a framework to sustainably manage the basin and reduce groundwater level declines and subsidence.

A native safe yield of 82,500 afy and a total safe yield of 110,000 afy was established by the Court for the Antelope Valley Area of Adjudication and the adjudication parties were divided into various classes to establish respective water rights among groundwater producers. To achieve sustainable groundwater elevations, groundwater production would be reduced (ramped down) over a seven-year period (2016-2022) to a final production right.

As mentioned previously, LACWD No. 40 serves the project site. LACWD No. 40 relies, in part, on groundwater to meet water supplies. As indicated in the Antelope Valley Groundwater Adjudication, LACWD No. 40 has a production right of 6,789.26 afy. During the rampdown period, LACWD No. 40 agrees to purchase from AVEK each year an amount of water equal to 70 percent of LACWD No. 40's total annual demand or, if that amount is not available from AVEK, as much water as AVEK makes available at no more than the then-current AVEK treated water rate. Although the Proposed Project would increase water demand over existing conditions, the Water Supply Assessment prepared for the Proposed Project (see Appendix K: Water Supply Assessment) determined that through a combination of existing supply, groundwater banking, new supply, and recycled water, total supply will meet demand, including that of the Proposed Project, through 2040 under normal, single-dry, and multiple-dry year water conditions. Accordingly, the Proposed Project's water demands would not result in a depletion of groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The 2015 Judgment and Physical Solution for the Antelope Valley Groundwater Adjudication determined the total safe yield and the native safe yield of the Basin. The Judgment allocates rights to pump groundwater, including the pumping rights of the water purveyors, and sets forth a physical solution. Thus, the Judgment limits the amount of groundwater that can be pumped to ensure the protection and safe yield of the Antelope Valley Groundwater Basin. As such, the Proposed Project would comply with the provisions of the Judgement and 2015 UWMP relative to sustainable groundwater management.

Further, as discussed previously, the Proposed Project would comply with all applicable federal, State, regional, and City water quality control plans. With regulatory compliance, the Proposed Project would not obstruct a water quality control plan or groundwater management plan. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

### **5.9.2.4 Cumulative Impacts**

The geographic scope of the cumulative hydrology and water quality analysis is the vicinity of the project site and watershed. Hydrologic and water quality impacts tend to be localized; therefore, the areas near the project site would be most affected by Proposed Project activities. Development of the Proposed Project would result in the potential for short-term construction water quality impacts. However, the Proposed Project would be required to adhere to NPDES requirements and implement a SWPPP and local air quality management plan with specific BMPs, to reduce potential water quality impacts associated with construction activities, as well as air quality impacts related to water quality. Similarly, cumulative development projects would be required to comply with the same NPDES requirements as the Proposed Project during construction. Therefore, the Proposed Project's contribution to cumulative impacts would not be cumulatively considerable, and as such, cumulative impacts during construction of the Proposed Project would be less than significant.

Cumulative development projects, as well as the proposed project, would also increase storm water runoff and potentially alter the drainage patterns of the area. Similar to the Proposed Project, other related projects within the City would be subject to the same requirements as outlined in the LMC. Cumulative development projects would be required to demonstrate that the respective development would not increase the flow rate beyond existing conditions and that peak flows generated by individual development projects would be accommodated by the City's existing and/or proposed storm drain facilities. Individual development projects would be required to construct local storm drains and/or contribute to the regional drainage system pursuant to the LMC. Future projects would also be required to comply with existing water quality standards, implement site-specific improvements, and include BMPs as necessary. Applicants of related projects would also be required to pay the City's Drainage/Flood Control Improvements Fee per the LMC in order to mitigate the storm water runoff impacts caused by new development. As the Proposed Project would adequately convey the on- and off-site drainage through the

site via a proposed storm drain system, the Proposed Project's contribution to cumulative impacts to surface water hydrology and water quality would not be cumulatively considerable, as such, cumulative impacts would be less than significant.

The Proposed Project would not substantially deplete groundwater supplies or interfere with groundwater recharge. As discussed above, the Antelope Valley Groundwater Basin has recently been adjudicated and the Court determined the total safe yield and the native safe yield of the Basin. The judgment allocates rights to pump groundwater, including the pumping rights of the water purveyors, and sets forth a physical solution. Thus, the Judgment limits the amount of groundwater that can be pumped to ensure the protection and safe yield of the Basin. As such, the Proposed Project would not substantially deplete groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table; nor would it affect operations of the Water Supply Stabilization Project and the Eastside Water Banking and Blending Project. Groundwater supplies would be limited based on the Court determination and adjudication of the Basin. Thus, the Proposed Project and cumulative development would not significantly impact groundwater resources associated with increased demand for water.

Additionally, under the provisions of Senate Bill 610, LACWD No. 40 is required to prepare a comprehensive water supply assessment for every new development "project" (as defined by Section 10912 of the Water Code) within its service area that reaches certain thresholds. The types of projects that are subject to the requirements of SB 610 tend to be larger projects (e.g., residential projects with at least 500 dwelling units, shopping centers employing more than 1,000 persons or having more than 500,000 sf of floor space, commercial office buildings employing more than 1,000 persons or having more than 250,000 sf of floor space, etc.) that may or may not have been included within the growth projections of the LACWD No. 40 2015 UWMP. The water supply assessment for such projects would evaluate the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and measures to secure alternative sources if needed.

The Water Supply Assessment also concluded that LACWD No. 40 will be able to meet proposed water demand of the Proposed Project together with the existing and planned future water demands of the City. Compliance of the Proposed Project with regulatory requirements that promote water conservation such as the LMC, would also assist in assuring that adequate water supply is available on a cumulative basis.

In addition, any calculation of the extent to which the related projects would extract or otherwise directly use groundwater would be speculative. The Proposed Project would not impact groundwater recharge; thus, the Proposed Project's impact to groundwater recharge would not be cumulatively considerable, and as such, cumulative impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

### **5.9.3 SUMMARY OF SIGNIFICANCE**

No significant surface water hydrology, surface water quality, groundwater hydrology, or groundwater quality impacts have been identified and no mitigation measures are necessary. Thus, the Proposed Project's construction and operation-related hydrology and water quality impacts would be less than significant. Cumulative impacts would also result in less than significant impacts related to hydrology and water quality.

## 5.10 LAND USE AND PLANNING

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This section of the Environmental Impact Report (EIR) evaluates the potential land use impacts of the Proposed Project and its consistency with the City of Lancaster General Plan and other planning documents. Land use impacts can either result in land use incompatibilities or the division of neighborhoods or communities, or result from conflicts with implementation of any land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The analysis is based on the proposed Health District Master Plan (Master Plan).

### 5.10.1 ENVIRONMENTAL SETTING

#### 5.10.1.1 Existing Conditions

The project site is located within the City of Lancaster (City) in Los Angeles County, California. The project site is approximately 272.4 acres and consists of multiple parcels bordered by Avenue J to the north; 15th Street West, Kingtree Avenue, and 13th Street West to the east; Avenue K to the south; and the Antelope Valley Freeway (State Route [SR]-14) to the west. The project site consists of developed land with vacant, undeveloped parcels interspersed. The project site is located in a largely urbanized area and is surrounded by existing development and bordered by paved roadways.

#### *a. Existing On-Site Land Use Designations*

The City's General Plan Land Use Map designates portions of the project site as Commercial (C), Mixed Use (MU), Health Care (H), Office/Professional (OP), and Multi-Residential (MR2),<sup>1</sup> as shown in Figure 4.0-1: Existing General Plan Land Use Designations in Section 4.0: Environmental Setting of this EIR.

Consistent with the project site's Land Use Map designations, the City's zoning map applies the Commercial (C), Health Care (H), Office Professional (OP), Commercial Planned Development (CPD), High Density Residential (HDR), Mixed Use Neighborhood (MU-N), and Mixed Use Commercial (MU-C) zoning designations to the project site,<sup>2</sup> as shown in Figure 4.0-2: Existing Zoning Designations in Section 4.0.

#### *b. Existing On-Site Land Uses*

The project site is characterized by a variety of existing hospital, commercial, and residential uses, including the Antelope Valley Hospital. The Antelope Valley Hospital is a public hospital specializing in

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1 City of Lancaster, *General Plan 2030 Land Use Map*, adopted July 14, 2009 and last revised January 22, 2019, accessed June 2020, <https://www.cityoflanasterca.org/home/showdocument?id=9333>.

2 City of Lancaster, *Zoning Map*, adopted July 13, 2010 and last revised January 22, 2019, accessed June 2020, <https://www.cityoflanasterca.org/home/showdocument?id=12653>.



acute care and contains 342 beds within 489,930 square feet (sf) with a 78-bed Woman and Infant Facility within approximately 277,000 sf for a total of 420 beds within a total of 691,930 sf. Additionally, the project site contains 59 single-family attached units, 376 multifamily units for a total of 435 housing units, and approximately 1,040,430 sf of office and commercial space and approximately 230,000 sf of medical office space within the project site. A majority of the presently developed land is hardscape with minimal landscaping. The vacant, undeveloped parcels compose approximately 110 acres of the project site, and consist of typical desert vegetation.

### **c. Existing Surrounding Land Uses**

The project site is bordered by Avenue J to the north; 15th Street West, Kingtree Avenue, and 13th Street West to the east; Avenue K to the south; and the SR-14 to the west. North of Avenue J are commercial and office uses with single-family residential uses to the immediate northeast. To the east of the project site are public uses, including the Antelope Valley Juvenile Court and Sunnysdale Elementary School, as well as multifamily and single-family residential uses. Additionally, office uses are located east of the project site at the southeastern corner of the Avenue J-8 and 15th Street West, and commercial uses, including a vacant big-box store (former Toys R Us site – now demolished), are located to the southeast of the project site near Avenue K. South of the project site is additional commercial development near Avenue K and a vacant parcel. Amargosa Creek and SR-14 form the western boundary for a majority of the project site. West of SR-14 are commercial uses, including a number of hotels, and multi- and single-family residential development, with vacant parcels interspersed. Several commercial shopping centers are located to the west, northwest and north of the project site across 20th Street West and across Avenue J.

## **5.10.1.2 Regulatory Setting**

### **a. Regional and Local**

#### **Southern California Association of Governments**

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization (MPO) for six counties: San Bernardino, Orange, Riverside, Los Angeles, Ventura, and Imperial. The region encompasses a population exceeding 19 million persons in an area of more than 38,000 square miles. As the designated MPO, the federal government mandates that SCAG research and prepare plans for transportation, growth management, hazardous waste management, and air quality. Additionally, SCAG reviews environmental documents of projects with regional significance for consistency with regional plans. Among the leading activities SCAG undertakes are:

- Maintain a continuous, comprehensive, and coordinated planning process (the “3 Cs”) resulting in a Regional Transportation Plan (RTP) and a Federal Transportation Improvement Program (FTIP).

- Develop a Sustainable Communities Strategy (SCS) to address greenhouse gas (GHG) emissions as an element of the RTP.
- Develop demographic projections.
- Develop integrated land use, housing, employment, and transportation programs and strategies for the South Coast Air Quality Management Plan.
- Serve as co-lead agency for air quality planning in the Central Coast and Southeast Desert Air Basin districts.
- Develop and ensure that the RTP and the FTIP conform to the purposes of the State Implementation Plan for specific transportation-related criteria pollutants, per the Clean Air Act.
- Serve as the authorized regional agency for intergovernmental review of proposed programs for federal financial assistance and direct development activities.
- Review environmental impact reports for projects having regional significance to ensure they are in line with approved regional plans.
- Develop an area-wide waste treatment management plan.
- Prepare a Regional Housing Needs Assessment.
- Along with the San Diego Association of Governments and the Santa Barbara County/Cities Area Planning Council, prepare the Southern California Hazardous Waste Management Plan.

SCAG has developed a number of plans to achieve these regional objectives. The most applicable to the Proposed Project is the 2016 RTP/SCS.

### ***2016–2040 Regional Transportation Plan/Sustainable Communities Strategy***

Federal guidelines require that all new regionally significant transportation projects be included in the RTP before they can receive federal or State funds or approvals. The RTP is a long-range transportation plan that provides a vision for regional transportation investments over a period of 20 years or more. Using growth forecasts and economic trends, the RTP considers the role of transportation in a more holistic light, including economic factors, environmental issues, and quality-of-life goals.

The 2016 RTP/SCS is an update to the 2012–2035 RTP/SCS that reflects changes in economic, policy, and demographic conditions.<sup>3</sup> The goals of the 2016 RTP/SCS have remained unchanged from the goals presented in the 2012–2035 RTP/SCS. The goals of the 2016 RTP/SCS include the following: (1) improve regional economic development and competitiveness; (2) maximize mobility and accessibility in the

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3 Southern California Association of Governments (SCAG), *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy [2016 RTP/SCS]*, adopted April 2016, 17.

region; (3) improve travel safety and reliability in the region; (4) preserve and ensure a sustainable regional transportation system; (5) maximize productivity of the transportation system; (6) improve air quality and encourage active transportation; (7) encourage and creative incentives for energy efficiency; (8) encourage land use and growth patterns that facilitate transit and active transportation; and (9) maximize the security of the regional transportation system. Since the adoption of the 2012–2035 RTP/SCS, the development of the 2016 RTP/SCS has been influenced by (1) a surface and transportation funding and authorization bill known as the Moving Ahead for Progress in the 21st Century Act (MAP-21), which was signed into law by President Barack Obama on July 6, 2012; (2) the rapid advancement of new technologies that encourage more efficient transportation choices, such as multimodal transportation systems; and (3) the continuing emphasis on the reduction of GHG emissions as a result of the April 29, 2015, Executive Order B-30-15, which establishes a Statewide GHG reduction target of 40 percent (below 1990 levels) by 2030. More recently, SCAG adopted the 2020-2045 RTP/SCS, also known as *Connect SoCal*, on May 7, 2020. The 2020-2045 RTP/SCS focuses on a more prosperous mobile approach through implementing planning strategies that focus on transportation networks.<sup>4</sup> The 2020-2045 RTP/SCS core vision centers on maintaining and better managing the transportation network for moving people and goods, while expanding mobility choices by locating housing, jobs and transit closer together and increasing investment in transit and complete streets.<sup>5</sup> On May 7, 2020, SCAG’s Regional Council adopted *Connect SoCal* and certified the EIR for federal transportation conformity purposes only. In light of the COVID-19 pandemic, the Regional Council considered approval of *Connect SoCal* in its entirety and for all other purposes on September 3, 2020. Currently, SCAG has sent the greenhouse gas (GHG) reduction targets associated with the 2020-2045 SCS to California Air Resources Board (CARB) for concurrence.

### **Antelope Valley Air Quality Management District**

The Antelope Valley Air Quality Management District (AVAQMD) (known prior to January 1, 2002 as the Antelope Valley Air Pollution Control District) was established in 1997 by the State Legislature which separated the Antelope Valley and the desert portion of Los Angeles County from the South Coast Air Quality Management District (SCAQMD). AVAQMD is located within the Mojave Desert Air Basin and its boundaries start on the south just outside of Acton, north to the Kern County line, east to the San Bernardino County line, and west to the Quail Lake area. The AVAQMD is the local agency with the primary

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4 Southern California Association of Governments (SCAG), *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Draft*, “Chapter 1,” <https://www.connectsocial.org/Pages/Connect-SoCal-Draft-Plan.aspx>, Accessed on May 2020.

5 Complete streets ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians, and transit riders, as well as motorists.

responsibility for the control of non-vehicular sources of air pollution throughout the Antelope Valley. AVAQMD has established a number of rules and plans including air pollution control strategies leading to the attainment of federal and State air quality standards in the Mojave Desert Air Basin. Section 5.2: Air Quality, of this EIR contains an analysis of the Proposed Project's consistency with the AVAQMD's relevant rules and plans.

### **Los Angeles County Metropolitan Transportation Authority Congestion Management Program**

Metro administers the Congestion Management Program (CMP), a State-mandated program designed to provide comprehensive long-range traffic planning on a regional basis. The CMP includes a hierarchy of highways and roadways with minimum level of service standards, transit standards, a trip reduction and travel demand management element, a land use impact analysis methodology, a seven-year multimodal Capital Improvement Program (CIP), and a County-wide computer model used to evaluate traffic congestion and recommend treatment strategies. The CMP guidelines specify that those designated roadways/ intersections to which a project could add 50 or more trips during either the AM or PM peak hour be evaluated. The guidelines also require the evaluation of identified freeway segments to which a project could add 150 or more trips in each direction during peak hours. Due to the age of the CMP and more recent regional, State, and federal planning processes and requirements, the Metro Board adopted the recommendation to initiate the process to gauge the interest of local jurisdictions and other stakeholders in opting out of State CMP requirements. On March 12, 2019, the Lancaster City Council adopted Resolution No. 19-09, electing that the City be exempt from the CMP.<sup>6</sup>

### **City of Lancaster**

#### ***General Plan***

The City of Lancaster General Plan can be described as the City's long-term outlook for the future. This view of the future is a compilation of a system of basic community values, ideals, and aspirations as to how its natural and man-made environments should be organized and managed. The General Plan identifies the types of development that will be allowed, the spatial relationships among land uses, and the general pattern of future development. All subdivisions, public works, redevelopment projects, zoning decisions, and other various implementation tools must be consistent with the General Plan. Thus, the General Plan not only functions as a guide to the type of community that is desired, but also provides the means by which the community may achieve that desired future. Relevant components of the City's General Plan, which include respective goals, objectives, policies, and specific actions, are further

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6 City of Lancaster, "City Council Minutes," March 12, 2019, <https://www.cityoflanasterca.org/Home/ShowDocument?id=40604>, accessed June 2020.

described below. The City's General Plan was adopted on July 14, 2009 and provides for a 20-year planning horizon. The General Plan is organized into seven plans that cover broad topical areas, while addressing the issues required by State law and the Housing Element. The following plans included in the City's General Plan specifically relate to this section.

### **Plan for the Natural Environment**

The Plan for the Natural Environment evaluates the natural and human-induced environments within the City. This plan focuses on those resources determined to be suitable for certain levels of maintenance and protection, as well as their limitations for rural or urban use. Overall, the Plan for the Natural Environment provides a management program for those resources consistent with the City's values, and ensures the City as an active participant in the management of the Antelope Valley's resources. The topics of water resources, water consumption, air resources, biological resources, land resources, energy resources, mineral resources and scenic resources are addressed in this plan.

### **Plan for Public Health and Safety**

The Plan for Public Health and Safety contains an evaluation of natural and manmade conditions which may pose certain levels of health and safety hazards to life and property within the City, along with a comprehensive program to mitigate those hazards to acceptable levels. Acceptable risk is based on a determination of how safe is safe enough, balancing the cost of hazard mitigation with its benefits, according to the Plan for Public Health and Safety. The Plan for Public Health and Safety identifies constraints to urban and rural development which must be considered as part of overall and site-specific development strategies. This plan also addresses existing hazards faced by the City's residents and businesses, and provides a program to mitigate those hazards. Specifically, this plan addresses geology and seismicity, flooding and drainage, noise, Air Installation Compatible Use Zone (AICUZ), hazardous materials, crime prevention/protection services, fire prevention/suppression services, disaster preparedness and emergency medical facilities.

### **Plan for Active Living**

The Plan for Active Living focuses on the components of the City's shelter, culture, and lifestyle. This plan also focuses on the manner in which those in need can be helped so that all may share in achieving a high quality of life. Specifically, this plan addresses population and housing; provision of school sites/facilities; park land; pedestrian, equestrian and bicycle trails; cultural and art programs and facilities; historical, archaeological, and cultural resources; library facilities; and social service programs.

### **Plan for Physical Mobility**

The Plan for Physical Mobility identifies how goods and people move about in a community and affects land use, urban design, energy consumption, air quality, and the City's infrastructure. The plan states that circulation decisions must be addressed at the local level and coordinated with regional, State, and federal agencies, as well as with neighboring communities. The plan discusses transportation facilities and alternative modes of transportation with an eye to how future growth in the City and its vicinity will impact existing roadways and air transportation. Specifically, this plan addresses streets and highways; parking facilities; alternative transportation modes; commodity movement; and air transportation.

### **Plan for Municipal Services and Facilities**

Many of the municipal services in the City, such as water, sewage treatment, and solid waste management, are provided by other agencies or private companies. The Plan for Municipal Services and Facilities sets forth policies and programs for the rational and cost-efficient provision and extension of public services, infrastructure, and facilities to serve the existing community and support planned development and protect natural resources. Specifically, this plan addresses levels of service; water facilities; flood control and drainage; wastewater facilities; solid waste management; and coordination of development and public services.

### **Plan for Economic Development and Vitality**

Local economic development and vitality consists of the ways in which people and businesses contribute to a city's economy through consumption, production, investment, and job creation. This plan specifically addresses creation and retention of local employment; provision of municipal revenue-generating land uses; role of downtown Lancaster in the future of the City; establishment of Lancaster as a center for regional activities, and financing public services and facilities.

### **Plan for Physical Development**

The purpose of the Plan for Physical Development is to organize the City's physical environment into a logical, functional, and aesthetic pattern consistent with the City's long-term vision. This plan meets the California Government Code land use element mandate to designate the proposed general distribution, general location, and extent of the uses of land for housing, business, industry, and open space. Beyond that requirement, the Plan for Physical Development is also a summary of the manner in which other General Plan issues affect the arrangement and design of development within the City. The plan focuses on understanding current land uses and the design and form of present developments, as well as identifies land use constraints to development, land use trends for the future, and agency coordination to ensure compatible land uses.

The City's General Plan Land Use Map designates the project site as Commercial (C), Mixed Use (MU), Health Care (H), Office/Professional (OP), and Multi-Residential (MR2).<sup>7</sup>

Commercial land uses include a broad spectrum of types, including regional, community, neighborhood, and highway-oriented uses with floor area ratios (FAR) ranging from 0.5 to 1.0. The Mixed Use land use category combines retail, service, and office uses with higher density residential uses in the same building or on the same site with residential potentially located above commercial activities. Mixed-use development typically functions as the center of activity for the surrounding area and emphasizes integrated design with strong pedestrian/transit connections. Unit density and floor area ratios may vary depending on the purpose and design but the average density would be 21 dwelling units per acre and the average FAR would be 1.0. Health Care land uses include public and private hospitals, health care facilities, and related independent or assisted-living residential facilities. Land designated OP enables office and professional uses and supporting commercial uses with maximum floor area ratios of 0.75. MR2 land uses include high density multifamily residential development, with density ranging from 15.1 to 30.0 dwelling units per acre.

### **Housing Element**

The State Legislature has declared in California planning law that "...the availability of housing is of vital Statewide importance and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order." To address these concerns, the City adopted the Housing Element Update 2014-2021 on October 23, 2013, and the California Department of Housing and Community Development certified the adopted Housing Element on December 31, 2013.

The Housing Element addresses existing and future housing needs for all economic segments of the Lancaster community and presents the overall goals, objectives, policies, and action programs the City intends to implement in order to facilitate provision of housing for existing and future residents of the City, including segments of the City population with special housing needs. The adopted Housing Element plans for housing needs for the period of January 1, 2014, to September 30, 2021. The City is currently in the process of updating its Housing Element.

### ***City of Lancaster Municipal Code***

Zoning is the means by which cities implement their General Plan. The City of Lancaster's Zoning Code translates the long-term goals and policies of the General Plan into the guidelines used for the decision-

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<sup>7</sup> City of Lancaster, *General Plan 2030 Land Use Map*, adopted July 14, 2009 and last revised January 22, 2019, accessed June 2020, <https://www.cityoflanasterca.org/home/showdocument?id=9333>.

making on future developments. While the General Plan provides long-range and broad categories of land use, zoning provides specific development requirements, such as density, building height, building size, and development character. The City's Zoning Ordinance, codified as Title 17 of the Lancaster Municipal Code (LMC), provides for the creation within the City of zones and prescribes area requirements as well as classes of uses of buildings, structures, improvements, and premises within the respective zones. The City's zoning map applies the Commercial (C), Health Care (H), Office Professional (OP), Commercial Planned Development (CPD), High Density Residential (HDR), Mixed Use Neighborhood (MU-N), and Mixed Use Commercial (MU-C) zoning designations to the project site, as indicated on Figure 4.0-2.<sup>8</sup>

As detailed in the City's Zoning Code, the purpose of the C and CPD zones are to provide the means for the establishment of "regional," "subregional," and "general commercial" categories. These zones are also intended to allow the development of neighborhood, community, regional, and travel oriented commercial uses within the City and to provide for the daily commercial needs of residents of the City and adjoining areas, as well as visitors and businesses, in an urban environment with full urban services. The purpose of the H zone is to provide for the development of "health care facilities" as set forth in the text of the General Plan and delineated as "hospitals" on the General Plan Land Use Map. This zone is also intended to allow the development of those uses which are typically located near hospitals. The OP zone is intended to allow the development of office and professional uses with supporting retail and commercial services thereby providing for the business and employment needs of the City and adjoining areas in an urban environment with full urban services. The high-density residential zone is similarly intended to provide for high density multiple-family dwellings in an urban environment with full urban services. Only those uses that are complementary to and exist in harmony with such residential developments are allowed.

The purpose of the Mixed Use Neighborhood zone is to enable compact residential development, built in close proximity to daily commercial/office uses and services, offering pedestrian connections and gathering spaces, including trails and neighborhood parks. Typical developments in the MU-N zone include attached multi-family uses, such as apartments and condominiums, small-lot single-family subdivisions, and smaller commercial and office uses. Neighborhoods containing these developments would have a highly connected street pattern, such as a grid block layout for small-lot single family developments. The Mixed Use-Commercial zone emphasizes a more fully integrated residential and commercial mixed-use development, characterized by "destination features" and social gathering areas. Mixed use commercial developments are typically located along major arterial streets, and are intended

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<sup>8</sup> City of Lancaster, *Zoning Map*, adopted July 13, 2010 and last revised January 22, 2019, accessed June 2020, <https://www.cityoflanasterca.org/home/showdocument?id=12653>.



to contribute to the local streetscape through vertical elements of multi-storied structures, built closer to the front property line.

## **5.10.2 ENVIRONMENTAL IMPACTS**

### **5.10.2.1 Thresholds of Significance**

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with land use and planning. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant land use impact if it would:

**Threshold LU-1                      Physically divide an established community.**

**Threshold LU-2                      Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**

### **5.10.2.2 Methodology**

The intent of the analysis pertaining to whether the Proposed Project would physically divide an established community is to determine whether the Proposed Project would be compatible with surrounding uses in relation to land use, size, intensity, density, scale, and other physical and operational factors. The analysis is intended to determine whether existing nearby communities or land uses would be disrupted, divided, or isolated by the Proposed Project, with consideration given to the duration of any disruptions. The analysis is based on review of land use maps as well as aerial and street-view photography in which surrounding uses have been identified and characterized. The analysis addresses general land use relationships and urban form based on a comparison of existing land use relationships in the vicinity of the project site under existing conditions to the conditions that would occur with implementation of the Proposed Project.

The determination of the Proposed Project's consistency with applicable land use plans and policies is based upon a review of the previously identified planning documents that regulate land use or guide land use decisions at and around the project site. The Proposed Project is considered to be consistent with the provisions of the identified regional and local plans if it meets the general intent of the plans and would not preclude the attainment of the primary intent of the land use plan or policy.

### 5.10.2.3 Project Impacts

#### Threshold LU-1      **Physically divide an established community.**

The project site consists of approximately 272.4 acres of land in the central portion of the City. As described in Section 3.0: Projection Description, a majority of the project site is developed with urban uses and approximately 110 acres of the project site consists of vacant islands of undeveloped parcels interspersed with development. The developed areas on site are largely hardscaped with minimal landscaping while the vacant land consists of typical desert vegetation.

The project site is surrounded by developed uses, including predominantly commercial and office uses to the north and residential uses to the northeast. Commercial and office developments to the north are largely one to two stories in height with wide setbacks and ample surface parking, with residential uses to the northeast consisting of single-family dwelling units. East of the project site are largely residential and public uses, including the Antelope Valley Juvenile Court buildings and Sunnydale Elementary School. Multifamily and senior housing are located along Kingtree Avenue to the east and near the Avenue J-8 and 15th Street West intersection to the southeast. Additionally, office uses are located east of the site at the southeastern corner of the Avenue J-8 and 15th Street West, and commercial uses, including a vacant big-box store (now demolished), are located to the southeast of the project site near Avenue K. South of the project site is additional commercial development near Avenue K and a vacant parcel. Amargosa Creek and SR-14 form the western boundary for a majority of the project site. West of SR-14 are commercial uses, including a number of hotels, and multi- and single-family residential development, with vacant parcels interspersed. Several commercial shopping centers are located to the west, northwest and north of the project site across 20th Street West and across Avenue J.

A number of existing paved and active roadways provide access to the project site and would continue to upon implementation of the Proposed Project. Among these are major east-west and north-south roadways such as Avenue J and 15th Street West, respectively. Other sizeable roadways transecting or bordering the project site are 20th Street West and Avenue J-8, as well as several smaller surface streets.

Full buildout of the proposed Master Plan would include existing development, redevelopment of the Antelope Valley hospital, and new development. New development enabled by the proposed Master Plan would include clustered, mixed-use development, including medical and general offices, retail and commercial uses, hospitality uses, and a range of housing types at varying densities. The Proposed Project would enable the development of the District Core (DC), District General (DG), and District Edge (DE) zones across the project site. Building heights outlined in the proposed Development Code would be up to 6 stories in the DC, up to 4 stories in the DG, and up to 3 stories in the DE. The relocated hospital and hotel(s) would be exempt from the height restrictions of the DC zone. Existing uses, including the Antelope Valley

Hospital, consist of multi-story developments similar to that which is proposed. As seen in Figure 3.0-5: Regulating Plan in Section 3.0: Project Description, higher density development with greater building heights, including the new Antelope Valley Hospital, would be clustered near the center of the project site or in other areas where similar such types of development currently exist. Mid-tier height, mixed-use development would surround the DC zone and be permitted across a majority of the project site. Lower density, primarily residential development would be placed on the eastern side of the project site, integrated with similar adjacent uses to the east. Such land use placement would ensure a gradual increase in building height towards the center of the site, protecting distant views to the maximum extent feasible.

New vehicular, bicycle, and pedestrian access to the project site would be proposed via new roadway connections to the arterial roadway network surrounding and traversing the project site. These connections would facilitate vehicular and pedestrian connectivity between existing land uses across the project site within the project vicinity. Primary internal street network connections include the extensions of existing roadways to provide north-south and east-west connectivity. Future development would be specifically focused toward healthy, active living by creating a comfortable, safe, and efficient environment for walking and biking within a clustered health-oriented campus.

The Proposed Project would not disrupt or physically divide an established community, as future development that would occur would primarily be infill development on an already highly urbanized project site. Accordingly, the Proposed Project would not isolate any established communities or residences from neighboring communities. Therefore, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold LU-2                    Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**

The following analysis pertains to both construction and operation of the Proposed Project. The discussion begins with a description of the changes and amendments to the existing regulatory planning documents that would occur with the Proposed Project and then moves on to evaluate whether implementation of

the Proposed Project would conflict with an applicable land use plan, policy, or regulation to the extent that it would constitute a significant impact.

### ***City of Lancaster***

#### **General Plan Analysis**

As described in Section 3.0 of this EIR, the Proposed Project would require a General Plan Amendment to change the land use designation to Mixed Use and a corresponding Zone Change to Mixed Use - Health District. Table 5.10-1: City of Lancaster General Plan Consistency Analysis, provides an analysis of the Proposed Project's consistency with the City's relevant General Plan goals, objectives, and policies. As demonstrated in Table 5.10-1, the proposed Master Plan would be generally consistent with the relevant General Plan goals, objectives, and policies that were adopted for the purpose of avoiding or mitigating an environmental effect. As such, impacts would be less than significant.

#### **Lancaster Municipal Code**

As outlined previously in Section 5.10.1.2, Regulatory Setting, the City's Zoning Ordinance, codified as Title 17 of the LMC, is the means by which the General Plan is implemented. The proposed Health District Code includes three new zoning districts that would replace the existing zones within the project site: DC, DG, and DE. The proposed land use and Regulating Plan for the project site, shown in Figure 3.0-5 and described in Section 3.0, identifies the locations of each zoning district. As described in Section 3.0, the DC zone is envisioned to contain walkable urban main street areas that would provide locally and regionally serving medical, commercial, retail, entertainment, and civic uses. This zone is characterized by active, pedestrian-oriented medical, retail, restaurant, art galleries, and other ground-floor uses set at or near the sidewalk, with offices and housing on upper floors. The DC zone would contain the Antelope Valley Hospital and higher intensity development, focused near the center of the project site. The DG zone is intended to provide a variety of urban housing choices in walkable neighborhoods with activated residential and retail ground floors. This zone would encompass a majority of the project site and surround the DC zone. Lastly, the DE zone would provide a variety of urban housing choices in small to medium footprint buildings, supported by neighborhood-serving retail and service uses.

The Regulating Plan, or Zone District, would be the implementing mechanism for future projects. As seen in Figure 3.0-5, the location of the predominantly residential DE zone would generally align with those enabled under current zoning. Further, as described, the mix of allowed and intended uses within the DC and DG zones are anticipated to generally accommodate uses which are enabled by current zoning designation and encourage a greater variety of possible mixed-use development. As such, impacts would be less than significant.

**SCAG RTP/SCS Analysis**

As previously noted, the 2016 RTP/SCS is an advisory document to local agencies in the southern California region for their information and voluntary use while preparing local plans and handling local issues of regional significance.

As shown in Table 5.10-2: SCAG 2016–2040 RTP/SCS Analysis, an assessment is provided of the Proposed Project’s relationship to advisory and voluntary policies contained in various chapters of the 2016 RTP/SCS. The analysis contained in Table 5.10-2 concludes that the Proposed Project would generally be consistent with the advisory and voluntary RTP/SCS policies. Therefore, implementation of the Proposed Project would not result in significant land use impacts due to inconsistency with the advisory and voluntary RTP/SCS policies. Accordingly, impacts would be less than significant.

**Table 5.10-1  
City of Lancaster General Plan Consistency Analysis**

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
<b>Plan for the Natural Environment</b>	
<b>Goal 3: To identify the level of natural resources needed to support existing and future development within the City and its sphere of influence, and ensure that these resources are managed and protected.</b>	
<b>Water Resources</b>	
<b>Objective 3.1:</b> Protect, maintain, and replenish groundwater supplies to meet present and future urban and rural needs.	
<b>Policy 3.1.1:</b> Ensure that development does not adversely affect the groundwater basin.	<b>Consistent.</b> As discussed in Section 5.9: Hydrology and Water Quality, the project site is located within the Antelope Valley Groundwater Basin (AV Basin) and Los Angeles Waterworks District No. 40 (District 40) provides retail water to the site. The AV Basin has recently been adjudicated and the Court determined the total safe yield and the native safe yield of the AV Basin. Section 5.17.1: Water Service and Supply, provides a discussion concerning the Proposed Project’s water supplies, including groundwater, as well as the Draft Water Supply Assessment (WSA) prepared for the Proposed Project (included as Appendix K). District 40 relies, in part, on groundwater to meet water supplies in accordance with the Court’s Judgment. Although the Proposed Project would increase water demand over existing conditions, the Proposed Project’s water demands would not result in a depletion of groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Thus, the Proposed Project would be consistent with this policy.
<b>Policy 3.1.3:</b> Encourage the use of recycled tertiary treated wastewater when possible.	<b>Consistent.</b> In 2015, District 40 received approximately 25 percent of its water supply from groundwater pumping, 67 percent from the Antelope Valley East-Kern Water Agency (AVEK), 6 percent from recycled water, and 2 percent from new supplies. Once available to the project site, the Proposed Project would utilize recycled water on site to supplement non-potable water demands. Thus, the Proposed Project would be consistent with this policy.
<b>Water Consumption</b>	
<b>Objective 3.2:</b> Reduce the per capita rate of water consumption in the City of Lancaster through increased conservation, technology, retrofits, and system efficiency to levels consistent with other desert communities.	

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
<p><b>Policy 3.2.1:</b> Promote the use of water conservation measures in the landscape plans of new developments.</p>	<p><b>Consistent.</b> As discussed in Section 5.17.1, individual projects proposed under the Master Plan would be required to adhere to the latest CALGreen code including complying with regulatory measures such as, installing Low Impact Design (LID) standards to all interior and exterior plumbing features in order to conserve water to the furthest extent feasible. Additionally, all future individual projects developed pursuant to the Master Plan would also be constructed in compliance with the City of Lancaster’s Landscaping Installation and Maintenance Practices (Lancaster Municipal Code [LMC] Chapter 8.5). Therefore, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 3.2.2:</b> Consider the potential impact of new development projects on the existing water supply.</p>	<p><b>Consistent.</b> A Draft WSA was prepared for the Proposed Project (see Appendix K). Based on the information, analysis, and findings documented therein, there is substantial evidence to support a determination that there will be sufficient water supplies to meet the demands of the Proposed Project as well as for future demands of the Proposed Project plus all forecasted demands in the next 20 years. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 3.2.3:</b> Encourage incorporation of water-saving design measures into existing developments.</p>	<p><b>Consistent.</b> As previously discussed, individual projects proposed under the Master Plan would be required to adhere to the latest CALGreen code including complying with regulatory measures such as, installing LID standards to all interior and exterior plumbing features in order to conserve water to the furthest extent feasible. Thus, the Proposed Project would promote the use of water conservation measures in the design of new development and, as such, the Proposed Project would be consistent with Policy 3.2.3 and Policy 3.2.5.</p>
<p><b>Policy 3.2.5:</b> Promote the use of water conservation measures in the design of new developments.</p>	
<p><b>Air Resources</b></p>	
<p><b>Objective 3.3:</b> Preserve acceptable air quality by striving to attain and maintain national, state, and local air quality standards.</p>	
<p><b>Policy 3.3.1:</b> Minimize the amount of vehicular miles traveled.</p>	<p><b>Consistent.</b> The Proposed Project would enable the development of a mix of uses in proximity to one another, including medical, office, commercial, and residential uses. New roadway connections to the arterial roadway network surrounding and traversing the project site would accommodate bicyclists, pedestrians, and motorists alike and encourage local trips through an integrated, highly connected medical campus. Additionally, the project site would continue to be served by public transportation to further reduce vehicle miles traveled (VMT). Thus, the Proposed Project would be consistent with this policy.</p>

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
<p><b>Policy 3.3.2:</b> Facilitate the development and use of public transportation and travel modes such as bicycle riding and walking.</p>	<p><b>Consistent.</b> New roadways within the project site would be two-lane facilities with bike lanes and sidewalks. Public transportation would continue to be provided by the Antelope Valley Transportation Authority (AVTA). The Proposed Project would encourage mixed-use development which would enable efficient land utilization and be conducive to means of alternative transportation. As described in the Street Design Standards, of the proposed Health District Code, pedestrian crossings shall be appropriately sized and placed so as to maximize awareness of pedestrians by motorists, and roundabouts are to be designed to prioritize non-motorist comfort and safety by slowing vehicular traffic for the duration of its path through the roundabout. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 3.3.3:</b> Minimize air pollutant emissions generated by new and existing development.</p>	<p><b>Consistent.</b> Construction and operation of the Proposed Project would increase air pollutant emissions which contribute to reduced air quality. Mixed-use development, clustered uses, and design provisions for alternative means of transportation would have the benefits of reducing VMT and vehicular trips. As further described in Section 5.2: Air Quality of this EIR, future individual project proponents would be required to implement Mitigation Measure MM AQ-1 during construction and MM AQ-2 through MM AQ-8 during operation. With mitigation, construction impacts related to air quality would be less than significant, while operational impacts would be significant and unavoidable with mitigation. As the Proposed Project would implement the maximum feasible mitigation related to air quality, it would be consistent with this policy.</p>
<p><b>Policy 3.3.4:</b> Protect sensitive uses such as homes, schools, and medical facilities from the impacts of air pollution.</p>	<p><b>Consistent.</b> As mentioned previously, the Proposed Project would reduce air pollution emissions by design and through adherence to MM AQ-1 through MM AQ-7. With mitigation, emissions during construction and operation of the Proposed Project would be reduced to the greatest extent feasible, minimizing impacts to receptors in the area, including sensitive receptors. Further, as described in Section 5.2, proposed dry cleaners using perchloroethylene (PCE) would be required to implement MM AQ-8, which calls for the preparation of a Health Risk Assessment (HRA) in the event that the dry cleaner is proposed within 500 feet of a sensitive receptor and provides a detailed comprehensive analysis to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure for human populations, and to assess and quantify both the</p>



Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
	individual and population-wide health risks associated with those levels of exposure during operation of the Proposed Project. With mitigation, air quality impacts to sensitive uses would be less than significant and the Proposed Project would be consistent with this policy.
<b>Biological Resources</b>	
<b>Objective 3.4:</b> Identify, preserve and maintain important biological systems within the Lancaster sphere of influence, and educate the general public about these resources, which include the Joshua Tree - California Juniper Woodlands, areas that support endangered or sensitive species, and other natural areas of regional significance.	
<b>Policy 3.4.4:</b> Ensure that development proposals, including City sponsored projects, are analyzed for short- and long-term impacts to biological resources and that appropriate mitigation measures are implemented.	<b>Consistent.</b> The majority of the project site is developed with urban uses, with some vacant parcels interspersed, and is located in a highly urbanized area of the City. The Biological Assessment prepared for the Proposed Project (see Appendix C: Biological Resources Study) indicated that a number of special-status plant species are documented to occur within the vicinity of the project area. Further, the Joshua tree was designated as a candidate species under the California Endangered Species Act (CESA) by the California Fish and Game Commission in September 2020. A total of nine Joshua trees are present on the project site. These Joshua trees were determined to be isolated in their location and do not constitute Joshua tree woodland habitat. No other special-status species were identified on the project site. Additionally, no sensitive or designated critical habitats were found to be present on the project site. Based on the absence of suitable habitat for other special-status plant species within the project area, all of the potential special-status plant species were determined to have a low likelihood to occur. The project site has the potential to house three special-status wildlife species, Blainville’s horned lizard ( <i>Phrynosoma blainvillii</i> ), Loggerhead shrike ( <i>Lanius ludovicianus</i> ), and burrowing owl ( <i>Athene cunicularia</i> ). Further, on-site vegetation that would be removed could provide suitable nesting, roosting and perching habitat for migratory birds or raptors. With adherence to MM BIO-1 through MM BIO-4, potential impacts to biological resources would be less than significant. Additionally, LMC Chapter 15.66, Biological Impact Fee, establishes a fee to mitigate biological impacts on a regional basis. As discussed in Section 5.3 of this EIR, each individual project applicant for projects proposed on vacant and undeveloped land would be required to pay the applicable fee to mitigate regional impacts to biological resources. Payment of this fee would contribute to the acquisition of additional

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
	<p>conservation habitat to preserve the unique biological resources of the Antelope Valley. Finally, MM BIO-5 would require applicants of individual projects that could potentially impact waters of the U.S. or waters of the State, including State or federally protected wetlands, obtain permits from USACOE and CDFW. As such, the Proposed Project would be consistent with this policy.</p>
<b>Land Resources</b>	
<p><b>Objective 3.5:</b> Preserve land resources through the application of appropriate soils management techniques and the protection and enhancement of surrounding landforms and open space.</p>	
<p><b>Policy 3.5.1:</b> Minimize erosion problems resulting from development activities.</p>	<p><b>Consistent.</b> As discussed in Section 5.9, the proposed drainage of the project site would remain generally consistent with the natural drainage course of the existing site, largely flat with runoff conveyed via on-street drainage infrastructure. Prior to the start of construction, future individual project applicants must obtain coverage under the State’s most current Construction General Permit (CGP), Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ, under the National Pollutant Discharge Elimination System (NPDES). Compliance with the CGP involves the development and implementation of a project-specific Stormwater Pollution Prevention Plan (SWPPP) designed to reduce potential adverse impacts to surface water quality during the period of construction.</p> <p>Development of the Proposed Project would require the construction of onsite stormwater facilities designed in accordance with the current State Water Resources Control Board (SWRCB) Small Municipal Separate Storm Sewer Systems (MS4) General Permit (NPDES General Permit No. CAS000004 and NPDES No. PAG133577). Project improvement plans would include the review and approval of a Final Water Quality Management Plan (WQMP). The source control, site design, and treatment control BMPs required for the Proposed Project would ensure that the receiving storm drain system and proximate receiving waters are not adversely impacted by Project-related erosion.</p> <p>The Proposed Project would also be required to comply with the AVAQMD Rule 403 for projects that disturb ten acres or more for residential developments, or five acres or more for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day</p>

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
	<p>of bulk materials on at least three days. For projects that meet these requirements, then future project applicants would be required to prepare a Fugitive Dust (PM<sub>10</sub>) Control Plan.</p> <p>With regulatory compliance, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 3.5.2:</b> Since certain soils in the Lancaster study area have exhibited shrink-swell behavior and a potential for fissuring, and subsidence may exist in other areas, minimize the potential for damage resulting from the occurrence of soils movement.</p>	<p><b>Consistent.</b> The project site is in a located in an area of alluvium type soil, low shrink-swell potential, and no surface faults, as described in Section 5.6: Geology and Soils, of this EIR. Additionally, the Proposed Project would adhere to all applicable regulatory requirements related to shrink-swell, fissuring, and subsidence, minimizing geologic impacts on- or offsite. Further, because some development would be potentially located within a liquefaction zone, implementation of Mitigation Measure MM GEO-1 would be incorporated to reduce the potential for seismic related ground failure, including liquefaction. MM GEO-1 would require any future developments to conduct a geotechnical investigation report by a registered design professional prior to the approval of the proposed development plan. If risk for seismic ground failure and liquefaction in and around the future development site is identified, special design and construction provisions for the structures would be implemented, as necessary. As such, the Proposed Project would be consistent with this policy.</p>
<p><b>Energy Resources</b></p>	
<p><b>Objective 3.6:</b> Encourage efficient use of energy resources through the promotion of efficient land use patterns and the incorporation of energy conservation practices into new and existing development, and appropriate use of alternative energy.</p>	
<p><b>Policy 3.6.1:</b> Reduce energy consumption by establishing land use patterns which would decrease automobile travel and increase the use of energy efficient modes of transportation.</p>	<p><b>Consistent.</b> As discussed throughout Section 5.10: Land Use and Planning and Section 5.7: Greenhouse Gas Emissions, the Proposed Project would enable mixed-use development that reduce VMT and vehicle trips by clustering uses in proximity to one another. Further, consistent with this policy, the Proposed Project would integrate the project site through a number of new or redeveloped roadways that accommodate alternative means of transportation to the automobile. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 3.6.2:</b> Encourage innovative building, site design, and orientation techniques which minimize energy use.</p>	<p><b>Consistent.</b> The Proposed Project would comply with the latest energy efficiency requirements specified in the State energy standards under Title 24</p>

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
	<p>(California Energy Code and CALGreen Code). In addition to solar ready elements, these standards encourage demand-responsive technologies such as battery storage and heat pump water heaters and would improve buildings' thermal envelopes through high-performance attics, walls, and windows to improve comfort and energy savings. Further, the Landscape Standards included in the Lancaster Health District Code call for deciduous trees to be planted at open spaces and buildings with south and west orientation, providing passive solar light and heat gain in winter, while providing cooling shade through summer. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 3.6.3:</b> Encourage the incorporation of energy conservation measures in existing and new structures.</p>	<p><b>Consistent.</b> Future development enabled by the Proposed Project would adhere to energy efficiency requirements specified in the State energy standards under Title 24 (California Energy Code and CALGreen Code), as specified in Section 5.5: Energy, of this EIR. These requirements include a range of energy conservation measures and design elements. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 3.6.4:</b> Support State and federal legislation that would eliminate wasteful energy consumption in an appropriate manner.</p>	<p><b>Consistent.</b> The Proposed Project would incorporate energy conservation features by complying with applicable regulations including CALGreen and State energy standards under Title 24, and incorporate energy design features where applicable. Additionally, the transit-oriented development would reduce the VMT associated with the proposed uses, and as a result, reduce the consumption of petroleum-based fuels. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 3.6.5:</b> Reduce the amount of energy consumed by City operations and assist residences and businesses in reducing their energy consumption rates.</p>	<p><b>Consistent.</b> As discussed in Section 5.5 of the EIR, the Proposed Project would enable mixed-use development in targeted areas and facilitate the design of a pedestrian-oriented, walkable medical campus to encourage walkability and minimize the necessity of automobile trips and VMT. These features would serve to reduce VMT and associated transportation fuel consumption. In addition, during construction activities of individual projects, vehicles would be required to comply with CARB anti-idling regulations and the In-Use Off-Road Diesel Fleet regulations which indirect reduces the consumption of petroleum-based fuels. Lancaster Choice Energy (LCE) conveys power to City consumers via Southern California Edison (SCE) infrastructure. LCE supplies power to homes and businesses via different plan options, including a base 35 percent renewable energy option; a 100 percent renewable energy option;</p>

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
	<p>and a 100 percent solar/wind net metering program for solar/wind customers. The current sources procured by LCE include wind, solar, and geothermal sources, with a goal of incorporating locally generated power. These represent the available off-site renewable sources of energy that would help meet the Proposed Project’s energy demand. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 3.6.6:</b> Consider and promote the use of alternative energy such as wind energy and solar energy. (Note: Policy 15.2.1 considers the use of waste to energy cogeneration systems as an energy source.)</p>	<p><b>Consistent.</b> Future development enabled by the Proposed Project would be constructed to the latest requirements of Title 24, Part 6, Building Energy Efficiency Standards. This would include the incorporation of solar ready requirements where applicable, as well as demand-responsive technologies such as battery storage and heat pump water heaters. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Scenic Resources</b></p>	
<p><b>Objective 3.8:</b> Preserve and enhance important views within the City, and significant visual features which are visible from the City of Lancaster.</p>	
<p><b>Policy 3.8.1:</b> Preserve views of surrounding ridgelines, slope areas, and hilltops, as well as other scenic vistas (see also Policy 19.2.5).</p>	<p><b>Consistent.</b> As discussed in Section 5.1: Aesthetics, there are no visually prominent viewpoints from the project site. Major north-south and east-west roadways, including those traversing the project site, and vacant areas of the project site afford some views of distant mountain ranges to the south and west, although these views are substantially impeded by existing development and trees.</p> <p>The Proposed Project would orient higher density development with greater building heights towards the center of the project site and in the vicinity of existing development with similar intensities. Additionally, landscaping and trees would be placed strategically along roadways and in open space areas to either screen a view or to frame a view of the distant mountains to the best extent feasible. As such, the Proposed Project would not substantially block views of the ridgelines to the south and southwest of the City. Thus, the Proposed Project would be consistent with this policy.</p>

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
<b>Plan for Public Health and Safety</b>	
<b>Goal 4:</b> To provide a secure manmade environment which offers a high level of protection from natural and manmade hazards to life, health, and property.	
<b>Geology and Seismicity</b>	
<b>Objective 4.1:</b> Minimize the potential for loss of life, physical injury, property damage, and social disruption resulting from seismic ground shaking and other geologic events.	
<p><b>Policy 4.1.1:</b> Manage potential seismic hazards resulting from fault rupture and strong ground motion to facilitate rapid physical and economic recovery following an earthquake through the identification and recognition of potentially hazardous conditions and implementation of effective standards for seismic design of structures.</p>	<p><b>Consistent.</b> As discussed in Section 5.6: Geology and Soils, the project site is greater than six miles from the Hitchbrook Fault and San Andreas Fault. Because there are no known earthquake faults that underlie the project site, there is no known potential for the Proposed Project to expose people or structures to potential substantial adverse effects associated with rupture of a known earthquake fault.</p> <p>However, the project site is located in a seismically active region of southern California and is expected to experience moderate to severe ground shaking associated with earthquakes during operation. This risk is not considered substantially different than the risk to other similar properties throughout the southern California region. The Proposed Project would adhere to State and local requirements related to reducing the effects of seismic activity. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 4.1.2:</b> Require development within hillside areas and areas which potentially have soils or underlying formations that might produce severe building constraints to have engineering studies performed in order to determine appropriate structural design criteria and effective construction standards.</p>	<p><b>Consistent.</b> As mentioned, there are no known earthquake faults that underlie the project site and no known potential for the Proposed Project to expose people or structures to potential substantial adverse effects associated with rupture of a known earthquake fault. Further, the project site is relatively flat, with a gentle slope, and is not located near a natural or man-made hillside, nor would the Proposed Project result in the creation of any new slopes onsite. No areas of potential slope instability exist within the project site. As noted in Section 5.6, development would be potentially located within liquefaction zone, implementation of MM GEO-1 would reduce the potential for seismic related ground failure, including liquefaction. Nevertheless, due to seismic activity in the southern California region, the Proposed Project would be required to adhere to the minimum standards and seismic safety requirements outlined in the latest California Building Code. Thus, the Proposed Project would be consistent with this policy.</p>

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
<b>Flooding and Drainage</b>	
<b>Objective 4.2:</b> Minimize the potential for loss of life, physical injury, property damage, and social disruption resulting from a FEMA 100-year flood.	
<p><b>Policy 4.2.1:</b> Manage flood hazards to ensure an acceptable level of risk and to facilitate rapid physical and economic recovery following a flood through the identification and recognition of potentially hazardous conditions and implementation of effective standards for location and construction of development.</p>	<p><b>Consistent.</b> As discussed in Section 5.9: Hydrology and Water Quality, the project site is bounded by Amargosa Creek on its southwestern boundary that follows a northwest/southwest direction. Additionally, an east-west branch of this channel bisects the project site approximately 930 feet south of Avenue J-8 and proceeds out of the project site. The entirety of the project site outside the drainage channel is designated as Zone X, which is outside both the 100-year and 500-year floodplains.</p> <p>The drainage channel is located in Zone AE, which includes areas with 1 percent annual chance of flood hazard. However, the FEMA FIRM Map notes that this low hazard is contained within the channel. Additionally, no development would be placed within the channel, nor would flows be altered.</p> <p>In addition, the Proposed Project shall also comply with LMC Section 15.64.060, Drainage/Flood Control Improvements Fee. Per LMC Section 15.64.060, future individual project applicants would be required to pay the City’s drainage/flood control improvements fee on all new development in the City pursuant to Article II of Chapter 13.04, to reduce the storm water runoff impacts caused by new development. Thus, the Proposed Project would be consistent with this policy.</p>
<b>Noise</b>	
<b>Objective 4.3:</b> Promote noise compatible land use relationships by implementing the noise standards identified in Table 3-1 to be utilized for design purposes in new development, and establishing a program to attenuate existing noise problem.	
<p><b>Policy 4.3.1:</b> Ensure that noise-sensitive land uses and noise generators are located and designed in such a manner that City noise objectives will be achieved.</p>	<p><b>Consistent.</b> Project-related construction activities would occur during the least-noise sensitive portion of the day to reduce noise generated by construction activities. The magnitude of impact would depend on the location of the proposed development and construction schedule. Consequently, construction noise impacts would be less than significant with implementation of MM NOI-1.</p> <p>MM NOI-2 requires loading docks be designed with sound attenuation measures which includes sound barriers to reduce off-site noise levels. An</p>

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
	<p>acoustical analysis shall be performed to ensure noise levels on sensitive uses are within the City noise compatible land use objectives on nearby sensitive receptors. Accordingly, impacts resulting from these noise sources would be reduced to less than significant with mitigation incorporated. Additionally, all other operational noise sources (e.g., roadway related noise, helicopter noise, parking lots, HVAC Systems, human activity related noise) would be less than significant.</p> <p>The majority of the Project’s operation-related vibration sources, such as mechanical equipment, would incorporate vibration attenuation mounts as required by the particular equipment specifications. As indicated in Mitigation Measure MM NOI-3, limiting the use of caisson drilling and large bulldozers to no less than 50 feet and vibratory rollers to no less than 100 feet within the nearest sensitive receptor would result in vibration levels below the 78 VdB perceptible levels. In addition, limiting the use of jackhammers to no less than 50 feet of the nearest sensitive receptors would result in vibration levels below the 78 VdB perceptible levels. Therefore, operation would not substantially increase existing vibration levels and potential construction-related vibration impacts would be less than significant with MM NOI-3. Accordingly, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 4.3.2:</b> Wherever feasible, manage the generation of single event noise levels (SENL) from motor vehicles, trains, aircraft, commercial, industrial, construction, and other activities such that SENL levels are no greater than 15 dBA above the noise objectives included in the Plan for Public Health and Safety.</p>	<p><b>Consistent.</b> Refer to the discussion of mitigation of noise impacts in the response to Policy 4.3.1 above. Thus, the Proposed Project would be consistent with the policy to reduce the generation of single event noise levels.</p>
<p><b>Policy 4.3.3:</b> Ensure that the provision of noise attenuation does not create significant negative visual impacts.</p>	<p><b>Consistent.</b> In reviewing individual project construction and operation related noise impacts, if noise attenuation is required, then site and architectural design features would be utilized to reduce off-site noise on sensitive land uses in conjunction with the provision of noise barriers. Design techniques to be considered in mitigating potential noise impacts include the use of setbacks to increase the distance between the noise source and receiver; landscaping and walls to “block” line of sight; and the placement of similar noise land uses in close proximity to one another with transition to more noise sensitive uses further from noise sources. Thus, the Proposed Project would be consistent with this policy.</p>



Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
<b>Hazardous Materials</b>	
<b>Objective 4.5:</b> Protect life and property from the potential detrimental effects (short and long term) of the creation, transportation, storage, treatment, and disposal of hazardous materials and wastes within the City of Lancaster.	
<p><b>Policy 4.5.1:</b> Ensure that activities within the City of Lancaster transport, use, store, and dispose of hazardous materials in a responsible manner which protects the public health and safety.</p>	<p><b>Consistent.</b> As discussed in Section 5.8: Hazards and Hazardous Materials, construction activities associated with the Proposed Project would be subject to applicable local, State, and federal regulations relating to the routine transport, use, and disposal of hazards and hazardous materials which appropriately address all of the environmental conditions that are present at the project site. As such, impacts would be less than significant through regulatory compliance.</p> <p>Furthermore, a variety of State and federal laws would govern the generation, treatment, and disposal of hazardous wastes during operation of the Proposed Project. The Los Angeles County Fire Department has the authority to inspect on-site uses and to enforce State and federal laws governing the storage, use, transport, and disposal of hazardous materials and wastes. In addition, the existing project site could continue to properly dispose of all generated hazard and hazardous waste to a designated recycling company in accordance with the Department of Toxic Substances Control standards. As such with, regulatory compliance, operational impacts related to hazards and hazardous waste would be less than significant. Therefore, the Proposed Project would be consistent with this policy.</p>
<b>Crime Prevention and Protection Services</b>	
<b>Objective 4.6:</b> Reduce the risk of crime and provide residents with security through maintenance of an adequate force of peace officers, physical planning strategies that maximize surveillance, minimize opportunities for crimes, and by creating a high level of public awareness and support for crime prevention.	
<p><b>Policy 4.6.1:</b> Ensure that adequate law enforcement is provided to the citizens and businesses of the City of Lancaster.</p>	<p><b>Consistent.</b> As determined in Section 5.13.2: Sheriff Services, the Proposed Project would slightly decrease the patrol officer to resident ratio and would require additional patrol officers to maintain the current service ratio. However, as required by LMC 15.64.130, future developments within the project site would require payment of the City’s development impact fee and Sheriff’s substation fee for law enforcement services, in order to maintain acceptable levels of law enforcement services in the area. Accordingly, impacts would be less than significant. Thus, the Proposed Project would be consistent with this policy.</p>

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<b>Policy 4.6.2:</b> Ensure that the design of new development discourages opportunities for criminal activities to the maximum extent possible.	<b>Consistent.</b> As discussed in greater detail in Section 5.1: Aesthetics, the Proposed Project would include a range of exterior nighttime lighting sources, including at building entrances, parking areas, and streets. Lighting serves to aid in wayfinding and add a measure of security, consistent with this policy.
<b>Fire Prevention and Suppression Services</b>	
<b>Objective 4.7:</b> Ensure that development occurs in a manner that minimizes the risk of structural and wildland fire.	
<b>Policy 4.7.1:</b> Ensure that an adequate number of fire stations and adequate fire fighting equipment and personnel are provided to protect the citizens and businesses of the City of Lancaster.	<b>Consistent.</b> As determined in Section 5.13.1: Fire Services, the response times and distances for the two Los Angeles County Fire Department (LACFD) stations serving the project site are adequate. Further, as discussed in Section 5.13.1 the Proposed Project would have less than significant impacts related to fire services.
<b>Policy 4.7.2:</b> Ensure that the design of new development minimizes the potential for fire.	<b>Consistent.</b> Future individual development allowed by the Proposed Project would be required to comply with all federal, State, and local requirements related to fire safety. These include the provision of fire apparatus access roads and adequate water system flow and equipment, among others, as outlined in the Los Angeles County Fire Code. Thus, the Proposed Project would be consistent with this policy.
<b>Goal 5:</b> To provide a system of emergency services that will enable the City to act promptly with appropriate measures in the event of a natural or man-made disaster, to save lives, alleviate human suffering, minimize damage and maintain the capability to effectively continue City operations.	
<b>Disaster Preparedness</b>	
<b>Objective 5.1:</b> Maintain a level of preparedness to respond to emergency situations which will save lives, protect property, and facilitate recovery with a minimum of disruption.	
<b>Policy 5.1.1:</b> Expand access to resources through the coordination and cooperation in planning and operations along multi agency and jurisdictional lines to ensure adequate public services during major emergencies.	<b>Consistent.</b> As discussed in Section 5.13.1 and Section 5.13.2, the Proposed Project would have less than significant impacts related to fire and law enforcement services. Accordingly, the Proposed Project would not impede or preclude the City from ensuring emergency readiness and pursuing this policy. Thus, the Proposed Project would be consistent with this policy.
<b>Emergency Medical Facilities</b>	
<b>Objective 5.2:</b> Promote the provision of quality medical facilities and services to meet the needs of area residents.	
<b>Policy 5.2.1:</b> Facilitate the expansion and extension of quality medical and emergency medical facilities to meet the needs of Lancaster residents and businesses.	<b>Consistent.</b> The Proposed Project would allow for the replacement and modernization of the Antelope Valley Hospital and would retain the existing Antelope Valley Hospital Woman and Infant Facility. Additionally, supporting

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	medical uses would be enabled on site to encourage an integrated medical campus. Thus, the Proposed Project would be consistent with this policy.
<b>Plan for Active Living</b>	
<b>Goal 9:</b> To promote access to high quality local educational services for Lancaster residents.	
<b>Provision of School Sites/Facilities</b>	
<b>Objective 9.1:</b> Cooperate with local educational entities in their acquisition of sites and the construction of schools in such a manner to ensure the availability of adequate school facilities to serve the needs of Lancaster residents at all levels, including location of a four-year university within the City of Lancaster.	<b>Consistent.</b> With adherence to regulatory requirements mandating the payment of school impact fees, the Proposed Project would have a less than significant impact on school facilities. Thus, the Proposed Project would be consistent with this policy.
<b>Policy 9.1.2:</b> Maintain ongoing, open communication with area school districts, and take a proactive role to ensure that communication is maintained.	<b>Consistent.</b> As part of the development review process, the City reached out to the Lancaster School District and the Antelope Valley Union High School District to obtain updated information related to their school facilities and to coordinate any potential impacts the Proposed Project may have on district facilities.
<b>Goal 10:</b> To provide a park, recreation and open space system which enhances the livability of urban and rural areas by providing parks; establishing a comprehensive trails system and meeting the open space and recreational needs of Lancaster residents.	
<b>Park Land</b>	
<b>Objective 10.1:</b> Provide sufficient neighborhood and community park facilities such that a rate of 5.0 acres of park land per 1,000 residents is achieved and distributed so as to be convenient to Lancaster residents.	
<b>Policy 10.1.1:</b> Provide opportunities for a wide variety of recreational activities and park experiences, including active recreation and passive open space enjoyment within a coordinated system of local, regional, and special use park lands areas.	<b>Consistent.</b> As identified in the Access and On-Site Open Space section of the proposed Development Code, residential uses would be required to provide on-site open space. The Development Code allows flexibility in how open space requirements are met, allowing rear and side yards, courts, decks, and balconies. Additionally, LMC Section 15.64.090 (Park Acquisition Fee), Section 15.64.100 (Park Development Fee), and Section 15.72 (Park In-Lieu Fee) are required for all new residential development in order to mitigate the impacts on the availability of open space, land, park, and recreational facilities, as well as ensure adequate park, recreation, and open space facilities are provided throughout the City. Payment of the fees would further reduce any potential impact to parks, recreation, and open space facilities associated with the demand for parks and recreational facilities created by the Proposed Project. Thus, the Proposed Project would be consistent with this policy.

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<b><i>Pedestrian, Equestrian, and Bicycle Trails</i></b>	
<b>Objective 10.2:</b> Through the adoption and implementation of a Master Plan of Trails, establish and maintain a hierarchical system of trails (including equestrian, bicycle, and pedestrian trails) providing recreational opportunities and an alternative means of reaching schools, parks and natural areas, and places of employment, and connecting to regional trail systems.	
<b>Policy 10.2.4:</b> Facilitate the use of bicycles as an alternative form of transportation, as well as a form of recreation.	<b>Consistent.</b> The proposed Master Plan incorporates the City’s Master Plan of Trails and Bikeways including the existing Class II and Class III bike lane and routes along Avenue J-8 and 12th Street West and the proposed Class I, Class II, and Class III bike paths, bike lanes, bike routes, and jogging trails along Avenue J, 15th Street West, and Lorimer Avenue that would serve the residents and visitors of the project site. Additionally, the Amargosa Creek trail would potentially connect to the proposed Master Plan’s active public realm network connecting the northern and southern parts of the City by bicycle or foot. Internal biking, walking, and jogging networks are also included in the proposed Master Plan including a fitness loop that connects to the public realm and open space network. Additionally, refer to the responses to Policy 3.3.1 and Policy 3.3.2.
<b>Goal 11:</b> To enhance the quality of life for Lancaster residents by providing opportunities for social interaction and participation in a wide range of cultural activities.	
<b><i>Cultural and Art Programs and Facilities</i></b>	
<b>Objective 11.1:</b> Pursuant to the direction of the Parks, Recreation, Open Space and Cultural Master Plan, promote and provide cultural and art programs, as well as the availability of public and private cultural facilities, museums, and (indoor and outdoor) performing arts facilities to meet the needs of Lancaster residents.	
<b>Policy 11.1.2:</b> Encourage a wide variety of performing and visual arts programs, productions, and exhibits within the City of Lancaster.	<b>Consistent.</b> Implementation of the proposed Master Plan would facility a wide variety of performing and visual arts programs, productions, and exhibits within the project site. The proposed zones, such as the DC zone, would provide vibrant, walkable, urban main street areas that would provide locally and regionally serving medical, commercial, retail, entertainment, and civic uses. The DC zone would be characterized by active, pedestrian-oriented medical, retail, restaurant, art galleries, and other ground-floor uses set at or near the sidewalk, with offices and housing on upper floors.
<b>Goal 12:</b> To promote community appreciation for the unique history of the Antelope Valley and the City of Lancaster and to promote community involvement in the protection, preservation, and restoration of the area’s significant cultural, historical, or architectural features.	

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<b>Historical, Archaeological, and Cultural Resources</b>	
<b>Objective 12.1:</b> Identify and preserve and/or restore those features of cultural, historical, or architectural significance.	
<p><b>Policy 12.1.1:</b> Preserve features and sites of significant historical and cultural value consistent with their intrinsic and scientific values.</p>	<p><b>Consistent.</b> As discussed in Section 5.4: Cultural Resources, an Archaeological Assessment was prepared for the project site which included records searches for archeological, cultural, and historical resources which may be present on site, among other local research and field surveys. Known historical or cultural resources have been identified on site. Thus, due to previous identification of numerous archaeological resources in the immediate vicinity, it is possible that ground-disturbing activities could reveal the presence of previously unknown resources, including those of historical value. Implementation of MM CUL-1 through MM CUL-6, at the request of California Native American tribes, would require training, alerting field personnel to the possibility of encountering buried prehistoric or historic cultural deposits, halting work in the vicinity of a discovered resource, notifying the City, and retaining a qualified cultural resource monitor and/or archaeologist prior to proceeding. In the event of a new find, salvage excavation and reporting would be required. With mitigation incorporated, impacts would be less than significant, consistent with this policy.</p>
<b>Plan for Physical Mobility</b>	
<b>Goal 14:</b> A well-balanced transportation and circulation system which provides for the efficient and safe transport of goods and people within and through the City of Lancaster; and which balances concerns for mobility with concerns for safety and the quality of the City’s living environment.	
<b>Streets and Highways</b>	
<b>Objective 14.1:</b> Maintain a classification system of streets throughout the City which balances the need for free traffic flow with the development of a well-connected and an integrated multimodal transportation system that offers choices among modes including pedestrian ways, public transportation, streets, and bikeways (reference the Master Plan of Complete Streets for details).	
<p><b>Policy 14.1.1:</b> Manage traffic on streets to improve safety and reduce operation and maintenance costs. Auto speed and convenience may be diminished in some locations to achieve a more walkable, bike-friendly, and livable community. Street design and operation in these areas should emphasize community character, access to adjacent land uses, and the accommodation of multiple travel modes, rather than vehicle speed.</p>	<p><b>Consistent.</b> New vehicular, bicycle, and pedestrian access to each proposed Sub-Area would be proposed via new roadway connections to the arterial roadway network surrounding and traversing the project site. These connections would facilitate vehicular and pedestrian connectivity between existing land uses across the project site within the project vicinity. Thus, the Proposed Project would be consistent with this policy.</p>

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<p><b>Policy 14.1.2:</b> Maintain and improve the operation of the street network, while providing the flexibility to allow consideration of innovate design solutions.</p>	<p><b>Consistent.</b> The proposed Master Plan includes a proposed network of internal roadways that would be constructed within the project site, including primary, secondary, and tertiary thoroughfares. The proposed roadway network would consist of urban-scaled, block-defining thoroughfares that enable a walkable urban district that functions well for pedestrians, bicyclists, drivers, transit users, and those operating emergency vehicles. Amenities such as landscaping and tree plantings in the public realm, street furniture, outdoor light fixtures, and other features would enhance the pedestrian experience, while crosswalks and traffic-slowing measures such as roundabouts and curb bulb-outs would heighten pedestrian visibility and safety. During operation of full buildout of the Master Plan, improvements identified in Measures TRAF-2 through TRAF-8 would ensure that intersections operate under improved operational conditions.</p>
<p><b>Policy 14.1.4:</b> Encourage the design of roads and traffic controls to optimize safe traffic flow by minimizing turning movements, curb parking, uncontrolled access, and frequent stops.</p>	<p><b>Consistent.</b> The proposed Development Code includes street design standards which call for prominent pedestrian crossings, roundabouts that emphasize non-automobile-oriented traffic, and design elements such as landscaped medians, lane narrowing, and enhanced buffered bicycle lanes that all serve to control and modify traffic flow. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Objective 14.2:</b> Promote a street system which balances the needs of automobiles with the needs of pedestrians, bicyclists, and transit users while protecting environmental and quality of life issues. Over time, Lancaster’s streets should evolve to respond to the needs of transportation users and the surrounding neighborhood.</p>	
<p><b>Policy 14.2.1:</b> Support and improve a street network that is sensitive to environmental issues such as, biological, land, and water resources, as well as air quality, while permitting continued development within the study area.</p>	<p><b>Consistent.</b> The landscape standards outlined in the proposed Development Code include design measures to be incorporated into on-site streets, alleys, and parking lots such as biofiltration basins and vegetated swales, permeable alleys, parking lanes, sidewalks, and parking lots; and filtration and infiltration areas in the parks and greenways. These features achieve filtration and partial storage during storm cycles. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 14.2.2:</b> Manage the City’s roadway network so that it is aesthetically pleasing through the development and maintenance of streetscapes. Maintain design standards or guidelines for streetlights, landscaping, street furniture, and other streetscape features that enhance Lancaster neighborhoods, with due consideration given to maintenance needs and operational costs.</p>	<p><b>Consistent.</b> The proposed Development Code governs a range of streetscape and landscape design features such as public frontages, lane type and width, street furniture, trees and plantings, and others, which all contribute towards an aesthetically pleasing experience for all users of the public rights-of-way across the project site.</p>

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<p><b>Policy 14.2.3:</b> Support flexible street design and operation that takes into consideration community character, access to adjacent land uses, and the accommodation of multiple travel modes.</p>	<p><b>Consistent.</b> As mentioned previously, trees and landscaping proposed along roadways and parking areas serve to screen views and provide an element of noise attenuation. Further, street, walkway, and parking lighting would aid in wayfinding and user safety, as well as provide an element of security. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Parking Facilities</b></p>	
<p><b>Objective 14.3:</b> Achieve a balance between the supply of parking and demand for parking, recognizing the desirability and availability of alternatives to the use of the private automobile.</p>	
<p><b>Policy 14.3.1:</b> Maintain an adequate supply of parking that will support the present level of automobiles and allow for the expected increase in alternative modes of transportation.</p>	<p><b>Consistent.</b> The proposed Development Code provides guidelines for parking areas, structures, and facilities so that they are comfortable, as well as appropriately located and configured so as not to diminish the quality of the public realm. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 14.3.2:</b> Provide safe and convenient parking that has minimal impacts on the natural environment, the community image, and quality of life.</p>	
<p><b>Alternative Transportation Modes</b></p>	
<p><b>Objective 14.4:</b> Reduce reliance of the use of automobiles and increase the average vehicle occupancy by promoting alternatives to single-occupancy auto use, including ridesharing, non-motorized transportation (bicycle, pedestrian), and the use of public transit.</p>	
<p><b>Policy 14.4.1:</b> Support and encourage the various public transit companies, ridesharing programs and other incentive programs, that allow residents to utilize modes of transportation other than the private automobile, and accommodate those households within the Urbanizing Area of the City that rely on public transit.</p>	<p><b>Consistent.</b> The Master Plan Area’s location also takes advantage of existing transportation alternatives in the vicinity that could reduce reliance on the private automobile for transportation needs. A number of public transit options are within reasonable walking distance (less than one-quarter mile) of the Master Plan Area. AVTA Routes 1, 7, 11 and 12 directly serve the project site; AVTA provides local bus service to take children to school, employees to work, and residents to local stores and malls. AVTA also provides commuter bus service to downtown Los Angeles, Century City/West Los Angeles, and the San Fernando Valley. These routes operate during the work week only and depart from the bus station at Lancaster City Park, located approximately 1.25 miles southeast of the project site. The Lancaster Metrolink station is located approximately 1-mile northeast of the project site and provides commuter rail service to downtown Los Angeles, as well as transfers to a number of local and regional bus routes (Amtrak, AVTA, Eastern Sierra Transit Authority, and Kern Transit). As such, the Master Plan Area provides access for employees, residents, and visitors.</p>

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<p><b>Policy 14.4.2:</b> Promote the use of alternative modes of transportation through the development of convenient and attractive facilities that support and accommodate the services.</p>	<p><b>Consistent.</b> The proposed Master Plan would emphasize mixed-use development in targeted areas and cluster places of work, living, and enjoyment. These land use patterns heighten the efficient use of land resources by clustering uses and reducing the necessity of automobile trips and resultant VMT. Moreover, the design of the project site is transportation-oriented, offering internal pedestrian and bicycle linkages, interfacing with surrounding mobility networks, and being located proximate to public transportation.</p>
<p><b>Policy 14.4.3:</b> Encourage bicycling as an alternative to automobile travel for the purpose of reducing vehicle miles traveled (VMT), fuel consumption, traffic congestion, and air pollution by providing appropriate facilities for the bicycle riders (see also Policy 10.2.4 and subordinate specific actions of the Plan for Active Living).</p>	<p><b>Consistent.</b> Refer to the responses to Policy 3.3.1 and Policy 3.3.2. Thus, the Proposed Project would reduce VMT, fuel consumption, traffic congestion, and air pollution and would be consistent with this policy.</p>
<p><b>Policy 14.4.4:</b> Encourage commuters and employers to reduce vehicular trips by implementing Transportation Demand Management strategies.</p>	<p><b>Consistent.</b> Implementation of MM AQ-7 requires large employers (250 or more employees at a single work-site location) to provide a transportation demand management program, such as vanpools/carpools, ridesharing/ride-matching, and/or “guaranteed ride home” services that allow employees who use public transit to get a free ride home if they need to stay at work late.</p>
<p><b>Policy 14.4.5:</b> Design transportation facilities to encourage walking, provide connectivity, ADA accessibility, and safety by reducing potential auto/pedestrian conflicts.</p>	<p><b>Consistent.</b> Refer to the responses to Policy 3.3.1 and Policy 3.3.2. The Proposed Project would incorporate design to encourage walking and connectivity throughout the project site. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Plan for Municipal Services and Facilities</b></p>	
<p><b>Goal 15:</b> A full range of municipal services and facilities at desired levels for urban and rural areas, as appropriate.</p>	
<p><b>Water Facilities</b></p>	
<p><b>Policy 15.1.2:</b> Cooperate with local water agencies to provide an adequate water supply system to meet the standards for domestic and emergency needs.</p>	<p><b>Consistent.</b> In order to acquire sufficient water supplies for future demands, the LACWD No. 40 has established, through a MOU with AVEK, a New Water Supply (Developer Fee) for new developments, which provides a method to acquire additional imported water supplies. Developers may secure entitlements by entering into agreements with the LACWD No. 40 to purchase a permanent water supply. Individual projects proposed under the Master Plan would be required to adhere to the latest CALGreen code including complying with regulatory measures such as, installing LID standards to all interior and exterior plumbing features in order to conserve water to the</p>



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	<p>furthest extent feasible. In order to ensure impacts would remain less than significant and that the Proposed Project would have adequate water supply, each individual project proposed under the Master Plan would be required to obtain a New Water Supply Entitlement Acquisition Agreement with the LACWD No. 40 for any water beyond existing use consistent with existing City requirements.</p>
<b>Flood Control and Drainage</b>	
<p><b>Policy 15.1.3:</b> Ensure that adequate flood control facilities are provided, which maintain the integrity of significant riparian and other environmental habitats in accordance with Biological Resources policies.</p>	<p><b>Consistent.</b> Refer to the response to Policy 3.4.4 related to biological resources, response to Policy 3.5.1 involving land use policies, and response to Policy 4.2.1 concerning flood control and drainage. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 15.1.4:</b> Ensure that mitigation is provided for all development in recognized flood prone areas. Any mitigation of flood hazard in one area shall not exacerbate flooding problems in other areas.</p>	<p><b>Consistent.</b> As discussed in Section 5.9, the Proposed Project would not place development within a recognized flood prone area. Thus, the Proposed Project would be consistent with this policy.</p>
<b>Wastewater Facilities</b>	
<p><b>Policy 15.1.5:</b> Ensure sufficient infrastructure is built and maintained to handle and treat wastewater discharge.</p>	<p><b>Consistent.</b> As stated in Section 3.0: Project Description, infrastructure improvements would be constructed as needed to support the planned land uses, including the sewer system. Improvements will be determined at the time individual building projects are proposed. Thus, the Proposed Project would be consistent with this policy.</p>
<b>Solid Waste Management</b>	
<p><b>Objective 15.2:</b> Minimize the negative impacts of solid waste disposal using a variety of methods including mitigating the disposal of waste from outside the Antelope Valley.</p>	
<p><b>Policy 15.2.2:</b> Minimize the generation of solid wastes as required by State law (AB-939) through an integrated program of public education, source reduction, and recycling.</p>	<p><b>Consistent.</b> Each future applicant for an individual project would implement on-site recycling programs in accordance with the requirements of AB 341 and 1826 as appropriate, which would assist the City in achieving its State-mandated source reduction and recycling goals under AB 939. The Proposed Project would also provide adequate recycling area or room for the collection and removal of recyclable materials in accordance with AB 1327 and the LMC requirements. Each individual development project would adhere to the City’s Green Building Code for new building construction. As such, the Proposed Project would be operated in a manner that would be consistent with all source reduction and recycling goals set forth by the City to achieve</p>

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	compliance with the applicable regulatory plans consistent with the City's obligations under AB 939, including but not limited to the requirements listed in the City's General Plan.
<b>Coordination of Development and Public Services</b>	
<b>Objective 15.3:</b> Ensure the coordination of development activity with the provision of public services and facilities in order to eliminate gaps in service provision, provide economical public services, and achieve the equitable sharing of the cost of such facilities and services.	
<b>Policy 15.3.1:</b> Direct growth to areas with adequate existing facilities and services, areas which have adequate facilities and services committed, or areas where public services and facilities can be economically extended.	<b>Consistent.</b> Refer to the response to Policy 15.1.5 and Section 5.13: Public Services and Section 5.17: Utilities and Service Systems. Existing public services and utilities are available to the project site. Infrastructure improvements would be constructed as needed to support the planned land uses as necessary, and any potential impacts to public services would be reduced to less than significant with mitigation and payment of development impact fees in accordance with the City's LMC. Thus, the Proposed Project would be consistent with this policy.
<b>Plan for Economic Development and Vitality</b>	
<b>Goal 16:</b> To promote economic self-sufficiency and a fiscally solvent and financially stable community.	
<b>Creation and Retention of Local Employment</b>	
<b>Policy 16.1.1:</b> Promote a jobs/housing balance that places an emphasis on the attraction of high-paying jobs which will enable the local workforce to achieve the standard of living necessary to both live and work within the community.	<b>Consistent.</b> The Proposed Project would provide an additional increase of 6,477 new jobs and 1,600 dwelling units within the project site. Implementation of the Proposed Project would result in a jobs to housing ratio of 4.05 jobs/housing unit within the project site, thus increasing the City's overall jobs and housing ratio. Additional employment opportunities and new dwelling units created by the Proposed Project would balance this ratio by creating jobs close to existing and new housing opportunities. Many of the jobs created within the healthcare industry would also aid in the creation of the healthcare district.
<b>Provision of Municipal Revenue-Generating Land Uses</b>	
<b>Objective 16.3:</b> Foster development patterns and growth which contributes to, rather than detracts from net fiscal gains to the City.	
<b>Policy 16.3.1:</b> Promote development patterns which will minimize the costs of infrastructure development, public facilities development and municipal service cost delivery.	<b>Consistent.</b> The project site is centrally located within the City and existing infrastructure occurs throughout the project site. The mix of uses proposed under the Master Plan would utilize the existing infrastructure, and as new infrastructure upgrades or connections are required, would be minimized due to the existing infrastructure within the project site.

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<b>Establishment of Lancaster as a Center for Regional Activities</b>	
<b>Objective 16.5:</b> Promote a sense of community by establishing Lancaster as a regional center for recreational, cultural, entertainment and educational facilities.	
<b>Policy 16.5.1:</b> Promote the attraction of regional public institutions to the Lancaster area.	<b>Consistent.</b> The District Core, and the multitude of uses permitted within this area, would provide vibrant, walkable, urban main street areas that would provide locally and regionally serving medical, commercial, retail, entertainment, and civic uses. This zone is characterized by active, pedestrian-oriented medical, retail, restaurant, art galleries, and other ground-floor uses set at or near the sidewalk, with offices and housing on upper floors. The interaction of the uses would promote the attraction of various institutions and/or private employers to relocate to the project site.
<b>Financing Public Services and Facilities for New Development</b>	
<b>Objective 16.6:</b> Ensure that new development pays for its fair and equitable infrastructure and public facilities costs.	
<b>Policy 16.6.1:</b> Require new development to construct and/or pay for new on-site capital improvements necessitated by their project, consistent with performance criteria identified in Objective 15.1.	<b>Consistent.</b> Consistent with City requirements, new development would be required to pay applicable development impact fees in order to ensure adequate service.
<b>Policy 16.6.2:</b> Require new development to ensure that all new off-site capital improvements necessitated by their project are available, consistent with performance criteria identified in Objective 15.1.	
<b>Policy 16.6.3:</b> Encourage the planning and development of large scale self-sufficient, mixed use communities with integrated phasing and financing of infrastructure improvements, public facilities and municipal service costs.	
<b>Plan for Physical Development</b>	
<b>Goal 17:</b> To establish a variety of land uses which serve to develop Lancaster into a balanced and complete community in which people live, work, shop, and play.	
<b>Define Land Use Categories</b>	
<b>Policy 17.1.1:</b> Maintain an adequate inventory of land for residential, commercial, employment, quasi-public, public and open space uses.	<b>Consistent.</b> The proposed Land Use and Regulating Plan for the Proposed Project includes three new zoning districts which would enable future development at the project site: District Core (DC), District General (DG), and District Edge (DE). DC would provide locally and regionally serving medical, commercial, retail, entertainment, and civic uses; DG would enable

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	development of a variety of a variety of residential uses with activated ground floor retail space; and DE would call for high quality residential uses. As discussed throughout this section, residential uses would be required to include an open space component through a variety of possible configurations. Thus, the Proposed Project would be consistent with this policy.
<b>Policy 17.1.2:</b> Provide sufficient land to accommodate a variety of housing types meeting the economic, lifestyle, and social needs of current and future residents.	<b>Consistent.</b> The Proposed Project would enable development of a diverse range of high-quality housing choices at a variety of price points, consistent with this policy.
<b>Policy 17.1.3:</b> Provide a hierarchical pattern of attractive commercial developments which serve regional, community, and neighborhood functions with maximum efficiency and accessibility.	<b>Consistent.</b> The Central District , would consist of the core medical uses including the hospital and heliport, sub-acute care uses, continuum of care uses; hospitality uses; medical office space; office space, retail space; restaurant space; and new multifamily housing types within approximately 147.2 acres.
<b>Policy 17.1.4:</b> Provide for office and industrial-based employment-generating lands which are highly accessible and compatible with other uses in the community.	<b>Consistent.</b> The Central District would permit development that would include up to 802 multifamily apartment homes, approximately 400,000 sf of medical office space, 200,000 sf of office space, 50,000 sf of retail space, 75,000 sf of retail space, 45,000 sf of restaurant space, and up to 180 hospitality rooms and 70,000 sf of conference space within approximately 329,200 sf of hospitality uses.
<b>Policy 17.1.5:</b> Provide sufficient lands for the conduct of public, quasi-public, institutional, cultural, educational, and recreational activities.	<b>Consistent.</b> As identified in Section 5.13 and Section 5.14, any potential impacts of the Proposed Project on communal facilities and resources, including parks, schools, libraries, or others, would be reduced to less than significant through compliance with the LMC and the payment of development impact fees. Thus, the Proposed Project would be consistent with this policy.
<b>Goal 18:</b> To manage development by planning the location and intensity of urban and rural uses to create a comprehensive structure.	
<b>Land Use Patterns</b>	
<b>Policy 18.1:</b> Prevent future discordant land uses, and where possible reconcile existing discordant land uses, by establishing appropriate interface among conflicting uses and functions.	<b>Consistent.</b> The Proposed Project would enable development of an integrated medical campus focused on the replacement and modernization of the Antelope Valley Hospital and clustering of supporting uses. Consistent with this policy, the Land Use and Regulating Plan would orient proposed uses in a way that integrates with surrounding development. Refer to the response to Policy 18.1.5. Thus, the Proposed Project would be consistent with this policy.

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
<p><b>Policy 18.1.3:</b> Ensure that land use map designations are compatible with adjacent proposed land uses, surrounding developments, existing infrastructure, the roadway system, and Redevelopment Project Areas.</p>	<p><b>Consistent.</b> The proposed Master Plan would result in a land use designation change to Health District Mixed Use and a corresponding Zone Change to Health District Mixed Use and Health District Mixed Use Neighborhood. Development with greater building heights, including the new Antelope Valley Hospital, would be clustered near the center of the project site or in other areas where similar such types of development currently exist. Mid-tier height, mixed-use development would surround the DC zone and be permitted across a majority of the project site. Lower density, primarily residential development would be placed on the eastern side of the project site, integrated with similar adjacent uses to the east. Such land use placement would ensure a gradual increase in building height towards the center of the site, protecting distant views to the maximum extent feasible.</p>
<p><b>Policy 18.1.4:</b> Encourage the long-term maintenance of new residential development.</p>	<p><b>Consistent.</b> The Proposed Project would implement a Master Plan for an approximately 272.4-acre area in the City. The proposed Master Plan would guide future development at the project site, as well as any future renovation or redevelopment activities associated with existing uses, including residential development. The conceptual design of the Proposed Project would also ensure compatibility with existing residential uses within the project site and to the east and southeast. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 18.1.5:</b> Employ transitional or graduated density zoning patterns, alternative development standards, or design techniques to mitigate the interface between higher and lower intensity land uses.</p>	<p><b>Consistent.</b> The Proposed Project would locate higher density development with greater building heights, including the new Antelope Valley Hospital, clustered near the center of the project site or in other areas where similar such types of development currently exist. Lower density residential development would be placed on the eastern side of the project site, integrated with similar adjacent uses east of the site. Such land use placement would ensure a gradual increase in building height towards the center of the site, protecting distant views to the maximum extent feasible and integrating on-site building intensity with surrounding development. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Objective 18.2:</b> Encourage the location of new urban growth so that the provision of services to new development is not a burden to existing residents.</p>	
<p><b>Policy 18.2.1:</b> Encourage appropriate infill development.</p>	<p><b>Consistent.</b> The development standards identified within the proposed Master Plan are intended to provide for programmatic flexibility and creative design solutions, provide a buffer for adjacent property owners, and produce an environment that is consistent with the City's goals. The development</p>

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
	standards for each zoning district provide regulations for building placement and orientation, height, setbacks, open space, and landscaping.
<b>Policy 18.2.2:</b> Encourage appropriate development to locate so that municipal services can be efficiently provided.	<b>Consistent.</b> Refer to the response to Policy 15.3.1. Additionally, the project site is centrally located within the City and surrounded by existing development and municipal services. Thus, the Proposed Project would be consistent with this policy.
<b>Goal 19:</b> To achieve an attractive and unique image for the community by creating a sustainable, cohesive and enduring built environment.	
<b>Community Design</b>	
<b>Objective 19.1:</b> Promote the long-term image and livability of Lancaster as a unique community with a strong sense of place through the development and application of comprehensive community design guidelines.	
<b>Policy 19.1.1:</b> Develop and apply a comprehensive set of community design standards and guidelines in conformance with the goals, objectives, policies and action programs contained in the Community Design subsection of the Plan for Physical Development.	<b>Consistent.</b> Design guidelines would be consistent with the City General Plan goals, objectives, and policies and would provide direction for architecture, signage, parking, landscape, circulation, and lighting features. The purpose is to establish visual themes that are aesthetically pleasing and that would create a cohesive “sense of place” for people who work or visit the project site, and to ensure that the project site remains compatible with surrounding uses. These design guidelines include both mandatory standards and interpretive design guidelines.
<b>Community Form</b>	
<b>Objective 19.2:</b> Integrate new development with established land use patterns through quality infill to enhance overall community form and create a vibrant sense of place.	
<b>Policy 19.2.1:</b> Promote a diversity of neighborhood environments, from the traditional downtown core to well-integrated new growth areas.	<b>Consistent.</b> The proposed Master Plan includes the Health District Code, which includes three new zoning districts that would replace the existing zones within the project site. The proposed mix of zones would promote a denser mix of uses within the District core and would gradually transition to lower residential densities similar to those along the east portion of the site. Uses would also transition to the south to a mix between the District core and the residential uses on the edge of the project site.
<b>Policy 19.2.2:</b> Create walkable, mixed-use, transit- accessible neighborhoods and commercial districts that provide opportunities for young and old to live, work, shop, and recreate.	<b>Consistent.</b> As discussed throughout this section, the Proposed Project would enable mixed-use development and a variety of uses across a medical campus integrated by complete streets, including means for pedestrian, bicyclists, motorists, public transportation, and emergency vehicle access. Thus, the Proposed Project would be consistent with this policy.

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
<p><b>Policy 19.2.5:</b> Create a network of attractive paths and corridors that encourage a variety of modes of transportation within the City (see also Policy 3.8.1).</p>	<p><b>Consistent.</b> See response to Policy 19.2.2 above. Further, the proposed Development Code includes landscape standards to help generate a network of varied, human-scale, habitable, and sustainable public and private open spaces that are landscaped with native and adaptive desert plant materials, including areas along roadways. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 19.2.9:</b> Promote the neighborhood as the basic building block of urban design to achieve a sustainable community form, providing for the needs of existing residents and businesses while preserving choices for future generations.</p>	<p><b>Consistent.</b> The proposed Development Code ensures that the project site would be developed in a manner that is compatible with the surrounding residential and non-residential neighborhoods through appropriate, transitional in-fill development patterns and the inclusion of high-quality architecture, streetscape improvements, and landscape design. As such, the buildings closer to the perimeter of the project site would be comparable to the existing buildings on the adjacent properties; the project site would be surrounded by location-appropriate setback areas, streetscape improvements, and trees; and taller buildings would be located near the center of the project site where they would be screened by landscaping and smaller buildings over the life of the Proposed Project.</p>
<p><b>City Image</b></p>	
<p><b>Objective 19.3:</b> Improve the city’s visual identity by utilizing design standards that instill a sense of pride and well-being in the community.</p>	
<p><b>Policy 19.3.1:</b> Promote high quality development by facilitating innovation in architecture/building design, site planning, streetscapes, and signage.</p>	<p><b>Consistent.</b> The proposed Development Code includes design standards and guidelines which would govern future development within the project site. The Code would allow flexibility in architectural style while ensuring quality in site design and aesthetic experience through standards for allowed uses, parking facilities, urban frontage, open space, signs, and streets. Further, the Code includes landscape standards which emphasize the use of native and adaptive desert plant materials. Thus, the Proposed Project would be consistent with this policy.</p>
<p><b>Policy 19.3.2:</b> Enhance the livability of Lancaster by creating attractive, safe, and accessible gathering spaces within the community.</p>	<p><b>Consistent.</b> The Proposed Project calls for the provision of on-site private open space by residential uses for each addition, new building, or building that renovates over 50 percent of the floor area. Open space may be provided in a number of forms, including rear and side yards, courts, decks, and balconies. These spaces can accommodate community gatherings and enhance the sense of place within the Master Plan Area. In addition, the Proposed Project also calls for expanded on-site public open space in the form of squares, parks,</p>

Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
	greens, paseos, and trails integrated with the public realm within the project site to serve the recreation and leisure needs of the Proposed Project’s residents and employees. Thus, the Proposed Project would be consistent with this policy.
<b>Policy 19.3.5:</b> Enhance the image and character of the city by embracing public art to promote the history, heritage, and culture of Lancaster.	<b>Consistent.</b> As described in Section 3.0, the intent of the DC zone is to provide vibrant, walkable, urban main street areas that would provide locally and regionally serving medical, commercial, retail, entertainment, and civic uses.
<b>Housing Element</b>	
<b>Goal 6:</b> To promote sufficient housing to meet the diverse housing needs of all economic segments of the present and future City of Lancaster.	
<b>Objective 6.1:</b> Provide adequate sites that will enable the production of 2,510 housing units through September 2021 to meet the demands of present and future residents, including an adequate number and range of new dwelling types which are affordable to extremely low-, very low-, low-, moderate- and above moderate-income households.	
<b>Policy 6.1.1:</b> Ensure that a mix of housing types are provided, including single- and multi-family housing within a variety of price ranges which will provide a range of housing options for those wishing to reside within the City of Lancaster, and which will enable the City to achieve Objective 6.1.	<b>Consistent.</b> The Proposed Project would enable development of a diverse range of high-quality housing choices at a variety of price points, consistent with this policy. Thus, the Proposed Project would be consistent with this policy.
<b>Policy 6.1.2:</b> Promote infill housing development within areas presently approved for urban density residential development, as well as areas which have been committed to urban development.	<b>Consistent.</b> The proposed Master Plan would permit the development of up to 802 multifamily apartment homes within the Central District; 465 multifamily apartments and 40 single family condominiums for up to 505 new homes within the East Neighborhood; and 83 multifamily apartments and 210 single family condominiums for up to 293 new homes within the South Campus.
<b>Policy 6.1.7:</b> Ensure adequate water and sewer capacity to meet Lancaster’s housing need.	<b>Consistent.</b> As discussed in Section 5.17.1 there is substantial evidence to support a determination that there will be sufficient water supplies to meet the demands of the Proposed Project. As discussed in Section 5.17.2, there is adequate capacity of the Sanitation Districts of Los Angeles County No. 14 facilities to treat the Proposed Project’s generated wastewater.
<b>Policy 6.1.8:</b> Encourage affordable mixed use and multi-residential housing developments on mixed use zoned sites.	<b>Consistent.</b> The proposed Master Plan would allow flexibility for design, use, and intensity. The proposed Master Plan would enable replacement of the existing 342-bed Antelope Valley Hospital with up to 300 beds within a new approximately 700,000 sf facility with a 12,000 sf plant facility; and up to 80 beds within approximately 91,000 sf of acute care facilities. Further, the proposed Master Plan would allow additional development of up to 284 beds



Relevant General Plan Goals, Objectives, and Policies	Master Plan Consistency
	within 249,800 sf of sub-acute care facilities; 400 rooms within 480,000 sf of continuum of care space; 400,000 sf of medical office space, 200,000 sf of office space, 151,000 sf of retail space, 91,000 sf of restaurant space; 180 hotel rooms with 70,000 sf of conference center space; and 250 single family condominium units and 1,350 multifamily apartment units, for a total of 1,600 housing units.

Source: City of Lancaster General Plan; City of Lancaster General Plan Housing Element (2014 to 2021).

**Table 5.10-2**  
**SCAG 2016–2040 RTP/SCS Analysis**

Goal	Analysis
<b>RTP/SCS G1:</b> Align the plan investments and policies with improving regional economic development and competitiveness.	<b>Not Applicable.</b> This goal applies to SCAG and its member governments, and would not apply to the Proposed Project.
<b>RTP/SCS G2:</b> Maximize mobility and accessibility for all people and goods in the region.	<p><b>Consistent:</b> Development of the Proposed Project would ensure that mobility and accessibility for people and goods would be maximized. The Proposed Project takes a multi-modal approach to circulation system planning within the project site and encourages a balanced and safe mix of vehicular, pedestrian, bicycle, public transit, and emergency response vehicle mobility throughout the interior and perimeter of the project site.</p> <p>Section 5.15: Transportation of this EIR addresses local and regional transportation, traffic, circulation, and mobility in more detail. As discussed therein, with implementation of mitigation, any potential impacts associated with traffic and transportation would be less than significant. This would ensure that mobility and accessibility for people and goods in the vicinity of the project site and greater area continues to be realized. Thus, the Proposed Project would be consistent with this goal.</p>
<b>RTP/SCS G3:</b> Ensure travel safety and reliability for all people and goods in the region.	<b>Consistent:</b> All modes of transit would be required to follow safety standards set by corresponding regulatory documents. Streets, pedestrian walkways, and bicycle routes would follow safety precautions and standards established by local and regional agencies. Thus, the Proposed Project would be consistent with this goal.
<b>RTP/SCS G4:</b> Preserve and ensure a sustainable regional transportation system.	<b>Consistent:</b> Section 5.15 of this EIR evaluates impacts of the Proposed Project related to transportation. As determined therein, with implementation of existing regulations and standards, as well as mitigation, any potential impacts associated with traffic and transportation would be less than significant. Thus, the Proposed Project would be consistent with this goal.
<b>RTP/SCS G5:</b> Maximize the productivity of our transportation system.	<b>Consistent:</b> The local and regional transportation system would be improved and maintained to encourage efficiency and productivity. The Proposed Project strives to maximize productivity of the region’s public transportation for residents, visitors, and workers coming into the project site. The Proposed Project would enable direct access to existing AVTA transit facilities within the area of the project site to ensure accessibility and maximize the productivity thereof. Strategic location of higher density, mixed-use development is anticipated to encourage walkability and greater public transit use. Thus, the Proposed Project would be consistent with this goal.

Goal	Analysis
<p><b>RTP/SCS G6:</b> Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).</p>	<p><b>Consistent:</b> The reduction of energy use, improvements in air quality, and promotion of more environmentally sustainable development would be encouraged by planning for the use of alternative transportation modes, green design techniques for buildings, active and passive solar design for non-residential buildings, and other energy-reducing techniques. Each individual development project proposed under the Master Plan would be required to meet the latest California Green Building Standard Code and other best management practices to reduce energy demands.</p> <p>As proposed, the Proposed Project would allow a hospital, residential, retail, commercial, and open space uses that allow residents to consume services on site. This serves to reduce vehicle trips, thereby reducing air emissions, greenhouse gas emissions, and traffic impacts. Thus, the Proposed Project would be consistent with this goal.</p>
<p><b>RTP/SCS G7:</b> Actively encourage and create incentives for energy efficiency, where possible.</p>	<p><b>Consistent:</b> Innovation in desert-sensitive architectural design would be used, including energy-efficient Energy Star certified lighting fixtures and equipment and active and passive solar design for non-residential buildings.</p> <p>Project design would increase the structures energy efficiency, water efficiency, and overall sustainability. For example, new homes would be required to comply with the latest CalGreen Building Code as adopted by the City and include, but are not limited to, the installation of rooftop solar, electric vehicle charging stations, and/or small-scale wind turbines. Installation of water conservation measures would also indirectly reduce the consumption of electricity needed to move water throughout the project site. Thus, the Proposed Project would be consistent with this goal.</p>
<p><b>RTP/SCS G8:</b> Encourage land use and growth patterns that facilitate transit and non-motorized transportation.</p>	<p><b>Consistent:</b> The Proposed Project calls for a complete streets approach in the planning and design of internal roadways. AVTA is the provider of public transit service within the City. As development matures within the project site, sufficient demand may be generated to support additional bus lines or a change in routes to stop at additional locations along or within the project site. Thus, the Proposed Project would be consistent with this goal.</p>
<p><b>RTP/SCS G9:</b> Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.</p>	<p><b>Not Applicable.</b> This goal applies to SCAG and its member governments, and would not apply to the Proposed Project.</p>

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

### **5.10.2.4 Cumulative Impacts**

The Proposed Project, in combination with cumulative development, could potentially result in a significant environmental impact related to land use and planning. However, as determined in this section, the Proposed Project would not physically divide an established community. The proposed uses within the project site would be consistent and compatible with existing land uses surrounding the project site, including the residential uses to the east. Further, the Proposed Project has been demonstrated to be generally consistent with relevant goals, objectives, and policies of the City. Related projects would similarly undergo CEQA review and would be subject to compliance with the local and regional plans reviewed in this section. Therefore, implementation of related projects in accordance with relevant land use plans and policies would not combine with the Proposed Project to result in potentially significant cumulative land use impacts. Cumulative impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

### **5.10.3 SUMMARY OF SIGNIFICANCE**

Impacts related to land use and planning would be less than significant and no mitigation measures are necessary.

This section of this Environmental Impact Report (EIR) evaluates the potential for the Proposed Project to result in noise impacts within the project site and surrounding area. This evaluation uses procedures and methodologies as specified by the Federal Transit Administration (FTA), the Federal Highway Administration (FHWA), and the California Department of Transportation (Caltrans). Noise monitoring, roadway noise modeling datasheets, construction equipment noise output sheets, and construction vibration output sheets are included in Appendix H.1: Ambient Noise Data, Appendix H.2: Roadway Noise Calculations, Appendix H.3: Construction Equipment Noise Output Sheets, and Appendix H.4: Construction Vibration Output Sheets.

### 5.11.1 ENVIRONMENTAL SETTING

#### 5.11.1.1 Fundamentals of Noise

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is generally defined as unwanted sound. Sound is characterized by various parameters that describe the physical properties of sound waves. These properties include the rate of oscillation (frequency); the distance between successive high and low noise levels, the speed of propagation; and the pressure level or energy content of a given sound wave. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level.

The unit of sound pressure expressed as a ratio to the faintest sound detectable to a person with normal hearing is called a decibel (dB). Sound or noise can vary in intensity by more than one million times within the range of human hearing. A logarithmic loudness scale, similar to the Richter scale for earthquake magnitude, is used to describe sound-intensity levels. The human ear is not equally sensitive to all sound frequencies within the entire spectrum. Noise levels at maximum human sensitivity are factored more heavily into sound descriptions in a process called A weighting, written as dBA. Further reference to decibels in this analysis should be understood to be A-weighted.

Several noise descriptors have been developed to evaluate the adverse effect of community noise on people. Since noise level fluctuates over time, an equivalent sound level (Leq) descriptor is used to describe typical time-varying instantaneous noise. Finally, because community receptors are more sensitive to unwanted noise intrusion during evening and nighttime hours, State law requires that an artificial decibel increment be added to noise occurring during those time periods. The 24-hour noise descriptor with a specified evening (7:00 PM to 10:00 PM) and nighttime (10:00 PM to 7:00 AM) penalty is called the Community Noise Equivalent Level (CNEL).

Noise sources can generally be categorized as one of two types: (1) point sources, such as stationary mechanical equipment; and (2) line sources, such as a roadway. A hard, or reflective site consists of asphalt, concrete, or very hard-packed soil, which does not provide any excess ground-effect attenuation. An acoustically soft or absorptive site is characteristic of normal earth and most ground with vegetation. As an example, a 60-dBA noise level measured at 50 feet from a point source at an acoustically hard site would be 54 dBA at 100 feet from the source and 48 dBA at 200 feet from the source. Noise from the same point source at an acoustically soft site would be 52.5 dBA at 100 feet and 45 dBA at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling of distance from the source to the receptor for hard and soft sites, respectively.<sup>1</sup> Noise levels generated by a variety of activities are shown in Figure 5.11-1: Common Noise Levels.

### 5.11.1.2 Noise Terminology

Different types of scales are used to characterize the time-varying nature of sound. Applicable scales include the maximum noise level (L<sub>max</sub>), equivalent noise level (Leq), and the CNEL. L<sub>max</sub> is the maximum noise level measured during a specified period. Leq is the average A-weighted sound level measured over a given time interval. Leq can be measured over any period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods. CNEL is an average A-weighted sound level measured over a 24-hour period. However, this noise scale is adjusted to account for some individuals' increased sensitivity to noise levels during the evening and nighttime hours. A CNEL noise measurement is obtained by adding 5 dBA to sound levels occurring during the evening, from 7:00 PM to 10:00 PM, and 10 dBA to sound levels occurring during the nighttime, from 10:00 PM to 7:00 AM. The 5 dBA and 10 dBA "penalties" are applied to account for increased noise sensitivity during the evening and nighttime hours. Day-night average level (L<sub>dn</sub>) is the A-weighted equivalent sound level for a 24-hour period with an additional 10 dB imposed on the equivalent sound levels for nighttime hours of 10:00 PM to 7:00 AM. Table 5.11-1: Noise Descriptors, identifies various noise descriptors developed to measure sound levels over different periods of time.

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<sup>1</sup> USDOT FHWA, *Fundamentals and Abatement*, 97.

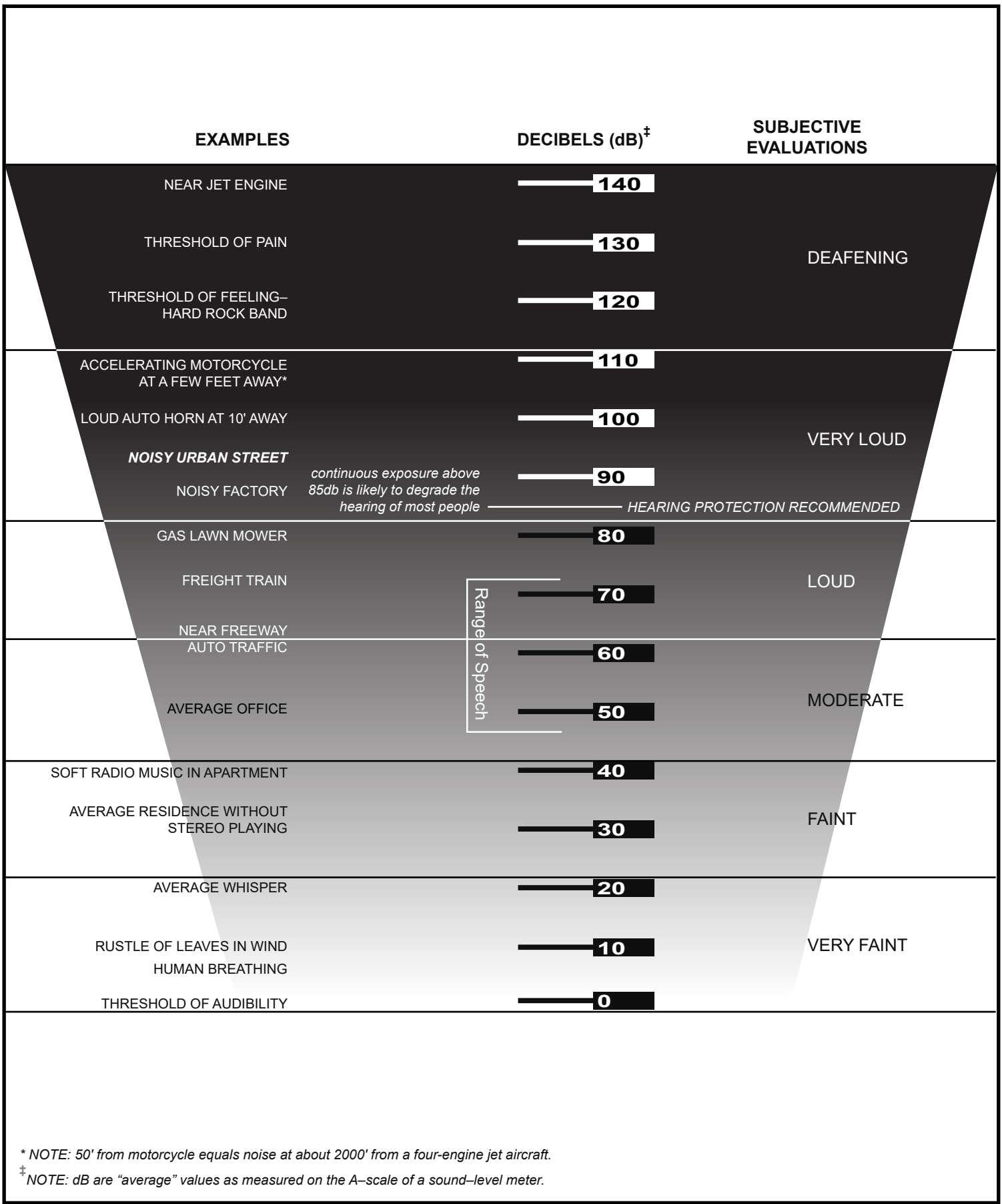


FIGURE 5.11-1

**Table 5.11-1  
Noise Descriptors**

<b>Term</b>	<b>Definition</b>
Sound	A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
Decibel (dB)	The unit for measuring the volume of sound equal to 10 times the logarithm (base 10) of the ratio of the pressure of a measure sound to a reference pressure.
A-Weighted Decibel (dBA)	A sound measurement scale that adjusts the pressure of individual frequencies according to human sensitivities. The scale accounts for the fact that the region of highest sensitivity for the human ear is between 2,000 and 4,000 cycles per second (hertz).
Equivalent Continuous Sound Level (Leq)	The sound level containing the same total energy as a time varying signal over a given time period. The $L_{eq}$ is the value that expresses the time averaged total energy of a fluctuating sound level. $L_{eq}$ can be measured over any time period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods.
Day-Night Level (Ldn)	The energy average of the A-weighted sound levels occurring during a 24-hour period with 10 dBA added sound levels occurring from 10 PM to 7 AM.
Community Noise Equivalent Level (CNEL)	A rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments add 5 dBA for the evening, 7:00 PM to 10:00 PM, and add 10 dBA for the night, 10:00 PM to 7:00 AM. The 5 and 10 decibel penalties are applied to account for increased noise sensitivity during the evening and nighttime hours. The logarithmic effect of adding these penalties to the 1-hour $L_{eq}$ measurements typically results in a CNEL measurement that is within approximately 3 dBA of the peak-hour $L_{eq}$ . <sup>1</sup>
sound pressure level	The sound pressure is the force of sound on a surface area perpendicular to the direction of the sound. The sound pressure level is expressed in dB.
Ambient Noise	The level of noise that is all encompassing within a given environment, being usually a composite of sounds from many and varied sources near to and far from the observer. No specific source is identified in the ambient environment.

*Note: California Department of Transportation, Technical Noise Supplement; A Technical Supplement to the Traffic Noise Analysis Protocol, Sacramento, CA: November 2009, N51-N54.*

### 5.11.1.3 Noise Barrier Attenuation

The introduction of a barrier between a noise source and a sensitive receptor redistributes the sound energy into several paths, including a diffracted path over the top of the barrier, a transmitted path through the barrier, and a reflected path directed away from the sensitive receptor. Diffraction is the bending of sound waves over the top of a barrier. The area behind the barrier in which diffraction occurs is known as a “shadow zone,” and sensitive receptors located in this area will experience some sound attenuation. The amount of attenuation is related to the magnitude of the diffraction angle. The diffraction



angle will increase if the barrier height increases or if the distance from sensitive receptors to the barrier is decreased. In addition to diffraction with the use of barriers, sound can travel through the barrier itself. The level of sound transmission through the barrier depends on factors relating to the composition of the barrier (such as its weight and stiffness), the angle of incidence of the sound, and the frequency spectrum of the sound. The rating of a material's ability to transmit noise is called transmission loss. Transmission loss is related to the ratio of the incident noise energy to the transmitted noise energy, and it is normally expressed in decibels, which represents the amount noise levels will be reduced when the sound waves pass through the material of the barrier.

Noise energy can also be reflected by a barrier wall. The reflected sound energy thus would not affect the sensitive receptor but may affect sensitive receptors to the left and right of the developed barrier.<sup>2</sup> Man-made or natural barriers can also attenuate sound levels, as illustrated in Figure 5.11-2: Noise Barrier Diffraction. A solid wall or berm may reduce noise levels by 5 to 10 dBA.<sup>3</sup>

Contemporary wood frame construction techniques in California typically provide about 25 dBA reduction in exterior to interior noise levels. This is due to structural means used to comply with California regulations, such as the Title 24 energy conservation standards. The minimum attenuation of exterior to interior noise provided by typical structures in California is provided in Table 5.11-2: Noise Attenuation of Typical Structures.

**Table 5.11-2**  
**Noise Attenuation of Typical Structures**

<b>Building Type</b>	<b>Open Windows (dBA)</b>	<b>Closed Windows (dBA)<sup>a</sup></b>
Residences	17.0	25.0
Churches	20.0	30.0
Hospitals/convalescent homes	17.0	25.0
Offices	17.0	25.0
Theaters	20.0	30.0
Hotels/motels	17.0	25.0

Source: Bolt Beranek and Newman, Inc., *Highway Noise: A Design Guide for Highway Engineers*, NCHRP Report No. 117, 1971. Prepared for Highway Research Board, National Academy of Sciences, Washington, D.C.

<sup>a</sup> As shown, structures with closed windows can attenuate exterior noise by a minimum of 25.0 to 30.0 dBA.

- 2 US Department of Housing and Urban Development, Office of Community Planning and Development, *The Noise Guidebook* (n.d.), 21–23.
- 3 Federal Highway Administration, *Highway Noise Fundamentals*, 1980, 18.

### 5.11.1.4 Vibration

Vibration consists of waves transmitted through a solid medium. Ground-borne vibration propagates from the source through the ground to adjacent buildings by surface waves. A vibration may be a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in hertz (Hz). Most environmental vibrations consist of a composite, or “spectrum,” of many frequencies, and are generally classified as broadband or random vibrations. Figure 5.11-3: Typical Levels of Groundborne Vibration, identifies typical groundborne vibration levels.

The normal frequency range of most groundborne vibration that can be felt starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration is often measured in terms of the peak particle velocity (PPV) in inches per second (in/sec) because it is related to the stresses that are experienced by buildings. Vibration is also measured in vibration decibels (VdB). The human threshold of perception is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Vibration levels are acceptable at approximately 85 VdB if there are an infrequent number of events per day.<sup>4</sup>

Vibration energy attenuates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source.<sup>5</sup> High frequency vibrations reduce much more rapidly than low frequencies, so that in the far-field from a source, the low frequencies tend to dominate. Soil properties also affect the propagation of vibration. When groundborne vibration interacts with a building, there is usually a ground-to-foundation coupling loss, but the vibration can also be amplified by the structural resonances of the walls and floors.<sup>6</sup> Vibration in buildings is typically perceived as rattling of windows or of items on shelves, or the motion of building surfaces.

Groundborne vibration is generally limited to areas within a few hundred feet of certain types of construction activities, especially pile driving. Road vehicles rarely create enough groundborne vibration to be perceptible to humans unless the road surface is poorly maintained and there are potholes or bumps.<sup>7</sup> If traffic, typically heavy trucks, induces perceptible vibration in buildings, such as window rattling or shaking of small loose items, then it is most likely an effect of low-frequency airborne noise or ground characteristics. Human annoyance by vibration is related to the vibration energy and the number and duration of events, as well as the setting in which the person experiences the vibration. As discussed previously, vibration can be amplified by the structural resonances of the walls and floors of buildings. The more the events or the greater the duration, the more annoying it will be to humans.

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4 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006, 7-8.

5 California Department of Transportation, *Earthborne Vibrations*, 1990, VII-27.

6 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006, 7-1, 7-2.

7 Federal Transit Administration, 2006, 7-9.

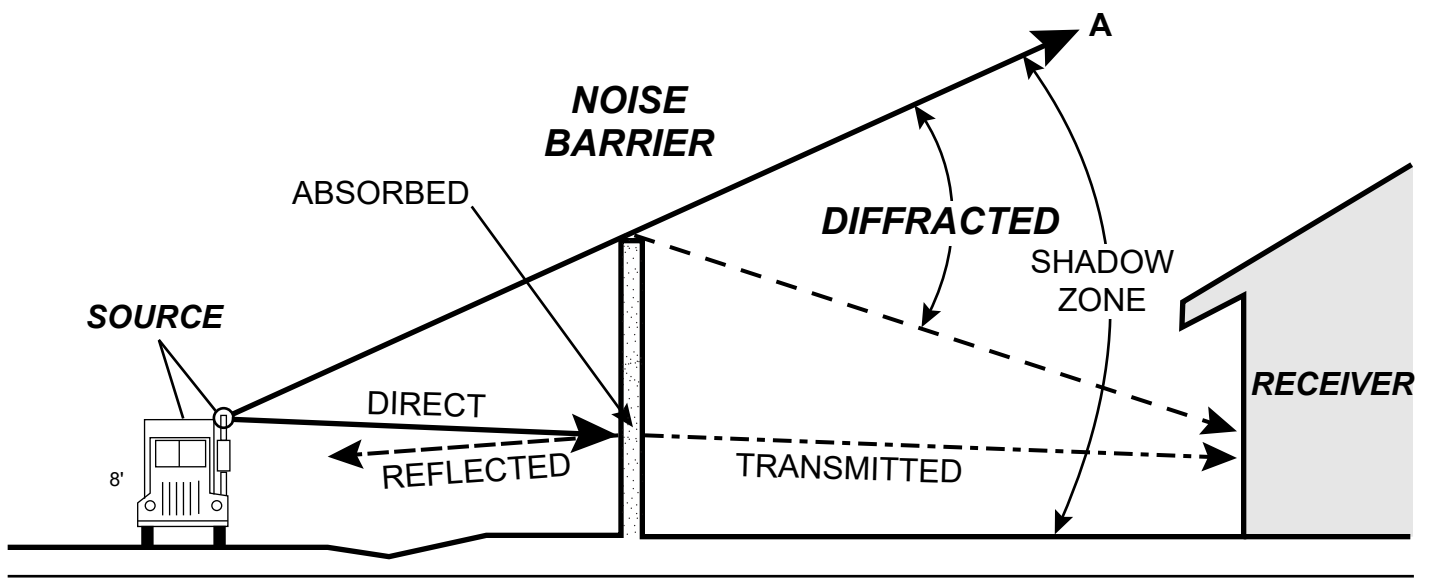
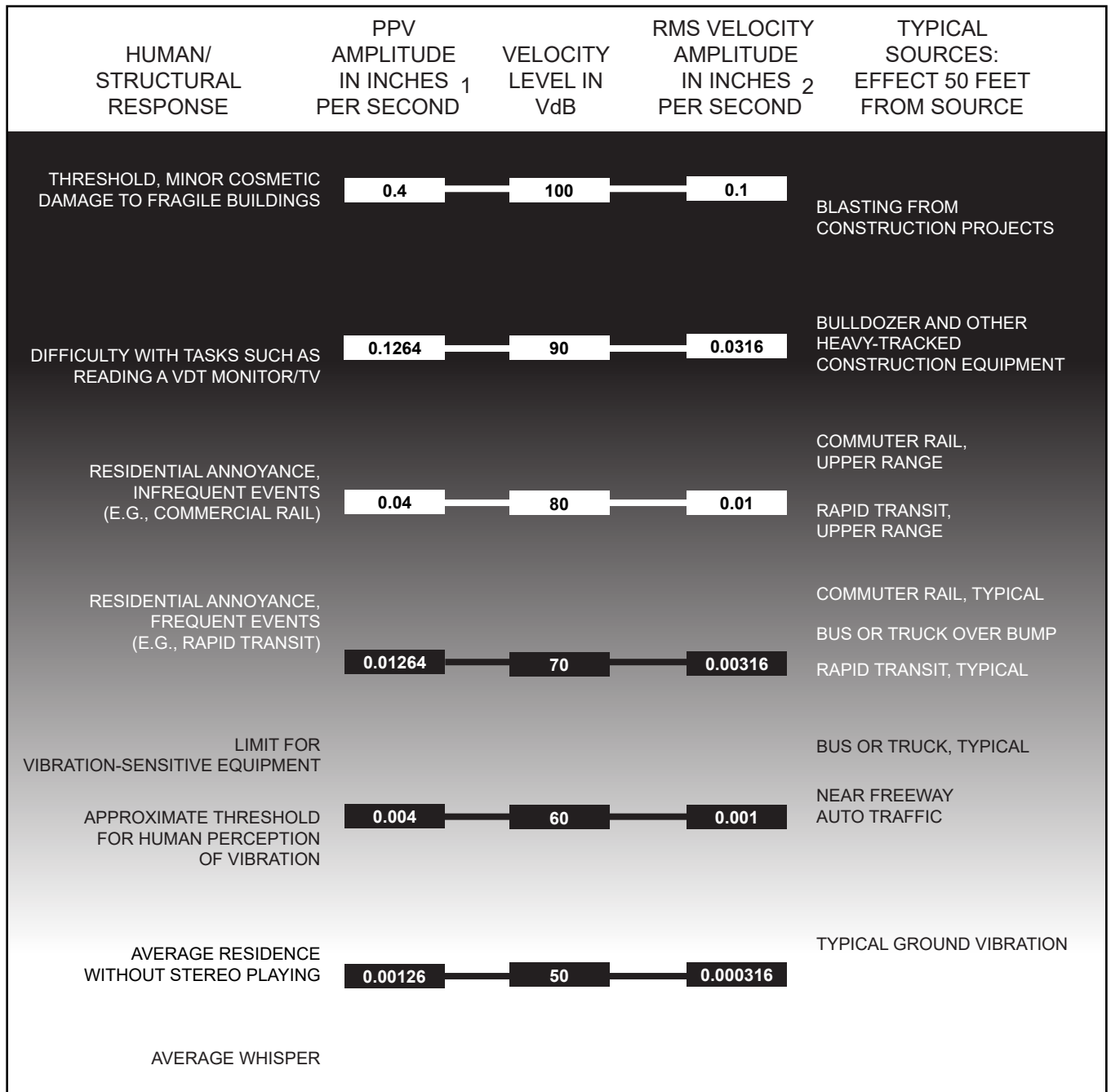
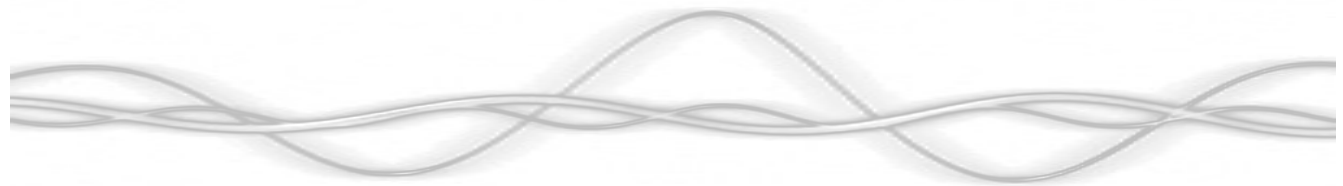


FIGURE 5.11-2



<sup>1</sup> PPV is typically a factor 1.7 to 6 times greater than RMS vibration velocity. A factor of 4 was used to calculate noise levels.

<sup>2</sup> Vibration levels in terms of velocity levels are defined as:  $V=20 \times \log_{10} (a/r)$   
 V=velocity levels in decibels  
 a=RMS velocity amplitude  
 r=reference amplitude (accepted reference quantities for vibration velocity are  $1 \times 10^{-6}$  inches/second in the United States)

FIGURE 5.11-3

### 5.11.1.5 Existing Conditions

#### *a. Project Area Noise Levels*

The project site is surrounded by transportation and stationary sources of noise that contribute to the existing ambient noise environment. Major transportation sources include mobile vehicular noise along Antelope Valley Freeway (State Route [SR] 14) to the west, Avenue J to the north, and 15th Street West.

The project site is currently developed with the existing Antelope Valley Hospital which contains 342 beds within 489,930 square feet (sf) with a 78-bed Woman and Infant Facility within approximately 277,000 sf for a total of 420 beds within 489,930 sf and a ground-based heliport. The Antelope Valley Hospital is a public hospital specializing in acute care and is a Level II trauma center.<sup>8</sup> Additionally, the project site contains 59 single-family attached units and 376 multifamily units, for a total of 435 housing units. Additionally, there is a total of approximately 1,040,430 sf of office and commercial space and approximately 230,000 sf of medical office space. A majority of the presently developed land is hardscape with minimal landscaping.

Noise sources that contribute to the ambient noise environment include operational related activity at the Antelope Valley Hospital (e.g., mechanical heating, ventilation, and air conditioning [HVAC] equipment, emergency vehicles, helicopter operations, personal vehicles, etc.), mechanical equipment related to commercial/retail uses, activities within open space areas, residential related noise sources, and vehicle travel.

The Antelope Valley Hospital is a Level II trauma center and is able to initiate definitive care for all patients. The existing ground-based heliport is used as a receiving location for patients flown in by helicopter. The ground-based heliport is located approximately 250 feet west of the main entrance to the Antelope Valley Hospital. Existing flights are dependent on emergencies; thus, the number of flights to the heliport is dependent on the need to transport patients to the hospital. The existing approach and departure path is primarily from the south.

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8 A Level II Trauma Center is a licensed hospital able to initiate definitive care for all injured patients, accredited by the Joint Commission on Accreditation of Healthcare Organizations in accordance with California Code of Regulations, Title 22, Division 9, Chapter 7, Section 100248.

**Table 5.11-3  
Noise Measurements in the Proposed Project Site and Vicinity**

Site	Description	Time Period	15-minute Leq
1a	Adjacent to the Antelope Valley Freeway to the west, south of Avenue J-8, west of 15 <sup>th</sup> Street West	10:11 AM – 10:26 AM	62.0
1b	South of Avenue J-8, west of 15 <sup>th</sup> Street West	10:06 AM – 10:21 AM	50.9
2a	Adjacent to the Antelope Valley Freeway to the west, north of Avenue J-8	10:38 AM – 10:53 AM	61.4
2b	North of Avenue J-8	10:40 AM – 10:55 AM	57.5
3	Along Avenue J, between 20 <sup>th</sup> Street West and 15 <sup>th</sup> Street West	11:37 AM – 11:52 AM	70.0
4	Corner of 15 <sup>th</sup> Street West and Avenue J-4	11:38 AM – 11:48 AM	61.9
5	South of Avenue J, west of Kingtree Avenue	11:06 AM – 11:21 AM	46.1
6	Along 13 <sup>th</sup> Street West, south of Avenue J-5 and north of Avenue J-8	11:03 AM – 11:20 AM	53.1

*Source: Refer to Appendix H.1: Ambient Noise Measurement Sheets for monitoring data sheets.*

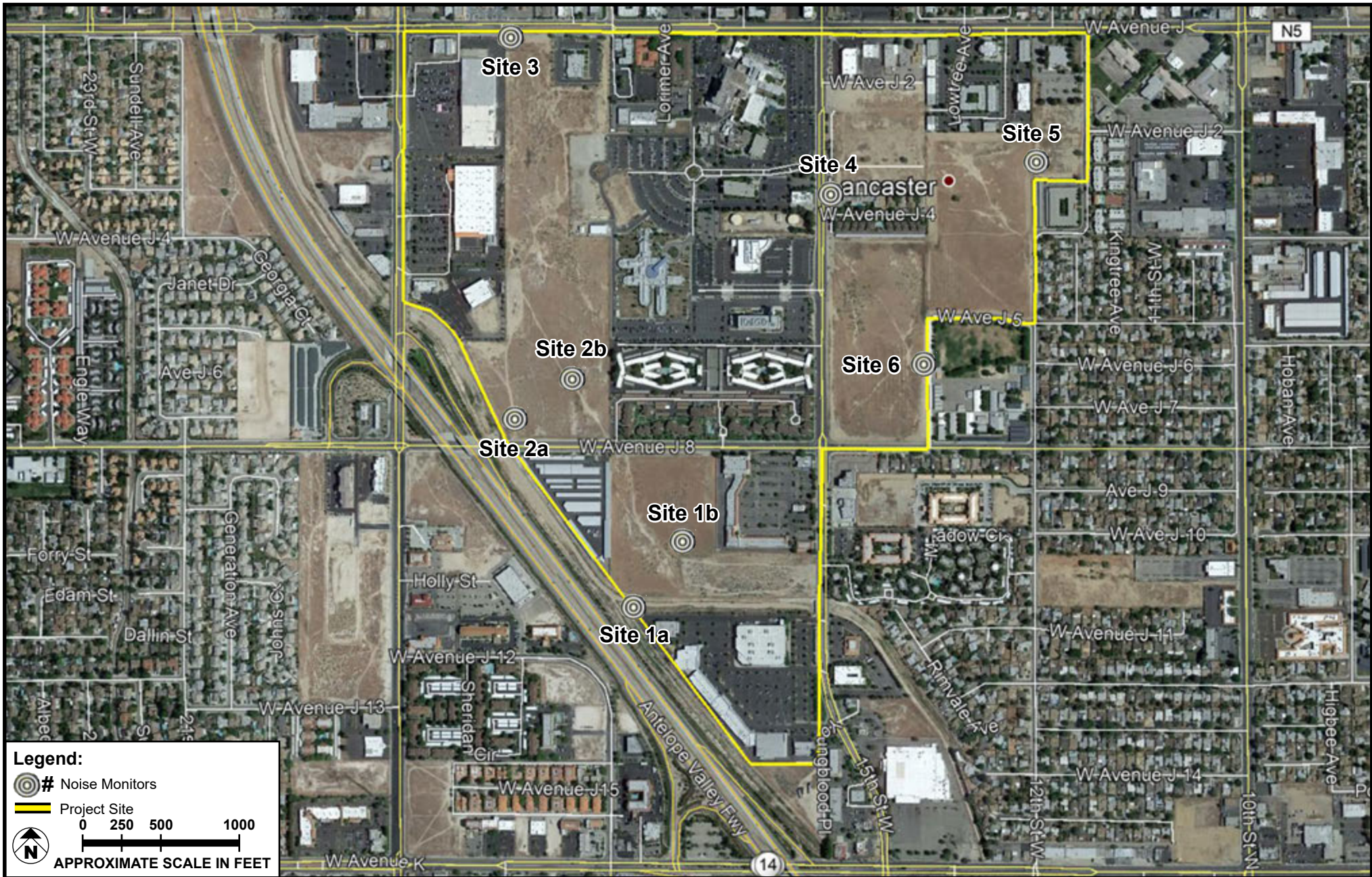
*Note: Noise measurements were conducted on June 7, 2017.*

The existing ambient noise environment within the project site was determined by conducting noise measurements. Noise monitoring was conducted over 15-minute intervals with a Larson Davis 831 Sound Level Meter. The ambient noise environment results are provided in Table 5.11-3: Noise Measurements in the Proposed Project Site and Vicinity. As shown, average ambient noise levels ranged from a low of 46.1 dBA at Site 5 to a high of 70.0 dBA at Site 3. Refer to Figure 5.11-4: Noise Monitoring Locations, for the location each monitoring site.

### **b. Existing Off-Site Roadway Noise Levels**

In order to characterize the ambient roadway noise environment in the vicinity of the project site, noise prediction modeling was conducted based on vehicular traffic volumes along nearby roadway segments. Existing roadway noise levels were modeled using the Federal Highway Administration Highway Prediction Noise Model (FHWA-RD-77-108). This model calculates the average noise level in dBA CNEL at a given roadway segment based on traffic volumes, vehicle mix, average speeds, roadway geometry, and site conditions. Traffic noise levels were calculated for sensitive receptors at distances of 75 feet from the nearest edge of the road.





SOURCE: Google Earth - 2020; Meridian Consultants - 2020

FIGURE 5.11-4



The noise prediction model used daily traffic volumes to determine average daily trips (ADTs) along the analyzed roadway segments. The estimated existing roadway noise levels are provided in Table 5.11-4: Modeled Existing Roadway Noise Levels. As indicated in Table 5.11-4, the existing vehicle-generated noise levels along roadway segments near the project site range from a low of 62.1 dBA CNEL along Avenue J-8 between 15th Street West and 10th Street West to a high of 77.9 dBA CNEL along SR-14 between Avenue J-8 and Avenue K. In terms of the City's land use noise compatibility categories based on roadway traffic only, most locations are classified as conditionally acceptable, with the residential uses along the west side of the SR-14 listed as normally unacceptable.

**Table 5.11-4  
Modeled Existing Roadway Noise Levels**

Roadway Segment	Zoning	Existing Roadway Noise Level (dBA CNEL)	Existing Noise Exposure Compatibility Category
<b>20th Street West</b>			
Between Lancaster Boulevard and Avenue J	Commercial (C)/High Density Residential (HDR)/Medium Density Residential (MDR)/Single-Family Residential (R-7,000)	65.0	Conditionally Acceptable
Between Avenue J and Avenue J-8	C/Commercial Planned Development (CPD)	68.8	Conditionally Acceptable
<b>15th Street West</b>			
Between Lancaster Boulevard and Avenue J	R-7,000/ MDR/C/Office Professional (OP)	65.1	Conditionally Acceptable
Between Avenue J and Avenue J-8	Health Care (H)/HDR/Mixed-Use Neighborhood (MU-N)	67.9	Conditionally Acceptable
Between Avenue J-8 and Avenue K	CPD/OP/MDR/Mixed-Use Commercial (MU-C)	65.6	Conditionally Acceptable
<b>Avenue J</b>			
Between 20th Street West and 15th Street West	C/H/ OP	69.8	Conditionally Acceptable
Between 15th Street West and 10th Street West	C/OP/Public/ R-7,000	69.8	Conditionally Acceptable
<b>Avenue J-8</b>			
Between 20th Street West and 15th Street West	CPD/C/HDR/ MU-C/Open Space	66.8	Conditionally Acceptable
Between 15th Street West and 10th Street West	OP/ R-7,000/MDR	62.1	Conditionally Acceptable



Roadway Segment	Zoning	Existing Roadway Noise Level (dBA CNEL)	Existing Noise Exposure Compatibility Category
<b>SR-14</b>			
Between Avenue J and Avenue J-8	R-7,000/CPD/C/Open Space	76.5	Conditionally Acceptable/Normally Unacceptable
Between Avenue J-8 and Avenue K	CPD/Open Space/C	77.9	Conditionally Acceptable/Normally Unacceptable

Notes: Roadway noise model results are provided in Appendix H.2. Roadway noise levels are modeled 75 feet from the center of the roadway.

### c. Existing Vibration Conditions

The primary source of existing groundborne vibration in the vicinity of the project site is vehicle traffic on the SR 14. According to the FTA,<sup>9</sup> typical road traffic-induced vibration levels are unlikely to be perceptible by people. In part, FTA indicates that “it is unusual for vibration from traffic including buses and trucks to be perceptible, even in a location close to major roadways.” Trucks and buses typically generate vibration levels of approximately 63 VdB (at 50 feet distance), and these levels could reach 72 VdB when trucks and buses pass over bumps in the road. Therefore, based on FTA published vibration data (levels above 75 VdB are distinctly perceptible), the existing ground vibration environment in the Project vicinity would be below the perceptible levels.

### d. Location of Sensitive Noise Receptors

Noise- and vibration-sensitive uses include residences, schools, libraries, health care facilities, and open space/recreation areas where quiet environments are necessary for enjoyment, public health, and safety. Noise-sensitive land uses which the project site include the Antelope Valley Hospital and multifamily residential units along 15th Street West and Avenue J-8. Off-site sensitive receptors include the multifamily residential uses immediately to the south and east, as well as north of Avenue J. A school is located adjacent to the southeast portion of the project site north of Avenue J-8 and east of 13th Street West.

9 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2004.

## 5.11.2 REGULATORY SETTING

### 5.11.2.1 Federal

#### *a. Department of Housing and Urban Development*

The U.S. Department of Housing and Urban Development (HUD) has set a goal of 65 dBA CNEL as a desirable maximum exterior standard for residential uses developed under HUD funding. While HUD does not specify acceptable interior noise levels, standard construction of residential uses constructed typically provides in excess of 20 dBA of attenuation with the windows closed. Based on this premise, the interior CNEL should not exceed 45 dBA CNEL.<sup>10</sup>

#### *b. Federal Transit Administration*

The FTA has published guidelines for assessing the impacts of groundborne vibration associated with construction activities, which have been applied by other jurisdictions to other types of projects. The FTA's measure of the threshold of architectural damage for conventional sensitive structures (e.g., residential units, etc.) is 0.2 inch per second PPV.<sup>11</sup> The vibration threshold of perception is 0.01 inch per second PPV. With respect to human annoyance, the FTA provides criteria for various land use categories which are based on the frequency of vibration events. According to the FTA, a vibration criterion of 72 VdB should be used for residential land uses. With respect to potential building damage (primarily from construction activities), the FTA provides guidelines for the evaluation of potential groundborne vibration damage applicable to various building categories. According to FTA guidelines, a vibration criterion of 0.20 inches per second, or 106 VdB, should be considered as the significant impact level for nonengineered timber and masonry buildings. Structures engineered with concrete and masonry (no plaster) have vibration damage criteria of 0.3 inches per second, or 110 VdB. All structures or buildings constructed of reinforced-concrete, steel, or timber, have vibration damage criteria of 0.50 inches per second, or 114 VdB. The general human response to different levels of groundborne vibration velocity levels are as follows: 65 VdB is the approximate threshold of perception for many people; 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible; and 85 VdB is the vibration acceptable only if there are an infrequent number of events per day.

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10 Code of Federal Regulations, Title 24, sec. 51, *Housing and Urban Development, Environmental Criteria and Standards*, revised April 1, 2004.

11 Federal Transit Administration, *Transit and Vibration Impact Assessment*, FTA-VA-90-1003-06, May 2006.

## 5.11.2.2 State

### **a. Noise Standards**

The California Department of Health Services (DHS) has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure; these guidelines have been included in the State of California General Plan Guidelines, which is published and updated by the Governor’s Office of Planning and Research.<sup>12</sup> According to the State, an exterior noise environment up to 60 dBA CNEL and 65 dBA CNEL is “normally acceptable” for single- and multifamily residential uses, respectively, without special noise insulation requirements. In addition, noise levels up to 75 dBA CNEL are “conditionally acceptable” with special noise insulation requirements, while noise levels at 75 dBA CNEL and above are “clearly unacceptable” for residential uses. In addition, Section 65302(f) of the California Government Code requires each county and city in the State to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(g) requiring a noise element to be included in the general plan. The noise element must (1) identify and appraise noise problems in the community, (2) recognize Office of Noise Control guidelines, and (3) analyze and quantify current and projected noise levels.

DHS’s Office of Noise Control has established guidelines to provide communities with noise environments that it deems to be generally acceptable based on land-use categories. These guidelines serve as a primary tool for a city to use to assess the compatibility between land uses and outdoor noise. Noise exposure for single-family uses is normally acceptable when the CNEL at exterior residential locations is equal to or below 60 dBA, conditionally acceptable when the CNEL is between 55 to 70 dBA, and normally unacceptable when the CNEL exceeds 70 dBA. Some overlap exists between categories. These guidelines apply to noise sources such as vehicular traffic, aircraft, and rail movements.

### **b. Vibration Standards**

The California Department of Transportation (Caltrans) published its *Transportation and Construction Vibration Guidance Manual* in September 2018.<sup>13</sup> The manual provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. This manual provides guidelines for assessing vibration damage potential to various types of buildings, ranging from 0.08 to 0.12 inches per second for extremely

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12 State of California, Governor’s Office of Planning and Research, *General Plan Guidelines 2017, 2018*, 374, accessed June 2020, <http://opr.ca.gov/planning/general-plan/guidelines.html>.

13 California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, September 2018, accessed June 2020, [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf).

fragile historic buildings, ruins, and ancient monuments, to 0.50 to 2.0 inches per second for modern industrial and commercial buildings.

The guidance and procedures provided in the Caltrans manual should be treated as screening tools for assessing the potential for adverse effects related to human perception and structural damage. General information on the potential effects of vibration on vibration-sensitive research and advanced-technology facilities is also provided, but a discussion of detailed assessment methods in this area is beyond the manual's scope. The document is not an official policy, standard, specification, or regulation. Therefore, the vibration analysis in this EIR is based on the FTA's standards and the Caltrans standards are included for informational purposes only.

### 5.11.2.3 Local

#### *a. City of Lancaster General Plan*

The City of Lancaster General Plan identifies objectives, policies, and specific actions designed to protect public health from potential noise impacts.<sup>14</sup> Noise compatible land use objectives are provided in Table 5.11-5: Noise Compatible Land Use Objectives, which are to be utilized for design purposes in new development and establishing a program to attenuate existing noise problems. For residential land uses, the objective is a maximum exterior noise level of 65 dBA CNEL. For schools, the maximum exterior noise level is 65 dBA CNEL for classrooms and 70 dBA CNEL for playgrounds. For commercial and industrial uses, the maximum exterior noise level is 70 dBA CNEL.

**Table 5.11-5  
Noise Compatible Land Use Objectives**

Land Use	Maximum Exterior CNEL	Maximum Interior CNEL
Rural, Single Family, Multiple Family Residential	65 dBA	45 dBA
Schools		
Classrooms	65 dBA	45 dBA
Playgrounds	70 dBA	--
Libraries	--	50 dBA
Hospitals/Convalescent Facilities		
Living Areas	--	50 dBA
Sleeping Areas	--	40 dBA
Commercial and Industrial	70 dBA	--
Office Areas	--	50 dBA

Source: City of Lancaster General Plan, Table 3-1: Noise Compatible Land Use Objectives, accessed June 2020, <https://www.cityoflanasterca.org/home/showdocument?id=9323>

<sup>14</sup> City of Lancaster, *General Plan 2030*, July 2009.

The following policies and specific actions from the City of Lancaster General Plan are applicable to the Proposed Project:

Policy 4.3.1                      Ensure that noise-sensitive land uses and noise generators are located and designed in such a manner that City noise objectives will be achieved.

Specific Action 4.3.1(a)        Where new development is proposed for areas within which the exterior or interior noise levels outlined in Table III-1 of Objective 4.3 are likely to be exceeded by existing or planned land uses, require a detailed noise attenuation study to be prepared by a qualified acoustical engineer, in order to determine appropriate mitigation and ways to incorporate such mitigation into project design.

Specific Action 4.3.1(b)        Enforce California Noise Insulation Standards which apply to new multiple family development within a 60 CNEL noise contour adjacent to roads, transit lines, and manufacturing areas to ensure that the units have been designed to limit interior noise levels in habitable rooms to 45 CNEL with doors and windows closed.

Specific Action 4.3.1(d)        When proposed projects include uses that could be potentially significant noise generators, require noise analyses to be prepared by an acoustical expert, including specific recommendations for mitigation when 1) the project is located in close proximity to noise sensitive land uses, or 2) the proposed noise source could violate the noise provisions of the General Plan or Municipal Code.

Specific Action 4.3.1(e)        For purposes of consistency, require that noise reports incorporate the following methodology:

- Assume three (3) dBA attenuation with doubling of distance for the natural attenuation of noise emanating from roadways (with the exception of freeways where a 4.5 dBA attenuation of doubling of distance may be utilized.)
- Use the daily design capacity of roadways as outlined in the City of Lancaster Transportation Master Plan and the posted speed limit to quantify the design noise levels adjacent to master planned transportation routes for mitigation purposes.

Specific Action 4.3.1(h) Ensure that new commercial and industrial activities (including the placement of mechanical equipment) are designed so that activities comply with the maximum noise level standards at the property line of adjacent uses, thereby minimizing impacts on adjacent uses.

Specific Action 4.3.1(i) Through application of zoning ordinance requirements, ensure that design and placement of air conditioning units and pool equipment within residential areas is accomplished in a manner which does not intrude upon the peace and quiet of adjacent noise sensitive areas.

Policy 4.3.2 Wherever feasible, manage the generation of single event noise levels (SENL) from motor vehicles, trains, aircraft, commercial, industrial, construction, and other activities such that SENL levels are no greater than 15 dBA above the noise objectives included in the Plan for Public Health and Safety.

Specific Action 4.3.2(d) As a condition of approval, limit non-emergency construction activities to daylight hours between sunrise and 8:00 PM.

Policy 4.3.3 Ensure that the provision of noise attenuation does not create significant negative visual impacts.

Specific Action 4.3.3(a) In reviewing noise impacts, utilize site and architectural design features to mitigate impacts on sensitive land uses in conjunction with the provision of noise barriers. Design techniques to be considered in mitigating potential noise impacts include:

#### SITE DESIGN

- The use of building setbacks, landscaping and walls and dedication of noise easements to increase the distance between the noise source and receiver.
- The location of uses and orientation of buildings which are compatible with higher noise levels adjacent to noise generators or in clusters to shield more noise sensitive areas and uses.
- The placement of noise tolerant land uses, such as parking areas, between the noise source and receiver.
- The placement of noise tolerant structures such as garages or carports to shield noise-sensitive areas.

- Clustering of office, commercial, or multiple family residential structures to reduce interior open space noise levels.

#### ARCHITECTURAL DESIGN

- The use of dense building materials.
- Tight fitting doors, ceilings, and floors.
- The use of noise reducing windows and the placement of entry doors on the side of the building facing away from the major roadway.
- Avoid balconies and patio areas facing major transportation routes.

#### Specific Action 4.3.3(b)

Whenever feasible, require the use of noise barriers (walls, berms, or a combination thereof) to reduce significant noise impacts.

- Noise barriers must be massive enough to prevent significant noise transmission and high enough to shield the receiver from the noise source.
- The barrier must be carefully constructed so that there are no cracks or openings.
- The barrier must interrupt the line-of-sight between the noise source and the noise receiver.
- The effects of flanking should be minimized by bending the barrier back from the noise source at the end of the barrier (Flanking is a term used to describe the manner by which the performance of a noise barrier is compromised by noise passing around the end of the barrier.)
- Require landscaping treatment to be provided in conjunction with noise barriers to provide visual relief and to reduce aesthetic impacts.

#### **b. City of Lancaster Municipal Code**

Section 8.24.040 of the Lancaster Municipal Code prohibits construction or repair work of any kind which makes loud noises within 500 feet of any occupied dwelling, apartment, hotel, mobile home, or other place of residence at any time on Sunday or any day between the hours of 8:00 PM and 7:00 AM. Construction or repair work includes any earth excavating, filling or moving where any of the foregoing entails the use of any air compressor, jack hammer, power-driven drill, riveting machine, excavator, diesel-powered truck, tractor, or other earth-moving equipment, hard hammers on steel or iron or any other machine tool, device or equipment which makes loud noises.

### 5.11.3 ENVIRONMENTAL IMPACTS

#### 5.11.3.1 Threshold of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with noise. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant noise impact if it would:

- Threshold NOI-1**      **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**
- Threshold NOI-2**      **Generation of excessive groundborne vibration or groundborne noise levels.**
- Threshold NOI-3**      **For a project located within the vicinity of a private airstrip or 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, would the project expose people residing or working in the project area to excessive noise levels?**

#### **a. Construction**

Policy 4.3.2 of the City's General Plan states that, wherever feasible, the generation of SENL from construction activities should be managed such that SENL levels are no greater than 15 dBA above the noise objectives included in Objective 4.3 of the Plan for Public Health and Safety of the City's General Plan.

#### **b. Vibration**

The City currently does not have a significance threshold to assess vibration impacts. Thus, the FTA guidelines set forth in FTA's *Transit Noise and Vibration Impact Assessment Manual*<sup>15</sup> are used to evaluate potential impacts related to construction vibration. According to FTA guidelines, impacts relative to ground-borne vibration associated with potential building damage would be considered significant if any of the following future events were to occur:

- Project construction activities cause ground-borne vibration levels to exceed 0.5 PPV at the nearest off-site reinforced-concrete, steel, or timber building.

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15 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018, accessed June 2020, [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf)



- Project construction activities cause ground-borne vibration levels to exceed 0.3 PPV at the nearest off-site engineered concrete and masonry building.
- Project construction activities cause ground-borne vibration levels to exceed 0.2 PPV at the nearest off-site nonengineered timber and masonry building.
- Project construction activities cause ground-borne vibration levels to exceed 0.12 PPV at buildings extremely susceptible to vibration damage, such as historic buildings.

**c. Roadway Noise**

The following threshold of significance is applied for traffic noise impacts:

- Any noise increase of 5 dBA or greater is potentially significant when it impacts a sensitive land use, such as a residential area, and the noise level at the sensitive land use is less than 60 dBA Ldn or CNEL.
- Any noise increase of 3 dBA or greater is potentially significant when it impacts a sensitive land use, such as a residential area, and the noise level at the sensitive land use ranges from 60 to 65 dBA Ldn or CNEL.

**d. Operational Noise**

Impacts associated with operational noise would be considered significant if any of the following were to occur:

- If Project-related operational (stationary-source) noise levels exceed the exterior 65 dBA Leq noise level standard at nearby sensitive receiver locations.
- If the existing ambient noise levels at the nearby noise-sensitive receivers:
  - Are less than 60 dBA and the Project create a readily perceptible 5 dBA or greater project-related noise level increase; or
  - Range from 60 to 65 dBA and the Project creates a barely perceptible 3 dBA or greater project-related noise level increase; or
  - Already exceed 5 dBA, and the Project creates a community noise level impact of greater than 1.5 dBA.

### 5.11.3.2 Methodology

**a. Construction**

**On-Site Construction Noise**

Construction activities typically generate noise from the operation of equipment required for construction of various facilities. Noise impacts from on-site construction and staging of construction trucks were evaluated by determining the noise levels generated by different types of construction activity, calculating

the construction-related noise level at nearby noise-sensitive receptor locations, and comparing these construction-related noise levels to existing ambient noise levels (i.e., noise levels without the proposed Master Plan-related construction noise). The actual noise level would vary, depending upon the equipment type, model, the type of work activity being performed, and the condition of the equipment.

In order to calculate a construction CNEL, hourly activity or utilization factors (i.e., the percentage of normal construction activity that would occur, or construction equipment that would be active, during each hour of the day) were estimated based on the temporal characteristics of other previous and current construction projects. The hourly activity factors express the percentage of time that construction activities would emit average noise levels. Typical noise levels for each type of construction equipment were obtained from the FHWA's Roadway Construction Noise Model (RCNM Version 1.1). Calculated noise levels associated with construction at noise-sensitive receptor locations were then compared to estimated existing noise levels and the construction noise significance thresholds. Additionally, as construction noise would occur in the context of the existing noise environment, and not as an independent noise source that occurs in isolation, the calculation increase over ambient is the logarithmic sum of the ambient noise level and the forecasted construction noise level minus the ambient noise level.

### **Construction Traffic Noise**

The analysis of construction traffic noise impacts focuses on off-site areas by: (1) identifying major roadways that may be used for construction worker commute routes or truck haul routes; (2) generally identifying the nature and location of noise-sensitive receptors along those routes; and (3) evaluating the traffic characteristics along those routes, specifically as related to existing traffic volumes. Construction traffic volume and road parameter data would be input into the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) to calculate average noise levels for these trips. Construction trucks staging and hauling route noise impacts would be evaluated by determining the noise levels generated by different types of construction activity, calculating the construction-related noise levels to existing ambient noise levels (i.e., noise levels without construction noise).

### **Construction Equipment Vibration**

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. While ground vibrations from construction activities do not often reach the levels that can damage structures, fragile buildings must receive special consideration.

Impacts due to construction activities were evaluated by identifying vibration sources (i.e., construction equipment), measuring the distance between vibration sources and surrounding structure locations, and making a significance determination.

For quantitative construction vibration assessments related to building damage and human annoyance, vibration source levels for construction equipment is taken from the FTA *Transit Noise and Vibration Impact Assessment Manual*. Building damage was assessed for each piece of equipment individually and assessed in terms of peak particle velocity. Ground-borne vibration related to human annoyance is assessed in terms of rms velocity levels.

The vibration source levels for various types of equipment are based on data provided by the FTA.

## **b. Operation**

### **Roadway Noise**

Traffic noise levels were modeled using the FHWA Noise Prediction Model (FHWA-RD-77-108). This model calculates the average noise level in dBA CNEL along a given roadway segment based on traffic volumes, vehicle mix, posted speed limits, roadway geometry, and site conditions. The model calculates noise associated with a specific line source and the results characterize noise generated by motor vehicle traffic along the specific roadway segment. The model incorporates an alpha factor that characterizes the surface conditions of the area. An acoustically hard site uses an alpha factor of zero, while an acoustically soft site uses an alpha factor of 0.5. The greater the alpha factor, the greater the noise attenuates with increasing distance. Average vehicle noise rates utilized in the FHWA model have been modified to reflect average vehicle noise rates identified for California by Caltrans. According to data collected by Caltrans, California automobile noise is 0.8 to 1.0 dBA louder than national levels, while medium and heavy truck noise is 0.3 to 3.0 dBA quieter than national levels.<sup>16</sup> Roadway traffic data was obtained from the traffic impact study for the Proposed Project (see Appendix J). Noise levels were evaluated with respect to the following modeled traffic scenarios:

- Existing Conditions
- Buildout Conditions
- Buildout plus Project Conditions

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16 Rudolf W. Hendriks, *California Vehicle Noise Emission Levels*, NTIS, FHWA/CA/TL-87/03, 1987.

## Stationary Noise

Stationary point-source noise impacts were evaluated by identifying the noise levels generated by outdoor stationary noise sources such as rooftop mechanical equipment, outdoor recreational areas, parking areas, etc.; estimating the noise level from each noise source at surrounding residential property locations; and comparing such noise levels to ambient noise levels to determine significance. Operational noise levels were calculated for the hourly Leq from each noise source to surrounding sensitive receptors based on past field monitoring of similar uses conducted by Meridian Consultants or published noise references. Noise levels were then compared against the applicable exterior noise threshold.

## Operation Vibration

The majority of the Proposed Project's operational-related vibration sources, such as mechanical and electrical equipment, would incorporate vibration attenuation mounts, as required by the particular equipment specifications. Therefore, operation of the Proposed Project would not increase the existing vibration levels in the immediate vicinity of the project site and, as such, vibration impacts associated with the Proposed Project would be minimal. Therefore, the ground borne vibration analysis is limited to Project-related construction activities.

### 5.11.3.3 Project Impacts

**Threshold NOI-1**      **Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

## Construction

Noise impacts from project construction activities within the project site would result from the noise generated by the amount of construction equipment, the location of the equipment, the timing and duration of the noise-generating construction activities, and the relative distance to noise-sensitive receptors. Each stage of construction would involve the use of various types of construction equipment and would, therefore, have its own distinct noise characteristics. Noise from construction equipment would generate both steady-state and episodic noise that could be heard within and adjacent to the project site. In addition to these on-site sources, construction would include off-site truck travel associated with the hauling of excavated materials from the project site, as well as the delivery of construction materials, including concrete. The analysis of noise levels associated with on-site construction activities as well as off-site truck travel is provided below under separate subheadings. In addition, vibration levels associated with on-site construction activities are evaluated in terms of impacts to both off-site buildings and humans.

### On-Site Construction Activities

Individual pieces of construction equipment that would most likely be used for construction within the project site produce maximum noise levels of 74 dBA to 85 dBA at a reference distance of 50 feet from the noise source, as shown in Table 5.11-6: Typical Maximum Noise Levels for Construction Equipment. The construction equipment-reference noise levels are based on measured noise data compiled by the FHWA. These maximum noise levels would occur when equipment is operating under full power conditions. However, equipment used on construction sites typically operate at less than full power. The acoustical usage factor is the percentage of time that each type of construction equipment is anticipated to be in full power operation during a typical construction day. These values are estimates and will vary based on the actual construction process and schedule.

**Table 5.11-6  
Typical Maximum Noise Levels for Construction Equipment**

Type of Equipment	Reference Maximum Noise Levels at 50 Feet <sup>1</sup> (dBA Lmax)	Acoustical Usage Factor (%)
Air compressor	78	40
Cement and mortar mixer	80	50
Concrete mixer truck	79	40
Concrete pump	81	20
Crane	81	16
Dozer	82	40
Drill Rig	84	20
Excavator	81	40
Forklift	75	20
Generator	81	50
Grader	85	40
Dump/Haul truck	76	40
Paver	77	50
Rollers	80	20
Rubber-tire loader	79	40
Tractor/Loader/Backhoe	84	40
Delivery truck	74	40
Water truck	82	10
Welders	74	40

Source: FHWA Roadway Construction Noise Model User's Guide, 2006, Table 1.

<sup>1</sup> Construction equipment noise levels are based on the FHWA Roadway Construction Noise Model.

To characterize construction-period noise levels, the average (hourly Leq) noise level associated with each construction stage was calculated based on the quantity, type, and usage factors for each type of

equipment that would be used during each construction stage. These noise levels are typically associated with multiple pieces of equipment operating simultaneously. Site grading typically requires the use of earth moving equipment, such as excavators, graders, dozers, scrapers, and tractors/loaders/backhoes. Building construction typically involves the use of cranes, forklifts, generators, tractors/loaders/backhoes, and welders. Paving typically involves the use of pavers, paving equipment, and rollers. Architectural coating typically involves air compressors.

Equipment estimates, and noise levels used for the analysis during the construction phases are representative of worst-case conditions because it is unlikely that all construction equipment contained on the project site would operate simultaneously. Construction equipment operates at its noisiest levels for certain percentages of time during operation. Equipment such as graders, dozers, and scrapers would operate at different percentages over the course of an hour.<sup>17</sup> Forecasts of construction noise levels are shown in Table 5.11-7: Construction Noise Levels, which presents construction noise levels generated by on-site construction equipment at each monitored site. As shown, without the implementation of any mitigation measures, construction noise within 50 feet of the source would increase approximately 9 dBA above the significance threshold of 80 dBA for rural, single-family, multiple family residential, and school uses and approximately 4 dBA above the significance threshold of 85 dBA for commercial and industrial uses; thus resulting in potentially significant construction related noise impacts. Implementation of any combination of construction best management practices described in Mitigation Measure MM NOI-1 would provide noise abatement during construction near adjacent receptors. As listed in MM NOI-1, the use of optimal muffler systems for all equipment would reduce construction noise levels by approximately 10 dB or more.<sup>18</sup> Temporary abatement techniques include the use of temporary and/or movable shielding for both specific and nonspecific operations. An example of such a barrier utilizes noise curtains in conjunction with trailers to create an easily movable, temporary noise barrier system. A noise barrier can achieve a 5 dB noise level reduction when it is tall enough to break the line-of-sight to the receiver. After it breaks the line-of-sight, it can achieve approximately 1.5 dB of additional noise level reduction for each one (1) meter (3.3 feet) of barrier height.<sup>19</sup> As such, with implementation of any combination the best management practice measures identified in MM NOI-1, the SENL from construction activities would not increase greater than 15 dBA above the noise objectives for residential uses, school uses, and commercial uses. Consequently, construction noise levels would be less than significant with mitigation incorporated.

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17 DOT, Federal Highway Administration (FHWA), *Traffic Noise Model*, 2006.

18 Federal Highway Administration, *Special Report – Measurement, Prediction, and Mitigation*, updated June 2017. [https://www.fhwa.dot.gov/Environment/noise/construction\\_noise/special\\_report/hcn04.cfm](https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm), accessed June 2020.

19 Federal Highway Administration, *Noise Barrier Design – Visual Quality*, accessed June 2020, [https://www.fhwa.dot.gov/Environment/noise/noise\\_barriers/design\\_construction/keepdown.cfm](https://www.fhwa.dot.gov/Environment/noise/noise_barriers/design_construction/keepdown.cfm).

**Table 5.11-7  
Construction Noise Levels**

Site	Existing Ambient Noise Level (dBA)	Construction Noise Level <sup>1</sup> (dBA)	Existing Noise + Construction Noise Level (dBA) <sup>2</sup>	Significance Threshold <sup>3</sup>	Increase Above Residential/School Significance Threshold without Mitigation	Increase Above Commercial Significance Threshold without Mitigation
1a	61.9	89.0	89.0	80.0	+9.0	+4.0
1b	50.7	89.0	89.0	80.0	+9.0	+4.0
2a	61.5	89.0	89.0	80.0	+9.0	+4.0
2b	57.4	89.0	89.0	80.0	+9.0	+4.0
3	70.2	89.0	89.1	80.0	+9.0	+4.0
4	62.0	89.0	89.0	80.0	+9.0	+4.0
5	46.2	89.0	89.0	80.0	+9.0	+4.0
6	52.8	89.0	89.0	80.0	+9.0	+4.0

Source: Refer to Appendix H.3 for construction equipment noise output sheets.

Note:

<sup>1</sup> Includes operation of 1 crane, 3 forklifts, 1 generator, 1 tractor, 1 welder/torch. (Refer to Appendix H.3-4 Building Construction).

<sup>2</sup> Logarithmic sum of the ambient noise level and the forecasted construction noise level minus the ambient noise level.

<sup>3</sup> Policy 4.3.2: SENL levels are no greater than 15 dBA above the noise compatible land use objective of 65 dBA CNEL for residential uses.

### **Off-Site Construction Activities**

Off-site construction noise, as detailed in the methodology section above, has been forecasted using the FHWA TNM and is based on forecasted haul truck activity as well as the delivery of building materials, including concrete. The FHWA TNM was used to calculate the hourly Leq noise levels generated by construction-related trucks. Noise impacts were determined by comparing the predicted noise level with that of the existing ambient noise levels along the anticipated truck travel routes. As provided from the CalEEMod outputs during construction (refer to Appendix B), at the maximum, construction would include approximately 1,961 worker trips per day including 509 vendor trips per day during building construction. Additionally, approximately 4,594 total hauling round trips would occur during demolition, or approximately 15 trips per day. Based on these trips, roadway noise levels from worker trips would be 56.2 dBA during the daytime, 59.4 dBA during the daytime from vendor trips, and 48.7 dBA during the daytime from haul trips. The cumulative noise levels from worker, vendor and haul trips would result in approximately 61.2 dBA during the daytime. As shown in Table 5.11-4 above, existing roadway noise levels ranged from a low of 62.1 dBA CNEL to a high of 77.9 dBA CNEL. As indicated therein, the estimated noise levels due to off-site construction truck travel would be within the existing ambient noise levels. Thus, Proposed Project noise impacts attributable to off-site worker, vendor and haul truck travel would be less than significant.

## Operation

### ***Buildout plus Project (2040)***

To estimate roadway noise level increase and impacts due to the Proposed Project, noise level increases were calculated from the traffic volumes provided in the Traffic Study (refer to Appendix J). Table 5.11-8: Buildout 2040 Roadway Noise Levels, illustrates the roadway noise level increases for the future Year 2040 which takes into account planned local and regional transportation improvements. As shown in Table 5.11-8, Proposed Project-related traffic would not cause noise levels along the analyzed roadways to increase by more than 3.0 dBA. The maximum noise level increase along existing roadways would be 2.2 dBA along Avenue J-8, between Avenue 15th Street West and 20th Street West. Consequently, traffic noise levels would not increase by 3 dBA or greater.

**Table 5.11-8  
Buildout 2040 Roadway Noise Levels**

Roadway Segment	Buildout (2040)	Buildout (2040) plus Project	Increase	Significant Impact?
	dBa CNEL			
<b>20th Street West</b>				
Between Lancaster Boulevard and Avenue J	66.3	66.6	+0.3	No
Between Avenue J and Avenue J-8	67.1	68.6	+1.5	No
<b>15th Street West</b>				
Between Lancaster Boulevard and Avenue J	66.2	66.9	+0.7	No
Between Avenue J-3 and Avenue J-8	67.5	68.2	+0.7	No
Between Avenue J-8 and Avenue K	64.8	65.9	+1.1	No
<b>Avenue J</b>				
Between 20th Street West and 15th Street West	69.0	69.7	+0.7	No
Between 15th Street West and 10th Street West	69.7	70.2	+0.5	No
<b>Avenue J-8</b>				
Between 20th Street West and 15th Street West	68.7	69.1	+0.4	No
Between 15th Street West and 10th Street West	64.2	64.4	+2.2	No
<b>SR-14</b>				
Between Avenue J and Avenue J-8	77.4	77.5	+0.1	No
Between Avenue J-8 and Avenue K	78.8	78.9	+0.1	No

Source: Refer to Appendix H.2 for roadway noise calculations.  
Note: N/A = not available.

## **Helicopter Noise**

As previously discussed, the Antelope Valley Hospital is a Level II trauma center and receives patients via vehicle and helicopter operations. Existing flights are dependent on emergencies; thus, the number of flights to the heliport is dependent on the need to transport patients to the hospital. The existing ground-based heliport is located approximately 250 feet west of the main entrance to the Antelope Valley Hospital.



As discussed in Section 3.0 of the EIR, the existing ground-based heliport would be relocated approximately 400 feet west from the existing landing area and would accommodate helicopters delivering patients to the new Antelope Valley Hospital. The design of the relocated ground-based heliport is unknown at this time; however, for purposes of analysis, the relocated heliport would accommodate existing helicopter flight operations, as well as those associated with the new Antelope Valley Hospital operations.

The existing approach and departure path is primarily from the south. The new location would not be far enough from the existing location to result in a significant change in existing approach and departure paths. Thus, the existing approach and departure flight paths, which are primarily from the south, would not significantly change and the general area of helicopter noise would remain similar to existing conditions. Noise from helicopter flights would occur for a relatively short period of time and would be infrequent and are largely dependent on emergencies. Therefore, the existing noise levels associated with helicopter operations would not significantly change or significantly increase as a result of the relocated ground-based heliport. Accordingly, helicopter related noise impacts would be less than significant.

### **Stationary Noise**

#### **Parking Lots**

Development of the Proposed Project would introduce parking lots associated with retail-commercial, hospitality, and medical facility related uses on the project site. Generally, noise associated with parking lots is not of sufficient volume to exceed community noise standards based on the time-weighted CNEL scale. Parking lots can be a source of annoyance due to automobile engine start-ups and acceleration, and the activation of car alarms. Parking lots can generate  $L_{eq}$  noise levels of between a low of 49 dBA  $L_{eq}$  (tire squeals) to a high of 74 dBA  $L_{eq}$  (car alarms) at 50 feet. Existing on-site residential uses along 15th Street West and off-site residential land uses along 12th Street West, Kingtree Avenue, Avenue J, Avenue J-8; off-site school use along Avenue J-8 and west of 12th Street West; the relocated hospital; and proposed on-site single-family and multifamily uses along internal roadways would be the closest sensitive receptors and would thus represent the worst-case impact associated with parking lot noise from the Proposed Project. Due to the existing level of traffic noise along area roadways, noise would not likely be audible due to the masking of noise by traffic. However, as shown in Table 5.11-4 above, roadway noise levels range from 62.1 dBA to a high of 77.9 dBA CNEL. Consequently, SENL levels from the maximum noise levels from car alarms at 74 dBA would not increase ambient noise levels greater than 15 dBA above the noise objectives. As such, noise levels from parking lots would be less than significant.

### **Loading Docks**

External truck loading and unloading docks associated with the Proposed Project would introduce potential stationary noise sources. These sources would primarily be associated with the retail and commercial, hospitality, and medical facility uses. The specific location of potential loading docks has not been determined. The operations at loading docks typically result in noise levels of 64 to 66 dBA at 75 feet. The noise from loading docks would not cause an increase in long-term average noise of more than 5 dBA on the time-weighted CNEL scale and would not be significant from that perspective. However, single noise events could be an annoyance during certain time periods such as evening and morning hours to existing on-site and off-site residential land uses. Noise levels may exceed local standards. Implementation of Mitigation Measure MM NOI-2 would require sound attenuation measures be incorporated into the design of future individual projects to minimize noise levels generated from loading docks. In addition, acoustical analysis would be prepared to ensure noise levels on sensitive uses would be within the noise compatible land use objectives (refer to Table 5.11-5 and Table 5.11-6) of nearby receptors. Impacts would be reduced to less than significant with mitigation incorporated.

### **HVAC Systems**

The Proposed Project would introduce various stationary noise sources, including HVAC systems, which would be located either on the roof, the side of a structure or on the ground. Off-site and on-site sensitive receptors could be potentially affected by the introduction of such equipment. Typically, this type of equipment produces noise levels of approximately 56.0 dBA at 50 feet from the source. This equipment would be screened and integrated in architectural design of the building which would further attenuate sound emanating from the HVAC systems. As the sound distance doubles to 100 feet from the equipment, sound levels would be 50 dBA, which would be below the exterior and interior noise limits (refer to Table 5.11-6) of nearby sensitive receptors. The use of such equipment would not generate noise levels that would substantially elevate the ambient noise environment and would not generate substantial noise and impacts to nearby noise-sensitive receptors. Impacts would be less than significant.

### **Human Activity Related Noise**

Future residents located on the project site, as well as existing and nearby sensitive receptors, may experience increases in noise due to an increase in human activity within the area either from people living on the premises, utilizing the on-site amenities including common areas, commercial and mixed-use areas. Potential residential and commercial types of noise include people talking, doors slamming, stereos, and other noise associated with human activity. These noise sources are not unique and generally contribute to ambient noise levels experiences in all land use areas. Overall, the noise generated by the Proposed Project's land uses would be consistent with the ambient noise levels in the project site, which range from 46 to 70 dBA. Accordingly, impacts would be less than significant.

## Mitigation Measures

The following mitigation measures would be implemented to reduce potentially significant impacts to less than significant.

### MM NOI-1 Construction Management Plan

Prior to the issuance of a grading permit, a construction management plan shall be prepared by the future applicant and/or construction contractor for each individual project. The construction management plan shall contain at a minimum, but not limited to, the following construction best management practices (BMPs) to quantify that reduction of construction noise levels fall below the City's established thresholds:

- The on-site speed limit for all vehicles and construction equipment shall be limited to 15 mph on any construction site.
- Construction operations shall not occur between 8:00 PM and 7:00 AM on weekdays or Saturday or at any time on Sunday. The hours of any construction related activities shall be restricted to periods and days permitted by the City's Noise Ordinance.
- The on-site construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process to the owner shall be established prior to construction commencement that will allow for resolution of noise problems that cannot be immediately solved by the site supervisor.
- Electrically handheld power equipment shall be used instead of pneumatic or internal combustion powered equipment to the extent feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far away as practicable from noise-sensitive receptors.
- Fixed construction equipment, including compressors and generators, shall be located as far as practicable from noise-sensitive receptors.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- No project-related public address or music system from construction sites shall be audible at any adjacent receptor.
- All noise producing construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating conditions that meet or exceed original factor specifications. Mobile or fixed

“package” equipment (e.g., arcwelders, air compressors, etc.) shall be equipped with shrouds and noise control features that are readily available for the type of equipment.

- Temporary noise barriers shall be used during construction phases when the use of heavy equipment is prevalent within 50 feet of sensitive receptors.

#### **MM NOI-2 Loading Docks**

Prior to the issuance of a building permit, sound attenuation measures must be incorporated into the design of individual projects to minimize noise from loading docks so that noise levels stay remain below the City’s established thresholds. These measures may include, but are not limited to, designing loading docks to have either a depressed (i.e., below grade) loading area, an internal bay, or a wall to break the line of sight between on-site and adjacent residential land uses and loading operations. Acoustical analysis shall be performed to demonstrate that the loading dock does not result in noise levels on sensitive uses within the City that exceed the noise compatible land use objectives on nearby receptors. These components must be incorporated into the plans submitted by the applicant to the City for review and approval, prior to issuance of building permits.

#### **Level of Significance**

Implementation of MM NOI-1 would provide noise abatement during construction near adjacent receptors. The SENL from construction activities would not increase greater than 15 dBA above the noise objectives for residential uses, school uses and commercial uses. As such, construction noise levels would be reduced to less than significant with mitigation incorporated.

Implementation of MM NOI-2 would require sound attenuation measures be incorporated into the design of future individual projects to minimize noise levels generated from loading docks. Noise sensitive uses would be within the noise compatible land use objectives and impacts would be reduced to less than significant with mitigation incorporated.

**Threshold NOI-2            Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?**

#### **Construction**

##### ***On-Site Construction Vibration***

Table 5.11-9: On-Site Construction Vibration Impacts–Building Damage and Table 5.11-10: On-Site Construction Vibration–Human Annoyance present the construction vibration impacts associated with on-

site construction in terms of building damage and human annoyance, respectively. As shown in Table 5.11-9, the forecasted vibration levels due to on-site construction activities would not exceed the building damage significance threshold for all sites surrounding the project area during construction. Therefore, on-site construction vibration would not result in a significant vibration impact with regard to building damage.

As shown in Table 5.11-10, the forecasted vibration levels due to on-site construction activities would exceed the human annoyance significance thresholds at potential sensitive receptors. As indicated in Mitigation Measure MM NOI-3, limiting the use of caisson drilling and large bulldozers to no less than 50 feet and vibratory rollers to no less than 100 feet within the nearest sensitive receptor would result in vibration levels below the 78 VdB perceptible levels. In addition, limiting the use of jackhammers to no less than 50 feet of the nearest sensitive receptors would result in vibration levels below the 78 VdB perceptible levels. As such, with implementation of MM NOI-3, on-site construction vibration would result in a less than significant vibration impact with regard to human annoyance.

**Table 5.11-9  
On-Site Construction Vibration Impacts—Building Damage**

Nearest Off-Site Building Structure <sup>a</sup>	Estimated Vibration Velocity Levels at the Nearest Off-Site Structures from the Project Construction Equipment <sup>b</sup> (PPV ips)						Significance Threshold (PPV ips) <sup>c</sup>	Significant Impact without Mitigation?
	Caisson Drilling	Jackhammer	Large bulldozer	Loaded Trucks	Vibratory Roller	Small Bulldozer		
<i>FTA Reference Vibration Levels at 25 feet</i>								
	0.089	0.035	0.089	0.076	0.074	0.003	—	—
50 feet	0.031	0.012	0.031	0.027	0.074	0.001	0.3	No
75 feet	0.017	0.007	0.017	0.015	0.040	0.001	0.3	No
100 feet	0.011	0.004	0.011	0.010	0.026	0.000	0.3	No

Source: US Department of Transportation, Federal Transportation Authority, *Transit Noise and Vibration Impact Assessment*, September 2018, [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf);

Refer to Appendix H.4 for construction vibration worksheets.

*a* Represents off-site building structures located nearest to the project site to the north, south, east, and west.

*b* Vibration level calculated based on FTA reference vibration level at a 25-foot distance.

*c* FTA criteria for engineered concrete and masonry buildings.

**Table 5.11-10**  
**Construction Vibration Impacts–Human Annoyance**

Distance	Estimated Vibration Velocity Levels at the Nearest Off-Site Structures from the Project Construction Equipment (PPV ips)						Significance Threshold (VdB)	Significant Impact without Mitigation?
	Caisson Drilling	Jackhammer	Large bulldozer	Loaded Trucks	Vibratory Roller	Small Bulldozer		
<i>FTA Reference Vibration Levels at 25 feet</i>								
	<b>87</b>	<b>79</b>	<b>87</b>	<b>86</b>	<b>94</b>	<b>58</b>	—	—
50 feet	78	70	78	77	85	48	78	Yes
75 feet	73	65	73	71	80	43	78	Yes
100 feet	69	61	69	68	76	39	78	No

Source: US Department of Transportation, Federal Transportation Authority, *Transit Noise and Vibration Impact Assessment*, September 2018, [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf);

Refer to Appendix H.4 for construction vibration worksheets.

Notes: **Boldface type** indicates vibration levels in exceedance of the significance threshold. Ips = inches per second; PPV = peak particle velocity.

### **Off-Site Construction Vibration**

In addition to on-site construction activities, construction delivery/haul trucks would generate ground-borne vibration as they travel along the project's anticipated off-site truck travel routes. Based on the FTA data, the vibration generated by a typical heavy-duty truck would be approximately 71 VdB (0.015 PPV) at a distance of 75 feet from the truck.<sup>20</sup> This forecasted vibration level would be well below the most stringent building damage criteria of 0.12 PPV. Therefore, vibration impacts with respect to building damage from off-site construction truck travel on public roadways would be less than significant.

In addition, vibration sensitive uses (e.g., hospital, residential, school, etc.) are located along Avenue J, Kingtree Avenue, 12th Street West, 13th Street West, Avenue J-8, and 15th Street West. Ground-borne vibration levels generated by off-site construction truck travel would be below the 78 VdB significance threshold, as these uses are located more than 75 feet from the truck travel pathway. Thus, vibration impacts with respect to human annoyance from off-site construction truck travel would be less than significant for the vibration sensitive land uses located along these roadways.

### **Operation**

Similar to existing conditions, the primary sources of vibration associated with operation would include passenger-vehicle circulation within the project area and on-site truck activity. Ground-borne vibration typically attenuates rapidly as a function of distance from the vibration source. Furthermore, the majority

<sup>20</sup> Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, September 2018, Figure 5-4, accessed June 2020, [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf)

of the Proposed Project's operation-related vibration sources, such as mechanical equipment, would incorporate vibration attenuation mounts as required by the particular equipment specifications. Therefore, operation would not substantially increase existing vibration levels in the immediate vicinity of the project site. Therefore, vibration impacts associated with operation would be less than significant.

### Mitigation Measures

The following mitigation measure would be implemented to reduce potentially significant impacts to less than significant.

MM NOI-3 Prior to the issuance of a grading permit, a construction-related vibration management plan shall be prepared by the future applicant and/or construction contractor for each individual project. The construction-related vibration management plan shall contain at a minimum, but not limited to, the following construction best management practices (BMPs) to quantify that reduction of construction vibration levels fall below the perceptible level threshold:

- In the event heavy duty construction vibration equipment are to be used, equipment use shall be limited to the following to minimize impacts related to human annoyance:
  - Caisson drilling and large bulldozers shall be limited to be no less than 50 feet and vibratory rollers to no less than 100 feet within the nearest sensitive receptor to not exceed the 78 VdB perceptible level threshold. Additionally, limiting the use of jackhammers to no less than 25 feet of the nearest sensitive receptors would result in vibration levels below the 78 VdB perceptible levels.

### Level of Significance

Implementation of Mitigation Measure MM NOI-3 would limit the use of construction equipment at the nearest sensitive receptor and would result in vibration levels below the 78 VdB perceptible levels. As such, impacts would be reduced to less than significant with mitigation incorporated.

**Threshold NOI-3 For a project located within the vicinity of a private airstrip or 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, would the project expose people residing or working in the project area to excessive noise levels?**

The Master Plan area is located approximately 3 miles southeast of Fox Airfield and 4 miles northwest of the Palmdale Regional Airport. The airport flight path and airport noise contour do not extend to the Master Plan area. Therefore, the Master Plan area is located outside of any airport land use plan or any

runway landing/take-off flight paths for this airport. No other public or public use airstrips are located within the vicinity of the Master Plan area and no airport related safety impacts would exist. Accordingly, no impacts would occur.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

No impacts would occur.

### **5.11.3.4 Cumulative Analysis**

Noise impacts are localized in nature and decrease with distance. Cumulative construction noise impacts have the potential to occur when multiple construction projects in the local area generate noise within the same time frame and contribute to the local ambient noise environment. Based on noise levels generated by construction activities associated with the Proposed Project and the proximity of both on- and off-site receptors, construction noise from the Proposed Project would contribute to the cumulative noise environment. It is expected that, as with the Proposed Project, the related projects would implement BMPs, which would minimize any noise-related nuisances during construction. Therefore, combined construction noise impact of the related projects and the Project's contribution would not cause a significant cumulative impact. Consequently, impacts would be less than significant with mitigation incorporated.

As discussed above, vibration impacts are generally less than significant when the receptor is more than 25 feet from the vibration source. Similar to the Proposed Project, if future projects occur concurrently with the Proposed Project, similar vibration mitigation measures would be implemented when adjacent to sensitive receptors. As such, cumulative construction vibration impacts would be less than significant. Impacts from vibration during operation would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### ***Level of Significance***

Cumulative impacts would be less than significant.



## 5.11.4 SUMMARY OF SIGNIFICANCE

### 5.11.4.1 Construction

MM NOI-1 would provide noise abatement during construction near adjacent receptors. Project-related construction activities would occur during the least-noise sensitive portion of the day to reduce noise generated by construction activities. The magnitude of impact would depend on the location of the proposed development and construction schedule. Consequently, construction noise impacts would be less than significant with mitigation incorporated. Cumulative noise impacts during construction would be less than significant.

Construction related vibration impacts would be less than significant with implementation of MM NOI-3. Cumulative vibration impacts during construction would be less than significant.

### 5.11.4.2 Operation

MM NOI-2 loading docks be designed with sound attenuation measures which includes sound barriers to reduce off-site noise levels. An acoustical analysis shall be performed to ensure noise levels on sensitive uses are within the City noise compatible land use objectives on nearby sensitive receptors. Accordingly, impacts resulting from these noise sources would be reduced to less than significant with mitigation incorporated. Additionally, all other operational noise sources (e.g., roadway related noise, helicopter noise, parking lots, HVAC Systems, human activity related noise) would be less than significant.

The majority of the Project's operation-related vibration sources, such as mechanical equipment, would incorporate vibration attenuation mounts as required by the particular equipment specifications. Therefore, operation would not substantially increase existing vibration levels and would remain less than significant. Cumulative impacts would be less than significant.

## 5.12 POPULATION AND HOUSING

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This section of the Environmental Impact Report (EIR) addresses the potential for the Proposed Project to induce substantial population or housing growth that would result in impacts to the environment. The existing inventory of uses present within the project site and surrounding area are described, along with the methodology and the regulatory setting that guided the evaluation pursuant to local statutes and regulations. Potential impacts to residents, housing, and employment that would result from the Proposed Project are identified, along with any measures to mitigate the significant effects of the Proposed Project.

### 5.12.1 ENVIRONMENTAL SETTING

#### 5.12.1.1 Existing Conditions

##### *a. Regional*

The Southern California Association of Governments (SCAG) provides jurisdictional-level growth forecasts for population, households, and employment. Specifically, the population, housing, and employment growth forecast for the SCAG region between 2020 and 2040 is identified in Table 5.12-1: SCAG Employment, Housing, and Population Forecasts. The forecast projects a total of 19,663,000 residents, 6,458,000 households, and 8,414,000 jobs in 2020. The forecast projects a total of 22,138,800 residents within the SCAG region in 2040, which results in additional 2,475,800 residents being added to the SCAG region between 2020 and 2040. The forecast projects 7,412,300 households in 2040 which results in an increase of 954,300 households added to the SCAG region between 2020 and 2040. The forecast projects 8,414,000 jobs by 2020 and 9,871,500 jobs by 2040 which results in an increase of 1,457,500 jobs in the SCAG region between 2020 and 2040.

The California Department of Finance (DOF) also provides population and housing information for local jurisdictions. As of January 2019, which is the most recent information provided for the County, the County's population was 10,253,716.<sup>1</sup> The number of housing units was approximately 3,546,684, with an occupancy rate of approximately 94 percent, or 3,329,771 units.<sup>2</sup> Additionally, the County contained a total of 8,102,402 jobs in 2017 which is the most recent year for economic information.<sup>3</sup>

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1 California Department of Finance (DOF), Demographic Research Unit, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark, May 2019, accessed June 2020, available at <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

2 California Department of Finance (DOF), Demographic Research Unit, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark, May 2019, accessed June 2020, available at <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

3 US Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, accessed June 2020, <https://data.census.gov/cedsci>

SCAG’s forecasted population growth for the City would be 167,400 residents in 2020 and 209,900 residents 2040. This would result in an additional 42,500 residents, or an increase of approximately 22 percent, being added to the City between 2020 and 2040.

As indicated in Table 5.12-1, the City is forecasted to have 52,400 households in 2020 and 65,300 households in 2040. This increase would result in an additional 12,900 households being added in the City between 2020 and 2040. As indicated in Table 5.12-1, the City is also forecasted to have 51,700 jobs in 2020 and 59,600 jobs in 2040, which would result in an increase of 7,900 jobs between 2020 and 2040.

**Table 5.12-1  
SCAG Employment, Housing, and Population Forecasts**

	Adopted SCAG Region Wide Forecasts			Adopted SCAG City of Lancaster Forecasts		
	Year 2020	Year 2035	Year 2040	Year 2020	Year 2035	Year 2040
Population	19,663,000	22,091,000	22,138,800	167,400	195,800	209,900
Households	6,458,000	7,325,000	7,412,300	52,400	61,000	65,300
Employment	8,414,000	9,441,000	9,871,500	51,700	56,700	59,600

*Source: Southern California Association of Governments (SCAG), 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy [2016 RTP/SCS], April 2016.*

**b. City of Lancaster**

The City of Lancaster General Plan identifies anticipated population, households, and employment growth within the City and within its sphere of influence through the year 2030. As shown in Table 5.12-2: Lancaster 2030 Growth Projection, the projected population for the year 2030 is estimated at 259,696 residents, representing an increase of 117 percent as compared to the year 2000; an estimated 81,403 households in 2030 representing an increase of approximately 113 percent between 2000 to 2030; and 71,816 jobs representing an increase of approximately 38 percent by 2030.

**Population**

According to the California DOF, the City’s forecasted population in January 2019 was 161,604 residents, which is the most recent population projection available. In 2017, the City’s population was forecasted to

be 161,401 which is an approximate increase of 0.1 percent for this time period. Additionally, population within the City has increased approximately 3.0 percent in the nine-year period between 2010 and 2019.<sup>4</sup>

**Table 5.12-2  
Lancaster 2030 Growth Projection**

	2000	2030	Percent Growth
Population	119,416	259,696	117%
Households	38,289	81,403	113%
Employment	52,119	71,816	38%

Source: City of Lancaster General Plan, Table 1-2: Lancaster 2030 Growth Projection, July 14, 2009.

## Housing

The City's housing stock in 2010 consisted of 51,835 units of which approximately 91 percent, or 46,992 units, were occupied. In 2017, there were 52,807 housing units in the City of which 47,936 were occupied and, as of January 2019, it is estimated that there are 53,103 units in the City<sup>5</sup> of which 48,207 dwelling units were occupied, or a vacancy rate of approximately 9 percent. Based on the latest estimates for 2019, the City's average household size is approximately 3.2 residents per household.<sup>6</sup>

## Employment

The employment profile for the Antelope Valley and the City primarily consists of health care and social assistance, educational services, retail trade, accommodation and food services, public administration, transportation and warehousing, and other (e.g., utilities, construction manufacturing, etc.). Health care, retail trade, and education comprise approximately 50 percent of total employment within the Antelope Valley and approximately 55 percent within the City.<sup>7</sup>

4 California Department of Finance (DOF), Demographic Research Unit, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark, May 2019, accessed June 2020, available at <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

5 California Department of Finance (DOF), Demographic Research Unit, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark, May 2019, accessed June 2020, available at <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

6 California Department of Finance (DOF), Demographic Research Unit, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark, May 2019, accessed June 2020, available at <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

7 US Census Bureau, Center for Economic Studies, Longitudinal Employer-Household Dynamics (LEHD) data, Antelope Valley Employment Profile, 2014.

The City's labor force averaged 60,700 monthly jobs in 2017 while 4,400 persons were unemployed, which equates to an unemployment rate of 6.7 percent.<sup>8</sup>

### **c. Project Site**

The project site consists of mostly developed land including the existing Antelope Valley Hospital which contains 342-beds within 489,930 square feet (sf) with a 78-bed Woman and Infant Facility within approximately 277,000 sf for a total of 420 beds within 691,930 sf and a ground-based heliport. The Antelope Valley Hospital is a public hospital specializing in acute care and is a Level II trauma center. The project site also contains 59 single-family attached units and 376 multifamily units, for a total of 435 housing units, and a total of 1,040,430 sf of office and commercial space and approximately 230,000 sf of medical office space. Based on the total development within the project site, there are approximately 1,392 residents within the project site and approximately 5,138 employees, consisting of 1,155 health care related jobs and approximately 3,983 office and commercial space related jobs.<sup>9</sup>

## **5.12.1.2 Regulatory Setting**

### **a. State**

#### **California Housing Element Law**

California planning and zoning law requires each city and county to adopt a general plan for future growth.<sup>10</sup> This plan must include a housing element that identifies the housing need for all economic segments and provides opportunities for housing development to meet that need. At the State level, the Housing and Community Development (HCD) Department estimates the relative share of California's projected population growth that would occur in each county within the State based on California DOF population projections and historical growth trends. Where there is a regional council of governments, the California HCD Department provides the regional housing need to the regional council. The regional council then assigns a share of the regional housing need to each of its cities and counties. The process of assigning shares provides cities and counties the opportunity to comment on the proposed allocations. The Housing and Community Development Department oversees the process to ensure that the regional council of governments adequately distributes its share of the State's projected housing need.

Each city and county must update its general plan housing element on a regular basis (either every five or eight years). Among other things, the housing element must incorporate policies and identify potential

<sup>8</sup> California Employment Development Department (EDD). Monthly Labor Force Data for Cities and Census Designated Places (CDP) Annual Average 2017 – Revised, April 19, 2019.

<sup>9</sup> Resident forecasts based on 3.2 residents per household. Employment forecasts are from the SCAG Employment Density Study (2001) and the office/commercial employment is based on 319 square feet per employee and the hospital employment is based on 424 square feet per employee.

<sup>10</sup> California Government Code, sec. 65300.

sites that would accommodate the city's share of the regional housing need. Before adopting an update to its housing element, the city or county must submit the draft to the State HCD Department for review. The department will advise the local jurisdiction whether its housing element complies with the provisions of California Housing Element Law.

The regional councils of governments are required to assign regional housing shares to the cities and counties within their region on a similar schedule. At the beginning of each cycle, the HCD Department provides population projections to the councils of governments, which then allocate shares to their cities and counties. The shares of regional need are allocated before the end of the cycle so that the cities and counties can amend their housing elements by the deadline.

**b. Regional and Local**

**Southern California Association of Governments**

Pursuant to federal and State law, SCAG serves as a Council of Governments, a Regional Transportation Planning Agency, and the Metropolitan Planning Organization (MPO) for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. SCAG encompasses more than 38,000 square miles. SCAG mandated responsibilities include developing plans and policies with respect to the region's population growth, transportation programs, air quality, housing, and economic development. Specifically, SCAG is responsible, in coordination with other State and local agencies, for preparing the Regional Comprehensive Plan (RCP), Regional Transportation Plan (RTP), and Regional Housing Needs Assessment (RHNA). These documents include population, employment, and housing projections for the region and its 13 subregions. The project site is located within the City of Lancaster Subregion.

**Regional Comprehensive Plan**

As part of its planning obligations, SCAG prepares the RCP; the most recent version was adopted in 2008. The RCP does not itself include population projections but serves as a policy guide upon which population projections are prepared in updates to the RTP. The 2008 RCP is an advisory document that describes future conditions if current trends continue, defines a vision for a healthier region, and recommends an Action Plan with a target year of 2035. The RCP may be voluntarily used by local jurisdictions in developing local plans and addressing local issues of regional significance. However, SCAG reviews new major regional projects based on consistency with the RTP described below.

**2016–2040 Regional Transportation Plan/Sustainable Communities Strategy**

The 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) is an update to the 2012–2035 RTP/SCS that reflects changes in economic, policy, and demographic

conditions.<sup>11</sup> The goals of the 2016 RTP/SCS have remained unchanged from the goals presented in the 2012–2035 RTP/SCS. The goals of the 2016 RTP/SCS include the following: (1) improve regional economic development and competitiveness; (2) maximize mobility and accessibility in the region; (3) improve travel safety and reliability in the region; (4) preserve and ensure a sustainable regional transportation system; (5) maximize productivity of the transportation system; (6) improve air quality and encourage active transportation; (7) encourage and creative incentives for energy efficiency; (8) encourage land use and growth patterns that facilitate transit and active transportation; and (9) maximize the security of the regional transportation system. However, since the adoption of the 2012–2035 RTP/SCS, the development of the 2016 RTP/SCS has been influenced by (1) a surface and transportation funding and authorization bill known as the Moving Ahead for Progress in the 21st Century Act (MAP-21), which was signed into law by President Barack Obama on July 6, 2012; (2) the rapid advancement of new technologies that encourage more efficient transportation choices, such as multimodal transportation systems; and (3) the continuing emphasis on the reduction of greenhouse gas (GHG) emissions as a result of the April 29, 2015, Executive Order B-30-15,<sup>12</sup> which establishes a Statewide GHG reduction target of 40 percent below 1990 levels by 2030. Similarly, SCAG adopted the 2020-2045 RTP/SCS, also known as *Connect SoCal*, on May 7, 2020. The 2020—2045 RTP/SCS focuses on a more prosperous mobile approach through implementing planning strategies that focus on transportation networks.<sup>13</sup> The 2020—2045 RTP/SCS core vision centers on maintaining and better managing the transportation network for moving people and goods, while expanding mobility choices by locating housing, jobs and transit closer together and increasing investment in transit and complete streets.<sup>14</sup> On May 7, 2020, SCAG’s Regional Council adopted *Connect SoCal* and certified the EIR for federal transportation conformity purposes only. In light of the COVID-19 pandemic, the Regional Council considered approval of *Connect SoCal* in its entirety and for all other purposes on September 3, 2020. Currently, SCAG has sent the GHG reduction targets associated with the 2020—2045 SCS to the California Air Resources Board (CARB) for concurrence.

### **Regional Housing Needs Assessment**

SCAG prepares the RHNA as mandated by State law as part of the periodic updating of the Housing Element of General Plans by local jurisdictions. The RHNA identifies the housing needs for very low income, low-income, moderate-income, and above moderate-income groups. The most recent RHNA allocation, the 6th Cycle RHNA Allocation Plan, is anticipated to be adopted by the Regional Council in

11 Southern California Association of Governments (SCAG), 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy [2016 RTP/SCS], adopted April 2016, 17.

12 Codified as Senate Bill 32.

13 Southern California Association of Governments (SCAG), *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Draft*, “Chapter 1,” <https://www.connectsocial.org/Pages/Connect-SoCal-Draft-Plan.aspx>, Accessed on May 2020.

14 Complete streets ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians, and transit riders, as well as motorists.

March 2021. This allocation identifies housing needs for the planning period between October 2021 and October 2029. Local jurisdictions are required by State law to update their General Plan Housing Elements based on the most recently adopted RHNA allocation.

The SCAG Housing Need Allocation Plan for the City projects a need for an additional 9,002 housing units of all types within the City between October 2021 through October 2029.<sup>15</sup> Of these units, 4,267 units (47.4 percent) would be for above moderate-income households, 1,325 units (14.7 percent) for moderate-income households, 1,192 units (13.2 percent) for low-income households, and 2,218 units or 24.6 percent for very low-income (including extremely low-income) households.

### **City of Lancaster General Plan**

California law requires that every city and county prepare and adopt a long-range comprehensive General Plan to guide future development and to identify the community's environmental, social, and economic goals. The General Plan must (1) identify the need and methods for coordinating community development activities among all units of government; (2) establish the community's capacity to respond to problems and opportunities; and (3) provide a basis for subsequent planning efforts. The City's General Plan sets forth goals, objectives, and programs to provide a guideline for day-to-day land use policies, as well as meet the existing and future needs and desires of the community, while integrating a range of State-mandated elements, including Land Use, Transportation, Noise, Safety, Housing, and Open Space/Conservation.<sup>16</sup> The City General Plan identifies anticipated population, household, and employment growth within the City through the year 2030.

### ***Housing Element***

State law requires that each jurisdiction evaluate its housing element every 8 years to determine its effectiveness in achieving County and State goals and objectives, and to adopt an updated Housing Element that reflects the results of this evaluation. The City of Lancaster General Plan contains a Housing Element, certified on December 31, 2013, that identifies the overall goals, objectives, policies, and action programs that the City intends to implement to facilitate the provision of housing for existing and future residents.<sup>17</sup> The City of Lancaster is currently in the process of updating its Housing Element for the 2021-2029 period.

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15 SCAG, *Estimate of SCAG RHNA Allocation Based on Staff-Recommended Final RHNA Methodology*, February 2020.

16 City of Lancaster, *General Plan 2030*, 2009, 1-13.

17 City of Lancaster, *General Plan Housing Element*, December 31, 2013, accessed June 2020.  
<https://www.cityoflanasterca.org/home/showdocument?id=16573>.



As noted in the City's Housing Element, the City has experienced a modest increase in the growth rate between 2000 and 2010, from 2.2 to 3.2 percent per year.<sup>18</sup> The City's growth rate has increased and decreased in response to short-term economic cycles; however, the City's share of total County population has steadily increased over the long term. For example, in 1960, Lancaster's share of Los Angeles County's population equaled 0.5 percent. However, by 2010 that share increased to 1.6 percent. Relevant goals, objectives, policies, and specific actions of the Housing Element are as follows:

- Goal 6 To promote sufficient housing to meet the diverse housing needs of all economic segments of the present and future City of Lancaster.
  
- Objective 6.1 Provide adequate sites that will enable the production of 2,510 housing units through September 2021 to meet the demands of present and future residents, including an adequate number and range of new dwelling types which are affordable to extremely low, very low, low, moderate and above moderate-income households.
  
- Policy 6.1.1 Ensure that a mix of housing types are provided, including single- and multi-family housing within a variety of price ranges which will provide a range of housing options for those wishing to reside within the City of Lancaster, and which will enable the City to achieve Objective 6.1.
  
- Policy 6.1.2 Promote infill housing development within areas presently approved for urban density residential development, as well as areas which have been committed to urban development.
  
- Specific Action 6.1.2(b) Encourage the utilization of Zoning Ordinance provisions pertaining to the development of mixed use projects such as: related office uses in conjunction with housing for the aged, infirm, or convalescent, or limited residential occupancies above neighborhood-type commercial uses. Where developers propose commercial projects or reuses of buildings, particularly in the downtown area, staff will inform them of the provision in the Zoning Ordinance that would allow them to incorporate residential units as part of the project. In addition, the staff will encourage these uses by providing flexibility in building and site design.

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18 Lancaster General Plan Housing Element (2014 – 2021), Page HE-C-1. Adopted December 31, 2013, accessed Jun 2020.

- Policy 6.1.7                      Ensure adequate water and sewer capacity to meet Lancaster’s housing need.
- Policy 6.1.8                      Encourage affordable mixed use and multi-residential housing developments on mixed use zoned sites.
- Goal 8                              To promote provision of adequate housing opportunities for those desiring to live in Lancaster, regardless of age, race, ethnic background, color, national origin, religion, familial status, marital status, disability, sex, sexual orientation, ancestry, source of income and any other protected class under state and federal law.
- Objective 8.1                      Promote provision of housing for the elderly, handicapped, homeless, and other special needs groups.
- Policy 8.1.1                      Promote the development and rehabilitation of housing specifically designed for the elderly providing a variety of living environments.

***Plan for Economic Development and Vitality***

The City’s General Plan includes the Plan for Economic Development and Vitality<sup>19</sup> that covers economic development, urban development, fiscal impacts of development and development issues and options. It establishes policies and programs to guide the City to economic self-sufficiency. The plan analyzes the local economy and employment in the City. As noted in the plan, one of the most important issues facing the growth of Lancaster is the expansion of local job opportunities and the diversification of the City’s employment base in order to achieve economic self-sufficiency. A strategic pillar of the plan is to attain a balance between local employment and local housing (jobs/housing balance). Relevant goals, objectives, policies, and specific actions of the Plan for Economic Development and Vitality are as follows:

- Goal 16                              To promote economic self-sufficiency and a fiscally solvent and financially stable community.
- Objective 16.1                      Implement the four Pillars of the Lancaster Economic Development/Redevelopment Strategic Plan in order to achieve a more vibrant, energetic and prosperous Lancaster.

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19 City of Lancaster, General Plan, Plan for Economic Development and Vitality, July 14, 2009, accessed June 2020. <https://www.cityoflanasterca.org/home/showdocument?id=16573>.

Policy 16.1.1 Promote a jobs/housing balance that places an emphasis on the attraction of high-paying jobs which will enable the local workforce to achieve the standard of living necessary to both live and work within the community.

Specific Action 16.1.1(a): Implement the initiatives of the Lancaster Economic Development/Redevelopment Strategic Plan pertaining to jobs/housing balance and local job creation.

Specific Action 16.1.1(g): Periodically review available information on labor market and local employment characteristics to better anticipate economic development problems and opportunities and as a means of tracking the performance and diversity of the local economy.

Policy 16.1.2 Promote the development of a local high-skilled 21st Century workforce that will meet the needs of existing and prospective employers.

Specific Action 16.1.2(a): Implement the workforce initiatives of the Lancaster Economic Development/Redevelopment Strategic Plan pertaining to development of a competitive 21st Century labor force.

Policy 16.1.3 Promote economic self-sufficiency through the application of programs and efforts that help to revitalize local commerce and create a sustainable and prosperous marketplace.

Specific Action 16.1.3(a): Implement the commerce initiatives of the Lancaster Economic Development/Redevelopment Strategic Plan pertaining to the revitalization of local commerce.

Objective 16.2 Promote programs that stress the retention and expansion of existing businesses within the City and for the recruitment of new businesses to Lancaster.

Policy 16.2.1 Stress the retention and expansion of basic industries to maximize economic growth.

Specific Action 16.2.1(a): Facilitate the provision of special assistance to retain and expand existing basic industries, particularly those in the military and civilian aerospace sectors of the local economic base.



**Threshold POP-1** Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

**Threshold POP-2** Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

### 5.12.2.2 Methodology

This analysis considers population, housing, and employment growth that would occur with implementation of the Proposed Project and whether this growth is consistent with applicable regional growth forecasts. The most recent DOF population and housing estimates for the City were used in conjunction with the SCAG population projections to determine potential population and housing impacts. The Proposed Project's new population increase was based on calculating the number of new residential units by the City's average household size to determine the new residents within the project site. For purposes of analysis within this EIR and for conservative estimates, it is assumed that employees would not live in the proposed housing units. SCAG employment rates were utilized to calculate the new jobs that would be generated due to implementation of the Proposed Project. The new jobs were compared to SCAG's employment forecasts to determine whether the Proposed Project's employment creation is consistent with those projections.

### 5.12.2.3 Project Impacts

**Threshold POP-1** Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

#### **a. Construction**

Due to the employment patterns of construction workers in Southern California, and the operation of the market for construction labor, construction workers are not likely, to any significant degree, to relocate to an area as a consequence of the job opportunities presented by the Proposed Project. The construction industry differs from most other industry sectors in several important ways that are relevant to potential impacts on population:

- There is no regular place of work. Construction workers commute to job sites that change many times during a year. These often-lengthy daily commutes are made possible by the off-peak starting and ending times of the typical construction workday.
- Many construction workers are highly specialized (e.g., crane operators, steel workers, masons, etc.), and move from job site to job site as dictated by the demand for their skills.

- The work requirements of most construction projects are also highly specialized, and workers are employed on a job site only if their skills are needed to complete a phase of the construction process.

It is reasonable to assume, therefore, that Proposed Project–related construction workers would not relocate their households’ place of residence as a direct consequence of working on the Proposed Project. Thus, Proposed Project construction would not induce substantial population growth either directly or indirectly in the area and as a result Proposed Project impacts would be less than significant.

## **b. Operation**

### **Population**

The Proposed Project would involve the development of 250 single-family attached units, and 1,350 multifamily (apartment) units for a total of 1,600 units. Estimated buildout is expected to occur over 20 years. As previously discussed in the Methodology subsection, based on 3.2 persons per household, it is estimated that approximately 5,120 residents would be anticipated to live within the project site. Similarly, for conservative analytical purposes all new jobs within the project site would be considered as new residents and thus, approximately 6,477 new jobs would generate the same number of residents within the City, as indicated in Table 5.12-3: Summary of Proposed Project On-Site Employment. At Proposed Project buildout, it is anticipated that the new population added within the City would be approximately 11,597 residents.

The City’s General Plan estimates a population of 259,696 residents by year 2030. The Proposed Project’s estimated 11,597 new direct and indirect residents relate to population growth within the City associated with buildout of the Proposed Project. This level of population growth represents approximately 8.3 percent of the General Plan’s forecasted growth in new residents by 2030; or approximately 11.8 percent of the forecasted growth between 2019 and 2030.<sup>20</sup> Therefore, the Proposed Project would not induce substantial population growth because it would account for only a small portion of forecasted population growth, rather than exceeding the population growth forecast for the City, and impacts would be less than significant.

SCAG estimates the 2040 population for the City to be 209,900 residents. This represents an anticipated population increase of 42,500 residents between 2020 and 2040. The Proposed Project would represent approximately 27.3 percent of this total estimated population increase. Therefore, the Proposed Project would not induce substantial population growth because it would account for only a small portion of

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20 Anticipated growth within the City is 140,280 residents between 2000 and 2030 and 98,092 residents between 2019 and 2030. The Proposed Project’s approximately 11,597 residents would account for 8.3 percent of the General Plan’s anticipated population growth within the City between 2000 and 2030 and 11.8 percent between 2019 and 2030.

forecasted population growth, rather than exceeding the population growth forecast for the City and impacts would be less than significant.

### **Housing**

The Proposed Project would add up to 1,600 residential dwelling units to the project site, which would include 250 single-family condominium and 1,350 multifamily (apartment) units. The City's General Plan estimates a total of 81,403 units within the City by 2030, which would be an increase of 43,114 units between 2000 and 2030. The Proposed Project's estimated 1,600 new residential units at buildout would provide new housing within the City. This level of housing growth represents approximately 3.7 percent of the General Plan's forecasted housing growth by 2030, or approximately 6.6 percent of the forecasted growth between 2019 and 2030.<sup>21</sup> Therefore, the Proposed Project would not induce substantial growth because it would account for only a small portion of forecasted household/housing growth, rather than exceeding the household/housing growth forecast for the City, and impacts would be less than significant.

SCAG estimates that there would be 65,300 housing units by 2040 for the City, which would be an increase of 12,900 housing units between 2020 and 2040. The Proposed Project would represent approximately 12.4 percent of this total estimated housing unit increase. Additionally, the project site currently contains a mix of land uses including the Multi-Residential and Mixed-Use designations that permit residential development within the project site. Therefore, the Proposed Project would not result in any significant adverse impacts in terms of household/housing unit growth that would exceed projections/planned levels for the Proposed Project buildout year, and impacts would be less than significant.

### **Employment**

Table 5.12-3: Summary of Proposed Project On-Site Employment summarizes the estimated on-site employment at Proposed Project buildout. As shown in Table 5.12-3, the Proposed Project would increase on-site employment by approximately 6,477 employees. All Proposed Project employment is anticipated to occur within the City and ultimately within the SCAG region.

The City's General Plan estimates that there would be a total number of 71,816 employment opportunities by 2030, or an increase of approximately 19,697 jobs between 2000 and 2030. The additional 6,477 new jobs that would be created by the Proposed Project at buildout would represent approximately 32.9 percent of the City's General Plan forecast employment growth, or approximately 58.3 percent of the forecasted growth of approximately 11,116 jobs between 2017 and 2030.

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21 Anticipated growth within the City is 43,114 housing units between 2000 and 2030 and 28,300 housing units between 2019 and 2030.

**Table 5.12-3  
Summary of Proposed Project On-Site Employment**

Land Use Designation	Proposed		
	SF/employee	SF	Total New Employees
Hotel	1,179 <sup>a</sup>	329,200	279
Office/Commercial	319 <sup>b</sup>	842,000	2,639
Hospital and Medical Uses	424 <sup>c</sup>	1,508,800	3,558
<b>Total</b>			<b>6,477</b>

Source: SCAG, *Employment Density Study, 2001*.

Notes:

- <sup>a</sup> Based on median employees per acre for Los Angeles Hotel/Motel.
- <sup>b</sup> Based on average employees per acre for Los Angeles Low Rise Office.
- <sup>c</sup> Based on average employees per acre for Los Angeles Other Retail/Services.

In terms of employment within the SCAG Region, the new jobs created by the Proposed Project at buildout would represent approximately 0.44 percent of the forecasted job growth in the SCAG region and approximately 82.0 percent of the forecasted job growth in the City between 2020 and 2040.

Based on the above, the Proposed Project would neither cause growth (e.g., new employment, etc.) nor accelerate development in an undeveloped area that exceeds projected/planned levels for the year of Project buildout. Therefore, Proposed Project impacts related to consistency with SCAG's employment forecast for the SCAG region and the City would be less than significant.

### **Conclusion**

SCAG has been attempting to integrate land use and transportation by working with subregions and local communities to increase development densities and improve the jobs/housing balance. Smart land use strategies encourage walking, biking, and transit use, thereby reducing vehicular demand. This saves travel time, reduces pollution, and leads to improved health. According to SCAG, a balanced region would have a ratio of approximately 1.22 jobs per dwelling unit. This would result in the availability of 1.22 jobs for each housing unit in the community. According to the City's General Plan Master Environmental Assessment, the City's job/housing ratio is 1.13:1 which is slightly below the desired ratio of 1.22:1.<sup>22</sup> Many of the jobs factored into this ratio are identified as being service-oriented jobs which do not provide

22 City of Lancaster, General Plan 2030 EIR, April 2009, accessed June 2020  
<https://www.cityoflanasterca.org/home/showdocument?id=11351>.



the income necessary to support a household. A significant portion of the working population continues to commute to Los Angeles or other areas for adequate employment.

The Proposed Project would provide an increase of 6,477 new jobs and 1,600 dwelling units within the project site. Implementation of the Proposed Project would result in a jobs to housing ratio of 4.05 jobs/housing unit within the project site, thus increasing the City's overall jobs and housing ratio. Additional employment opportunities and new dwelling units created by the Proposed Project would balance this ratio by creating jobs close to existing and new housing opportunities. Many of the jobs created within the healthcare industry would also aid in the creation of the healthcare district.

Therefore, the Proposed Project would not induce substantial unplanned population growth in an area either directly or indirectly, and population, housing, and employment impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts related to the Proposed Project's potential to induce unplanned population growth within the City and the SCAG region would be less than significant.

### **Threshold POP-2      Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

The Proposed Project is located in area that is mostly developed with approximately 110 acres of scattered parcels of vacant land. The project site includes developed areas as well, including the Antelope Valley Hospital; a total of 435 housing units; and a total of 1,270,430 sf of office, commercial, and medical office space. As discussed previously, approximately 1,392 residents are estimated to reside within the project site. The Proposed Project involves the construction of up to 250 single-family condominium units and 1,350 multifamily units on-site for a total increase of 1,600 housing units, that would further improve the housing supply in the area. Additionally, the Proposed Project would generate approximately 5,120 new residents and 6,477 new jobs, or an estimated direct and indirect population of 11,597 residents, within the project site. The Proposed Project could potentially displace all existing residents within the project site. Existing residents could have the opportunity to reside within the new residential units under the proposed Master Plan and would, therefore, account for approximately 12.0 percent of the new residential population forecast under the Proposed Project. However, buildout of the Master Plan area does not require the demolition of the existing residences. Additionally, the City's average housing

vacancy rate between 2000 and 2019 was approximately 9 percent, or approximately 4,871 housing units as of 2019. Residents within the existing 435 housing units would have the opportunity to reside within existing housing stock elsewhere within the City and would account for approximately 8.9 percent of the City's average vacant housing stock. Therefore, implementation of the Proposed Project would not displace substantial numbers of people or housing necessitating the construction of replacement housing elsewhere within the City. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

### **5.12.2.4 Cumulative Impacts**

Implementation of the Proposed Project, in combination with future development anticipated in the City of Lancaster and its sphere of influence in accordance with the adopted General Plan, would contribute to future population, housing, and employment growth within the area. While the Proposed Project would contribute to the growth of the City, any population, housing, and employment growth as a result of the Proposed Project would be consistent with increases anticipated by the City's General Plan and regional growth forecasts. Specifically, the Proposed Project would add approximately 5,120 residents to the project site and indirectly 6,447 new residents based on the increase in jobs at the project site. The proposed project would bring an estimated total of 11,597 new residents to the City.

Cumulative population, housing, and employment growth within the SCAG region would be 2,475,800 residents, 954,300 households, and 1,457,500 jobs between 2020 and 2040. The Proposed Project's population, housing, and employment growth would represent 0.47 percent, 0.17 percent, and 0.44 percent of the population, housing, and employment forecasts in the SCAG region between 2020 and 2040, respectively. Therefore, the Proposed Project's incremental population, housing, and employment effect would not be cumulatively considerable;<sup>23</sup> hence, the Proposed Project's cumulative population, housing, and employment impact would be less than significant. Additionally, the Proposed Project's cumulative housing and employment growth provides benefits for the jobs/housing ratio, regional housing goals that promote housing production, General Plan Housing Element goals regarding the mixture of residential densities, and the General Plan's economic goals to promote the provision of quality medical facilities and services to meet the needs of residents and businesses. As a result, the Proposed

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23 State CEQA Guidelines, sec. 15064(h)(1).

Project would not cause a significant adverse impact with respect to cumulative population and housing growth and cumulative impacts would be less than significant.

As previously concluded, although the Proposed Project could potentially displace existing residents and housing units, the proposed Master Plan would permit up to 1,600 new residential units. Additionally, the City's average vacancy housing rate has been approximately 9 percent between 2000 and 2019, which would equate to approximately 4,871 existing housing units available for existing residents within the City. Therefore, the residents within the project site would have the opportunity to move to the new units proposed under the Master Plan or to existing units within the City. As such, the Proposed Project would not result in the displacement of a substantial amount of existing housing or people. Although other residential development projects in the City may require the displacement of housing or people, such impacts would be specific to each individual project. Therefore, the Proposed Project's effect on existing residents and housing would not be cumulatively considerable; hence the Proposed Project's cumulative impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts related to the Proposed Project's potential to induce unplanned population, housing, and employment growth within the City and the SCAG region would be less than significant.

## **5.12.3 SUMMARY OF SIGNIFICANCE**

No significant impacts have been identified and no mitigation measures are necessary. Cumulative impacts would also result in less than significant impacts related to population, employment, and housing.

## 5.13 PUBLIC SERVICES

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This section addresses the potential impacts of the Proposed Project on fire protection, law enforcement, schools, and library services. The Proposed Project’s potential impacts related to available park resources is addressed in Section 5.14: Recreation. The information provided in this section is based on correspondence and consultation with the County of Los Angeles Fire Department, County of Los Angeles Sheriff’s Department, Lancaster School District, and Antelope Valley Union High School District. Information with respect to library services was obtained from the Los Angeles County Library website and the City of Lancaster General Plan. Each subsection includes an introduction, followed by discussions of existing conditions, regulatory framework, methodology, environmental impacts, cumulative impacts, mitigation measures if required, and level of significance after mitigation.

This section of the Environmental Impact Report (EIR) addresses the potential for the Proposed Project to impact fire services provided by the Los Angeles County Fire Department (LACFD). The existing inventory of uses present within the project site and surrounding area are described, along with the methodology and the regulatory setting that guided the evaluation pursuant to local statutes and regulations. Potential impacts to fire services that would result from the Proposed Project are identified, along with any measures to mitigate the significant effects of the Proposed Project, if required. The analysis is based, in part, on information provided by the LACFD, which is included in Appendix I: Public Services Correspondence of this EIR.

### 5.13.1.1 ENVIRONMENTAL SETTING

#### 5.13.1.1.1 Existing Conditions

The LACFD provides comprehensive emergency services, including fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education, and community services.

The fire stations that would serve the Proposed Project, specifically within 5 miles of the project site, are Fire Station 33 and Fire Station 134. Fire Station 33 is located at 44947 Date Avenue within the City, approximately 1.5 miles northeast from the project site. The station is staffed with a 3 person paramedic assessment engine company comprised of 1 fire captain, 1 firefighter specialist, and 1 firefighter paramedic, a 4 person fire engine and ladder truck comprised of 1 fire captain, 1 fire fighter specialist, and 2 firefighters, and a 2 person firefighter paramedic squad. Fire Station 134 is located at 43225 25th Street West within the City, approximately 1.5 miles southwest from the project site. It is staffed daily with a 3-person paramedic assessment engine company comprised of 1 fire captain, 1 fire fighter specialist, and 1 firefighter paramedic and a 2 person firefighter paramedic squad.

Additional fire stations within 5 miles of the project site are Fire Station 129 and Fire Station 130, which serve as backup stations for the project site and surrounding area. Fire Station 129, located at 42110 6th Street West, is approximately 3 miles south of the project site. It is staffed daily with a Hazardous Materials Task Force which consists of a 4-person engine company comprised of 1 fire captain, 1 firefighter specialist, and 2 firefighters; a 3-person engine company; and a 2 person hazardous materials squad. Fire Station 130, located at 44558 40th Street West, is located approximately 2 miles northwest of the project site. It is staffed daily with a 4-person engine company comprised of 1 fire captain, 1 firefighter specialist, and 2 firefighters and a 2-person firefighter paramedic squads.

As indicated by the LACFD, response times and distances for Fire Station 33 and Fire Station 134 are adequate to serve the project site. Currently the LACFD has a plan for Fire Station 33 to expand to accommodate an additional engine company due to the growth within the vicinity of the project site. The estimated target completion of the fire station expansion is 2021-2022.<sup>1</sup>

## **5.13.1.2 REGULATORY SETTING**

### **5.13.1.2.1 State**

#### **Occupational Safety and Health Administration**

The California Occupational Safety and Health Administration (OSHA) enforces the provisions of the State Occupational Safety and Health Act, which requires safety and health regulations under Title 24 of the California Code of Regulations (CCR). Examples of general requirements related to fire protection and prevention include maintaining fire suppression equipment specific to a project site; providing a temporary or permanent water supply of sufficient volume, duration, and pressure; properly operating on-site fire-fighting equipment (e.g., sprinklers, etc.); and keeping sites free from the accumulation of unnecessary combustible materials.

#### **California Building Code and California Fire Code**

Title 24 of the CCR is a compilation of building standards, including fire safety standards for residential and commercial buildings. The California Building Code standards serve as the basis for the design and construction of buildings in California. The California Fire Code (CCR, Title 24, Part 9) is a component of the California Building Code. Typical fire safety requirements of the California Fire Code include the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. The California Fire Code applies to all occupancies in California, except where more stringent standards have been adopted by local agencies.

### **5.13.1.2.2 Local**

#### **City of Lancaster General Plan**

#### **Plan for Public Health and Safety**

The primary goal for the Plan for Public Health and Safety is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from natural and human induced

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1 Michael Y. Takeshita, Los Angeles County Fire Department, letter correspondence, June 7, 2019. Refer to Appendix I of this EIR for the correspondence.

hazards.<sup>2</sup> The Plan for Public Health and Safety specifically addresses fire prevention and suppression services, crime prevention and protection services, disaster preparedness, emergency medical facilities, geology and seismicity, flooding and drainage, noise, air installation land use compatibility, and hazardous materials. The type and location of hazards are identified, as well as policies and programs to minimize impacts.<sup>3</sup>

The following objective, policies, and specific actions are applicable to the proposed project:

Objective 4.7	Ensure that development occurs in a manner that minimizes the risk of structural and wildland fire.
Policy 4.7.1:	Ensure that an adequate number of fire stations and adequate firefighting equipment and personnel are provided to protect the citizens and businesses of the City of Lancaster.
Specific Action 4.7.1(c)	Involve fire department personnel in the development review process for all new development proposals through participation in the Development Review Committee and by referring development requests to the Los Angeles County Fire Department for review and comment.
Policy 4.7.2:	Ensure that the design of new development minimizes the potential for fire.
Specific Action 4.7.2(a):	Require the use of fire resistant roofs in residential developments.
Specific Action 4.7.2(b)	In conjunction with the Los Angeles County Fire Department review the adequacy of ordinances requiring fire sprinklers, and continue with the practice of requiring fire sprinklers in residential structures as required by the Los Angeles County Fire Code.

### **Plan for Municipal Services and Facilities**

The Plan for Municipal Services and Facilities sets forth policies and programs for the rational and cost-efficient provision and extension of public services, infrastructure, and facilities to serve the existing community and support planned development and protect natural resources. Specifically, this plan addresses coordination of development and public services; levels of service; water facilities; flood control

2 City of Lancaster, *Lancaster General Plan 2030*, July 2009, accessed June 2020, available at <https://www.cityoflanasterca.org/home/showdocument?id=9323>.

3 City of Lancaster, *Lancaster General Plan 2030*, July 2009, accessed June 2020, available at <https://www.cityoflanasterca.org/home/showdocument?id=9323>.

and drainage; wastewater facilities; and solid waste management. The following goal, objective, policy, and specific action are applicable to the Proposed Project:

Goal 15:	A full range of municipal services and facilities at desired levels for urban and rural areas, as appropriate.
Objective 15.1	Achieve and maintain five (5) minute average response time from receipt of alarm at station to time of arrival on scene. (Fire Protection)
	Achieve and maintain eight (8) minutes average response time from alert at station to arrival on scene. (Paramedic Services)
Policy 15.1.1	Promote continued coordination between the City of Lancaster and local service providers.
Specific Action 15.1.1(d)	Coordinate with other local government agencies (including L.A. County, the school districts, and other special districts) to periodically share information regarding projects of regional and subregional concern.

### **Lancaster Hazard Mitigation Plan**

The *2017 City of Lancaster Hazard Mitigation Plan* (Hazard Mitigation Plan) provides a list of activities designed to assist the City in reducing risk and preventing losses from future hazard events. The strategies address multihazard issues, as well as hazard specific activities for windstorms, earthquakes, fires, flooding, landslide, and terrorism.

### **Lancaster Emergency Operations Plan**

The *Emergency Operations Plan* (EOP)<sup>4</sup> addresses the City's planned response and recovery to emergencies associated with natural disasters and technological incidents. It provides an overview of operational concepts, identifies components of the City's emergency management organization within the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS), and describes the overall responsibilities of the Federal, State and County entities and the City for protecting life and property and assuring the overall well-being of the population.

### **Lancaster Municipal Code**

Lancaster Municipal Code (LMC) Title 15, Chapter 15.32, Fire Code, adopts by reference the 2020 County of Los Angeles Fire Code, incorporating by adoption the 2019 Fire Code. All development within the City

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4 City of Lancaster, 2017 City of Lancaster Hazard Mitigation Plan



must comply with these standards to ensure fire safety precautions during project demolition and construction, adequate emergency access (during demolition, construction, and operation), and fire hydrant, fire sprinkler and fire alarm system availability.

LMC Title 15, Chapter 15.76, Fire Protection Fees, was adopted for the purpose of imposing mitigation fees on applicants seeking to construct development projects. The purpose of the fees is to minimize, to the greatest extent practicable, a new development's impact on the LACFD public services and public facilities. The intent is that applicants for development projects pay their fair share of the costs of providing such public services and public facilities. The development impact fee is imposed in an amount based upon the gross square footage of new residential and nonresidential development or a similarly fair and reasonable basis.

### 5.13.1.3 ENVIRONMENTAL IMPACTS

#### 5.13.1.3.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with fire services. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have significant impacts on fire services if it would:

**Threshold FF-1                      Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.**

#### 5.13.1.3.2 Methodology

Analysis of fire services is concerned with response time and water fire-flow service to the area that is in question. An analysis of response times for the fire department serving a development should be completed in order to determine if the fire department has enough resources to arrive to a fire or other medical emergency in a timely fashion. Additionally, the ability to provide adequate service to an area was determined by the ability to provide fire flow service to the area. Fire-flow is the amount of water required for firefighting purposes, usually delivered by a system of underground piping and fire hydrants.

#### 5.13.1.3.3 Project Impacts

**Threshold FF-1                      Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities or the need for new or**

**physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.**

## **Construction**

Construction-related traffic could potentially affect emergency access to and near the project site on a temporary basis. Construction activities would generate traffic associated with the movement of construction equipment, hauling of demolition and graded materials, and construction worker trips. Additionally, construction activities may involve temporary lane closures for utility improvements (generally one-lane closures to maintain through access on all roadways). Other implications of construction-related traffic include increased travel time due to flagging or stopping of traffic to accommodate trucks entering and exiting the project site during construction. As discussed in Section 5.15: Transportation and Traffic of this EIR, implementation of Mitigation Measure MM TRAF-1 would require the preparation of traffic management plans to ensure emergency vehicle access during all aspects of Proposed Project construction. The traffic management plans would incorporate measures including but not limited to the use of flag persons during construction activities that are adjacent to public rights-of-way to facilitate the traffic flow until construction is complete, and the provision of safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers. Emergency access to the project site would remain clear and unhindered during construction of the Proposed Project pursuant to City requirements. Therefore, LACFD emergency response times and access impacts during Proposed Project construction would be less than significant.

Additional demand for LACFD services during Proposed Project construction could occur as a result of the potential for accidental on-site fires from such sources as the operation of mechanical equipment and the use of flammable construction materials. As discussed in Section 5.8 of this EIR, the Proposed Project's construction contractor(s) would handle, store and dispose of hazardous materials (including flammable materials) in accordance with all applicable local, State and federal regulations to minimize the potential for and effects from spills of hazardous, toxic or petroleum substances during construction activities. Therefore, potential impacts associated with the potential for accidental on-site fires would also be less than significant.

## **Operation**

In regard to operation, the Proposed Project is expected to increase the number of calls for service in the area, such as calls for structure fires, car fires, electrical fires, as well as emergency medical service calls from the increase in residents and visitors as a result of the new residential, medical, and commercial uses

proposed by the Master Plan. As discussed in Section 5.12: Population and Housing of this EIR, implementation of the Proposed Project is estimated to house up to 5,120 new residents and 6,447 new employees.

As mentioned previously, the two closest fire stations to the project site that would provide primary response are Fire Station 33 and Fire Station 134. Furthermore, additional fire stations within 5 miles of the project site that would provide backup include Fire Station 129 and 130. It should be noted that LACFD has a plan to expand Fire Station 33 to accommodate an additional engine company with an estimated completion of 2021-2022. As indicated by the LACFD (refer to Appendix I of this EIR for the LACFD letter), both these stations would meet the performance standards set by LACFD as they relate to response times and distances for the project site and its vicinity and the Proposed Project would not have a significant effect on LACFD service demands.

In addition, LMC Title 15, Chapter 15.76, Fire Protection Fees, requires applicants of future individual development projects to pay the City's development impact fee for fire services. Payment of the development impact fees would further ensure that the Proposed Project would not reduce acceptable levels of fire services in the project area. Thus, implementation of the Proposed Project would not degrade existing facilities or require any additional fire stations to be built or expanded and compliance with Section 15.76 of the LMC would further ensure that Proposed Project's fire service impacts would be less than significant.

All future individual development projects proposed within the project site must comply with the standards set forth in LMC Title 15, Chapter 15.32, Fire Code to ensure fire safety precautions during project demolition and construction, adequate emergency access (during demolition, construction, and operation), and fire hydrant, fire sprinkler and fire alarm system availability. Additionally, all development projects would be required to comply with the most current adopted fire, building codes, and nationally recognized fire and life safety standards. Thus, compliance with Title 15, Chapter 15.32, would ensure that Proposed Project's fire service impacts would remain less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Proposed Project impacts on fire services would be less than significant with compliance to LMC Chapter Title 15, Chapter 15.32 and LMC Title 15, Chapter 15.76.

#### 5.13.1.3.4 Cumulative Impacts

Construction of cumulative development could result in construction-related traffic, such as traffic associated with the movement of construction equipment, the hauling of demolition and graded materials, construction worker trips, and the need for temporary lane closures for utility improvements. The combination of these activities could potentially affect emergency access for fire services. Other implications of construction-related traffic include increased travel time due to flagging or stopping of traffic to accommodate trucks entering and exiting the project site during construction. However, the related projects are anticipated to implement construction management plans for traffic control, as is the case with the Proposed Project, to ensure that potential construction-related impacts are reduced. Another purpose of construction traffic management plan is to maintain roadway capacity adequate for emergency vehicle access on streets with neighboring construction sites. As such, emergency access to the project site would remain clear and unhindered during construction of the Proposed Project pursuant to City requirements. Cumulative impacts associated with emergency access on the surrounding roadways due to construction activities would be less than significant.

Cumulative growth would increase the future service population of the LACFD. These future development projects would undergo environmental review by the City pursuant to CEQA to address potential impacts. The related projects would be reviewed by the LACFD to ensure that sufficient fire service measures are implemented to reduce potential impacts to fire services. As discussed above and as indicated by the LACFD, the Proposed Project would result in a less than significant impact on LACFD services. Furthermore, the Proposed Project's impacts would not be cumulatively considerable because each applicant of future individual developments would be required to pay development impact fees in accordance with LMC 15.76 in order to offset direct and cumulative impacts to fire services. Such fees would minimize the cumulative development's impact on LACFD's fire services and facilities. Thus, cumulative development projects would pay their fair share of the costs of providing such fire services. Accordingly, cumulative impacts would be less than significant.

#### Mitigation Measures

No mitigation measures are required.

#### Level of Significance

Cumulative impacts would be less than significant.

#### 5.13.1.4 SUMMARY OF SIGNIFICANCE

Future development projects associated with the Proposed Project would be required to comply with the most recent regulatory requirements which would ensure that the City's infrastructure, including access,

traffic circulation, water, and hydrant systems are adequate for both current LACFD needs, as well as the needs of the Proposed Project. Thus, the Proposed Project would not increase response times or interfere with the LACFD ability to provide adequate service levels. Therefore, the Proposed Project's impacts would be less than significant. Cumulative impacts would also result in less than significant.

## 5.13.2 POLICE PROTECTION SERVICES

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This section of the Environmental Impact Report (EIR) addresses the potential for the Proposed Project to impact police protection services provided by the Los Angeles County Sheriff's Department (LASD). The existing inventory of uses present within the project site and surrounding area are described, along with the methodology and the regulatory setting that guided the evaluation pursuant to local statutes and regulations. Potential impacts to police protection services that would result from the Proposed Project are identified, along with any measures to mitigate the significant effects of the Proposed Project, if required. The analysis is based, in part, on information provided by the LASD's Facilities Planning Bureau, which is included in Appendix I: Public Services Correspondence of this EIR.

### 5.13.2.1 ENVIRONMENTAL SETTING

#### 5.13.2.1.1 Existing Conditions

The LASD provides law enforcement services including emergency and nonemergency police responses, crime prevention, routine police patrols, investigative services, traffic enforcement, and traffic investigation services within the City. The station that serves the City and the surrounding jurisdictions (e.g., Antelope Acres, Lake Los Angeles, Quartz Hill, etc.) is the Lancaster Station located at 501 Lancaster Boulevard. The Lancaster Station is located approximately 2 miles northeast of the project site.

As of June 1, 2019, the Lancaster Station was staffed by 228 sworn personnel, of which 191 are assigned to patrol duties during day, night, or early morning shifts.<sup>1</sup> The Lancaster Station's average response times for emergency, priority, and routine calls for service were 6 minutes, 20 minutes, and 133 minutes, respectively.<sup>2</sup> In extreme emergencies, assistance can be provided by other LASD's Stations, the nearest being the Palmdale Station (approximately 9 miles south), and the Santa Clarita Valley Station (approximately 45 miles southwest). There are no additional sheriff facilities planned in the area (refer to Appendix I). Additionally, the crime-to-population ration in the Lancaster Station's service area is 11.12 per 1,000 residents. Criminal activities reported to the Lancaster Station include homicide, sexual assault, robbery, aggravated assault, burglary, larceny, auto theft, arson, as well as other offenses, including but not limited to, traffic violations, narcotics, prostitution, trespassing, disorderly conduct. The Lancaster Station's call ratio is 152.65 per 1,000 residents.

As indicated by the LASD, the most recent year of information provided by LASD is from 2010. Based on this information, the resident population of the Lancaster Station's service area was 191,000 and with the Lancaster Station's current staffing levels, the service ratio is 10 patrol deputies per 10,000 residents.

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1 Captain Todd P. Weber, Los Angeles Sheriff's Department, Lancaster Police, letter correspondence, June 12, 2019. Refer to Appendix I of this EIR for the correspondence.

2 Captain Todd P. Weber, Los Angeles Sheriff's Department, Lancaster Police, letter correspondence, June 12, 2019.

More recent information from 2017 indicates that the Lancaster Station's service area population was 189,675 residents; and, based on current staffing levels equates to a service ratio of 10 patrol deputies per 9,931 residents.<sup>3</sup>

### 5.13.2.2 REGULATORY SETTING

#### a. Local

##### City of Lancaster General Plan

##### Plan for Public Health and Safety

The Plan for Public Health and Safety of the City's General Plan focuses on crime prevention and protection services.<sup>4</sup> The primary goal of the Plan for Public Health and Safety is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from natural and human induced hazards. The following objectives, policies and specific actions with respect to police protection services are applicable to the Proposed Project:

- |                           |   |
|---------------------------|---|
| Objective 4.6             | Reduce the risk of crime and provide residents with security through maintenance of an adequate force of peace officers, physical planning strategies that maximize surveillance, minimize opportunities for crimes, and by creating a high level of public awareness and support for crime prevention. |
| Policy 4.6.1:             | Ensure that adequate law enforcement is provided to citizens and business of the City of Lancaster.   |
| Policy 4.6.2:             | Ensure that the design of new development discourages opportunities for criminal activities to the maximum extent possible.   |
| Specific Action 4.6.2 (a) | Involve the Public Safety Office and Community Neighborhood Division in the development review process for all new development proposals through participation in the Development Review Committee for review and comment.  |

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3 Los Angeles County Sheriff's Department, Lancaster Station 2017 Synopsis, <http://shq.lasdnews.net/CrimeStats/yir9600/yir2017/lan/synopsis.htm>. Accessed June 2020.

4 City of Lancaster, *Lancaster General Plan 2030*, July 2009, accessed June 2020, available at <https://www.cityoflanasterca.org/home/showdocument?id=9323>.

Specific Action 4.6.2 (b) Promote public safety through the incorporation of Crime Prevention Through Environmental Design (CPTED) concepts and other methods into the development design.

### **Plan for Municipal Services and Facilities**

The Plan for Municipal Services and Facilities sets forth policies and programs for the rational and cost-efficient provision and extension of public services, infrastructure, and facilities to serve the existing community and support planned development and protect natural resources. Specifically, this plan addresses coordination of development and public services; levels of service; water facilities; flood control and drainage; wastewater facilities; and solid waste management. The following goal, objective, policy, and specific action are applicable to the Proposed Project:

Goal 15:	A full range of municipal services and facilities at desired levels for urban and rural areas, as appropriate.
Objective 15.1	Achieve and reduce part one crimes <sup>5</sup> to below three hundred (300) crimes per 10,000 population. (Police Protection)
Policy 15.1.1	Promote continued coordination between the City of Lancaster and local service providers.
Specific Action 15.1.1(d)	Coordinate with other local government agencies (including L.A. County, the school districts, and other special districts) to periodically share information regarding projects of regional and subregional concern.

### **Lancaster Hazard Mitigation Plan**

The *2017 City of Lancaster Hazard Mitigation Plan* (Hazard Mitigation Plan) provides a list of activities designed to assist the City in reducing risk and preventing losses from future hazard events. The strategies address multihazard issues, as well as hazard specific activities for windstorms, earthquakes, fires, flooding, landslide, and terrorism.

### **Lancaster Emergency Operations Plan**

The *Emergency Operations Plan* (EOP)<sup>6</sup> addresses the City's planned response and recovery to emergencies associated with natural disasters and technological incidents. It provides an overview of operational concepts, identifies components of the City's emergency management organization within the

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5 FBI Uniform Crime Report.

6 City of Lancaster, 2017 City of Lancaster Hazard Mitigation Plan



Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS), and describes the overall responsibilities of the Federal, State and County entities and the City for protecting life and property and assuring the overall well-being of the population.

### **Lancaster Municipal Code**

LMC Chapter 15.64, Development Impact Fees, was adopted for the purpose of imposing impact fees on applicants seeking to construct development projects for the purpose of defraying the costs of public expenditures for capital improvements and operational services which would benefit such new development. Section 15.64.130, Sheriff's Substation Facilities Fee, requires a sheriff's substation facilities fee for all new development in the City. The sheriff's substation facilities fee is be used to finance land acquisition, design, construction, equipping and related capital costs for sheriff substation facilities.

## **5.13.2.3 ENVIRONMENTAL IMPACTS**

### **5.13.2.3.1 Thresholds of Significance**

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with police protection services. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have significant impacts on police protection services if it would:

**Threshold PP-1                      Result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.**

### **5.13.2.3.2 Methodology**

The methodology used to evaluate potential impacts on police protection services is based on the ability of police personnel to adequately serve the existing and future population, including employees and daytime and nighttime visitors. Analysis of police protection services anticipated at the time of Proposed Project buildout was compared to the current ability of the LASD to meet the demand for police protection services. Law enforcement agencies also use standardized officer-to-population ratios to determine if they can provide adequate service to an area.

### 5.13.2.3.3 Project Impacts

**Threshold PP-1**      **Result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.**

#### Construction

Construction-related traffic could potentially affect emergency access to and near the project site on a temporary basis. Construction activities would generate traffic associated with the movement of construction equipment, hauling of construction and demolition related materials, and construction worker trips. Additionally, construction activities may involve temporary lane closures for utility improvements (generally one-lane closures to maintain through access on all roadways). Other implications of construction-related traffic include increased travel time due to flagging or stopping of traffic to accommodate trucks entering and exiting the project site during construction. As discussed in Section 5.15: Transportation and Traffic of this EIR, implementation of Mitigation Measure MM TRAF-1 would require the preparation of traffic management plans to ensure emergency vehicle access during all aspects of Proposed Project construction. The traffic management plans would incorporate measures including, but not limited to, the use of flag persons during construction activities that are adjacent to public rights-of-way to facilitate the traffic flow until construction is complete, and the provision of safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers. Emergency access to the project site would remain clear and unhindered during construction of the Proposed Project pursuant to City requirements. With implementation of MM TRAF-1 in Section 5.15 of this EIR, emergency access impacts from construction activities would be less than significant.

#### Operation

Implementation of the Proposed Project would result in an increase in population and number of employees at the project site, which would result in an increase in demand for police protection services provided by the Lancaster Station. As discussed in Section 5.12: Population and Housing, buildout of the Proposed Project is estimated to house up to 5,120 new residents and 6,447 new employees. As previously discussed, the 2010 officer to resident ratio is 10 patrol officers per 10,000 residents and as of 2017 the officer to resident ratio is 10 patrol officers per 9,931 residents. With implementation of the Proposed Project, the officer to resident ratio would be increased to 10 patrol officers per 10,607 residents at buildout<sup>7</sup> which would increase demand for police protection services provided by LASD's Lancaster

<sup>7</sup> 191,000 service area residents + 11,597 residents with the Proposed Project = 202,597 residents / 191 sworn patrol officers \* 10 = 10 patrol officers per 10,607 residents.

Station. As a result, additional law enforcement equipment, facilities, and personnel would potentially be required to accommodate the demands of the Proposed Project at buildout. However, as required by LMC 15.64.130, Sheriff's Substation Facilities Fee, future developments would require payment of the City's development impact fee and the sheriff's substation fee for police protection services in order to maintain acceptable levels of police protection services in the project site Area. The sheriff's substation facilities fee is used to finance land acquisition, design, construction, equipping and related capital costs for sheriff substation facilities. Thus, compliance with Section 15.64.130 would ensure that Proposed Project's police protection service impacts would be less than significant.

Further, future development within the project site would be reviewed by LASD as part of the development review process. Specifically, the LASD generally prescribes to the principles of CPTED, which reduce opportunities for criminal activities by employing physical design features that discourage anti-social behavior and encourage proper use of the site. The overall tenets of CPTED include defensible space, territoriality, surveillance, physical security, and strategically located lighting and landscaping. Consistent with the City's development review process, each individual development project proposed under the Master Plan would be required to incorporate CPTED features in consultation with LASD prior to project approval. Accordingly, the Proposed Project would result in less than significant impacts to LASD services.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Proposed Project impacts on police protection services would be less than significant with compliance to LMC Section 15.64.130.

### **5.13.2.3.4 Cumulative Impacts**

Construction of cumulative development could result in construction-related traffic, such as traffic associated with the movement of construction equipment, the hauling of construction and demolition related materials, construction worker trips, and the need for temporary lane closures for utility improvements. The combination of these activities could potentially affect emergency access for police protection services. Other implications of construction-related traffic include increased travel time due to flagging or stopping of traffic to accommodate trucks entering and exiting the project site during construction. However, the related projects are anticipated to implement construction management plans for traffic control, as is the case with the Proposed Project, to ensure that potential construction-related impacts are reduced. Another purpose of construction traffic management plans is to maintain roadway

capacity adequate for emergency vehicle access on streets with neighboring construction sites. As such, emergency access to the project site would remain clear and unhindered during construction of the Proposed Project pursuant to City requirements. Cumulative impacts associated with emergency access on the surrounding roadways due to construction activities would be less than significant.

Cumulative growth would increase the future service population of the Lancaster Station. These future development projects would undergo environmental review by the City pursuant to CEQA to address potential impacts. The related projects would be reviewed by the LASD to ensure that sufficient security measures are implemented to reduce potential impacts to police protection services. As discussed above, the Proposed Project impacts would not be cumulatively considerable because each applicant of future individual developments would be required to pay development impact fees in accordance with LMC 15.64.130 in order to offset direct and cumulative impacts to police protection services. Therefore, the Proposed Project's cumulative impact with regard to police protection services would not be cumulatively considerable and impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Cumulative impacts would be less than significant.

### **5.13.2.4 SUMMARY OF SIGNIFICANCE**

Future development projects associated with the Proposed Project would be required to comply with LMC 15.64.130. Accordingly, the Proposed Project's police protection services would be less than significant. Cumulative impacts would be less than significant.

This section of the Environmental Impact Report (EIR) addresses the potential for the Proposed Project to impact school services and facilities provided by the Lancaster School District (LSD) and the Antelope Valley Union High School District (AVUHSD). The existing inventory of uses present within the project site and surrounding area are described, along with the methodology and the regulatory setting that guided the evaluation pursuant to State and local statutes and regulations. Potential impacts to school services and facilities that would result from the Proposed Project are identified, along with any measures to mitigate the significant effects of the Proposed Project, if required. The analysis is based, in part, on information provided by the LSD and AVUHSD, which is included in Appendix I: Public Services Correspondence of this EIR.

**5.13.3.1 ENVIRONMENTAL SETTING**

**5.13.3.1.1 Existing Conditions**

The City of Lancaster and its sphere of influence is served by four different school districts: LSD, Westside Union School District (Westside), Eastside Union School District (Eastside), and AVUHSD. The four school districts provide educational services for students in grades kindergarten (K) through 12. Education facilities and resources within the City also include joint-use programs, and private and public education. Antelope Valley College (AVC), which is located in the City, is the local community college and has a satellite campus for California State University, Bakersfield.<sup>1</sup>

For elementary (K through 6th grade) and middle school (7th and 8th grades), the project site is located within the service boundary of the LSD. For high school grades (9th through 12th grades), the project site is located within the AVUHSD. Table 5.13.3-1: LSD and AVUHSD Schools within 3 Miles of the Project Site, lists all schools within a 3-mile radius of the Proposed Project. The closest schools to the project site include Sunnydale Elementary School, Amargosa Creek Middle School, and Lancaster High School which would be the high school that would serve the project site.

The approximately 272.4-acre project site is largely developed and currently occupied by the Antelope Valley Hospital and commercial, office, and residential development. In addition, approximately 110 acres of vacant, undeveloped land is interspersed with development across the site.

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1 City of Lancaster, *Lancaster General Plan 2030*, July 2009, accessed June 2020, available at <https://www.cityoflancasterca.org/home/showdocument?id=9323>.

**Table 5.13.3-1**  
**LSD and AVUHSD Schools within 3 Miles of Project Site**

School Name	Location	Current Enrollment	Current Capacity
<b>Elementary School</b>			
Desert View Elementary	1555 West Avenue H-10	709	1,305
El Dorado Elementary	361 East Pondera Street	680	1,189
Mariposa Computer Science Magnet	737 West Avenue H-6	547	1,189
Miller Elementary	43420 22nd Street West	788	1,247
Monte Vista Elementary	1235 West Kettering Street	768	1,189
Sierra Elementary	747 West Avenue J-12	644	1,392
Sunnydale Elementary	1233 West Avenue J-8	649	1,218
West Wind Elementary	44044 36th Street West	758	986
LAVA - Lancaster Alternative & Virtual Academies	44034 13th Street West	122	200
Crossroads Community Day School & Leadership Academy	44310 Hardwood Avenue	91	214
<b>Middle School</b>			
Amargosa Creek Middle School	44333 27th Street West	960	1,537
<b>High School</b>			
Lancaster High School	44701 32nd Street West	2,662	— <sup>a</sup>
Antelope Valley High School	44900 Division Street	1,586	— <sup>a</sup>

Source: Larry M. Freise, Ed. D, Assistant Superintendent Business Services, Lancaster School District, email correspondence, June 4, 2019.

Brian Hawkins, Assistant Superintendent of Business Services, Antelope Valley Union High School District, email correspondence, August 26, 2019.

<sup>a</sup> Antelope Valley Union High School District does not have a current site student capacity report.

## 5.13.3.2 REGULATORY SETTING

### 5.13.3.2.1 State

#### California Department of Education

The California Department of Education (CDE) has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the legislature passed California State Assembly Bill (AB) 2926 in 1986, which allowed districts to collect impact fees from developers of new residential and commercial/industrial building space. The California Education Code provides that the governing board of any school district is authorized to levy a fee, charge,

dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities.

### **Mitigation Fee Act**

The California Mitigation Fee Act, AB 1600, mandates procedures for administration of impact fee programs, including collection and accounting, reporting, and refunds.<sup>2</sup> A development impact fee is a monetary fee, per California Education Code Section 17620(a)(1), that states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities.

### **Senate Bill 50**

The Leroy F. Greene School Facilities Act of 1998 (Senate Bill [SB] 50) sets a maximum level of fees a developer may be required to pay to mitigate a project's impacts on school facilities. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits, and subdivisions. The provisions of SB 50 are deemed to provide full and complete mitigation of potential school facilities impacts, notwithstanding any contrary provisions in CEQA or other State or local laws.<sup>3</sup> The fees are based on building permits. Currently, the LSD collects the maximum fee of \$3.18 per square foot (sf) for residential development, \$0.45 per sf for senior only housing and commercial/industrial development, and \$0.06 per sf for mini-storage development. AVUHSD currently collects fees of \$4.36 per sf for residential development, \$0.16 per sf for commercial/industrial development, and \$0.11 per sf for self-storage development.

## **5.13.3.2.2 Local**

### **City of Lancaster General Plan**

The Plan for Active Living of the City's General Plan focuses on components of the community's shelter, culture, and lifestyle and on the manner in which those in need can be helped so that all may share in achieving a high quality of life.<sup>4</sup> The plan also covers issues relating to the City's school services and facilities.

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2 California Government Code, Sections 66000 et seq.

3 Government Code Section 65996.

4 City of Lancaster, *Lancaster General Plan 2030*, July 2009, accessed June 2020, available at <https://www.cityoflanasterca.org/home/showdocument?id=9323>.

The following goal and specific actions are applicable to the Proposed Project:

- Goal 9 To promote access to high quality local educational services for Lancaster residents.
- Specific Action 9.1.1(b): Through the development review process, identify conditions to mitigate the impact on local public educational systems. Develop fee structures and/or other options to offer project sponsors appropriate mechanisms to participate in school impact mitigation.
- Specific Action 9.1.1(d): Require large scale residential developments which will generate a population sufficient to support one or more schools to integrate such schools into project design, and to reserve such land for acquisition by the applicable school district.
- Specific Action 9.1.1(e): Ensure that all new development projects are conditioned as appropriate to pay school facilities mitigation fees as required by SB 50 and Proposition 1A.
- Specific Action 9.1.2(c) Submit residential development proposals to applicable school districts for their review and comment.

### **Plan for Municipal Services and Facilities**

The Plan for Municipal Services and Facilities sets forth policies and programs for the rational and cost-efficient provision and extension of public services, infrastructure, and facilities to serve the existing community and support planned development and protect natural resources. Specifically, this plan addresses coordination of development and public services; levels of service; water facilities; flood control and drainage; wastewater facilities; and solid waste management. The following goal, objective, and specific action are applicable to the Proposed Project:

- Goal 15: A full range of municipal services and facilities at desired levels for urban and rural areas, as appropriate.
- Objective 15.1: Achieve and maintain sufficient number and size to provide required services. (Schools/Other Public Facilities)



Specific Action 15.1.1(d) Coordinate with other local government agencies (including L.A. County, the school districts, and other special districts) to periodically share information regarding projects of regional and subregional concern.

### **Lancaster Municipal Code**

Lancaster Municipal Code (LMC) Chapter 15.68, Funding for Interim Classrooms and School District Facilities, was adopted to establish a method of providing interim classrooms and related facilities for school districts having conditions of overcrowding within one or more attendance areas. Section 15.68.080, Payment of Fees-Land Made Available, requires the developer of a proposed residential development to pay fees or make land available if the area has been determined by City Council to have conditions of school attendance overcrowding. The purpose of such fees/land availability is to minimize, to the greatest extent practicable, a new development's impact on the school district serving that area. Compliance requirements include:

- Where the payment of fees is required, they shall be collected by the school district prior to the issuance of a building permit, or in the case of an installation of a mobile home or the construction of a mobile home park, a utility permit (e.g., electrical, sewer, plumbing, construction, etc.). Upon receipt of payment, the school district shall issue its certificate of completion of requirements under this chapter for interim school facilities' financing.
- Where land is to be made available, the developer shall provide a recordable written agreement to the school district which grants to the school district exclusive use of the land acceptable to the school district for an interim period. This written agreement shall be provided to the school district prior to the issuance of a building permit, or in the case of an installation of a mobile home or the construction of a mobile home park, a utility permit (e.g., electrical, sewer, plumbing, construction, etc.). Upon receiving the recordable agreement, the school district shall issue its certificate of completion.
- If the school district determines that the requirement for land or use fees in lieu thereof would result in an inequitable duplication of land or fees previously provided by the developer or his predecessors in interest, the school district shall adjust the requirement to the extent necessary to eliminate such duplications.

## **5.13.3.3 ENVIRONMENTAL IMPACTS**

### **5.13.3.3.1 Thresholds of Significance**

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with schools. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have significant impacts on schools if it would:

**Threshold SCH-1 Result in substantial adverse physical impacts associated with the provision of**

new or physically altered school facilities or the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain performance objectives for school services.

### 5.13.3.3.2 Methodology

Operation-related impacts on schools were quantitatively analyzed to assess the ability of the LSD and the AVUHSD to accommodate the student population that would be both directly and indirectly generated by the Proposed Project. In determining the student generation of the uses proposed by the Proposed Project, generation rates based on residential, commercial/retail, lodging and hospital uses were used, as shown in Table 5.13.3-2: Student Generation Rates for Residential Uses. Each rate was multiplied by the appropriate dwelling units and square footage total to obtain an approximation of how many students would be generated based on the proposed residential and commercial uses of the Proposed Project. The anticipated total number of students generated under the proposed Master Plan for elementary schools, middle schools, and the high schools were compared to the total capacity of each respective school to determine whether the schools could accommodate the Proposed Project's student generation.

**Table 5.13.3-2  
Student Generation Rates for Residential Uses**

Grade Levels	Generation Rates (Single-Family Units)	Generation Rates (Multifamily Units)
<b>Lancaster School District</b>		
K-6	0.308	0.397
7-8	0.081	0.091
<b>Antelope Valley Union High School District</b>		
9-12	0.268	0.268

Source: School Facility Needs Analysis for Lancaster School District Study, September 2018.  
Brian Hawkins, Assistant Superintendent of Business Services Antelope Valley Union High School District, email correspondence August 26, 2019.

The generation rates for commercial retail/service, lodging and medical uses are shown below in Table 5.13.3-3: Student Generation Rates for Non-Residential Uses: AVUHSD.

**Table 5.13.3-3**  
**Student Generation Rates for Non-Residential Uses: AVUHSD**

<b>Land Use</b>	<b>High School (Grades 9-12)</b>
Commercial Retail/Services (per 1,000 sf)	0.0177
Office (per 1,000 sf)	0.0277
Hospital (per 1,000 sf)	0.0221

*Source:*

*Brian Hawkins, Assistant Superintendent of Business Services, Antelope Valley Union High School District, email correspondence, August 26, 2019.*

*Abbreviations: sf = square feet.*

Proposed Project construction is not anticipated to result in adverse impacts to LSD or AVUHSD school facilities and overall capacity levels due to the temporary nature of construction-related activities.

### 5.13.3.3.3 Project Impacts

**Threshold SCH-1      Result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain performance objectives for school services.**

The Proposed Project would develop up to 1,600 residential dwelling units as well as commercial, retail, restaurant, office, medial office, hospitality, and hospital uses. Approximately 1,350 multifamily units and 250 single-family condominium units would be permitted under the proposed Master Plan. The residential units are anticipated to generate additional students that would utilize LSD and AVUHSD facilities. As indicated by LSD, the district does not have student generation rates for commercial/industrial uses. As indicated by AVUHSD, the district does not have student generation rates for lodging uses. As shown below in Table 5.13.3-4: Estimated Student Generation from the Proposed Project, the residential units would generate approximately 613 students for grades K–6, 143 students for grades 7–8, and 429 students for grades 9–12 for a total of 1,185 students.

Additionally, the Proposed Project would generate new employment opportunities that may result in indirect population growth in the area, which, in turn, could also increase demand for housing. Future student populations were determined using standard generation rates, as provided by AVUHSD based on the proposed land uses associated with the Proposed Project. As shown in Table 5.13.3-4, the non-residential portions of the Proposed Project would generate approximately 60 students for grades 9–12. At full buildout, the Proposed Project would add up to 613 students to grades K-6 and 143 students for

grades 7-8. These students would be attending schools within the LSD. Based on information provided by the LSD, schools within a 3-mile radius of the project site are currently operating below their capacities. The LSD would have the capability to be able to serve the students generated by the Proposed Project.

The Proposed Project would add up to 489 students for grades 9-12. These students would attend schools in the AVUHSD. Lancaster High School would be the school of attendance and the school site primarily impacted by the Proposed Project. According to the AVUHSD, last year's enrollment was 2,662 students. A current site capacity report was not provided, since the AVUHSD has contractual limits to the number of students per teacher both per class period and total served that day. These numbers fluctuate depending on the subjects taught or the education programs provided. Currently, the AVUHSD does not have an overcrowding standard or policy.

**Table 5.13.3-4  
Estimated Student Generation from the Proposed Project**

Grade Levels	Generation Rates					Proposed Students (Residential Uses)	Proposed Students (Non-Residential Uses)
	(Single-Family Units)	(Multifamily Units)	(Commercial Retail/Services)	(Office)	(Hospital)		
<b>Lancaster School District</b>							
K-6	0.308	0.397	N/A	N/A	N/A	613	—
7-8	0.081	0.091	N/A	N/A	N/A	143	—
<b>Subtotal</b>						<b>756</b>	<b>—</b>
<b>Antelope Valley Union High School District</b>							
9-12	0.268	0.268	0.0177	0.0277	0.0221	429	60
<b>Subtotal</b>						<b>429</b>	<b>60</b>
<b>Grand Total</b>						<b>1,185</b>	<b>60</b>

*Note: 250 Single Family Units are proposed; 1,350 Multi-Family Units are proposed; 571,200 sf of Retail and Services uses are proposed; 600,000 sf of office uses are proposed; 1,508,800 new sf Hospital uses are proposed under the Proposed Project.*

*Lancaster School District does not have commercial/industrial student generation rates. AVUHSD does not provide a rate for Lodging.*

*Source: Level I Developer Fee Study for Lancaster School District, October 2018, Brian Hawkins, Assistant Superintendent of Business Services Antelope Valley Union High School District, correspondence August 26, 2019.*

Furthermore, applicants of individual projects proposed under the Master Plan would be required to pay fees to the LSD and AVUHSD to compensate for the impacts of the residential and nonresidential development on local school capabilities, in order to maintain adequate classroom seating and facilities standards. As previously discussed, both the LSD and AVUHSD have adopted development impact fees for residential and nonresidential land uses for constructing school facilities to fully mitigate future school capacities. Additionally, each future applicant would also be required to comply with the LMC Chapter

15.68, Funding for Interim Classrooms and School District Facilities. Pursuant to SB 50, payment of fees to the LSD and AVUHSD is considered full mitigation for Proposed Project impacts. Therefore, impacts to LSD and AVUHSD facilities would be less than significant.

#### **Mitigation Measures**

No mitigation measures are required.

#### **Level of Significance**

Impacts would be less than significant.

#### **5.13.3.4 Cumulative Impacts**

As discussed above, the Proposed Project could directly and indirectly generate student population growth in the LSD and AVUHSD. Cumulative development served by the LSD and AVUHSD could result in significant impacts associated with new students residing in their attendance boundaries. As previously indicated, future individual development projects, including related projects, would be reviewed to determine their potential impact on school facilities. Each cumulative project would be required to pay the school mitigation fees prior to the issuance of building permits pursuant to SB 50. Pursuant to Government Code Section 65995, the payment of these fees would be considered full mitigation of school impacts generated by the Proposed Project as well as the related projects. Therefore, cumulative LSD and AVUHSD school impacts of the Proposed Project and related projects would be less than significant.

#### **Mitigation Measures**

No mitigation measures are required.

#### **Level of Significance**

Payment of fees in accordance with SB 50 would result in less than significant cumulative impacts.

#### **5.13.3.4 SUMMARY OF SIGNIFICANCE**

School-aged children generated by the Proposed Project would attend schools in the LSD and the AVUHSD. With adherence to regulatory requirements mandating the payment of school developer/impact fees, the Proposed Project would have a less than significant impact on school facilities. Other related projects would also be required to pay the school mitigation fees pursuant to Government Code Section 65995. The payment of the developer fees under the provisions of SB 50 constitute full mitigation for impacts to school facilities. Therefore, implementation of the Proposed Project would result in less than significant project and cumulative impacts to school facilities operated by the LSD and AVUHSD as well as the other school districts addressed by this analysis.

This section of the Environmental Impact Report (EIR) addresses the Proposed Project’s potential impacts on existing libraries within the project site vicinity. The demand for libraries is generated either directly through the construction of new residential units or indirectly through the addition of new jobs at a development site. The analysis that follows identifies and describes the existing library facilities near the project site that would be directly and indirectly affected by the Proposed Project’s new residents and employees and assesses whether library facilities near the project site would have increased demand. The analysis is based, in part, on information obtained about the Los Angeles County Public Library system (LA County Library) from their website.

### 5.13.4.1 ENVIRONMENTAL SETTING

#### 5.13.4.1.1 Existing Conditions

Established in 1912 under authority of the County Free Library Act, the LA County Library provides library services to over 3.4 million residents living in unincorporated areas of the County and to residents of 49 of the 88 incorporated cities in the County, including the City of Lancaster. LA County Library serves an area over 3,000 square miles through 85 regional/community branches, one institutional library, ten MākMō maker mobile libraries, and five Reading Machine early literacy mobiles.<sup>1, 2</sup> MākMō vehicles and mobile libraries promote Science, Technology, Engineering, Arts, and Math (STEAM) programs and travel throughout the County to bring programming to libraries and local community events.<sup>3</sup> These mobile services also provide hands-on activities such as computer coding, robotics, 3D printing, cardboard construction, and more. The LA County Library has a book collection of over 7.5 million volumes, supplemented by online databases that include a number of magazines, newspapers, government publications, and many specialized materials.<sup>4</sup> The LA County Library belongs to the South State Cooperative Library System, a consortium of 39 independent city, county and special district public libraries located in Los Angeles and Ventura counties which have agreed to cooperate in providing library service to the residents of all participating jurisdictions.<sup>5</sup>

The LA County Library branch serving the City is the Lancaster Library, located at 601 West Lancaster Boulevard, approximately 0.9 miles northeast of the project site at its closest point.<sup>6</sup> At approximately 49,000 square feet, the Lancaster Library includes spaces for children, teens, and adults, as well as study

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1 LA County Library, “About the Library,” accessed June 2020, available at <https://lacountylibrary.org/aboutus/>.

2 LA County Library, “Statistical Information: Fiscal Year Ending June 30, 2019,” accessed November 2020, available at <https://lacountylibrary.org/aboutus-info/>.

3 LA County Library, “MākMō,” accessed June 2020, available at <https://lacountylibrary.org/makmo/>.

4 LA County Library, “About the Library,” accessed June 2020, available at <https://lacountylibrary.org/aboutus/>.

5 Southern California Library Cooperative, <https://socallibraries.org>, accessed August 2020.

6 Google Maps, <https://www.google.com/maps>.

rooms and a 200-person-capacity meeting room.<sup>7</sup> The City conducted a Library Needs Assessment in 2018 in an effort to better understand service, program, and facility needs.<sup>8</sup> The Library Needs Assessment identified possibilities for service enhancements and expansion and sought to engage Lancaster residents in a dialogue about library services.

Other libraries in the region include Quartz Hill Library, located 4.1 miles southwest of the project site; Acton Agua Dulce Library, 12.8 miles southwest; Littlerock Library, 14.9 miles southeast; and Lake Los Angeles Library, 19.5 miles southeast.<sup>9</sup>

### 5.13.4.1.2 Regulatory Setting

#### **a. State**

##### **Mitigation Fee Act**

The California Mitigation Fee Act, Assembly Bill (AB) 1600, mandates procedures for administration of impact fee programs, including collection and accounting, reporting, and refunds.<sup>10</sup> A development impact fee is a monetary fee, per California Government Code Section 66000, that states that a local agency may charge a project applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project. New development impact fees shall not exceed the cost of providing capital improvements and operational services for which the need is attributable to those development projects that pay the fees.

#### **b. Local**

##### **City of Lancaster General Plan**

The City's General Plan was adopted on July 14, 2009, and provides for a 20-year planning horizon. The General Plan is organized into a number of plans that cover broad topical areas, while addressing the issues required by State law. The Plan for Active Living and the Plan for Municipal Services and Facilities included in the City's General Plan provides further guidance to address library facilities and are further described below.

7 LA County Library, "About Lancaster Library," accessed June 2020, available at <https://lacountylibrary.org/lancaster-library/>.

8 City of Lancaster, "City News & Updates," <https://www.cityoflancasterca.org/Home/Components/News/News/9141/20?arch=1>, accessed August 2020.

9 Google Maps, <https://www.google.com/maps>.

10 California Government Code, Sections 66000 et seq.

### ***Plan for Active Living***

The Plan for Active Living focuses on the components of the City's shelter, culture, and lifestyle. This plan also focuses on the manner in which those in need can be helped so that all may share in achieving a high quality of life. The Plan for Active Living states that adequate library facilities are important to the quality of life and education of Lancaster residents. While the provision of library facilities and services in the City is the responsibility of the LA County Library system, the City has determined that it can assist in the provision of library facilities by incorporating availability of library facilities into the general considerations of the adequacy of public services and facilities. Relevant components of the Plan for Active Living, which include the following objective and policies:

- Objective 12.2: Promote the availability of local library facilities; book, audiovisual and other material reserves; computer databases; Internet access and programs in accordance with the standards of the American Library Association.
- Policy 12.2.1: Promote the construction of libraries or expansion of existing libraries as required to meet the needs of existing and future residents.
- Policy 12.2.2 Promote the acquisition of library materials, databases, and programs that reflect the needs and interests of the City residents.

### ***Plan for Municipal Services and Facilities***

As mentioned previously, library services in the City are provided by the LA County Library. The Plan for Municipal Services and Facilities sets forth policies and programs for the rational and cost-efficient provision and extension of public services, infrastructure, and facilities to serve the existing community and support planned development and protect natural resources within the City. Relevant components of the Plan for Municipal Services and Facilities, which include the following objective, policy, and specific action:

- Objective 15.1: Achieve and maintain the following level of service: 0.35 square feet of library space per capita and 2.0 loanable materials per capita. (Libraries)
- Policy 15.1.1: Promote continued coordination between the City of Lancaster and local service providers.
- Specific Action 15.1.1(b): Through the development review process, continue to coordinate with service providers in evaluating development proposals.



## City of Lancaster Municipal Code

Chapter 15.64, Development Impact Fees, of the Lancaster Municipal Code (LMC) establishes the urban structure program for the adoption and administration of development impact fees by the City for the benefit of the citizens. As a condition to the issuance of a building permit by the City, the property owner or land developer will be required to pay development impact fees or provide other consideration to the City for the purpose of defraying the costs of public expenditures for capital improvements and operational services which will benefit such new development.

Section 15.64.140, Library Facilities Fee, calls for a library facilities fee to be imposed on all new development in the City to provide adequate public services and to support the well-being and general welfare of the City's growing population. The library facilities fee shall be used to finance land acquisition, design, construction, equipping, and related capital costs for local library facilities.

### 5.13.4.2 ENVIRONMENTAL IMPACTS

#### 5.13.4.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with public services, including library services. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant impact related to library services if it would:

**Threshold LIB-1            Result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.**

#### 5.13.4.2.2 Methodology

The methodology used to evaluate potential library impacts included the following: (1) reviewing the existing library services serving the project site, including square footage of facilities and number of volumes; (2) projecting the future population associated with the Proposed Project; and (3) evaluating the demand for library services anticipated at the time of buildout compared to the library standards set forth in the General Plan. Information was gathered from publicly available information in order to provide level of service analysis.

### 5.13.4.2.3 Project Impacts

**Threshold LIB-1      Result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.**

As described in the Regulatory Setting, the City has adopted objectives for municipal services and facilities, including library services, by which to measure their performance. For library services, the City has established 0.35 square feet of library space per capita and 2.0 loanable materials items per capita as the desired level of service. The Lancaster Library branch of the LA County Library system, located at 601 West Lancaster Boulevard, serves the City and would serve the project site upon project buildout. This facility is 48,721 square feet in size.<sup>11</sup> The specific number of volumes at this location was not available; however, as previously discussed the LA County Library has over 7.5 million volumes which are available to all members. As discussed in Section 5.12: Population and Housing, implementation of the Proposed Project would involve the development of 1,600 housing units and the generation of approximately 5,120 new direct residents in the City who would have access to the Lancaster Library. Similarly, for conservative purposes all new jobs within the project site were considered as new residents and thus, approximately 6,477 new jobs would generate the same number of residents within the City. At Proposed Project buildout, it is anticipated that the new population added within the City would be approximately 11,597 residents. This increase in residents would result in an increased demand on the Lancaster Library for services provided within their facilities.

As described Section 5.12, SCAG forecasts the City's population, housing, and employment growth will amount to a total of 167,400 residents in 2020 and 209,900 residents within the City in 2040, which results in an additional 42,500 residents or an increase of approximately 22 percent being added to the City between 2020 and 2040. The Proposed Project would represent approximately 27.3 percent of this total estimated population increase. The City plans to achieve and maintain 0.35 square feet of library facilities per capita; with the existing ratio of 0.30 square feet of library facilities per capita.<sup>12</sup> With implementation of the Proposed Project, that ratio would decline to 0.28 square feet of library facilities per capita.<sup>13</sup> It should be noted that the current ratio of facilities per capita without implementation of the Proposed Project does not meet City performance objectives. As such, implementation of the Proposed Project could worsen performance standards and impacts related to library services would be potentially significant. However, future individual development projects enabled by the proposed Master Plan would

11 LA County Library, "About Lancaster Library," accessed June 2020, available at <https://lacountylibrary.org/lancaster-library/>.

12 48,721 square feet / 161,604 residents = 0.30.

13 48,721 square feet / 173,201 residents = 0.28.

be required to comply with LMC Section 15.64.140, Library Facilities Fee. The library facilities fee is used to finance land acquisition, design, construction, equipping and related capital costs for local library facilities. Payment of these fees would ensure that library services are able to be maintained to an adequate level within the City. Therefore, with payment of applicable development impact fees by individual future project proponents, impacts of the Proposed Project on library facilities would be less than significant.

Additionally, the LA County Library's extensive digital collections, including a number of magazines, newspapers, government publications, and many specialized materials, provide remote access of materials and library services to residents while alleviating the need to visit a physical location. Also, the LA County Library system's network of mobile libraries bring library resources directly to communities and further reduce the need to visit a physical library branch. Moreover, the South State Cooperative Library System offers cooperative library services to residents across Los Angeles and Ventura counties at 39 independent city, county, and special district public libraries, spreading demand for library services across a broader geographical area and a variety of locations.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

### **5.13.4.2.4 Cumulative Impacts**

This cumulative impact analysis for library services considers development of the Proposed Project in conjunction with full General Plan buildout in the City of Lancaster, its sphere of influence, and surrounding jurisdictions.

As with the Proposed Project, the related projects would undergo discretionary review on a case-by-case basis; those projects of a sufficient size and/or land use mix (e.g., projects that include residential development) would be expected to coordinate with the LA County Library. As mentioned previously, the LA County Library belongs to the South State Cooperative Library System which provides shared library services to residents across 39 independent city, county and special district public libraries within Los Angeles and Ventura counties. Similar to the Proposed Project, related projects within the City would be required to pay development impact fees related to library facilities and services as required by LMC Section 15.64.140. Accordingly, any Project impacts would be less than significant by adherence to local fee requirements. Cumulative impacts to the library system would be mitigated through the development

impact fees that are imposed upon new construction within the City. Therefore, to the extent that library facilities are expanded to serve cumulative development, no significant impacts to library services and facilities are anticipated to occur. Accordingly, cumulative impacts would be less than significant.

#### **Mitigation Measures**

No mitigation measures are required.

#### **Level of Significance**

Impacts would be less than significant.

### **5.13.4.3 SUMMARY OF SIGNIFICANCE**

The Proposed Project's impacts would be less than significant and no mitigation measures are necessary. The Proposed Project's cumulative impacts would also result in less than significant impacts to library services.

## 5.14 RECREATION

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This section of the Environmental Impact Report (EIR) addresses the Proposed Project's potential impacts on existing public parks and recreational facilities within the project vicinity. The demand for public parks and recreational facilities is generated either directly through the construction of new residential units or indirectly through the addition of new jobs at a development site. The Proposed Project includes both the development of residential units and residents generated by new on-site employment opportunities. The analysis that follows identifies and describes the existing parks and recreational facilities near the project site that would be directly affected by the Proposed Project's new residents and employees and assesses whether public park and recreational facilities near the project site would have increased demand. The analysis is based, in part, on information provided by the City of Lancaster (City), which is included in Appendix I: Public Services Correspondence of this EIR.

### 5.14.1 ENVIRONMENTAL SETTING

#### 5.14.1.1 Existing Conditions

##### *a. Federal Land and Parks*

Regional recreational opportunities available near the project site include the facilities in the Portal Ridge Foothills which are located approximately 20 miles to the west of the project site, beyond which are the San Gabriel Mountains. The Angeles National Forest is located approximately 17 miles to the south of the project site and the Tehachapi Mountains are located approximately 29 miles northwest of the project site. State parks, County of Los Angeles (County) parks, and City parks are discussed in further detail below.

##### *b. State Parks*

There are four State park facilities located within 20 miles of the City: (1) Arthur B. Ripley Desert Woodland State Park is located approximately 20 miles northwest of the project site; (2) Antelope Valley California Poppy Reserve is located approximately 14 miles northwest of the project site; (3) Saddleback Butte State Park is located approximately 18 miles east of the project site; and (4) the Antelope Valley Indian Museum is located approximately 17 miles east of the project site.<sup>1</sup>

##### *c. County Parks*

County parks located within the vicinity of the City include: (1) Apollo Community Regional Park; (2) George Lane County Park; (3) and Jackie Robinson Park. Apollo Community Regional Park is located approximately 4 miles northwest of the project site; George Lane Park is located approximately 4 miles

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<sup>1</sup> City of Lancaster, *Lancaster Parks, Recreation, Open Space and Cultural Master Plan*, October 2007, Accessed June 2020, <https://www.cityoflanasterca.org/home/showdocument?id=4490>.

southwest of the project site; and Jackie Robinson Park is located approximately 13 miles southeast of the project site.

#### **d. City Parks and Recreational Facilities**

##### **Parks**

There are 13 parks that collectively comprise approximately 450 acres of parkland within the City. The City also has several museums, community buildings, and a baseball stadium which are not included in the City's total acreage count. All parks are located within 5 miles of the project site and serve the existing residents.

The following parks are located within the City:

- American Heroes Park located at 701 West Kettering Avenue;
- Deputy Pierre W. Bain Park located at 45045 5th Street East;
- El Dorado Park located at 44501 5th Street East;
- Forrest E. Hull Park located at 2850 West Avenue L-12;
- Jane Reynolds Park located at 716 Oldfield Street;
- Sgt Steve Owen Memorial Park/Big 8 Softball Complex located at 43063 10th Street West;
- Lancaster National Soccer Center at 43000 30th Street East;
- Mariposa Park located at 45755 Fig Avenue;
- Prime Desert Woodland Preserve located at 43201 35th Street West;
- Rawley Duntley Park located at 3334 West Avenue K;
- Skytower Park located at 43434 North Vineyard;
- Tierra Bonita Park located at 44910 27th Street East; and
- Whit Carter Park located at 45635 Sierra Highway.

The closest City parks to the project site include the Sgt. Steve Owen Memorial Park less than 2 miles south of the project site; American Heroes Park approximately one mile northeast of the project site; and Jane Reynolds Park approximately one mile east of the project site. The City recently installed a skateboard park/area at the existing Jane Reynolds Park.<sup>2</sup> City parks provide ample access to picnic

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<sup>2</sup> Based on email correspondence with Jocelyn Swain, Principal Planner with the City of Lancaster on May 20, 2019 (refer to Appendix I).

shelters, barbeques, volleyball, tennis, basketball and horseshoe courts, softball fields, swimming pools, playgrounds and walking trails.<sup>3</sup>

Based on the City's 2017 population of 161,401 residents and approximately 450 acres of parkland, the ratio of parkland to residents is 2.79 acres per 1,000 residents.<sup>4</sup> Similarly, based on the City's 2019 population of 161,604 residents and approximately 450 acres of parkland, the current ratio of parkland to residents is 2.78 acres per 1,000 residents

### **Recreational Facilities**

The following recreational facilities are located within the City and provide residents a variety of activities. The Cedar Center for the Arts provides several areas for arts and classroom spaces and includes an auditorium and the Museum of Art and History (MOAH): CEDAR Art Gallery. The Lancaster Municipal Stadium is a baseball stadium and ballpark that hosts a minor league baseball team. The Lancaster Performing Arts Center provides entertainment, music, and arts programs.

### **Bicycle and Pedestrian Facilities**

Existing bicycle routes and trails are located within and adjacent to the project site. Specifically, a Class II Bike Lane exists along a segment of Avenue J-8 from State Route (SR) 14 to 12th Street West and a Class III Bike Route along a segment of 12th Street West from Avenue J to Avenue K.

Proposed bicycle routes and trails are also located within and adjacent to the project site. Specifically, a Class I Bike Path is proposed along the Amargosa Creek channel that borders the western project site boundary and bisects the southern portion of the project site north of Avenue K. Class II Bike Lanes are proposed along a segment of Avenue J from SR-14 to 15th Street West; 15th Street West from Avenue J to Avenue K; and along Lorimer Avenue from Avenue J to Avenue J-8. A Class III Bike Route is proposed east of the project site along Avenue J-8. A Jogging Trail is also proposed along Avenue J that would traverse the northern project site boundary.

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3 City of Lancaster, Parks, Recreation & Arts. (<https://www.cityoflancasterca.org/about-us/departments-services/parks-recreation-arts/parks>). Accessed June 2020.

4 According to the California Department of Finance's (DOF) projection for the City's population in January 2017, was 161,401 persons.





comprehensive trails system and meeting the open space and recreational needs of Lancaster residents.

Objective 10.1 Provide sufficient neighborhood and community park facilities such that a rate of 5.0 acres of park land per 1,000 residents is achieved and distributed so as to be convenient to Lancaster residents.

Policy 10.1.1: Provide opportunities for a wide variety of recreational activities and park experiences, including active recreation and passive open space enjoyment within a coordinated system of local, regional, and special use park lands areas.

Specific Action 10.1.1(c) Where an individual development is of sufficient size to support one or more neighborhood or community parks, consider the dedication of such land for park use and developed as part of the project or payment of in-lieu fees may be made, subject to the policies, programs and standards of the Parks, Recreation, Open Space and Cultural Master Plan.

Objective 10.2 Through the adoption and implementation of a Master Plan of Trails, establish and maintain a hierarchical system of trails (including equestrian, bicycle, and pedestrian trails) providing recreational opportunities and an alternative means of reaching schools, parks, and natural areas, and places of employment, and connecting to regional trail systems.

Specific Action 10.2.2(b) Where consistent with the Master Plan of Trails, require all new development within the City of Lancaster to provide dedication of rights-of-way or easements, along with improvements.

Policy 10.2.3: Ensure that trail construction takes into consideration the safety and convenience of the trail users as the primary concern.

Specific Action 10.2.3(a) Incorporate the following guidelines into trail location and construction, wherever feasible:

- Incorporate street trees and landscaping which is non-toxic to animals into the design of primary and collector trails.
- Within nonurban residential subdivisions intended for occupancy by users of the equestrian trails, require that all residential lots have

access to local equestrian trails either directly or through other public rights-of-way or private easements.

- Minimize the number of switchbacks in hillside areas to minimize the amount of required grading; utilize topographic features as a turning point or provide vegetative screening.
- Avoid, where possible, areas of heavy traffic congestion and hazardous topographic conditions.
- Design staging areas and trail entrances to provide for intended equestrian, bicycle, and/or hiking use, and discourage motor vehicle access.
- For the protection of the trail user and the rights of the private land owner, provide fencing when a trail bisects or borders private property or concrete drainage channels; in the instance of local feeder trails, standard residential fencing may be substituted.
- Ensure provision of consistent fencing styles and materials, giving preference to concrete fencing because of its durability and ease of maintenance, or other styles as acceptable to the City.
- Where community trails cross existing or proposed drainage channels maintain the continuity of the trail by built-up areas or ramps for fording, or by bridges for major crossings.
- Provide signing for trail identification.
- Provide standard signs along the entire length of the trail, constructed of materials which minimize maintenance and which blend into the natural environment.
- Where community trails cross local streets provide street crossings at grade with appropriate striping and signing, where warranted. In cases of heavy equestrian usage, textured paving is desirable.
- Where community trails cross expressways and major arterials, provide grade separated crossings, where feasible.
- Where feasible, mitigate hazards to trail users such as drainage grates, manholes, potholes, or uneven road surfaces.

#### Policy 10.2.4

Facilitate the use of bicycles as an alternative form of transportation, as well as a form of recreation.

#### Specific Action 10.2.4(c)

Design bicycle routes and pathways to allow access to local and regional transit stops and locations.

## **Plan for Municipal Services and Facilities**

The Plan for Municipal Services and Facilities sets forth policies and programs for the rational and cost-efficient provision and extension of public services, infrastructure, and facilities to serve the existing community and support planned development and protect natural resources. Specifically, this plan addresses coordination of development and public services; levels of service; water facilities; flood control and drainage; wastewater facilities; and solid waste management. The following goal and objective are applicable to the Proposed Project:

Goal 15: A full range of municipal services and facilities at desired levels for urban and rural areas, as appropriate.

Objective 15.1: Achieve and maintain five (5) acres per 1,000 population.<sup>9</sup> (Parks and Recreation)

## **Parks, Recreation, Arts and Cultural Facilities Master Plan**

In 2007, the City adopted the *Parks, Recreation, Arts and Cultural Facilities Master Plan* (Parks Master Plan), which identifies needs and provides goals and policies for the implementation of cultural programs and facilities within the City.<sup>10</sup> The three major purposes of the Parks Master Plan are to (1) Present a long-term vision and goals for the Department and the community for the next 20 to 25 years; (2) Describe current and future needs, interests and community preferences for parks, recreation, arts programs and facilities; and (3) Develop a process and priorities for managing the Department's commitments so that new requests and initiatives are considered in light of existing commitments. The Master Plan is used as a guide to implement an array of parks and recreational needs throughout the City and represents an important implementation program consistent with the General Plan.<sup>11</sup>

## **Master Plan of Trails and Bikeways**

The City adopted a Master Plan of Trails and Bikeways in 2012 with the intent to guide the planning and design of pedestrian, bicycle and equestrian facilities in a comprehensive manner throughout the City.<sup>12</sup> The plan sets forth a Bicycle Plan, Trails Plan, Pedestrian Plan, and an American with Disability Act (ADA)

9 For specific criteria pertaining to Parks, Recreation and Cultural Facilities, refer to the Lancaster Parks, Recreation, Open Space and Cultural Master Plan.

10 City of Lancaster, *Lancaster Parks, Recreation, Open Space and Cultural Master Plan*, October 2007, accessed June 2020, available at <http://www.cityoflancasterca.org/home/showdocument?id=16821>.

11 City of Lancaster, *Lancaster General Plan 2030*, July 2009 accessed June 2020, available at <https://www.cityoflancasterca.org/home/showdocument?id=9323>.

12 City of Lancaster, *Master Plan of Trails and Bikeways*, March 2012, accessed June 2020, available at <https://www.cityoflancasterca.org/home/showdocument?id=16821>

Transition Plan. The Master Plan of Trails is a comprehensive plan that guides the design and development of pedestrian, bicycle, and trail facilities.

As part of the Bicycle Plan, the City plans to add 40 miles of Class I Bike Paths, 138 miles of Class II Bike Lanes and 37 miles of Class III Bike Routes. As part of the Trails Plan, recommendations include 48 miles of equestrian trails, 6 miles of multipurpose trails, and 24 miles of jogging trails (the 40 miles of bike paths included under the Bicycle Plan is also included in the Trails Plan). The Pedestrian Plan includes crosswalks, new or widened sidewalks, curb extensions (bulb-outs), new audio signals and countdown signals, median islands, and other types of pedestrian treatments. The ADA Transition Plan evaluates the City's physical assets, including facilities in the public right-of-way such as sidewalks; pedestrian paths, curb ramps, transit stop accommodations, driveway crossings, and pedestrian signals.

The City provides Class I, II, and III bicycle facilities on many of its street segments. Class I bikeways provide a separate right-of-way (outside the pavement used for automobiles) for bicycles and other uses. Class II bikeways provide a restricted right-of-way for bicycles, which is most often in the form of a painted line and signs on the road. Motor vehicles are allowed to enter the bike lane when making turns within 200 feet of an intersection and to park when permitted. Class III bikeways allow for sharing a travel lane by motor vehicles and bicycles and are indicated only by signs.

### **Lancaster Municipal Code**

Lancaster Municipal Code (LMC) Chapter 15.64.090, Park Acquisition Fee, is imposed on all new residential developments in order to mitigate the impacts of the new residential development on the availability of open space, park, and recreational facilities.

LMC Chapter 15.64.100, Park Development Fee, is imposed on all new residential developments in the City in order to mitigate the impacts of the new residential developments on the availability of open space and park and recreational facilities. The park development fees provide funds to develop park, recreation, and arts facilities.

LMC Chapter 15.72, Park-In-Lieu Fees, is imposed on any new dwelling unit or units containing bedrooms. It requires payment of a fee or dedication of land in lieu of the payment of the fee as provided for in Resolution No. 85-56.

## 5.14.2 ENVIRONMENTAL IMPACTS

### 5.14.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with parks and recreation facilities. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have significant impacts on parks and recreational resources if it would:

**Threshold REC-1      Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.**

**Threshold REC-2      Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**

### 5.14.2.2 Methodology

The methodology used to evaluate potential parks and recreational facility impacts included the following: (1) reviewing the existing parks serving the project site; (2) projecting the future population associated with the Proposed Project; and (3) evaluating the demand for parks and recreational service anticipated at the time of buildout compared to the expected level of service available, considering both park facilities, as well as the Proposed Project's recreational amenities. The analysis also considers whether the Proposed Project would conflict with the parks and recreation standards set forth in regulatory documents (i.e., the Quimby Act and the General Plan).

### 5.14.2.3 Project Impacts

**Threshold REC-1      Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.**

#### ***Construction***

Proposed Project construction is not anticipated to result in adverse impacts either to City parks and recreation facilities or to overall capacity levels due to the temporary nature of construction-related activities. Project construction would result in a temporary increase in the number of workers to the project area; thus, there is the potential for workers to utilize park facilities. Generally, this increase is anticipated to be negligible because construction workers are highly transient in their work location and

would likely utilize park facilities near their place of residence and because lunch break times are typically not long enough (30 to 60 minutes) for employees to take advantage of park facilities services and return to work within the allotted time.

Further, construction of the Proposed Project would not result in access restrictions to City parks and recreation facilities within 5 miles of the project site because construction would occur on site. Limited utility improvements would occur along the edge of the project site and would not be located immediately adjacent to existing parks. As such, access to nearby parks and recreation facilities would not be affected by these infrastructure related improvements. Furthermore, construction of these improvements would be temporary in nature.

Based on the above, Proposed Project construction would not generate a demand for park or recreational facilities that cannot be adequately accommodated by existing or planned facilities and services, nor would Proposed Project construction interfere with existing park usage in a manner that would substantially reduce the service quality of the existing parks near the project site. As construction workers are not anticipated to change their place of residence as a result of working at the project site, there would be no increase in the level of use at public parks and recreational facilities operated by other parks and recreation departments and/or districts. Therefore, construction-related impacts associated with public parks and recreation facilities would be less than significant.

### **Operation**

The Proposed Project would allow the development of up to 1,600 new residential dwelling units that would have an estimated population of approximately 5,120 new residents within the project site. Additionally, the Proposed Project is estimated to generate 6,447 new employees. For conservative analysis, the Proposed Project's estimated 11,597 new direct and indirect residents relate to population growth within the City associated with buildout of the Proposed Project. This increase in population would incrementally increase the demand on existing parks and recreational facilities.

With the increase in residents, the ratio of parkland to one thousand residents in the City would be 2.60 acres per 1,000 residents.<sup>13</sup> Implementation of the Proposed Project would maintain the existing park ratio. Additionally, the proposed project would create small parks and open space areas within the project site. These areas would be scattered through the project site to create cohesive and visually appealing areas. As the project site is located within the City, it is anticipated that new residents would utilize existing

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13 According to the California Department of Finance's (DOF) projection for the City's population in January 2019, the most recent population projection available, was 161,604 persons, plus an increase of 11,597 in population would be 173,201. Total acres of existing parkland is 450 acres. 450 acres divided by the ratio of 173.201 (173,201 residents / 1,000 residents) = 2.60 acres/1,000 residents.

and new park and recreational facilities. Accordingly, because the Proposed Project would be expected to provide an adequate amount of recreational amenities on-site, the Proposed Project would not result in a physical deterioration to existing neighborhood and regional parks.

The proposed Master Plan includes an open space network of squares, parks, greens, and paseos. Central Square, a central piece of the public open space network, provides a pedestrian-oriented anchor at the heart of the Health District. It is located adjacent to the new Antelope Valley Hospital and surrounded by medical offices, clinics, and wellness-education facilities. The square creates a prominent address for the new hospital at the crossroads of the primary north-south and east-west medical main streets of the District, providing good visibility and clear, direct access from the surrounding areas. Other forms of open space are distributed throughout the blocks and neighborhoods as public amenities. Greens are small open space areas within a neighborhood that range from 0.25 to 0.5 acres in size and would provide for passive recreation. Pocket parks would be interspersed within neighborhoods and provide small open space for passive recreation that would be up to 0.25 acres in size. Paseos contribute towards public open spaces and thoroughfares in both residential or commercial areas. In addition to the public open space discussed above, the proposed Master Plan includes requirements for private open space and landscape standards for all development.

The proposed Master Plan incorporates the City's Master Plan of Trails and Bikeways including the existing Class II and Class III bike lane and routes along Avenue J-8 and 12th Street West and the proposed Class I, Class II, and Class III bike paths, bike lanes, bike routes, and jogging trails along Avenue J, 15th Street West, and Lorimer Avenue that would serve the residents and visitors of the project site. Additionally, the Amargosa Creek trail would potentially connect to the proposed Master Plan's active public realm network connecting the northern and southern parts of the City by bicycle or foot. Internal biking, walking, and jogging networks are also included in the proposed Master Plan including a fitness loop that connects to the public realm and open space network.

As indicated previously, the Lancaster General Plan establishes a long-range Citywide standard for local parks of 5 acres per 1,000 residents. As shown, neither the existing parkland ratio or the proposed parkland ratio meets the standard of 5.0 acres of parkland per 1,000 residents. LMC Section 15.64.090 (Park Acquisition Fee), Section 15.64.100 (Park Development Fee), and Section 15.72 (Park In Lieu Fees), all require a fee for all new residential development in order to mitigate the impacts on the availability of open space, land, park, and recreational facilities, as well as ensure adequate park, recreation, and open space facilities are provided throughout the City. Payment of the fees would further reduce any potential impact to parks, recreation, and open space facilities associated with the demand for parks and recreational facilities created by the Proposed Project. Therefore, the Proposed Project's impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Level of Significance After Mitigation

LMC Section 15.64.090, Park Acquisition Fee, Section 15.64.100, Park Development Fee, and Section 15.72, requires payment of in-lieu parkland fees, or their equivalent, to minimize the Project's impact on parks and recreation land and facilities within the City. Therefore, payment of these fees would result in less than significant impacts to existing and future parks and recreational facilities.

### **Threshold REC-2      Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

The Proposed Project does propose the construction of residential uses that could increase the use of regional parks or other recreational facilities. In addition, the Proposed Project would provide expanded on-site open space in the form of squares, parks, greens, paseos, and trails integrated with the public realm within the project site to serve the recreation and leisure needs of the Proposed Project's residents and employees. Additionally, the payment of the park and recreation fees as required by the LMC would mitigate the impacts on the availability of open space land and park and recreational facilities. While the Proposed Project's residents and employment opportunities would result in some additional use of local parks, impacts with regard to local park use by Proposed Project residents and employees based on their place of employment would be less than significant under the Proposed Project.

Long term operation of on-site private open space and recreational facilities would be maintained by the property owner in accordance with the proposed Master Plan Health District Code. Long-term operation of public open space and recreational facilities would be maintained by the City. Operation and maintenance of these facilities on the environment within the project site are included as part of implementation of the proposed Master Plan. Thus, the physical construction and long-term operation of on-site recreational facilities is addressed under the relevant issue areas identified throughout this EIR (e.g., air quality, biological resources, cultural resources, etc.). There are no components of the planned recreational facilities on-site that are not already addressed and accounted for throughout this EIR. There are no significant impacts identified particular to the construction and operation of recreational facilities on the project site. Impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required



## Level of Significance

Impacts would be less than significant.

### 5.14.2.4 Cumulative Impacts

Construction of cumulative development would be completed by a mobile regional construction work force that moves from project to project as their particular trades are required. Given the mobility and short durations of work at a particular site, and a large construction labor pool that can be drawn upon in the region, construction employees would not be expected to relocate their residences within this region or move from other regions as a result of their work on the Proposed Project, as well as for cumulative development. Accordingly, construction of the Proposed Project as well as cumulative development is not anticipated to generate new residents utilizing parks and recreational facilities within 5 miles of the project site, within the boundaries of City, or within other park and recreation departments and/or districts. Therefore, cumulative impacts related to construction employment would be less than significant.

Cumulative growth in the greater project area through buildout includes general ambient growth projected to occur, as described in Section 4.0: Environmental Setting, of this EIR. As noted previously, the City is currently providing an average of 2.78 acres of park land per 1,000 residents, which is below the Parks Master Plan and the City's General Plan standards for park land. As the population continues to grow in the Proposed Project Area, increased demand would lower the existing parkland to population ratio if new facilities are not constructed.

As with the Proposed Project, the related projects would undergo discretionary review on a case-by-case basis and would be expected to coordinate with the City. Future development projects would also be required to comply with the park and recreation requirements of the Parks Master Plan, City's General Plan and Sections 15.64.090, 15.64.100, and 15.72, of the City's Municipal Code, as applicable. Despite regulatory code compliance, cumulative development may result in significant cumulative impacts on nearby parks and recreation facilities. However, as discussed previously, the Proposed Project impacts would not be cumulatively considerable because the Proposed Project residents and employees would not generate a substantial increase in the demand for park and recreation facilities within the City. Due to their place of employment, the Proposed Project employees would generate a demand for additional park and recreational facilities within the City, but this demand would be minimal. Therefore, the Proposed Project's cumulative impact with regard to City parks and recreation facilities would be less than significant.

### 5.14.3 SUMMARY OF SIGNIFICANCE

Future development projects associated with the Proposed Project would be required to comply with the park and recreation requirements of the Parks Master Plan, City's General Plan and Sections 15.64.090, 15.64.100, and 15.72 of the City's Municipal Code, as applicable. Accordingly, the Proposed Project's parks and recreational facilities impacts would be less than significant. Cumulative impacts would also result in less than significant impacts related to parks and recreation.

## 5.15 TRANSPORTATION

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This section of the Environmental Impact Report (EIR) provides an overview of existing traffic conditions and circulation patterns in the project area, including public transit, and evaluates the impacts of the Proposed Project on the future capacities of area roadways and freeways, as well as future access to the project site. The study area is generally bounded by Lancaster Boulevard to the north, Avenue K to the south, 10th Street West to the east, and 25th Street West to the west (Study Area). This section of the EIR also addresses the potential for the Proposed Project to affect the existing transportation and circulation system, along with regulatory framework and methodology for analysis of the potential impact of the Proposed Project on traffic and transportation. This section incorporates information from the following study of the project site:

- *Lancaster Health District Master Plan Traffic Operational and Safety Analysis Final Report (Traffic Study)*, Kimley Horn, August 2020;
- *Lancaster Health District Master Plan – Traffic Operational and Safety Analysis Addendum (Technical Addendum)*, Kimley Horn, October 12, 2020; and
- *Lancaster Health District Master Plan Vehicle Miles Traveled Analysis Draft Report (VMT Study)*, Kimley Horn, July 2020.

Complete copies of these reports and addendum are included as Appendix J: Transportation Impact Analysis of this EIR.

The Traffic Study analyzes existing and future weekday peak hour traffic conditions for the following scenarios:

- Existing (2019) Conditions
- Future (2040) without Project Conditions
- Future (2040) with Project Conditions
- Future (2040) with Project and Roadway Improvements Conditions

The Technical Addendum provides updates to the internal roadway layout and network since finalization of the Traffic Study, including the addition of one intersection. The VMT Study documents vehicle miles traveled (VMT) analysis conducted for the Proposed Project as a result of Senate Bill 743 (SB 743) and the new recommended metric in the CEQA guidelines for transportation impacts, VMT per capita.

## 5.15.1 ENVIRONMENTAL SETTING

### 5.15.1.1 Existing Conditions

#### *a. Regional Access*

The project site is located within the City of Lancaster (City) in Los Angeles County, California. The Antelope Valley Freeway (State Route [SR] 14) is an important regional north-south transportation link to and from the Antelope Valley. SR 14 provides the primary regional connection between the City, City of Palmdale and the Santa Clarita Valley, as well as metropolitan Los Angeles approximately 75 vehicle-travel miles to the south. SR 14 extends north to Kern County and then transitions to Interstate Highway 395 north of Inyokern. The facility contains 6 travel lanes, 3 in each direction, in the vicinity of the proposed project site, with ramp connections to Avenue J, Avenue J-8, Avenue K, and 20th Street West.

#### *b. Local Access*

The project site is approximately 272.4 acres and consists of multiple parcels bordered by Avenue J to the north; 15th Street West, Kingtree Avenue, Avenue J-5, and 13th Street West to the east; Avenue K to the south; and SR-14 and Amargosa Creek to the west. The project site consists of developed land interspersed with vacant, undeveloped parcels. The project site is located in a largely urbanized area and is surrounded by existing development and bordered by paved roadways. The project site has major and secondary arterials, collector roadways, and local streets as defined below:

Major arterials are primarily intended to serve through, non-local traffic and provide limited local access. They have a cross-section of six through lanes, and a raised landscape median and turn lanes at a limited number of access points. Major arterials are designated as 84-foot roadways within a 100 foot right-of-way. Pursuant the City's Master Plan of Trails and Bikeways,<sup>1</sup> the cross-section of several segments have recently been revised to facilitate Class II bike lanes, resulting in a reduction of vehicular lanes. Within the Study Area, Avenue I, Avenue J, Avenue K, Sierra Highway, Division Street, 10th Street West, 20th Street West, and 30th Street West are designated as major arterials.

Secondary arterials provide more local access than major arterials, while also providing a reduced level of non-local through traffic service. Secondary arterials have a cross-section of four through lanes, a bike lane in each direction and a left-turn lane within 68 feet of curb-to-curb space, within an 84-foot right-of-way. These roadways are usually undivided with the potential for limited on-street parking, turn lanes at major intersections, and partial control of vehicular and pedestrian access from driveways, cross streets, and

<sup>1</sup> City of Lancaster, *Master Plan of Trails and Bikeways*, March 2012.

crosswalks. Within the Study Area, Lancaster Boulevard, Avenue J-8, and 15th Street West are designated as secondary arterials.

Collector roadways provide access between the arterial network and the neighborhoods and commercial development. These roadways are typically two lanes wide with limited access to driveways and cross streets. They are usually undivided and do not have turn lanes at intersections. Collectors in the City are 44 feet curb-to-curb, within a 64 foot right-of-way. Within the Study Area, Avenue J-3, Avenue J-5, and 17th Street West are designated as collector roadways.

Local streets serve adjacent residential land uses only, allowing access to residential driveways and providing on-street parking for neighborhoods. Local residential streets in the City are designated as 42 foot roadways within a 60 foot right-of-way. These streets are not intended to serve through traffic traveling from one street to another. Within the Study Area, Lowtree Avenue and Lightwood Avenue are designated as local streets.

### **c. Traffic Study Intersections and Roadways**

The intersection locations within the Study Area are shown on Figure 5.15-1: Study Area Intersections. The study area roadways and intersections that would be used to provide access to the project site are shown on Figure 5.15-2: Focused Study Area Intersections. Table 5.15-1: Existing Study Area Intersections identifies the 31 study intersections that were evaluated based on consultation with City staff.

**Table 5.15-1  
Existing Study Area Intersections**

Intersections			
1.	10th Street West and Avenue I	17.	25th Street West and Avenue J-8
2.	20th Street West and Lancaster Boulevard	18.	20th Street West and Avenue J-8
3.	15th Street West and Lancaster Boulevard	19.	15th Street West and Avenue J-8
4.	10th Street West and Lancaster Boulevard	20.	10th Street West and Avenue J-8
5.	25th Street West and Avenue J	21.	30th Street West and Avenue K
6.	SR-14 SB Ramps and Avenue J	22.	25th Street West and Avenue K
7.	SR 14 NB Ramps and Avenue J	23.	20th Street West and Avenue K
8.	20th Street West and Avenue J	24.	SR-14 SB Ramps and Avenue K
9.	18th Street West and Avenue J	25.	15th Street West/SR-14 NB Ramps and Avenue K
10.	15th Street West and Avenue J	26.	10th Street West and Avenue K
11.	10th Street West and Avenue J	27.	Sierra Highway and Avenue K
12.	Sierra Highway and Avenue J	28.	Division Street and Avenue K
13.	Division Street and Avenue J	29.	10th Street West and Avenue K-8

Intersections			
14.	15th Street West and Avenue J-3	30.	18th Street West and Avenue J-8
15.	20th Street West and Home Depot Southerly Street	31.	15th Street West and Avenue J-5
16.	20th Street West and SR-14 NB Ramps		

Source: Lancaster Health District Master Plan Traffic Operational and Safety Analysis Final Report (*Traffic Study*), Kimley Horn, August 2020; refer to Table 2, and Lancaster Health District Master Plan – Traffic Operational and Safety Analysis Addendum (*Technical Addendum*), Kimley Horn, October 12, 2020 (refer to Appendix J of this EIR).

## **d. Public Transportation System**

### **Rail Services**

Metrolink provides rail service from the Antelope Valley to Santa Clarita, the San Fernando Valley and Los Angeles basin cities, with the Antelope Valley Line providing 9 weekday departures and arrivals, and 6 weekend departures and arrivals. The Metrolink Station is located at Lancaster Boulevard and Sierra Highway, approximately 1 mile northeast of the project site. It should be noted that the California High Speed Rail system identifies a route from Lancaster to the San Joaquin Valley; however, it is too speculative to determine when construction of this segment would occur.

### **Bus Services**

The Antelope Valley Transit Authority (AVTA) provides commuter bus service to downtown Los Angeles, Century City/West Los Angeles, and the San Fernando Valley. These routes operate Monday through Friday only and depart from Lancaster City Park. AVTA also provides local bus service to take children to school, employees to work, and residents to local stores and malls. Routes 1, 7, 11 and 12 serve the project area. In addition, AVTA provides Dial-a-Ride, a curb-to-curb van service primarily for disabled persons.

### **Bicycle Network**

Existing bicycle routes and trails are located within and adjacent to the project site. Class II bicycle facilities are striped lanes that provide bike travel and can be either located next to a curb or parking lane. If located next to a curb, a minimum width of five feet is recommended. However, a bike lane adjacent to a parking lane can be four feet in width. Bike lanes are exclusively for the use of bicycles and include bike lane signage, special lane lines, and pavement markings.

Class II bike lanes are currently provided on Lancaster Boulevard, Avenue J-8, 20th Street West, and 15th Street West north of Avenue J. A Class III Bike Route is currently marked along a segment of 12th Street West from Avenue J to Avenue K.

Planned bicycle network improvements will include installation of a Class I Bike Path along the Amargosa Creek channel that borders the western project site boundary. Class II bike lanes are proposed along Avenue J, 15th Street West south of Avenue J, and along Lorimer Avenue within the project site. A Class III Bike Route is proposed east of the project site along Avenue J-8.

### **Pedestrian Facilities**

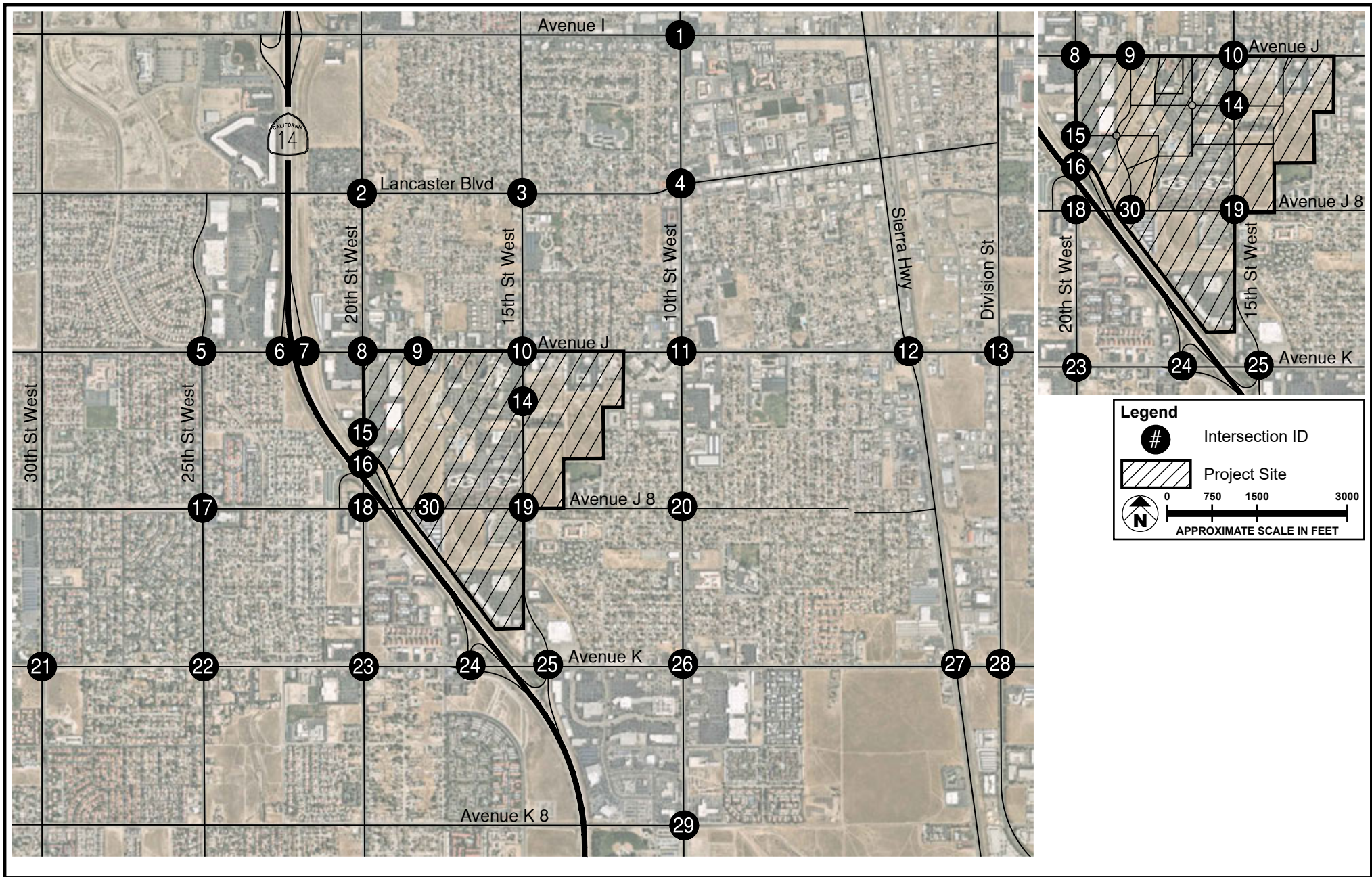
Pedestrian sidewalks are present adjacent to development throughout the project site, including curb and gutter, with crosswalks sited at major intersections. Notable areas without sidewalks consist of the vacant, undeveloped portions of the project site, including: the southern side of Avenue J near 20th Street West; the eastern side of 15th Street West between Avenue J-5 and Avenue J-8; and the eastern border of the project site along 12th Street West between Avenue J-4 and Avenue J-5, Avenue J-5 between 12th Street West and 13th Street West, 13th Street West between Avenue J-5 and Avenue J-8, and Avenue J-8 between 13th Street West and 15th Street West.

Additionally, a portion of the western side of 15th Street West near Meadow View Lane at the southern end of the project site lacks full development with curb and gutter. A Jogging Trail is also proposed along Avenue J that would traverse the northern project site boundary.

### ***e. Traffic Volumes and Level of Service***

Existing morning and evening peak hour turning movement counts were collected for the study intersections between 2014 and 2019. It should be noted that when the Traffic Operational and Safety Analysis was prepared, the COVID-19 pandemic was causing unusual traffic volumes on City roads. Therefore, no new traffic counts were collected as part of the study. However, all existing counts were grown to reflect a 2019 estimate based on growth rates from the City's travel demand model. Existing (2019) forecast morning and evening peak hour traffic volumes were used for information related to the 29 study intersections.

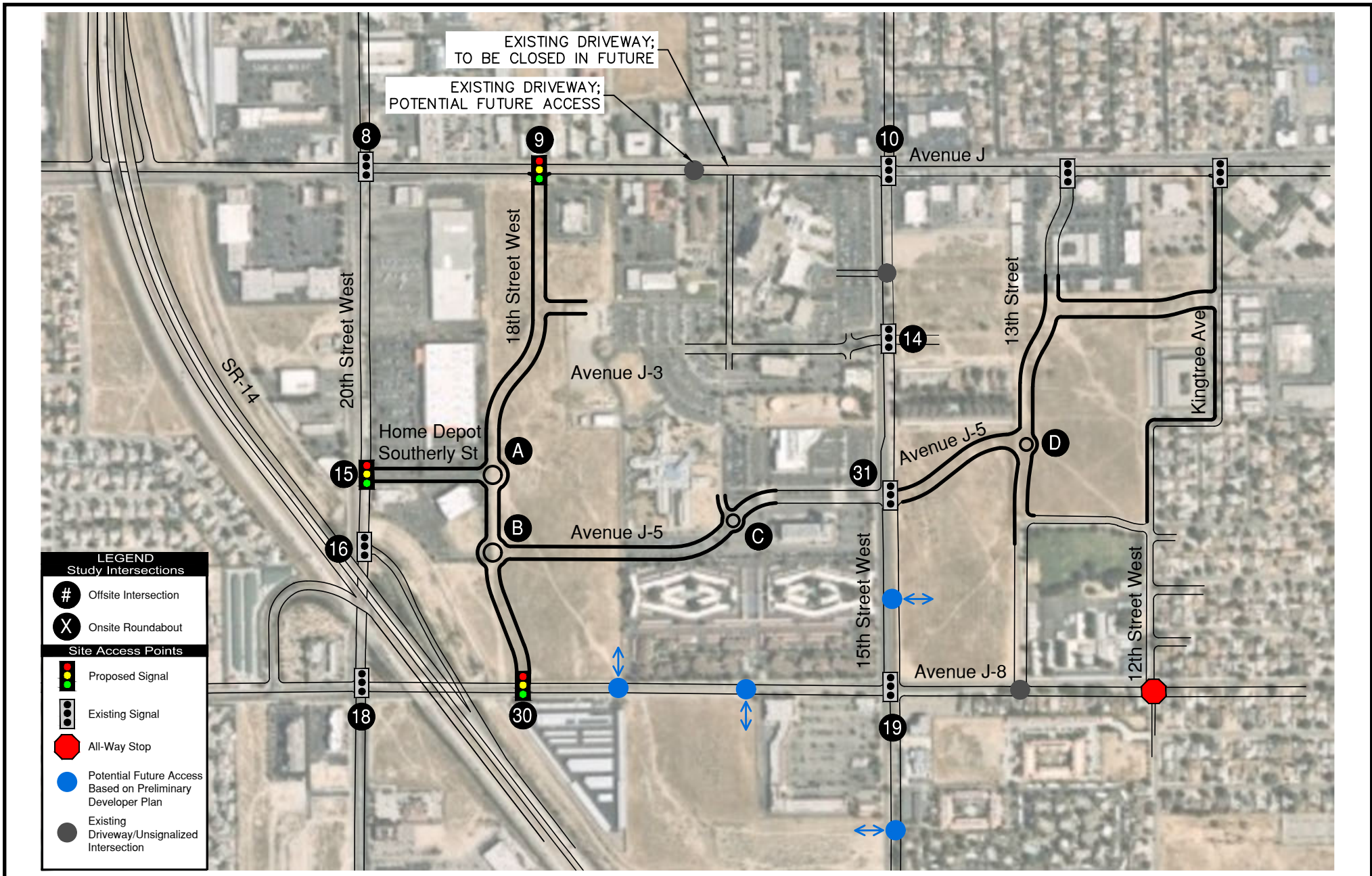




SOURCE: Kimley Horn, 2020.08.05 - LHD TIA\_Final

FIGURE 5.15-1





SOURCE: Kimley Horn, 2020.10.12 - LHD TIA Addendum

FIGURE 5.15-2

The existing traffic volumes, lane configurations, and signal timings were used to provide information related to operations at the Study Area intersections for existing weekday AM and PM peak hour conditions and are presented in Table 5.15-2: Existing (2019) Intersection Peak AM and PM Conditions. Due to a lack of existing traffic counts, traffic volumes for the following intersections were estimated: 18th Street West and Avenue J – Eastbound, 20th Street West and Home Depot Southerly Street – Northbound and southbound, and 18th Street West and Avenue J-8 - Eastbound (Intersections 9, 15, and 30). As shown in Table 5.15-2, all built-out study intersections would operate at an acceptable level of service (LOS) D or better during the AM and PM peak hours under existing conditions.

**Table 5.15-2  
Existing (2019) Intersection Peak AM and PM Conditions**

Intersection	Jurisdiction	Control	AM Peak Hour		PM Peak Hour	
			ICU V/C Ratio	HCM Delay	ICU V/C Ratio	HCM Delay
1. 10th Street West and Avenue I	Lancaster	Signal	0.46/LOS A	-	0.57/LOS A	-
2. 20th Street West and Lancaster Boulevard	Lancaster	Signal	0.43/LOS A	-	0.64/LOS B	-
3. 15th Street West and Lancaster Boulevard	Lancaster	ROB	-	16.9/ LOS C	-	10.1/ LOS B
4. 10th Street West and Lancaster Boulevard	Lancaster	Signal	0.51/LOS A	-	0.64/LOS B	-
5. 25th Street West and Avenue J	Lancaster	Signal	0.43/LOS A	-	0.50/LOS A	-
6. SR 14 SB Ramps and Avenue J	Caltrans	Signal	-	5.3/ LOS A	-	6.1/ LOS A
7. SR 14 NB Ramps and Avenue J	Caltrans	N/A	-	-	-	-
8. 20th Street West and Avenue J	Lancaster	Signal	0.56/LOS A	-	0.74/LOS C	-
9. 18th Street West and Avenue J	Lancaster	-	-	-	-	-
10. 15th Street West and Avenue J	Lancaster	Signal	0.65/LOS B	-	0.67/LOS B	-
11. 10th Street West and Avenue J	Lancaster	Signal	0.46/LOS A	-	0.59/LOS A	-
12. Sierra Highway and Avenue J	Lancaster	Signal	0.53/LOS A	-	0.60/LOS A	-
13. Division Street and Avenue J	Lancaster	Signal	0.64/LOS B	-	0.72/LOS C	-
14. 15th Street West and Avenue J-3	Lancaster	Signal	0.40/LOS A	-	0.41/LOS A	-
15. 20th Street West and Home Depot Southerly Street	Lancaster	TWSC	-	13.6/ LOS B	-	13.6/ LOS B
16. 20th Street West and SR 14 NB Ramps	Caltrans	Signal	-	17.1/ LOS B	-	21.7/ LOS C
17. 25th Street West and Avenue J-8	Lancaster	Signal	0.55/LOS A	-	0.49/LOS A	-
18. 20th Street West and Avenue J-8	Lancaster	Signal	0.44/LOS A	-	0.56/LOS A	-

Intersection	Jurisdiction	Control	AM Peak Hour		PM Peak Hour	
			ICU V/C Ratio	HCM Delay	ICU V/C Ratio	HCM Delay
19. 15th Street West and Avenue J-8	Lancaster	Signal	0.61/LOS B	-	0.56/LOS A	-
20. 10th Street West and Avenue J-8	Lancaster	Signal	0.43/LOS A	-	0.52/LOS A	-
21. 30th Street West and Avenue K	Lancaster	Signal	0.46/LOS A	-	0.42/LOS A	-
22. 25th Street West and Avenue K	Lancaster	Signal	0.47/LOS A	-	0.49/LOS A	-
23. 20th Street West and Avenue K	Lancaster	Signal	0.47/LOS A	-	0.54/LOS A	-
24. SR 14 SB Ramps and Avenue K	Caltrans	Signal	-	6.9/LOS A	-	7.7/LOS A
25. 15th Street West/ SR 14 NB Ramps and Avenue K	Caltrans	Signal	-	29.1/ LOS C	-	42.2/ LOS D
26. 10th Street West and Avenue K	Lancaster	Signal	0.55/LOS A	-	0.63/LOS B	-
27. Sierra Highway and Avenue K	Lancaster	Signal	0.56/LOS A	-	0.66/LOS B	-
28. Division Street and Avenue K	Lancaster	Signal	0.68/LOS B	-	0.78/LOS C	-
29. 10th Street West and Avenue K-8	Lancaster	Signal	0.39/LOS A	-	0.62/LOS B	-
30. 18th Street West and Avenue J-8	Lancaster	-	-	-	-	-
31. 15th Street West and Avenue J-5	Lancaster	Signal	-	-	-	-

Source: Traffic Study, Table 7 (refer to Appendix J of this EIR).

Notes:

Abbreviations: ICU = Intersections Capacity Utilization expressed in volume-to-capacity ratio; HCM = Delays and levels of service calculated using HCM 6<sup>th</sup> Edition methodology; Signal = signalized intersection; N/A = delay not reported because no movements are required to stop; TWSC = delay reported by minor street approach.

## **f. Future Buildout Conditions without the Project**

Like the existing conditions, the study intersections were evaluated using the methodologies designated by the City and described below. Under Buildout without Project conditions, which includes the addition of ambient growth, planned projects programmed to be completed prior to 2040, planned roadway improvements, and the General Plan buildout traffic, all study intersections are expected to operate at LOS D or better during both during the AM peak hour as identified in Table 5.15-3: Buildout Conditions (2040)—AM and PM Peak Hour Intersection Operations. During the PM peak hour, two intersections are projected to operate at LOS E, and the other 26 intersections are projected to operate at LOS D or better.

**Table 5.15-3  
Buildout Conditions (2040)—AM and PM Peak Hour Intersection Operations**

Intersection	Jurisdiction	Control	AM Peak Hour		PM Peak Hour	
			ICU V/C Ratio	HCM Delay	ICU V/C Ratio	HCM Delay
1. 10th Street West and Avenue I	Lancaster	Signal	0.57/LOS A	-	0.72/LOS C	-
2. 20th Street West and Lancaster Boulevard	Lancaster	Signal	0.58/LOS A	-	0.81/LOS D	-
3. 15th Street West and Lancaster Boulevard	Lancaster	ROB	-	26.2/LOS D	-	16.0/LOS C
4. 10th Street West and Lancaster Boulevard	Lancaster	Signal	0.58/LOS A	-	0.79/LOS C	-
5. 25th Street West and Avenue J	Lancaster	Signal	0.72/LOS C	-	0.80/LOS C	-
6. SR 14 SB Ramps and Avenue J	Caltrans	Signal	-	13.0/LOS B	-	22.6/LOS C
7. SR 14 NB Ramps and Avenue J	Caltrans	N/A	-	11.5/LOS B	-	33.9/LOS C
8. 20th Street West and Avenue J	Lancaster	Signal	0.72/LOS C	-	0.88/LOS D	-
9. 18th Street West and Avenue J	Lancaster	-	-	-	-	-
10. 15th Street West and Avenue J	Lancaster	Signal	0.67/LOS B	-	0.95/LOS E	-
11. 10th Street West and Avenue J	Lancaster	Signal	0.48/LOS A	-	<b>0.67</b> /LOS B	-
12. Sierra Highway and Avenue J	Lancaster	Signal	0.58/LOS A	-	0.71/LOS C	-
13. Division Street and Avenue J	Lancaster	Signal	0.69/LOS B	-	0.81/LOS D	-
14. 15th Street West and Avenue J-3	Lancaster	Signal	0.41/LOS A	-	0.51/LOS A	-
15. 20th Street West and Home Depot Southerly Street	Lancaster	TWSC	-	14.2/LOS B	-	12.1/LOS B
16. 20th Street West and SR 14 NB Ramps	Caltrans	Signal	-	11.7/LOS B	-	18.3/LOS B
17. 25th Street West and Avenue J-8	Lancaster	Signal	0.46/LOS A	-	0.52/LOS A	-
18. 20th Street West and Avenue J-8	Lancaster	Signal	0.64/LOS B	-	0.96/LOS E	-
19. 15th Street West and Avenue J-8	Lancaster	Signal	0.65/LOS B	-	0.69/LOS B	-
20. 10th Street West and Avenue J-8	Lancaster	Signal	0.52/LOS A	-	0.79/LOS C	-
21. 30th Street West and Avenue K	Lancaster	Signal	0.50/LOS A	-	0.48/LOS A	-
22. 25th Street West and Avenue K	Lancaster	Signal	0.54/LOS A	-	0.61/LOS B	-
23. 20th Street West and Avenue K	Lancaster	Signal	0.53/LOS A	-	0.58/LOS A	-
24. SR 14 SB Ramps and Avenue K	Caltrans	Signal	-	6.8/LOS A	-	7.3/LOS A
25. 15th Street West/SR 14 NB Ramps and Avenue K	Caltrans	Signal	-	26.1/LOS C	-	28.4/LOS C

Intersection	Jurisdiction	Control	AM Peak Hour		PM Peak Hour	
			ICU V/C Ratio	HCM Delay	ICU V/C Ratio	HCM Delay
26. 10th Street West and Avenue K	Lancaster	Signal	0.59/LOS A	-	0.73/LOS C	-
27. Sierra Highway and Avenue K	Lancaster	Signal	0.64/LOS B	-	0.75/LOS C	-
28. Division Street and Avenue K	Lancaster	Signal	0.77/LOS C	-	0.88/LOS D	-
29. 10th Street West and Avenue K-8	Lancaster	Signal	0.44/LOS A	-	0.78/LOS C	-
30. 18th Street West and Avenue J-8	Lancaster	-	-	-	-	-
31. 15th Street West and Avenue J-5	Lancaster	Signal	-	-	-	-

Source: Traffic Study, Table 8 (refer to Appendix J of the EIR).

Notes:

*Bolded values exceed City or Caltrans level of service standard.*

*ICU = Intersection Capacity Utilization expressed in volume-to-capacity ratio.*

*HCM = Delays and levels of service calculated using HCM 6th Edition methodology. Signal = signalized intersection.*

*TWSC = delay reported by minor street approach; ROB = single-lane roundabout*

## 5.15.1.2 Regulatory Setting

### a. State

#### Complete Streets Act

The Complete Streets Act<sup>2</sup> was signed into law in 2008. The law requires cities and counties, when updating the part of a local general plan that addresses roadways and traffic flows, to ensure that those plans account for the needs of all roadway users. Specifically, the legislation requires cities and counties to ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians, and transit riders, as well as motorists.

#### California Department of Transportation

The California Department of Transportation (Caltrans) publishes a document entitled *Guide for the Preparation of Traffic Impact Studies*, which provides guidelines and recommended elements of traffic studies for projects that could potentially impact state facilities such as State highways and freeway facilities. This is a State-level document that is used by each of the Caltrans District offices.

The *Guide for the Preparation of Traffic Impact Studies* defines when traffic studies should be conducted to address impacts to State facilities, but does not define quantitative impact standards. The *Guide for the Preparation of Traffic Impact Studies* states that Measures of Effectiveness (MOEs) are used to evaluate Caltrans facilities, and that the agency strives to maintain a LOS value of C on its facilities. However, the

<sup>2</sup> Assembly Bill 1358; Government Code Sections 65040.2 and 65302.

*Guide for the Preparation of Traffic Impact Studies* states that the appropriate target LOS varies by facility and congestion level, and is defined differently by Caltrans depending on the analyzed facility.

### **Senate Bill 743**

Senate Bill (SB) 743 (Steinberg) addresses transit-oriented infill projects and judicial review streamlining for environmental leadership development projects and was signed into law in 2013.<sup>3</sup> SB 743 directs the Office of Planning and Research (OPR) to develop revisions to the California Environmental Quality Act (CEQA) Guidelines that would establish new criteria for determining the significance of transportation impacts. These changes include elimination of auto delay and similar measures of traffic congestion as a basis for determining significant impacts. In addition, SB 743 is intended to redefine the transportation impacts of projects located close to transit.

In January 2016, OPR issued proposed changes to the CEQA Guidelines.<sup>4</sup> These changes state that projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor generally may be considered to have a less than significant transportation impact. In addition, the proposed guidelines advise that Transit Oriented Development (TOD) projects; development projects that result in net decreases in Vehicle Miles Traveled (VMT), compared to existing conditions; and land use plans consistent with a Sustainable Communities Strategy (SCS) or that achieve similar reductions in VMT as projected to result from the SCS generally may be considered to have a less than significant impact.<sup>5</sup> In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, including the Guidelines section implementing SB 743. Specifically, Section 15064.3 Determining the Significance of Transportation Impacts was added which identifies VMT as the most appropriate measure of the transportation impacts of a project. The provisions of this section applied statewide as of July 1, 2020.

### **b. Regional**

#### **County of Los Angeles Congestion Management Program**

Pursuant to Proposition 111, every county in California is required to develop a Congestion Management Plan (CMP) that examines the relationships between land use, transportation, and air quality. The CMP addresses the impact of local growth on the regional transportation system. Proposition 111 also established a nine percent per gallon gas tax, staged over a five-year period, for the purpose of funding

3 California Legislative Information, Senate Bill No. 743, September 27, 2013, [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140SB743](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743).

4 California Office of Planning and Research (OPR), *Revised Proposal on Updates to CEQA Guidelines on Evaluating Transportation Impacts in CEQA*, January 20, 2016, [http://www.opr.ca.gov/docs/Revised\\_VMT\\_CEQA\\_Guidelines\\_Proposal\\_January\\_20\\_2016.pdf](http://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf).

5 OPR, "Transportation Impacts (SB 743)," <http://www.opr.ca.gov/ceqa/updates/sb-743/>.

transportation-related improvements statewide. In order to be eligible for the revenues associated with Proposition 111, the CMP legislation (originally Assembly Bill [AB] 471, amended by AB 1791) requires that a CMP be developed, adopted, and updated biennially for every county that includes an urbanized area and shall include every city and the county government within that county. Statutory elements of the CMP include Highway and Roadway System monitoring, multi-modal system performance analysis, the Transportation Demand Management Program, the Land Use Analysis Program, and local conformance for all the county's jurisdictions.

As the Congestion Management Agency for Los Angeles County, the Los Angeles County Metropolitan Transportation Authority (Metro) is responsible for implementing Los Angeles County's CMP. Metro serves as Los Angeles County's transportation planner and coordinator, designer, builder and operator.

The purpose of the CMP is to develop a coordinated approach to managing and decreasing traffic congestion by linking the various transportation, land use and air quality planning programs throughout the Los Angeles County. The program is intended to address the impact of local growth on the regional transportation system. Level of service is a qualitative measure used to describe traffic flow conditions, which range from excellent, nearly free-flow, traffic conditions at LOS A to stop-and-go traffic conditions at LOS F. The program is consistent with that of the Regional Transportation Plan (RTP) prepared by the Southern California Association of Governments (SCAG). The CMP program requires review of significant individual projects, which might on their own impact the CMP transportation system.

According to the 2010 CMP, those proposed projects, which meet the following criteria, shall be evaluated:

- All CMP arterial monitoring intersections, including monitored freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours (of adjacent street traffic).
- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

Due to the age of the CMP and more recent regional, State, and federal planning processes and requirements, the Metro Board adopted the recommendation to initiate the process to gauge the interest of local jurisdictions and other stakeholders in opting out of State CMP requirements. On March 12, 2019, the Lancaster City Council adopted Resolution No. 19-09, electing that the City be exempt from the CMP.<sup>6</sup>

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<sup>6</sup> City of Lancaster, "City Council Minutes," March 12, 2019, <https://www.cityoflanasterca.org/Home/ShowDocument?id=40604>, accessed June 2020.

## SCAG Regional Transportation Plan/Sustainable Communities Strategy

SCAG adopted its most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) in April 2016.<sup>7</sup> The RTP/SCS represents SCAG’s long-term vision for the region’s transportation system. The RTP/SCS emphasizes mobility, accessibility, safety, reliability, and sustainability and creates a framework for capital investment in transportation infrastructure.

The 2016–2040 2016 RTP/SCS is an update to the 2012–2035 RTP/SCS that reflects changes in economic, policy, and demographic conditions.<sup>8</sup> The goals of the 2016 RTP/SCS have remained unchanged from the goals presented in the 2012–2035 RTP/SCS. However, since the adoption of the 2012–2035 RTP/SCS, the development of the 2016 RTP/SCS has been influenced by (1) a surface and transportation funding and authorization bill known as the Moving Ahead for Progress in the 21st Century Act, which was signed into law by President Obama on July 6, 2012; (2) the rapid advancement of new technologies that encourage more efficient transportation choices, such as multimodal transportation systems; and (3) the continuing emphasis on the reduction of greenhouse gas (GHG) emissions in accordance with the provisions of SB 32, which establishes a Statewide GHG reduction target of 40 percent (below 1990 levels) by 2030.<sup>9</sup>

### **c. Local**

#### **Lancaster General Plan**

##### ***Plan for Physical Mobility***

The Plan for Physical Mobility focuses on transportation issues, such as how goods and people move within the study area.<sup>10</sup> The plan recognizes that transportation affects land use, urban design, energy consumption, air quality, and the City’s infrastructure. Addressed not only at the local level, circulation decisions must be coordinated with regional, State, and federal agencies, as well as with neighboring communities. In the Plan for Physical Mobility, transportation facilities are discussed, as well as alternative modes of transportation. The following objectives, policies and specific actions are applicable to the Proposed Project:

Policy 14.1.1	Manage traffic on streets to improve and reduce operation and maintenance costs. Auto speed and convenience may be diminished in some locations to achieve a more walkable, bike-friendly, and livable
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<sup>7</sup> Southern California Association of Governments, “Final 2016 RTP/SCS,” [scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx](http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx), accessed June 2020.

<sup>8</sup> Southern California Association of Governments, “Sustainability Planning Grant,” accessed June 2020, <http://sustain.scag.ca.gov/Pages/Grants%20and%20Local%20Assistance/GrantsLocalAssistance.aspx>.

<sup>9</sup> Senate Bill 32 (Pavley), Chapter 249, Statutes of 2016), California Global Warming Solutions Act of 2006: emissions limit, September 8, 2016.

<sup>10</sup> City of Lancaster General Plan 2030, Plan for Physical Mobility, July 14, 2009. (the Plan for Physical Mobility was updated in 2017 as part of the complete streets effort)



community. Street design and operation in these areas should emphasize community character, access to adjacent land uses, and the accommodation of multiple travel modes, rather than vehicle speed.

Specific Action 14.1.1(b)

Adopt variable standards for traffic speed and travel delay that recognize the character of adjacent land uses, the functions of different streets, the different modes of transportation on a street or corridor and other community development goals. The City recognizes that vehicle based Level-of-Service (LOS) shall not be the sole measure of overall transportation operations. The following standards shall apply:

- For locations within the City’s “infill area”, as identified in Section 17.08.080 of the Lancaster Zoning Code, peak hour LOS lower than LOS D may be acceptable. Other indicators will also be used to evaluate transportation performance, including, but not limited to: user safety; short- and long-term costs of improvements and maintenance; provision of bicycle, pedestrian, and public transportation facilities; and connectivity of the overall street network. In these locations, the efficiency and convenience of vehicular operations must be balanced with the goal of increasing transit use, bicycling, and walking and other City goals and objectives contained in the adopted Master Plan of Complete Streets. Mitigation of strictly vehicular-based impacts shall not be required solely on the basis of the LOS metric.
- For locations outside of the City’s “infill area”, peak hour levels of service should generally be maintained at LOS D. However, mitigation of strictly vehicular-based LOS impact shall be evaluated against other City goals and objectives contained in the adopted Master Plan of Complete Streets.

As part of the development review process, continue to analyze the potential impacts of traffic generated by projects and the effects on adjacent land uses and surrounding neighborhoods, while utilizing a more flexible level of service standard that encourages transit ridership, bicycling, and walking. In the event a development project significantly contributes to traffic congestion; mitigation may still be

required. Mitigation measures should consider transit, bicycle, and pedestrian improvements as well as road improvements.

Objective 14.2 Promote a street system which balances the needs of automobiles with the needs of pedestrians, bicyclists, and transit users while protecting environmental and quality of life issues. Overtime, Lancaster’s streets should evolve to respond to the needs of transportation users and the surrounding neighborhood.

Policy 14.2.1 Support and improve a street network that is sensitive to environmental issues such as, biological, land, and water resources, as well as air quality, while permitting continued development within the study area.

Specific Action 14.2.1(a) Continue implementation of state environmental requirements mandated by the California Environmental Quality Act (CEQA) to mitigate, to the extent feasible, significant environmental impacts associated with traffic and circulation improvements.

Policy 14.2.2 Manage the City’s roadway network so that it is aesthetically pleasing through the development and maintenance of streetscapes. Maintain design standards or guidelines for streetlights, landscaping, street furniture, and other streetscape features that enhance Lancaster neighborhoods, with due consideration given to maintenance needs and operational costs.

Specific Action 14.2.2(b) Through the development review process, require the installation of street trees in new developments.

Policy 14.2.3 Support flexible street design and operation that takes into consideration community character, access to adjacent land uses, and the accommodation of multiple travel modes.

Specific Action 14.2.3(a) When considering the design of subdivisions, circulation patterns and street layouts, traffic flow requirements shall be balanced against their effect on pedestrian, bicycle, and transit access and the livability of both existing and proposed neighborhoods. Where conflicts arise between motorist convenience and the livability and wellbeing of neighborhoods, the latter concerns shall have priority.

- Policy 14.4.3 Encourage bicycling as an alternative to automobile travel for the purpose of reducing vehicle miles traveled (VMT), fuel consumption, traffic congestion, and air pollution by providing appropriate facilities for the bicycle riders (see also Policy 10.2.4 and subordinate specific actions of the Plan for Active Living).
- Specific Action 14.4.3(c) Consistent with the adopted Master Plan for Trails, require bikeways to link residential neighborhood areas with parks, scenic areas, and other points of interest. These bikeways also should be designed to encourage intra-city travel to employment areas, civic and commercial areas, and schools.
- Policy 14.4.4 Encourage commuters and employers to reduce vehicular trips by implementing Transportation Demand Management strategies.
- Specific Action 14.4.4(a) As part of the development and environmental review process, require implementation of transportation demand management programs for new commercial and industrial development based on local government responsibilities in the Los Angeles County Congestion Management Plan as applicable.

### ***Plan for Active Living***

The Plan for Active Living of the City’s General Plan focuses on the components of the community’s shelter, culture, and lifestyle and on the manner in which those in need can be helped so that all may share in achieving a high quality of life.<sup>11</sup> The following policy and specific actions are applicable to the Proposed Project:

- Policy 10.2.4 Facilitate the use of bicycles as an alternative form of transportation, as well as form of recreation (see also Policy 14.4.3 and related Specific Actions of the Plan for Physical Mobility).
- Specific Action 10.2.4(a) Incorporate bicycle routes into the City roadway system as appropriate.
- Specific Action 10.2.4(c) Design bicycle routes and pathways to allow access to local and regional transit stops and locations.

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11 City of Lancaster, *Lancaster General Plan 2030*, July 2009, accessed June 2020, available at <https://www.cityoflanasterca.org/home/showdocument?id=9323>.

## Lancaster Municipal Code

Lancaster Municipal Code (LMC) Section 15.64.040, Street improvements fee, imposes a fee on all new development in the City to finance the costs of street improvements, including acquisition, widening and reconstruction, street landscaping, intersection improvements and freeway interchange improvements in order to mitigate the additional traffic burdens created by new development to the City's arterial and collector street system.

LMC Section 15.64.050, Traffic signalization fee, imposes a traffic signalization fee on all new development in the City to finance the costs of traffic signalization improvements in order to mitigate additional burdens created by new development to the City's traffic problems beyond the financial ability of the City to control.

## Master Plan of Trails and Bikeways

The City's Master Plan of Trails and Bikeways, adopted March 2012,<sup>12</sup> is intended to guide the planning and design of pedestrian, bicycle and equestrian facilities in a comprehensive manner throughout Lancaster. The City's vision is to create a connected network of on-road and off-road trails and bikeway facilities to accommodate users of all ages and abilities, including equestrians. When implemented, it is anticipated that the proposed network will provide linkages between residential areas, commercial centers, transportation hubs, employment centers, and recreational venues.

## Master Plan of Complete Streets

Lancaster's Master Plan of Complete Streets<sup>13</sup> accompanies the City's General Plan, specifically the Plan for Physical Mobility. The General Plan's emphasis on safety, connectivity, access, and street design flexibility are key principles that mirror the objectives of the Master Plan of Complete Streets. As defined in the plan, complete streets refer to streets, sidewalks, and public rights-of-way that are designed, operated, and maintained to enable safe access for all users including pedestrians, bicyclists, transit riders, and freight and motor vehicle drivers of all ages and abilities.

The Master Plan of Complete Streets is meant to supplement existing engineering practices and requirements to meet the goals of complete streets and includes design guidance for future roadway improvements. While not encompassing all pedestrian, bicycle, and other traffic calming measures available to implement complete street principles in the City, the design guidelines are intended to provide initial design principles so that the development of new and existing streets serve all users and travel

12 City of Lancaster, Master Plan of Trails and Bikeways, March 2012, <https://www.cityoflanasterca.org/home/showdocument?id=16821>, accessed June 2020.

13 City of Lancaster, Master Plan of Complete Streets, no date, <https://www.cityoflanasterca.org/home/showdocument?id=34921>, accessed June 2020.

modes. In addition, the plan identifies potential complete streets in Lancaster and suggested treatments. The City is obligated to weigh the cost of proposed street improvements against the expected benefit of those improvements, while also considering both the initial and long-term maintenance obligations. Within the project area, the plan identifies 15th Street West between Avenue J and Avenue K as a potential complete street.

## 5.15.2 ENVIRONMENTAL IMPACTS

### 5.15.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with transportation. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant transportation impact if it would:

- Threshold TRAF-1**      **Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.**
- Threshold TRAF-2**      **Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).**
- Threshold TRAF-3**      **Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**
- Threshold TRAF-4**      **Result in inadequate emergency access.**

#### **a.                    *City of Lancaster***

##### **Level of Service**

The City’s minimum level of service standard for roadways and intersections is LOS D. The City has adopted LOS D as the minimum acceptable operation standard for roadways and intersections. The project will have a significant impact if:

1. The project would degrade the level of service at a location from a standard LOS (A, B, C or D) to a less than standard LOS (E or F); or
2. The project adds a significant number of trips to an intersection that is currently or is projected to operate at LOS E or F. The project could result in a significant impact if it increases the V/C ratio by V/C 0.02 or more at signalized intersections. For stop sign controlled intersections, a threshold of 2% increase in traffic volume was applied.

Per the City’s General Plan Specific Action 14.1.1(b), as part of the development review process, the City will evaluate the potential impacts of traffic generated by projects using a dual analysis process and

determine the effects on adjacent land uses and surrounding neighborhoods, while utilizing a more flexible LOS criteria that encourages transit ridership, bicycling, and walking. In the event a development project significantly degrades the effective use or safety of City streets; improvements may still be required. Required improvements should consider transit, bicycle, and pedestrian improvements as well as road improvements.

## **VMT**

VMT analysis for development projects in the City is based upon the latest version of the SCAG model developed for the 2016 RTP/SCS. This version of the model was previously used to identify the Antelope Valley Planning Area Baseline VMT metrics for 2020.

VMT for the Proposed Project reflects all land uses within the project site. The daily Total VMT per service population was calculated for the project site. A VMT impact would occur if the Total VMT per service population of the proposed Master Plan exceeds the City's threshold of 15% below the Antelope Valley Planning Area Baseline VMT.

### ***b. Caltrans***

Caltrans has established the cusp of the LOS C/D range as the target level of service standard for State Highway intersections. If an existing State Highway facility is operating at less than the target LOS, the existing MOE should be maintained.

## **5.15.2.2 Methodology**

### ***a. Level of Service Criteria***

For informational purposes, the traffic analysis focuses on daily capacity at intersections during the AM and PM commute periods when peak traffic volumes typically occur. A LOS ranking scale is used to identify the operating condition at intersections. This scale compares traffic volumes to intersection capacity and assigns a letter value to this relationship. The letter scale ranges from A to F with LOS A representing free flow conditions and LOS F representing congested conditions. The level of service criteria are summarized in Table 5.15-4: Intersection Level of Service Definition.

**Table 5.15-4  
Intersection Level of Service Definition**

LOS	Signalized Intersections (V/C Ratio)	Signalized Intersections (Sec. of Delay)	Unsignalized Intersections (Sec. of Delay)	Description
A	< 0.60	< 10.0	< 10.0	Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles.
B	0.61 – 0.70	> 10.0 to 20.0	> 10.0 to ≤ 15.0	Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles.
C	0.71- 0.80	> 20.0 to 35.0	> 15.0 to 25.0	Conditions of stable flow, delays are low to moderate, full use of peak direction signal phases is experienced.
D	0.81 – 0.90	> 35.0 to 55.0	> 25.0 to 35.0	Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.
E	0.91 – 1.00	> 55.0 to 80.0	> 35.0 to 50.0	Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period.
F	> 1.00	> 80.0	> 50.0	Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal.

Source: Highway Capacity Manual, 6th Edition.

Abbreviations: LOS = level of service; V/C = volume to capacity ratio; Sec. = second.

## **b. Level of Service Calculation Methodology**

### **Intersections**

The Intersection Capacity Utilization (ICU) methodology was used to determine levels of service for signalized intersections that are in the City's jurisdiction, and the results are shown as a volume-to-capacity (V/C) ratio. Level of service for the intersections with the SR 14 ramps, which are State facilities, and unsignalized intersections were calculated using the methodologies outlined in the Highway Capacity Manual (HCM)<sup>14</sup> and the results are presented as seconds of delay. Calculations for unsignalized intersections were completed using highway capacity software (HCS) software,<sup>15</sup> and SR 14 Ramp intersection levels of service were calculated using Synchro<sup>16</sup> software.

14 Highway Capacity Manual, 6th Edition: A Guide for Multi-Modal Mobility Analysis, Transportation Research Board, 2016.

15 Highway Capacity Software 7, McTrans, 2016.

16 Synchro plus SimTraffic 10, Trafficware Ltd., 2018.

### **c. Traffic Forecasts**

The City Travel Demand Forecasting (TDF) Model was used to develop future traffic growth projections within the Study Area. The model contains future Year 2035 growth projections for the City and north Los Angeles County, including development within the proposed Master Plan boundaries pursuant to anticipated commercial and household land use increases. These commercial and household land use increases would occur if the Proposed Project would not be developed. The TDF Model also incorporates planned local and regional transportation improvements, such as the Avenue J and J-8 Interchange Project. To align the volume projections with the volume forecasts developed for the Avenue J and J-8 Interchange Project Study Report (Project Development Support) (PSR-(PDS)), an additional 5 years of growth was added by assuming straight-line growth trends to produce Year 2040 (buildout) forecasts. The Year 2040 TDF Model output for the study area intersections is included in Appendix J. As mentioned prior, the Traffic Study evaluated existing conditions, buildout conditions (year 2040), and buildout plus Proposed Project conditions. The Traffic Study calculated buildout plus Proposed Project conditions by considering buildout conditions plus the conceptual internal roadway network modifications and additions associated with the Master Plan.

The proposed Master Plan is expected to be gradually build out over a 20-year period. Actual development would be subject to market conditions at the time individual projects are proposed. During this time frame, especially in the near future, major circulation network changes will occur that will significantly change traffic patterns within the Study Area. CEQA guidelines provide for the following guidance with respect to analysis scenarios:

*CEQA Article 9. Contents of Environmental Impact Reports, Section 15125(a)(2): “A lead agency may use projected future conditions (beyond the date of project operations) baseline as the sole baseline for analysis only if it demonstrates with substantial evidence that use of existing conditions would be either misleading or without informative value to decision -makers and the public. Use of projected future conditions as the only baseline must be supported by reliable projections based on substantial evidence in the record.”*

SR 14 interchange modifications at Avenue J and Avenue J-8,<sup>17</sup> which are funded with construction projected to start in 2020, include the addition of Northbound and Southbound On- and Off-Ramps at Avenue J and removal of the existing Southbound On-Ramp at Avenue J-8. The ramp additions and removal will result in significant changes in traffic patterns in the Study Area compared to existing conditions.

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17 Project Study Report-Project Development Support (PSR-PDS) to Request Programming for Capital Support for “Measure R” Candidate, Avenue J (between 15th Street West and 25th Street West) and on Route LA-14/LA138 (between Lancaster Boulevard and Avenue J-8), City of Lancaster/Caltrans, approved June 12, 2016.



Because of these substantial changes in traffic patterns that will occur in the near future, analysis of the existing plus project conditions scenario would be without informative value to decision-makers and the public. For these same reasons, and because the development timeline of each individual project within the proposed Master Plan is not identified, a near-future (cumulative) conditions analysis would also be without informative value. As identified in the CEQA Guidelines, the City (as the Lead Agency) has determined that the following traffic scenarios would be analyzed in accordance with CEQA to provide the public and decision-makers an accurate picture of projected future conditions based on reliable projects that are supported by substantial evidence in the record:

- Existing Conditions
- Buildout Conditions (2040)
- Buildout plus Project Conditions

Additional analysis related to future traffic conditions is provided in Appendix J of this EIR.

#### **d. Trip Generation Calculation**

As described in Section 3.0: Project Description of this EIR, the project site has been organized into three planning sub-areas defined by the centerlines of Avenue J-8 and 15th Street West. Trip estimates for each subarea were calculated based on trip rates contained in the Institute of Transportation (ITE) Engineers Trip Generation Manual<sup>18</sup> for the internal land use designations. Project traffic was added to the buildout volumes and intersection levels of service were recalculated assuming buildout plus Proposed Project traffic conditions. Project traffic additions were adjusted to account for trips generated by future development included in the TDF Model for the proposed Master Plan area.

Internal Capture (Mixed-Use) Trips. The ITE trip generation rates assume that each Proposed Project component is a stand-alone land use. However, due to the mix of land uses proposed on the site, a portion of the trips generated by the Proposed Project would remain internal to the subarea and not enter the “external” roadway network. ITE’s Trip Generation Handbook<sup>19</sup> defines a multi-use development as a “real estate project that consists of two or more ITE land use classifications between which trips are made without using the off-site road system.” Each subarea’s internal trips were determined based on the recommended procedure presented in NCHRP Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments.<sup>20</sup> The internal capture calculation worksheets are included in Appendix J.

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18 Trip Generation Manual, Institute of Transportation Engineers, 10th Edition, 2017.

19 Trip Generation Handbook, Institute of Transportation Engineers, 3rd Edition, 2017.

20 NCHRP Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments, Transportation Research Board, 2011.

Pass-By Trips. A portion of external trips to and from commercial land uses would be “pass-by trips,” meaning trips that are already on the adjacent road system and simply stop at the site on their way to or from the ultimate destination. The pass-by trips would be attracted from traffic already traveling one of the adjacent arterials that offer direct access to the project site. Pass-by trips are therefore not new to the immediate vicinity of the site. Based on ITE’s Trip Generation Handbook Appendix E – Database on Pass-By, Diverted and Primary Trips, the pass-by rate for commercial is an average of 34 percent of the external trips. The trip generation calculation for each subarea is included in Appendix J.

**e. VMT Methodology**

The SCAG RTP/SCS trip-based model is a travel demand forecasting model with socioeconomic and transportation network inputs, such as population, employment, and the regional and local roadway network, that estimates current travel behavior and forecasts future changes in travel demand. The current SCAG model has 2012 as the base year and 2040 as the forecast year and can be used to estimate VMT for current year 2020 conditions. The 2040 model contains the planned transportation improvements in the RTP and the growth projections in the SCS.

Given that development of the project site will be implemented over the next 20 years and that CEQA requires a comparison to baseline conditions, both the base year and future year versions of the SCAG model were updated to reflect buildout of the project site.

When calculating the VMT for the project site, the VMT methodology should match the methodology used to establish the Baseline VMT metrics and impact thresholds. In the City, an origin-destination (OD) VMT methodology was used to establish the Baseline VMT, which is defined as the VMT generated by land uses within the Los Angeles County Antelope Valley Planning Area (Antelope Valley). The OD VMT method estimates the VMT generated by land uses in a specific geographic area. All vehicles traveling to/from the defined area are tracked within the SCAG model and the number of trips and length of trips are used to calculate the OD VMT. While the OD VMT is accounting for all vehicle trips generated by land uses within a defined area, the full length of those trips is accounted for in the VMT estimate. For the purposes of analyzing VMT for transportation impacts, VMT can be reported as an efficiency metric. For land use plans, such as the proposed Master Plan, the City’s VMT methodology and impact thresholds are based on Total VMT per service population. This VMT metric reflects the Total VMT calculated by the OD VMT methodology and then divides the Total VMT by the service population (employees and residents) to get the efficiency metric of Total VMT per service population. Given that the Proposed Project contains a combination of residential and employment generating uses and that the hospital, hotel, and retail uses will also generate visitor trips, the use of Total VMT per service population allows for all trip types to be captured in the analysis.

Following the VMT analysis of the project site, the Total VMT per service population of the project site was then compared to the Antelope Valley Baseline VMT per service population to determine if it exceeds the City's impact threshold. In addition, given the amount of development being proposed and the size of the development site, the change in Total VMT in the Antelope Valley under Year 2040 conditions with and without buildout of the project site was evaluated to assess potential cumulative Proposed Project impacts.

### 5.15.2.3 Project Impacts

**Threshold TRAF-1 Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.**

The City's Plan for Physical Mobility discusses transportation facilities present within the City and includes goals, objectives, policies, and specific actions that promote alternative modes of travel.<sup>21</sup> The City's Master Plan of Trails and Bikeways<sup>22</sup> includes a list of goals, policies and actions that comprise a comprehensive blueprint by which the City can become more bicycle-friendly, pedestrian-friendly, and economically viable. The Master Plan of Trails and Bikeways also identifies proposed pedestrian trails and bikeways across Lancaster that contribute to a network of well located, safe, and secure transit linkages where people of all ages and physical abilities can travel throughout Lancaster without a vehicle. The Lancaster Master Plan of Complete Streets is intended to increase access and convenience for users of all modes of transportation to adjacent land-uses through complete streets. The Master Plan of Complete Streets contains general design guidelines for complete streets and identifies certain roadways across the City as ideal candidates for being improved to complete streets. Additionally, the plan establishes an alternative approach to evaluating street performance through the Multi-Modal Level of Service (MMLOS). The plan grades roadway segments across the City based on pedestrian, bicycle, and transit amenities and features present. Construction and operation impacts of the Proposed Project on various components of the City's circulation system are discussed as follows.

#### **Construction**

Construction of future individual development projects allowed by the Proposed Project would generate traffic from construction worker travel, as well from the arrival and departure of trucks delivering construction materials, and the removal of debris generated by on-site activities. Both the number of construction workers and trucks would vary throughout the individual construction processes in order to maintain a reasonable schedule of completion.

21 City of Lancaster General Plan 2030, *Plan for Physical Mobility*, July 14, 2009.

22 City of Lancaster, Master Plan of Trails and Bikeways, March 2012, <https://www.cityoflanasterca.org/home/showdocument?id=16821>, accessed June 2020.

Temporary impacts would occur during the construction of infrastructure improvements serving the project site, including internal and adjacent roadway and infrastructure improvements. Construction of these infrastructure improvements would cause short-term impacts related to noise, dust, and traffic flows as a result of temporary lane closures, and have the potential to affect all users of the public rights-of-way, including motorists, bicyclists, and pedestrians. Additionally, temporary construction activities may impact typical bus route operations or riders' access to bus stops. To minimize potential temporary transportation impacts during construction, a detailed construction traffic management plan(s) shall be prepared and submitted by the individual project developer to the City of Lancaster for review and approval as required by Mitigation Measure MM TRAF-1. Incorporation of MM TRAF-1 would reduce the temporary short-term construction related impacts to the City's circulation system to less than significant.

### ***Operation***

#### **Transit Access**

As mentioned in Section 5.15.1.1.d, AVTA provides local bus service to the project area with Routes 1, 7, 11, and 12. In the vicinity of the project site, local bus stops are located along Avenue J near 20th Street West, 17th Street West, 15th Street West and Kingtree Avenue, as well as along 15th Street West near Avenue J, Avenue J-3, Avenue J-5, Avenue J-8, Meadow View Lane, and the High Desert Plaza shopping center. AVTA also provides weekday commuter bus service to downtown Los Angeles, Century City/West Los Angeles, and the San Fernando Valley, departing from Lancaster City Park, approximately 1.25 miles southeast of the project site. Furthermore, Metrolink provides rail service from the Antelope Valley to Santa Clarita, the San Fernando Valley and Los Angeles basin cities, with the Antelope Valley Line providing 9 weekday departures and arrivals, and 6 weekend departures and arrivals. The Metrolink Station is located at Lancaster Boulevard and Sierra Highway, approximately 1 mile northeast of the project site.

Buildout of the proposed Master Plan would not substantially change or eliminate bus facilities or transit routes, nor would it conflict with a policy or program related to transit access. The proposed Development Code is intended to enable a public realm that functions well for all users, including transit riders. The proposed Master Plan envisions a potential AVTA hub within the project site at the southeastern corner of Avenue J and 20th Street West. This hub could bring AVTA routes to stops closer into the project site, making arrival by bus from Palmdale and other parts of Lancaster more feasible for employees, visitors, and residents. Consistent with General Plan goals, policies, and actions, the proposed Master Plan would encourage the use of public transportation through its proposed mixed-use, transit-oriented development, particularly near or along major arterial roadways. Further, the Proposed Project's streetscape improvements would heighten walkability of the project site and expand available bicycle infrastructure, encouraging transfer to and from transit options for those traveling through or near the project site. As such, additional transit amenities would serve to enhance the MMLOS across area roadways in accordance

with performance criteria considered in the City’s Master Plan of Complete Streets. Therefore, the Proposed Project would not conflict with any standard related to public transit facilities or services.

### ***Multi-Modal Circulation***

The City encourages pedestrian and non-motorized transportation by making provisions for sidewalks, bike lanes, and trails within roadway designs and rights-of-way. Alternative transportation corridors enhance and provide a range of mobility options for residents and visitors. Visitors, residents, and employees of the project site would have a range of transportation mode options. Pedestrian- and bicycle-friendly streets and intersections, a finer-grained public realm network, and a walkable building pattern would promote alternative modes of transportation in order to travel around and within the project site. The City encourages developments to consider pedestrian safety and accommodate safe routes which are clearly marked and striped. In most cases, they should be designed as one-way routes to flow in the same direction as the adjacent automobile traffic.

The Proposed Project would encourage the use of active and sustainable modes of transportation such as biking and walking through a combination of streetscape design, land use and building orientation, and connectivity. The proposed Master Plan seeks to enable development of a well-connected medical campus with a District Core consisting of a true urban center, organized by a complete, interconnected network of comfortable, safe, attractive streets, paseos, passages, and public and semi-public spaces that provide comfortable walking and biking access throughout the project site. Formal and informal open spaces integrated into each sub-district would accommodate healthy living via the facilities they provide and the programming they accommodate. A feature of the Proposed Project is an option for a “Fitness Loop” connecting public and open spaces throughout the project site. The Fitness Loop could consist of a well-mapped and well-marked walking/jogging/biking route, including linkage with the future Amargosa Creek Trail. Amargosa Creek borders the western side of the project site and transects it near Meadow View Lane. The Master Plan’s proposed bicycle and pedestrian improvements, consistent with City plans and policies, are discussed as follows.

### **Bicycle Access**

The City’s Master Plan of Trails and Bikeways proposes Class II bike lanes along Avenue J on the northern border of the project site and along 17th Street West through the project site between Avenue J and Avenue J-8. Further, Class II bike lanes are proposed along the length of 15th Street West through the site. In addition, a Class I (separated) bike lane is proposed along the length of Amargosa Creek.

Pursuant to the Master Plan of Trails of Bikeways, the Proposed Project would implement a range of bicycle improvements within and bordering the project site. Class II or buffered bike lanes would be incorporated

on Avenue J between 15th Street West and 25th Street West, resulting in a reduction in vehicular travel lanes from six to four. Existing Class II bike lanes along Avenue J-8 would be widened from 5 feet to 6 feet between 15th Street West and 25th Street West. For north–south routes, Class II bike lanes are proposed along 18th Street West between Avenue J and Avenue J-8 and 7-foot-wide buffered bike lanes would be added to 15th Street West between Avenue J and Avenue J-8, consistent with City plans. Lastly, a future Class I bike path is proposed within the Master Plan to follow Amargosa Creek.

The City’s vision is to create a connected network of on-road and off-road trails and bikeway facilities to accommodate users of all ages and abilities. When implemented, this network would provide linkages between residential areas, commercial centers, transportation hubs, employment centers, and recreational activities. As proposed, the Master Plan would expand and improve bicycle facilities across the Project Area. The proposed Development Code calls for physical buffers along bike lanes to be implemented where appropriate. In addition to the standards provided therein, all proposed bike lane designs shall be reviewed against the recommendations of the most current edition of the Urban Bikeway Design Guide published by the National Association of City Transportation Officials (NACTO). As such, additional bicycle amenities would serve to enhance the MMLOS across area roadways in accordance with performance criteria considered in the City’s Master Plan of Complete Streets. For these reasons, the Proposed Project would not conflict with any standard related to bicycle facilities or services.

### **Pedestrian Access**

The Master Plan of Trails and Bikeways identifies a number of proposed pedestrian paths and jogging paths in the vicinity of the project area, including within the project site. A jogging trail is proposed along Avenue J and a joint pedestrian/Class II bike route along Amargosa Creek.

A central component of the proposed Master Plan is creating an urban district of walkable scale, with activated street frontages and enhanced streetscapes that encourage pedestrian activity. Consistent with City policy, all streetscapes in the Master Plan Area would balance the circulation needs of all modes of travel, and emphasize pedestrian safety, comfort, and experience. Amenities such as landscaping and tree plantings in the public realm, street furniture, outdoor light fixtures, and other features would enhance the pedestrian experience, while crosswalks and traffic-slowing measures such as roundabouts and curb bulb-outs would heighten pedestrian visibility and safety. The proposed Master Plan also provides design standards for Avenue J that emphasize streetscape and landscape improvements, including the construction of a full 5-foot-wide minimum sidewalk, street trees, a landscaped median, lane narrowing, and enhanced buffered Class II Bike Lanes. A future pedestrian/Class I bike path is envisioned to follow Amargosa Creek. Lastly, the Project Plan would enable complete streets improvements to 15th Street West, including 7-foot-wide minimum sidewalks, street trees and native landscaping, buffered Class II bike

lanes, the construction of a landscaped median, and addition of parallel on-street parking in support of street fronting businesses and/or residences. As such, additional pedestrian amenities would serve to enhance the MMLOS across area roadways in accordance with performance criteria considered in the City's Master Plan of Complete Streets.

The *Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way* require that when new pedestrian facilities are planned in the United States, they must be accessible and usable by persons with disabilities (including physical, visual, hearing or cognitive impairments).<sup>23</sup> This includes provisions for curb ramps and sidewalks where appropriate. These guidelines consider pedestrian facilities to include sidewalks, shared-use paths, shared streets, and off-road paths. Future development within the project site would comply with all access requirements across the pedestrian network. Therefore, the Proposed Project would not conflict with any standard related to pedestrian facilities or services.

### **Roadway**

As mentioned previously, the City has adopted LOS D as the minimum acceptable operation standard for roadways and intersections. For locations within the City's "infill area", as identified in Section 17.08.080 of the Lancaster Zoning Code, peak hour LOS lower than LOS D may be acceptable. Due to limited right-of-way space on roadways within and near the project site, some streetscape improvements, such as the addition of buffered bicycle lanes, landscaping, parking, and pedestrian improvements, would necessitate the removal of vehicular traffic lanes. The Master Plan proposes to implement the following roadway improvements internal to the site and along the Proposed Project boundaries. These improvements are being installed by the City:

- Medical Main Street Project
  - Extending Avenue J-5 from 15th Street West to 18th Street West.
  - Constructing 18th Street West between Avenue J and Avenue J-8.
    - Installation of a new traffic signal at intersection of Avenue J and 18th Street West (study intersection 9)
    - Installation of a new traffic signal at intersection of Avenue J-8 and 18th Street West
  - Constructing "Home Depot Southerly Street" south of Home Depot to link 20th Street West and 18th Street West.
    - Installation of a new traffic signal at the intersection of "Home Depot Southerly Street" and 20th Street West (study intersection 15)
    - Removal of existing traffic signal at 20th Street West and Home Depot Driveway.

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23 United States Access Board, *Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way; Shared Use Paths*, 2013. (36 CFR Part 1190).

- Constructing 13th Street West between Avenue J-2 and J-8.
- Extending Avenue J-5 from 15th Street West to 13th Street West, widening it between 13th Street West and 12th Street West.
  - The existing traffic signal at Avenue J-5 and 15th Street West will be modified to include the addition of the east leg.
- Avenue J-8 Project

Addition of buffered Class II bicycle lanes and reduction in lanes from four to two between 15th Street West and 20th Street West (study intersections 18 and 19). Additionally, the existing signal at Home Depot is being relocated south to the proposed Home Depot Southerly Street, and the left-in/left-out movements at the existing access point will be closed. Because of these changes, existing traffic volumes for Home Depot and Desert Sands Charter High School were rerouted through the new intersection #15 in the following ways:

- For Home Depot
  - Westbound left (WBL) and southbound left (SBL) volumes were rerouted through Home Depot Southerly Street.
  - Northbound right (NBR) and westbound right (WBR) were assumed to remain accessing Home Depot through the existing driveway and that a negligible amount would use the new signal.
- For Desert Sands Charter High School
  - It was assumed that there was a 50/50 split for vehicles going northbound/southbound leaving the school, and that for vehicles going southbound, there was a 50/50 split between vehicles driving through Home Depot and making a WBL at the existing signal and vehicles making a WBR from Home Depot Southerly Street in order to make a U-turn at the existing signal. All of these trips have been rerouted to make a WBL at the new signal, which results in a reduction in southbound through (SBT) and WBR at this location.

Based on consultation with City staff, 31 intersections were included in the traffic analysis. For informational purposes, the evaluation of peak hour traffic operations at the 31 key intersections in terms of control delay and levels of service (LOS) with buildout of the Proposed Project is summarized in Table 5.15-5: Buildout Conditions (2040) Plus Project AM and PM Peak Hour Intersection Operations.



**Table 5.15-5  
Buildout Conditions (2040) Plus Project AM and PM Peak Hour Intersection Operations**

Intersection	Jurisdiction	Control	AM Peak Hour		PM Peak Hour	
			ICU V/C Ratio	HCM Delay	ICU V/C Ratio	HCM Delay
1. 10th Street West and Avenue I	Lancaster	Signal	0.60/LOS A	-	0.79/LOS C	-
2. 20th Street West and Lancaster Boulevard	Lancaster	Signal	0.61/LOS B	-	0.85/LOS D	-
3. 15th Street West and Lancaster Boulevard	Lancaster	ROB	-	53.9/LOS F	-	28.2/LOS D
4. 10th Street West and Lancaster Boulevard	Lancaster	Signal	0.63/LOS B	-	0.84/LOS D	-
5. 25th Street West and Avenue J	Lancaster	Signal	0.78/LOS C	-	0.85/LOS D	-
6. SR 14 SB Ramps and Avenue J	Caltrans	Signal	-	23.0/LOS C	-	38.8/LOS D
7. SR 14 NB Ramps and Avenue J	Caltrans	Signal	-	13.4/LOS B	-	42.0/LOS D
8. 20th Street West and Avenue J	Lancaster	Signal	0.90/LOS D	-	1.04/LOS F	-
9. 18th Street West and Avenue J	Lancaster	-	0.81/LOS D	-	0.74/LOS C	-
10. 15th Street West and Avenue J	Lancaster	Signal	1.12/LOS F	-	1.42/LOS F	-
11. 10th Street West and Avenue J	Lancaster	Signal	0.54/LOS A	-	<b>0.73</b> /LOS C	-
12. Sierra Highway and Avenue J	Lancaster	Signal	<b>0.63</b> /LOS B	-	<b>0.75</b> /LOS C	-
13. Division Street and Avenue J	Lancaster	Signal	0.74/LOS C	-	0.87/LOS D	-
14. 15th Street West and Avenue J-3	Lancaster	Signal	0.68/LOS B	-	0.80/LOS C	-
15. 20th Street West and Home Depot Southerly Street	Lancaster	Signal	0.83/LOS D	-	0.73/LOS C	-
16. 20th Street West and SR 14 NB Ramps	Caltrans	Signal	-	12.5/LOS B	-	20.7/LOS C
17. 25th Street West and Avenue J-8	Lancaster	Signal	0.51/LOS A	-	0.55/LOS A	--
18. 20th Street West and Avenue J-8	Lancaster	Signal	1.02/LOS F	70.1/LOS E	1.20/LOS F	-
19. 15th Street West and Avenue J-8	Lancaster	Signal	0.93/LOS E	-	0.97/LOS E	-

Intersection	Jurisdiction	Control	AM Peak Hour		PM Peak Hour	
			ICU V/C Ratio	HCM Delay	ICU V/C Ratio	HCM Delay
20. 10th Street West and Avenue J-8	Lancaster	Signal	0.59/LOS A	-	0.91/LOS E	-
21. 30th Street West and Avenue K	Lancaster	Signal	0.53/LOS A	-	0.51/LOS A	-
22. 25th Street West and Avenue K	Lancaster	Signal	0.59/LOS A	-	0.68/LOS B	-
23. 20th Street West and Avenue K	Lancaster	Signal	0.59/LOS A	-	0.65/LOS B	-
24. SR 14 SB Ramps and Avenue K	Caltrans	Signal	-	6.9/LOS A	-	7.8/LOS A
25. 15th Street West/SR 14 NB Ramps and Avenue K	Caltrans	Signal	-	30.8/LOS C	-	51.4/LOS D
26. 10th Street West and Avenue K	Lancaster	Signal	0.62/LOS B	-	0.77/LOS C	-
27. Sierra Highway and Avenue K	Lancaster	Signal	0.65/LOS B	-	0.78/LOS C	-
28. Division Street and Avenue K	Lancaster	Signal	0.80/LOS C	-	0.92/LOS E	-
29. 10th Street West and Avenue K-8	Lancaster	Signal	0.45/LOS A	-	0.81/LOS D	-
30. 18th Street West and Avenue J-8	Lancaster	Signal	0.83/LOS D	-	1.08/LOS F	-
31. 15th Street West and Avenue J-5	Lancaster	Signal	0.62/LOS B	-	0.84/LOS D	-

Source: Traffic Study, Table 13 and Technical Addendum (refer to Appendix J of the EIR). Notes:

Bolded values exceed City or Caltrans level of service standard.

ICU = Intersections Capacity Utilization expressed in volume-to-capacity ratio

HCM = Delays and levels of service calculated using HCM 6<sup>th</sup> Edition methodology

Signal = signalized intersection

ROB = single-lane roundabout.

The intersection data contained in Table 5.15-5 shows that three intersections are projected to operate at LOS F, one intersection is projected to operate at LOS E, and the remaining 26 study intersections are projected to operate at LOS D or better during the AM peak hours. For the Future (2040) with Project Conditions, the following intersections have an increase in V/C ratio or delay above the threshold that may result in a potential operational and/or safety issue during the AM and PM peak hours.

- Intersection #3: 15th Street West and Lancaster Boulevard
- Intersection #8: 20th Street West and Avenue J
- Intersection #10: 15th Street West and Avenue J
- Intersection #18: 20th Street West and Avenue J-8

- Intersection #19: 15th Street West and Avenue J-8
- Intersection #20: 10th Street West and Avenue J-8
- Intersection #28: Division Street and Avenue K
- Intersection #30: 18th Street West and Avenue J-8

Design provisions of the Master Plan and compliance with local regulatory requirements would reduce potential operational and/or safety issues to the greatest extent feasible. Furthermore, locations within the City's "infill area", such as the Proposed Project, peak hour LOS lower than LOS D may be acceptable. Nevertheless, the LOS at the identified intersections would operate at the LOS identified in Table 5.15-5.

Possible roadway improvements for study intersections include demand management techniques and capacity enhancement techniques. Demand management could be accomplished by implementing Transportation Demand Management measures. Potential capacity enhancements include providing additional lanes, modifying traffic signal timing, coordinating traffic signal timing along arterials, and modifying traffic signal phasing. Mitigation Measures TRAF-2 through TRAF-7 are identified to reduce Proposed Project-related operational issues at roadway intersections.

For informational purposes, with incorporation of these measures, one study intersection would operate at LOS F, one at LOS E during the AM peak hour, two study intersections would operate at LOS F, and one at LOS E during the PM peak hour. Thus, the improvements identified in measures TRAF-2 through TRAF-7 would ensure that traffic operations and LOS at these intersections would provide optimal circulation.

### **Site Access and Circulation**

The Master Plan includes a proposed network of internal roadways that would be constructed within the project site, including primary, secondary, and tertiary thoroughfares, as shown in Figure 5.15-2. The proposed roadway network is envisioned to consist of urban-scaled, block-defining thoroughfares that enable a walkable urban district that functions well for pedestrians, bicyclists, drivers, transit users, and those operating emergency vehicles. Primary internal street network connections include the extensions of Avenue J-3 and J-5 to provide east-west connectivity, and 18th Street West and 13th Street West/Lowtree Avenue to provide north-south connectivity. All internal roadways would be two-lane facilities with sidewalks and would operate at acceptable levels of service with the forecast traffic levels. Construction of internal street improvements shown in Figure 5.15-2 would be installed by the City as part of a Capital Improvement Project. Additional improvements would be sequenced in coordination with individual developments and construction of the new hospital building.

Future traffic volumes at the four existing and proposed roundabouts were estimated based upon the locations proposed for specific components of the Proposed Project. The four roundabouts are expected to operate at LOS A in the buildout conditions (2040).

## **Mitigation Measures**

### **Construction**

The following mitigation measure would be implemented to reduce potentially significant transportation impacts during construction to the greatest extent feasible.

**TRAF-1** Prior to obtaining a grading permit, a project applicant shall prepare and submit to the City of Lancaster detailed construction traffic management plans for review and approval. The construction traffic management plans shall include the following elements:

- Provisions for temporary traffic control during all construction activities adjacent to public right-of-way to improve traffic flow on public roadways (e.g., flag person);
- Identification of construction-related vehicle parking areas;
- Provision of safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers;
- Schedule construction-related deliveries to reduce travel during peak travel periods;
- Outline adequate measures to ensure emergency vehicle access during all aspects of the project's construction, including, but not limited to, the use of flagmen during partial closures to streets surrounding the project site to facilitate the traffic flow until construction is complete.
- Include the implementation of security measures during construction in areas that are accessible to the general public to help reduce any increased demand on law enforcement services, including fencing construction areas, providing security lighting, and providing security personnel to patrol construction sites.

### **Operational Improvement Measures**

The following operational improvement measures would be implemented to ensure the safe and efficient operation of the roadway system.

**TRAF-2** 20th Street West and Avenue J [Intersection 8]

Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of 20th Street West and Avenue J and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City's Traffic

Division of the City's Development Services Department for approval. The written results shall identify the individual project's fair share contribution towards the following improvements in order for this intersection to operate acceptably in 2040 with the addition of Proposed Project traffic:

- Signal modification to add Northbound Right overlap.

TRAF-3 15th Street West and Avenue J [Intersection 10]

Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of 15th Street West and Avenue J and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City's Traffic Division of the City's Development Services Department for approval. The written results shall identify the individual project's fair share contribution towards the following improvements in order for this intersection to operate acceptably in 2040 with the addition of Proposed Project traffic:

- Add additional northbound left turn lane (dual lefts); and
- Add eastbound right turn lane.

TRAF-4 20th Street West and Avenue J-8 [Intersection 18]

Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of 20th Street West and Avenue J-8 and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City's Traffic Division of the City's Development Services Department for approval. The written results shall identify the individual project's fair share contribution towards the following physical improvements in order for this intersection to operate acceptably in 2040 with the addition of Proposed Project traffic:

- Avenue J-8 road diet project will reduce westbound through lanes from 2 to 1; and
- Add westbound through/right turn lane.

TRAF-5 15th Street West and Avenue J-8 [Intersection 19]

Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of 15th Street West

and Avenue J-8 and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City's Traffic Division of the City's Development Services Department for approval. The written results shall identify the individual project's fair share contribution towards the following physical improvements in order for this intersection to operate acceptably in 2040 with the addition of Proposed Project traffic:

- Add westbound through/right turn lane.

TRAF-6 10th Street West and Avenue J-8 [Intersection 20]

Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of 10th Street West and Avenue J-8 and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City's Traffic Division of the City's Development Services Department for approval. The written results shall identify the individual project's fair share contribution towards the following physical improvements in order for this roadway segment to operate acceptably in 2040 with the addition of Proposed Project traffic:

- Restripe the eastbound approach to create an Eastbound Left/Through lane and a de facto right turn lane. This could be accomplished by restriping the double yellow line on the west leg of the intersection to the north.

TRAF-7 Division Street and Avenue K [Intersection 28]

Prior to project approval, additional operational and safety analyses shall be conducted by the project applicant to determine the operational performance of Division Street and Avenue K and identify any improvements due to the traffic generated by the individual development project. The applicant shall submit the written results to the City's Traffic Division of the City's Development Services Department for approval. The written results shall identify the individual project's fair share contribution towards the following physical improvements in order for this roadway segment to operate acceptably in 2040 with the addition of Proposed Project traffic:

- Add Eastbound Right turn overlap.

## Level of Significance

With implementation of Mitigation Measure MM TRAF-1, construction impacts related to transportation would be less than significant.

During operation of full buildout (2040) of the Proposed Project, with implementation of measures TRAF-2 through TRAF-7, one study intersection would operate at LOS F, one at LOS E, and the other study intersections would operate at LOS D or better during the AM peak hour. During the PM peak hour, two study intersections would operate at LOS F, one at LOS E, and the other study intersections would operate at LOS D or better. Though development of the Proposed Project is expected to occur over a 20-year timeframe, the operational improvement measures would be implemented to ensure the safe and efficient operation of the roadway system.

### **Threshold TRAF-2      Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).**

The Total VMT per service population of the project site can be compared to the Antelope Valley Baseline VMT per service population to determine if it exceeds the City's impact threshold for VMT. In addition, given the amount of development being proposed and the size of the project site, the change in Total VMT in the Antelope Valley under Year 2040 conditions with and without the buildout of the project site was evaluated to assess potential cumulative Project impacts. As shown below in Table 5.15-6: Project VMT per Service Population, the Proposed Project would generate 34.0 Total VMT per service population in the base year (2020) and 28.7 Total VMT per service population under future year conditions (2040). In comparison to the Antelope Valley Planning Area Baseline VMT of 41.8, the Proposed Project generated VMT for both existing and future years is more than 15% below the Antelope Valley Planning Area Baseline VMT. Accordingly, the Proposed Project would result in less than significant VMT impacts. Impacts would be less than significant.

**Table 5.15-6  
Project VMT per Service Population**

<b>VMT Metrics</b>	<b>Total VMT per Service Population</b>
Antelope Valley Planning Area Baseline (2020) VMT	41.8
Base Year (2020) with Project VMT	34.0
Future Year (2040) with Project VMT	28.7

Source: Lancaster Health District Master Plan Vehicle Miles Traveled Analysis Draft Report (VMT Study), Kimley Horn, July 2020.  
Abbreviations: VMT = vehicle miles traveled.

### Mitigation Measures

No mitigation measures are required.

### Level of Significance

Impacts would be less than significant.

**Threshold TRAF-3      Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

The proposed Master Plan includes a proposed network of internal roadways that would be constructed within the project site, including primary, secondary, and tertiary thoroughfares. The proposed roadway network would consist of urban-scaled, block-defining thoroughfares that enable a walkable urban district that functions well for pedestrians, bicyclists, drivers, transit users, and those operating emergency vehicles. As mentioned, primary network roadways would provide east–west, and north–south vehicular circulation. In the District Core, these would also function as entry/gateway avenues clearly directing visitors toward the center of the site. Secondary network roadways would serve all modes of travel and cut through existing large parcels. Tertiary network roadways would further break up blocks and are intended to provide connectivity for primarily pedestrians and bicyclists. The proposed roadway network identifies access points on the surrounding streets at appropriate locations that would not create any hazards. Further, the proposed medical, mixed-use, commercial, and residential uses are consistent with surrounding uses. Accordingly, the Proposed Project would not create or substantially increase safety hazards due to a design feature or incompatible use. Impacts would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Level of Significance

Impacts would be less than significant.

**Threshold TRAF-4      Result in inadequate emergency access.**

No hazards would be associated with construction of future individual development projects allowed by the Proposed Project. Regardless, all Proposed Project-related construction traffic would be required to comply with a temporary traffic control plan that meets the applicable requirements of the California Manual on Uniform Traffic Control Devices. Although impacts would be less than significant, maintenance of adequate emergency access during construction would be ensured through adherence with MM TRAF-1.



As discussed previously, access to the Master Plan area is proposed from the major streets bordering the site, with secondary and tertiary mobility provided on site. The proposed network would accommodate all users, including pedestrians, bicyclists, drivers, transit users, and those operating emergency vehicles. The proposed roadway network would not result in inadequate emergency access to the site and would not impede existing emergency access to the existing surrounding uses. Impacts during operation would be less than significant.

### **Mitigation Measures**

Compliance with MM TRAF-1 would be required.

### **Level of Significance**

Impacts would be less than significant with mitigation.

#### **5.15.2.4 Cumulative Impacts**

As mentioned previously in Section 5.15.2.2: Methodology, the City's TDF Model was used to develop future traffic growth projections within the study area. The model contains future Year 2035 growth projections for the City and northern Los Angeles County, including development within the Master Plan boundaries pursuant to anticipated commercial and household land use increases. The TDF Model also incorporates planned local and regional transportation improvements, such as the Avenue J Interchange Project. To align the volume projections with the volume forecasts developed for the Avenue Interchange PSR-PDS, an additional 5 years of growth was added by assuming straight-line growth trends to produce Year 2040 (buildout) forecasts.

Similar to the Proposed Project, short-term construction activities of cumulative development related to noise, dust, and traffic flows as a result of temporary lane closures could result in potentially significant adverse impacts to the City's circulation system. To minimize potential temporary transportation impacts during construction, adherence to MM TRAF-1 by future individual project proponents would substantially reduce the temporary short-term construction related impacts to the City's circulation system from cumulative development to a level of less than significant.

For informational purposes and as shown in Table 5.15-3, buildout conditions of the project site and surrounding area without the Proposed Project are forecasted to result in two study intersections during the AM peak hour and three study intersections during the PM peak hour to operate below the City's LOS D standard. As discussed in this section, the incorporation of operational improvement measures at these intersections would ensure the safe and efficient operation of the roadway system.

Similar to the Proposed Project, cumulative VMT impacts for both existing and future years would fall below the 15% Antelope Valley Planning Area Baseline VMT. Accordingly, the Proposed Project would result in less than significant cumulative VMT impacts.

### **Mitigation Measures**

Compliance with MM TRAF-1 would be required.

### **Level of Significance**

Construction-related cumulative impacts would be less than significant with mitigation.

Cumulative VMT impacts would be less than significant.

Though development of the Proposed Project is expected to occur over a 20-year timeframe, the operational improvement measures would be implemented to ensure the safe and efficient operation of the roadway system.

## **5.15.3 SUMMARY OF SIGNIFICANCE**

Implementation of the proposed Master Plan's building and design provisions, adherence to local regulatory requirements, and incorporation of mitigation would reduce transportation impacts to less than significant levels. With adherence to existing regulations and standards and incorporation of MM TRAF-1, any potential temporary construction impacts associated with traffic and transportation would be less than significant. With incorporation of measures TRAF-2 through TRAF-7, roadway improvements would be implemented to ensure the safe and efficient operation of the roadway system. Proposed Project VMT impacts would be less than significant.

Cumulative construction-related impacts would also be less than significant through incorporation of MM TRAF-1 during construction. Similar to the Proposed Project, incorporation of measures TRAF-2 through TRAF-7 would ensure roadway improvements would be implemented to ensure the safe and efficient operation of the roadway system under cumulative conditions.. Cumulative VMT impacts would be less than significant.

## 5.16 TRIBAL CULTURAL RESOURCES

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This section of the Environmental Impact Report (EIR) evaluates the Proposed Project's potential impacts on tribal cultural resources (TCRs). Information is provided on the historical development of the project site and surrounding area. Applicable federal, State, and local policies related to TCRs are discussed and potential impacts to TCRs are based on coordination and consultation with California Native American tribes that are traditionally and culturally affiliated with the project site. The consultation process was conducted pursuant to Public Resource Code (PRC) Section 21080.3.

### 5.16.1 ENVIRONMENTAL SETTING

#### 5.16.1.1 Existing Conditions

In compliance with the requirements of Senate Bill (SB) 18 and Assembly Bill (AB) 52, the City provided formal notification of the Proposed Project on April 9, 2019. Letters were sent via United States Postal Service (USPS) certified mail to the following California Native American tribes that requested notification:

- San Fernando Band of Mission Indians
- Serrano Nation of Mission Indians
- Kern Valley Indian Community
- Tubatulabals of Kern Valley
- Fernandeno Tataviam Band of Mission Indians
- San Manuel Band of Mission Indians
- Gabrieleno Band of Mission Indians—Kizh Nation
- Morongo Band of Mission Indians

Three responses were received. The San Manuel Band of Mission Indians requested consultation via an electronic communication dated May 6, 2019, and the Morongo Band of Mission Indians requested consultation via an electronic communication dated April 24, 2019. The San Fernandeno Tataviam Band of Mission Indians requested detailed information regarding specific development projects. It was relayed that this project is a plan which would allow for future development, but that no specific projects have been identified at this time. No communication or request for consultation was received from any other of the notified tribes within the 30- and 90-day response periods which ended May 10, 2019, and July 10, 2019, respectively.

In addition, in compliance with SB 18, a Sacred Sites/Lands File Search was conducted by the California Native American Heritage Commission (NAHC) for the Proposed Project on June 12, 2017. The results of

the Sacred Sites/Lands File search indicated negative results. However, the records maintained by the NAHC and the California Resources Information System are not exhaustive, and a negative response to these searches does not preclude the existence of a Cultural Place. The NAHC recommended contacting tribes associated with the Proposed Project area in order to avoid unforeseen discoveries once the Proposed Project has started and provided a list of tribal representatives to contact for additional information.

### **5.16.1.2 Regulatory Setting**

#### **a. State**

##### **Senate Bill 18**

Senate Bill (SB) 18 requires local governments to consult with California Native American tribes identified by the NAHC prior to the adoption or amendment of a general plan or specific plan, or amendment to general and specific plans, or a designation of open space land proposed on or after March 1, 2005. The city or county shall conduct consultations with California Native American tribes for the purpose of preserving or mitigating impacts to Cultural Places.

A Cultural Place is defined in PRC Sections 5097.9 and 5097.995 as:

- A Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9), or
- A Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC Section 5097.995).

The intent of SB 18 is to establish meaningful consultation between tribal governments and local governments (government-to-government) at the earliest possible point in the planning process so that cultural places can be identified and preserved and to determine necessary levels of confidentiality regarding Cultural Place locations and uses. According to the California Government Code (GC) Section 65352.4, “consultation” is defined as: the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties’ cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American Tribes shall be conducted in a way that is mutually respectful of each party’s sovereignty. Consultation shall also recognize the tribes’ potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of the antiquity and provides for the sensitive treatment and disposition of those remains.

### **Assembly Bill 52**

AB 52 was approved by California State Governor Jerry Brown, Jr. on September 25, 2014. The legislation amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. The primary intent of AB 52 was to include California Native American tribes early in the environmental review process and to establish a new category of resources related to Native Americans, known as tribal cultural resources, that require consideration under the California Environmental Quality Act (CEQA). PRC Sections 21074(a)(1) and (2) define tribal cultural resources as either (1) “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either” included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register) or included in a local register of historical resources, or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be a significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1 (i.e., criteria for listing a resource in the California Register). On July 30, 2016, the California Natural Resources Agency (CNRA) adopted the final text for the tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration of Mitigated Negative Declaration (MND) was filed after July 1, 2015. PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification for consultation to the designated contact, or a tribal representative, of California Native American tribes that are traditionally and culturally affiliated with the geographic area of a proposed project and who have requested in writing to be informed by the lead agency. Tribes interested in consultation must respond in writing within 30 days from the receipt of the lead agency’s formal written notification, and the lead agency must begin consultation within 30 days of receiving the tribe’s request for consultation.

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project’s impacts on the tribal cultural resources; and project alternatives or appropriate measures for preservation or mitigation that the tribe(s) may recommend to the lead agency. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a

significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, the information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

In addition, PRC Section 21082.3(d) states that if a California Native American tribe has requested consultation pursuant to PRC Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND for a project with a significant impact on an identified TCR.

### **Health and Safety Code (Section 7050.5)**

If human remains are encountered unexpectedly during implementation of a project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the following procedures must be observed:

- a) The immediate vicinity must be secured according to generally accepted cultural or archaeological standards or practices.
- b) The coroner has 24 hours to notify the NAHC.
- c) The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the project applicant, inspect the site of the discovery of the Native American remains and may recommend means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods.
- d) The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the project applicant to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. The area must not be damaged or disturbed by further development activity until

the applicant has discussed and conferred with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

- e) If the project applicant or his or her authorized representative rejects the recommendation of the MLD, the project applicant of MLD may request mediation per subdivision (k) of PRC Section 5097.94.
- f) If the NAHC is unable to identify an MLD, or the MLD identified fails to make a recommendation, or the mediation provided for in subdivision (k) of PRC Section 5097.94, if invoked, fails to provide reasonable treatment, then the human remains and items associated with Native American human remains must be interred with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.

### **Public Resources Code (Section 5097.98)**

Section 5097.98 of the PRC stipulates that whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, those persons believed to be most likely descended from the deceased Native American must be notified. The decedents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the NAHC. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

### ***b. Local***

#### **City of Lancaster General Plan**

The City's General Plan includes a Plan for Active Living which focuses on the components of the community's shelter, culture, and lifestyle. Objectives, policies, and specific actions are identified to protect significant cultural resources in the area. The Plan for Active Living recognizes that "Lancaster has a rich history, stretching from ancient Indian settlements to pioneer settlements and turn of the century farms and ranches. However, only a few structures remain. These buildings have become focal points for historical societies and preservationists." Further, the Plan for Active Living states that many areas within the City, particularly those near foothills and washes, have the potential to house historical artifacts. Given this, the Plan for Active Living calls for archaeological investigations prior to development, along with the continued preservation of remaining historic buildings in the City. The following policies and specific actions are applicable to the Proposed Project:

- Policy 12.1.1.1: Preserve features and sites of significant historical and cultural value consistent with their intrinsic and scientific values.
- Specific Action 12.1.1(a): As part of the CEQA review process, require site-specific historical, archaeological, and/or paleontological studies when there exists a possibility that significant environmental impacts might result or when there is a lack of sufficient documentation on which to determine potential impacts.
- Specific Action 12.1.1(b): Include a condition of approval on all development projects that addresses State and federal regulations with respect to the disposition of cultural resources.
- Specific Action 12.1.1(c): Process requests for inclusion in State and federal historic registers those historic and prehistoric sites and features which meet State or federal criteria.

## 5.16.2 ENVIRONMENTAL IMPACTS

### 5.16.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with TCRs. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant impact to a TCR if it would:

“Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:”

**Threshold TCR-1**      **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or**

**Threshold TCR-2**      **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead**



**agency shall consider the significance of the resource to a California Native American tribe.**

### **5.16.2.2 Methodology**

PRC Sections 21080.3.1 and 21080.3.2 require public agencies to consult with California Native American tribes identified by the NAHC) to identify potential significant impacts to TCRs, as defined in PRC Section 21074 as part of CEQA. In accordance with PRC Section 21080.3.1(d), formal notification was conducted to address potential impacts associated with Native American resources.

### **5.16.2.3 Project Impacts**

**Threshold TCR-1      Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

As discussed in Section 5.4: Cultural Resources of this EIR, the Proposed Project did not identify any historical resources that were listed or eligible for listing in the California Register. Moreover, the City has not enacted a local historic preservation ordinance, conducted a citywide historical resources survey, or implemented any other systematic historic preservation program, nor does the City maintain an official register of local historic resources. In the event that existing structures qualify for historic significance throughout implementation of the proposed Master Plan, Mitigation Measure MM CUL-1 as identified in Section 5.4: Cultural Resources of this EIR, would outline the protocol to be followed prior to demolition activities in the event properties are determined to be historically significant.

While no TCRs are known to be present within the project site, due to the previous identification of numerous archaeological resources in the immediate vicinity, it is possible that ground-disturbing activities could reveal the presence of previously unknown resources, including those of historical value to a California Native American tribe. Thus, construction activities would have the potential to impact unknown TCRs within the project site. Future development would be subject to compliance with Mitigation Measures MM CUL-2 through MM CUL-7 as identified in Section 5.4 of this EIR, which outlines the protocol to be followed in the event resources are unearthed during excavation and grading activities, requires education/training for construction workers, and tribal/archaeological monitors during ground disturbing activities.

### **Mitigation Measures**

MM CUL-1 through MM CUL-7 would be implemented during Proposed Project construction activities.

## Level of Significance

With implementation of MM CUL-1 through MM CUL-7 as identified in Section 5.4 of this EIR, the Proposed Project's potential impacts on TCRs would be less than significant.

**Threshold TCR-2**      **Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1? In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

As previously discussed, in compliance with SB 18, a Sacred Sites/Lands File Search was conducted by the NAHC for the Proposed Project on June 12, 2017. The results of the Sacred Sites/Lands File search indicated negative results. However, the records maintained by the NAHC and the California Resources Information System are not exhaustive, and a negative response to these searches does not preclude the existence of a Cultural Place. In compliance with AB 52, the City initiated the tribal consultation process for the Proposed Project on April 9, 2019, to the tribes listed above in Subsection 15.6.1.1. The 30-day response period for consultation requests concluded on May 10, 2019.

Based on the *Archeological Resources Assessment for the Lancaster Health District Project* and the responses from the Native American tribes as part of the consultation process, the City has determined that no significant TCRs are known to exist on the project site. However, as discussed above, future applicants for individual development projects shall meet with the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Morongo Band of Mission Indians, and the Fernandeño Tataviam Band of Mission Indians, as appropriate, to identify any concerns and work to satisfactorily address these concerns consistent with AB 52 and SB 18. The specific details have been included as part of MM CUL-2 through MM CUL-7 as identified in Section 5.4 of this EIR. The City has complied with AB 52 and SB 18 in regard to Native American consultation. As mentioned previously, although no TCRs are known to be present within the project site, there is the potential that ground-disturbing activities could reveal the presence of previously unknown resources, including those of historical value to a California Native American tribe. Future development would be subject to compliance with MM CUL-2 through MM CUL-7 as identified in Section 5.4 of this EIR, which outlines the protocol to be followed in the event resources are unearthed during excavation and grading activities.

## Mitigation Measures

MM CUL-2 through MM CUL-7 would be implemented during Proposed Project construction activities.

### **Level of Significance**

With implementation of MM CUL-2 through MM CUL-7 as identified in Section 5.4 of this EIR, the Proposed Project's potential impacts on TCRs would be less than significant.

#### **5.16.2.4 Cumulative Impacts**

The project site does not contain any TCRs listed in the California Register or known to California Native American tribe. There is the potential for unknown resources to be discovered as part of grading and excavation activities associated with the Proposed Project. With implementation of mitigation, impacts to unknown TCRs would be less than significant.

Due to the location of the cumulative projects and the higher sensitivity for cultural resources to occur within the undeveloped areas of the City, there is the potential that unknown TCRs could occur at one or more of the cumulative project sites. The potential destruction of unknown TCRs associated with ground-disturbing activities at the project site and cumulative project sites could be cumulatively considerable, due to the collective loss of California Native American artifacts and knowledge regarding the culture of the people who lived at the respective sites.

However, individual projects would be evaluated on a project-by-project basis to determine the extent of potential impacts to historical/archeological and paleontological resources. Further, each project would be required to comply with AB 52 for the purposes of identifying potential TCRs, and/or SB 18 if applicable. With adherence to federal and State statutes, as well as project-specific mitigation measures, cumulative impacts to TCRs would be less than significant. With implementation of mitigation measures, the Proposed Project's cumulative impacts on TCRs would be less than significant.

### **Mitigation Measures**

No specific cumulative mitigation measures are required.

### **Level of Significance**

With implementation of MM CUL-1 through MM CUL-7 as identified in Section 5.4 of this EIR, the Proposed Project's cumulative impacts on TCRs would be less than significant.

#### **5.16.3 SUMMARY OF SIGNIFICANCE**

With implementation of protocols related to demolition and ground-disturbing activities identified in MM CUL-1 through MM CUL-7 as identified in Section 5.4 of this EIR, Proposed Project impacts on TCRs would be less than significant. The Proposed Project's cumulative impacts would also result in less than significant impacts to TCRs.

## 5.17 UTILITIES AND SERVICE SYSTEMS

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This section of the Environmental Impact Report (EIR) addresses the potential impacts of the Proposed Project on water service, sewer service, solid waste, and dry utilities. The information provided in this section is based on information from the Los Angeles County Waterworks District No. 40 (LACWD), Los Angeles County Sanitation Districts (Sanitation Districts), County of Los Angeles Department of Public Works, and information on telecommunication infrastructure. Each of the following subsections includes an introduction, followed by discussions of existing conditions, regulatory framework, methodology, environmental impacts, cumulative impacts, mitigation measures if required, and level of significance after mitigation.

## 5.17.1 WATER SERVICE AND SUPPLY

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This section of the Environmental Impact Report (EIR) addresses the Proposed Project’s potential impacts on water supply and the water infrastructure system that serves the project site. The analysis describes the existing water infrastructure and water supply conditions present within the project site, along with the methodology and the regulatory framework that guided the impact evaluation pursuant to federal, State, regional, and local regulations. Potential water supply and water infrastructure impacts that would result from the Proposed Project are identified, along with any measures to mitigate the significant effects of the Proposed Project, if required. The Los Angeles County Waterworks Districts District 40 (LACWD No. 40) manages a majority of the City of Lancaster’s (City) water supply and infrastructure.

The water supply analysis is also based on the *Draft Water Supply Assessment for the Lancaster Health District Master Plan* (Water Supply Assessment), dated December 2020, prepared by the City of Lancaster. This Draft Water Supply Assessment has been sent to LACWD No. 40 for their review and approval. A complete copy of the Draft Water Supply Assessment is included as Appendix K of this EIR.

### 5.17.1 ENVIRONMENTAL SETTING

#### 5.17.1.1 Existing Conditions

##### *a. Water Service and Supply*

LACWD No. 40 provides domestic water service to the project site and surrounding area. The LACWD No. 40 serves water to eight geographically distinct “regions” within the Antelope Valley. The communities of Lancaster and Palmdale are served by the integrated Regions 4 and 34, which cover a large majority of the existing development within the LACWD No. 40 service area.

LACWD No. 40 uses both purchased (i.e., imported) water and groundwater as its supply sources. LACWD No. 40 purchases water from the Antelope Valley East Kern Water Agency (AVEK). The projected need for wholesale water is coordinated with AVEK. AVEK receives water from the State Water Project (SWP) and allocates water to municipalities, ranchers, and agricultural water users. AVEK has an allocation of 144,844 acre-feet per year (afy) of water from the SWP. To maximize the use of its SWP supplies, AVEK has developed the Westside Water Bank within its service area and has entered into various exchange programs with other SWP contractors. AVEK is also able to purchase additional SWP supplies from DWR (such as Article 21 and turnback pool water) when available. LACWD No. 40 has purchased banked groundwater to use for future dry years when supplies from the SWP and groundwater will not meet demands in the future.

Groundwater has historically been the secondary source of potable water supplies. The groundwater basin underlying LACWD No. 40 is the Antelope Valley Groundwater Basin. In December 2015, the Superior Court of California (Court), Santa Clara County, entered a judgment and physical solution in the Antelope Valley Groundwater Cases. Based on the Court's findings that the Antelope Valley Groundwater Basin is currently in overdraft, the total safe yield of the basin is 110,000 afy, that the native safe yield of the basin is 82,500 afy, the judgment and physical solution imposes pumping restrictions, which will be fully implemented following a 7-year ramp down period that started in 2016. As part of the judgment, a "Watermaster" board was appointed by the Court to implement and enforce the judgment. The board has the power to impose a fee on those that pump more than their allocated right.

Under the judgment, LACWD No. 40 has the right to pump approximately 20,005 afy of groundwater including an allocated right to pump 6,789 afy of the native safe yield, the right to pump 55 percent of the unused portion of the federal reserved right, and imported water return flows. Thirty-nine percent of the previous 5-year average of imported water used by the LACWD No. 40 is available for pumping in any given year.

Existing and committed demands and existing water supplies are approximately equal. Additional water supplies will have to be acquired and imported into the Antelope Valley to meet the demands associated with the level of growth projected for the service area. To acquire these additional water supplies, the LACWD No. 40 has executed a Memorandum of Understanding (MOU) with AVEK to implement a new Water Supply Entitlement Acquisition program for new developments that will be used to acquire additional imported water supplies. Developers may secure entitlements by entering into agreements with LACWD No. 40 to purchase a permanent water supply.

The volume of new water supply needed to serve a project is determined by LACWD No. 40 upon review of water demand calculations submitted by developers. The developers must pay the deposit prior to obtaining a will-serve letter from LACWD No. 40. LACWD No. 40 will transfer the deposit to AVEK to acquire the new water supply, which will be allocated to the LACWD No. 40. In the event that the cost of water exceeds the amount of the deposit, the developer is required to pay the difference.

### **Projected Water Demand and Water Supply**

In 2015, LACWD No. 40's water supply availability consisted of 20,361 acre-feet (af) of purchased water, 18,049 af of groundwater, and 250 af of recycled water for a total of 38,660 af.<sup>1</sup> LACWD No. 40's projected

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1 Los Angeles County Waterworks District No. 40 (LACWD No. 40), Antelope Valley, *Final 2015 Urban Water Management Plan (UWMP)*, Table 5-10, February 2017.

water demand is summarized in Table 5.17.1-1: District 40 Projected Total Water Demand by Land Use Type.

**Table 5.17.1-1**  
**District 40 Projected Total Water Demand by Land Use Type**

<b>Water Supply</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040<sup>c</sup></b>
Single-family	66,410	74,330	82,170	90,020	49,892
Multifamily	3,590	4,020	4,440	4,870	6,965
Commercial <sup>a</sup>	5,050	4,450	3,840	3,230	13,168
Industrial	5,380	6,030	6,660	7,300	132
Institutional/governmental <sup>b</sup>	1,680	1,480	1,280	1,080	4,741
Losses <sup>b</sup>	6,180	6,800	7,410	8,020	5,655
Recycled Water	8,200	10,900	13,600	16,300	N/A
<b>Total (without recycled water)</b>	<b>88,290</b>	<b>97,110</b>	<b>105,800</b>	<b>114,520</b>	<b>80,780</b>
<b>Total (with recycled water)</b>	<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>	<b>80,780</b>

Source: Los Angeles County Waterworks District No. 40 (LACWD No. 40), Antelope Valley, 2015 Urban Water Management Plan (UWMP), Table 3-3, Table 3-4, and Table 6-2.

<sup>a</sup> Commercial and institutional potable water demands are shown. Recycled water is assumed to be used for the remainder of water use projected for commercial and institutional use types as presented in Table 5-6 of the 2015 UWMP.

<sup>b</sup> Losses are assumed to be 7 percent of projected water demand.

<sup>c</sup> Available draft 2040 data was provided by LACWD No. 40 on November 18, 2020.

The 2015 UWMP projected water supply for the normal year, single-dry year, and multiple-dry year scenarios are summarized in Table 5.17.1-2: Summary of Projected Water Supply and Demand.

### **Climate Change Impacts**

The most recent drought in California has made water supply deficiencies a major concern prompting the Governor Brown to issue a proclamation of a state of emergency in January 2014 and an Executive Order requiring a Statewide reduction in water use of 25 percent in 2015. To achieve this reduction, each agency is assigned a mandated water reduction target. The LACWD No. 40's mandated water reduction target was 32 percent. Governor Brown lifted the drought emergency in April 2017.

**Table 5.17.1-2  
Summary of Projected Water Supply and Demand**

		2020 (AFY)	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)
<b>Demand</b>		<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>	<b>80,780</b>
<b>Normal Water Year</b>	Purchased/Imported (AVEK)	61,000	61,000	61,000	61,000	61,000
	Groundwater	36,790	36,790	36,790	36,790	36,500
	Recycled Water	8,200	10,900	13,600	16,300	N/A
	New Supply	4,100	12,900	21,600	30,300	39,000
<b>Total Supply</b>		<b>110,090</b>	<b>121,590</b>	<b>132,990</b>	<b>144,390</b>	<b>136,500</b>
<b>Single-Dry Water Year</b>	Purchased/Imported (AVEK)	4,800	4,800	4,800	4,800	
	Groundwater	36,790	36,790	36,790	36,790	36,500
	Groundwater (banked supply)	46,380	54,405	62,510	70,545	
	Recycled Water	8,200	10,900	13,600	16,300	
	New Supply	320	1,015	1,700	2,385	
<b>Total</b>		<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>	
<b>Multiple Dry Water Year First Year</b>	Purchased/Imported (AVEK)	12,000	12,000	12,000	12,000	
	Groundwater	36,790	36,790	36,790	36,790	36,500
	Groundwater (banked supply)	38,680	45,740	52,690	59,670	
	Recycled Water	8,200	10,900	13,600	16,300	
	New Supply	820	2,580	4,320	6,060	
<b>Total</b>		<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>	
<b>Multiple Dry Water Year Second Year</b>	Purchased/Imported (AVEK)	16,200	16,200	16,200	16,200	
	Groundwater	36,790	36,790	36,790	36,790	36,500
	Groundwater (banked supply)	34,200	40,620	47,010	53,330	
	Recycled Water	8,200	10,900	13,600	16,300	
	New Supply	1,100	3,500	5,800	8,200	
<b>Total</b>		<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>	
<b>Multiple Dry Water Year Third Year</b>	Purchased/Imported (AVEK)	24,500	24,500	24,500	24,500	
	Groundwater	36,790	36,790	36,790	36,790	36,500
	Groundwater (banked supply)	25,300	30,520	35,610	40,830	
	Recycled Water	8,200	10,900	13,600	16,300	
	New Supply	1,700	5,300	8,900	12,400	
<b>Total</b>		<b>96,490</b>	<b>108,010</b>	<b>119,400</b>	<b>130,820</b>	<b>80,780</b>

Source: LACWD No. 40, 2015 UWMP, Table 5-11, Table 6-2, Table 6-3, and Table 6-4.  
Available draft 2040 data was provided by LACWD No. 40 on November 18, 2020.



The LACWD No. 40 is highly susceptible to drought conditions, which exacerbate water shortages. In order to provide demands during short-term drought situations, the LACWD No. 40 implemented a Phased Water Conservation Plan (PWCP).<sup>2</sup> The PWCP is comprised of 10 phases with water conservation targets set for each phase. In 2015, water use declined as a result of the mandated demand reductions.

### ***Recycled Water***

Recycled water helps provide the Antelope Valley a beneficial reuse of treated wastewater. The distribution infrastructure that conveys recycled water to users is referred to as the Antelope Valley Backbone. Only a portion of the Antelope Valley Backbone is constructed. As funding sources become available, the Antelope Valley Backbone will be expanded to serve additional recycled water demands.

Lancaster Water Reclamation Plant (Lancaster WRP), Palmdale Water Reclamation Plan (PWRP) and Rosamond Wastewater Treatment Plan (RWWTP) all provide tertiary treated water to supply recycled water demands. The City receives recycled water from the Lancaster WRP. As stated in the 2015 UWMP, the LACWD No. 40 does not currently use or project to use recycled water, although recycled water is used and sold by others within the service area.

### ***b. Project Site***

The project site encompasses approximately 272.4 acres and currently contains the existing Antelope Valley Hospital which contains 342-beds within 489,930 (sf) with a 78-bed Woman and Infant Facility within approximately 277,000 sf for a total of 420 beds within 691,930 sf. The project site contains 59 single-family attached units and 376 multifamily units, for a total of 435 housing units. There is a total of 1,040,430 sf of office and commercial space and approximately 230,000 sf of medical office space within the project site. The project site also contains a total of approximately 110 vacant acres.

Table 5.17.1-3: Existing Multifamily Water Demand indicates that the total existing multi-family water demand for units within the project site is estimated at approximately 109.1 AFY.

The projected total existing water demand for the project site is estimated at 363.28 AFY as shown in Table 5.17.1-4: Existing Total Water Demand by Land Use Type.

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2 *Phased Water Conservation Plan*, accessed June 2020, <http://dpw.lacounty.gov/wwd/web/Documents/part5.pdf>.

**Table 5.17.1-3  
Existing Multifamily Water Demand**

Unit Type	% of Units	# of Units	Population Per Unit	Total Population <sup>a</sup>	Demand (gpd)	Demand (afy)
Studio	10	37	1	37	2,997	3.36
1-bedroom	30	114	2	228	18,468	20.69
2-bedroom	50	188	4	752	60,912	68.23
3-bedroom	10	37	5	185	14,985	16.79
<b>Total</b>		<b>376</b>			<b>97,362</b>	<b>109.07</b>

Source: Draft Water Supply Assessment (WSA) for the Lancaster Health District Master Plan Project (Proposed Project), December 2020. Refer to Appendix K of the EIR.

<sup>a</sup> Based on 81 gallons per capita per day and occupant loads as identified by Los Angeles County Waterworks District No. 40.  
Abbreviations: gpd =gallons per day; afy = acre-feet per year.

**Table 5.17.1-4  
Existing Total Water Demand by Land Use Type**

Land Use	Existing Size	Demand Factor	Gallons Per day	Total Demand (afy)
Single-Family Residential	59 du	0.82 afy/du	—	48.38
Multifamily Residential	376 du	81 gallons/day/person	97,362.00	109.07
Commercial/Office	1,040,430 sf <sup>a</sup>	4.17 afy/39,999 sf bldg	—	108.46
Medical Office	230,000 sf <sup>b</sup>	4.17 afy/39,999 sf bldg	—	23.98
Hospital	420 beds	156 gallons/day/bed	65,520.00	73.39
<b>Total</b>				<b>363.28</b>

Source: Draft WSA for the Lancaster Health District Master Plan Project (Proposed Project), December 2020.. Refer to Appendix K of the EIR.

Note: Refer to Table 5.17.1-3 for the multifamily residential total demand calculation.

<sup>a</sup> Assumed approximately 26.01 buildings at 39,999 sf per building.

<sup>b</sup> Assumed approximately 5.75 buildings at 39,999 sf per building.

Abbreviations: afy = acre feet per year; du = dwelling units; sf = square feet; bldg. = building.

Existing water transmission mains are located within the project site and the surrounding roadways.

### 5.17.1.2 Regulatory Setting

#### *a. Federal*

##### **Clean Water Act and Safe Drinking Water Act**

In 1972, the Federal Water Pollution Control Act (CWA) was amended to prohibit the discharge of pollutants to waters of the United States unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The CWA focused on tracking point sources, primarily from wastewater treatment plants and industrial waste dischargers, and required implementation of control measures to minimize pollutant discharges. Under the CWA, the United States Environmental Protection Agency (USEPA) has implemented pollution control programs such as setting wastewater standards for industry. The USEPA has also developed national water quality criteria recommendations for pollutants in surface waters.

The Safe Drinking Water Act (SDWA) was established in 1974 to protect the quality of drinking water in the US. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. The SDWA authorizes the USEPA to establish minimum standards to protect water systems to comply with these primary (health related) standards. Under the SDWA, the USEPA also establishes minimum standards for State programs to protect underground sources of drinking water from endangerment by underground injection fluids.

#### *b. State*

##### **California Urban Water Management Plan Act (California Water Code, Sections 10610–10656)**

The California Urban Water Management Planning Act (California Water Code, Sections 10610–10656) addresses several State policies regarding water conservation and the development of water management plans to ensure that adequate supplies are available to meet existing and future demands. The California Urban Water Management Planning Act also requires water suppliers to develop water management plans every five years to identify short-term and long-term demand management measures to meet growing water demands during normal, single dry, and multiple-dry years. Specifically, municipal water suppliers that serve more than 3,000 customers or provide more than 3,000 afy of water must adopt an urban water management plan (UWMP) every five years.<sup>3</sup> A number of recent requirements regarding preparation of UWMPs have been added to the Urban Water Management Planning Act. These additional requirements include: (i) a narrative description of water demand measures implemented over the past five years and future measures planned to meet 20-percent demand reduction targets in urban water use by December 31, 2020; (ii) a standard methodology for calculating system water loss; (iii) a

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<sup>3</sup> Los Angeles Department of Water and Power (LADWP), *2015 Urban Water Management Plan*, April 2016, accessed June 2020.

voluntary reporting of passive conservation savings, energy intensity, and climate change; and (iv) an analysis of water features that are artificially supplied with water.

### **Senate Bill X7-7 (California Water Code Section 10608)**

Senate Bill (SB) X7-7, also known as the Water Conservation Act of 2009, was enacted in November 2009, requiring all water suppliers to increase water use efficiency and for the State to achieve a 20-percent reduction in urban per capita water use by December 31, 2020.

### **Senate Bill 610 and Senate Bill 221**

SB 610 became effective January 1, 2002, amending Sections 10910-10915 of the California Water Code, by requiring that counties and cities consider the availability of adequate water supplies for certain new large developments projects as part of the California Environmental Quality Act (CEQA) process. Pursuant to SB 610, the urban water supplier is required to prepare a water supply assessment (WSA) for certain projects subject to CEQA. The WSA shall identify existing water supply entitlements, water rights, or water service contracts held by the public water system, and prior years' water deliveries received by the public water system. In addition, the WSA must address water supplies over a 20-year future period and consider average, single-dry, and multiple-dry years. In accordance with California Water Code Section 10912, projects subject to CEQA requiring submittal of a WSA include the following:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the projects specified above; or
- A project that would demand an amount of water equivalent to or greater than, that the amount of water required by a 500-dwelling unit project.

The WSA must be approved by the urban water supplier at a regular or special meeting and must be incorporated into the CEQA document. The lead agency must then make certain findings related to water supply based on the WSA.

As discussed in Section 3.0: Project Description of this EIR, the Master Plan proposes the replacement of the existing 342 bed Antelope Valley Hospital main facility with a 300-bed, 700,000 sf facility, a 40 bed psychiatric hospital and a 40-bed rehab hospital. To supplement the hospital facility, 284 sub—acute care beds (skilled nursing, rehab, and drug rehab) and 400 continuum of care beds are planned. Additionally, the proposed Master Plan would permit a maximum development up to approximately 842,000 sf of commercial and office space; up to 180 hotel rooms with 70,000 sf conference center; 250 single-family residential dwelling units, and 1,350 multifamily units, for a total of 1,600 housing units. Thus, as the Proposed Project exceeds 650,000 sf of floor area, a WSA by LACWD No. 40 is required. Senate Bill 221, effective in 2002, also addresses water supply in the land use planning process and focuses on new residential subdivisions in non-urban areas. The Proposed Project is not subject to the requirements of SB 221, which applies only to residential developments in non-urban areas.

### **California Plumbing Code**

Title 24, Part 5 of the California Code of Regulations (CCR) establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The current 2019 California Plumbing Code, has been published by the California Building Standards Commission went into effect on January 1, 2020.<sup>4</sup>

### **Sustainable Groundwater Management Act of 2014<sup>5</sup>**

The Sustainable Groundwater Management Act of 2014 (SGMA), passed in September 2014, is a comprehensive three-bill package that provides a framework for the sustainable management of groundwater supplies by local authorities.<sup>6</sup> The SGMA requires the formation of local groundwater sustainability agencies (GSAs) to assess local water basin conditions and adopt locally based management plans. Local GSAs must be formed by June 30, 2017. The SGMA provides 20 years for GSAs to implement plans and achieve long-term groundwater sustainability, and protect existing surface water and groundwater rights. The SGMA provides local GSAs the authority to (1) require registration of

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4 California Building Standards Commission, *2016 California Building Standards Code*, Title 24, Part 5, California Plumbing Code.

5 Association of California Water Agencies, *Sustainable Groundwater Management Act of 2014 Frequently Asked Questions*, October 2014.

6 Sustainable Groundwater Management Act, *2015 Amendments (effective January 1, 2016)*, California Government Code Section 65350.5, 65352, and 65352.5; California Water Code Section 10735.2 and 10735.8; and California Water Code Sections 10927, 10933, 12924, 113, 10750.1, and Part 2.74 (commencing with Section 10720) to Division 6.

groundwater wells; (2) measure and manage extractions; (3) require reports and assess fees; and (4) request revisions of basin boundaries, including establishing new sub-basins. Furthermore, under the SGMA, GSAs responsible for high- and medium-priority basins must adopt groundwater sustainability plans within 5 to 7 years of 2015, depending on whether the basin is in critical overdraft. The Antelope Valley Groundwater Basin (4-66) is not on the list.

### **Executive Order B-40-17 and Making Water Conservation a California Way of Life**

On April 7, 2017, following the reassessment of water supply conditions, Governor Brown issued Executive Order B-40-17 and lifted the drought state of emergency for all California counties except for Fresno, Kings, Tulare, and Tuolumne. In addition, Executive Order B-40-17 rescinds the two emergency proclamations from January and April 2014 and four drought related executive orders issued in 2014 and 2015.<sup>7</sup> However, Executive Order B-40-17 does build on Executive Order B-37-16 to maintain urban water use reporting requirements and prohibitions of wasteful practices, such as watering during rainfall, hosing off sidewalks, and irrigating ornamental turf on public street medians.<sup>8</sup> As such, the Making Water Conservation a California Way of Life Final Report was also released with the announcement of Executive Order B-40-17. This final report was prepared by the DWR, SWRCB, the California Public Utilities Commission, the California Department of Food and Agriculture, and the California Energy Commission, who will work closely with the State Legislature to implement four objectives: using water more wisely, eliminating water waste, strengthening local drought resilience, and improving agricultural water use efficiency and drought planning.<sup>9</sup>

### **California Water Plan<sup>10</sup>**

As required by the California Water Code Section 10005(a), the California Water Plan is the State's strategic plan for managing and developing water resources Statewide for current and future generations. It provides a collaborative planning framework for elected officials, agencies, tribes, water and resource managers, businesses, academia, stakeholders, and the public to develop findings and recommendations and make informed decisions for California's water future.

Updated every five years, the plan presents the status and trends of California's water dependent natural resources, water supplies, and agricultural, urban, and environmental water demands for a range of

7 These four executive orders include Executive Order B-26-14 from September 2014, Executive Order b-28-1 from December 2014, Executive Order B-29-15 from April 2015, and Executive Order B-36-15 from November 2015.

8 Office of Governor Edmund G. Brown Jr., Newsroom, Governor Brown Lifts Drought Emergency, Retains Prohibition on Wasteful Practices, April 7, 2017, <https://www.gov.ca.gov/news.php?id=19747>, accessed June 2020.

9 California Department of Water Resources, State Water Resources Control Board, California Public Utilities Commission, California Department of Food and Agriculture, and California Energy Commission, *Making Water Conservation a California Way of Life Final report*, April 2017.

10 California Department of Water Resources, *About the Water Plan*, <https://water.ca.gov/Programs/California-Water-Plan>, accessed June 2020.

plausible future scenarios. The California Water Plan also evaluates coordinated efforts of regional and Statewide resource management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. The evaluations and assessments thus help identify effective plan actions and policies for meeting California's resource management objectives in the near term and for several decades to come. While the California Water Plan cannot mandate actions or authorize itemized spending, policy-makers and lawmakers have the ability to authorize specific actions and appropriate necessary funding. In addition, while the California Water Plan Update 2013 represents the latest complete update, the California Water Plan Update 2018 is in development and will work in tandem with Governor Jerry Brown's California Water Action Plan, as discussed further below.

### **Governor's California Water Action Plan**

While the California Water Plan is required by the California Water Code, the California Water Action Plan (Action Plan) is instead released by Governor Jerry Brown's administration. The first Action Plan was published in January 2014 to provide a roadmap for the State's path toward sustainable water management.<sup>11</sup> The Action Plan discusses the challenges for managing the State's water resources supply, scarcity, and quality, and also considers the effects of ecosystems, flooding, population growth, and climate change and floods.<sup>12</sup> Ten actions were presented: (1) Making water conservation a California way of life; (2) Increase regional self-reliance and integrated water management across all levels of government; (3) Achieve the co-equal goals for the Delta; (4) Protect and restore important ecosystems; (5) Manage and prepare for dry periods; (6) Expand water storage capacity and improve groundwater management; (7) Provide safe water for all communities; (8) Increase flood protection; (9) Increase operational and regulatory efficiency; and (10) Identify sustainable and integrated financing opportunities. In complementing local efforts, the Action Plan emphasizes collaboration between different levels of government, water agencies, conservationists, tribes, farmers, and other stakeholders. Since the Action Plan Update for 2016 has been released, its implementation progress has also been documented with focuses on policy, funding, and coordinated projects. The Action Plan will continue to be implemented simultaneously with the California Water Plan Update 2018 as it is completed.

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11 California Department of Natural Resources, *California Water Action Plan*, <https://wildlife.ca.gov/Conservation/Watersheds/Instream-Flow/Action-Plan#:~:text=The%20California%20Water%20Action%20Plan,sustainable%20managed%20water%20resources%20system,> accessed June 2020.

12 California Department of Natural Resources, *California Water Action Plan 2014*.

**c. Regional and Local**

**2015 Urban Water Management Plan (LACWD No. 40)**

The 2015 UWMP for LACWD No. 40, dated January 2017, provides a summary of the agency's water supplies, demands, plans to ensure future reliability, detailed discussions of current and future water supply, and water supply strategies for the Antelope Valley. The LACWD No. 40 encompasses approximately 554 square miles. LACWD No. 40 is currently preparing the 2020 UWMP.

Historically, land uses within the Antelope Valley have focused primarily on agriculture; however, the Antelope Valley is in transition from predominantly agricultural uses to predominantly residential and industrial uses.

**City of Lancaster General Plan**

Many of the municipal services in the City of Lancaster, such as water, sewage treatment, and solid waste management, are provided by other agencies or private companies. The Plan for Municipal Services and Facilities sets forth policies and programs for the rational and cost-efficient provision and extension of public services, infrastructure, and facilities to serve the existing community and support planned development and protect natural resources within the City. The following policy and specific action items related to water facilities are applicable to the Proposed Project:

- Policy 15.1.2: Cooperate with local water agencies to provide an adequate water supply system to meet the standards for domestic and emergency needs.
- Specific Action 15.1.2(c): Periodically evaluate the adequacy of existing water facilities, consumption patterns and the need for new facilities, and include this information in the comparison of services and facilities, for performance criteria listed in Objective 15.1.
- Specific Action 15.1.2(d): Continue to work with the local purveyors to evaluate the need for additional storage capacity/facilities to meet the long-term growth needs of the City.

**Lancaster Municipal Code**

Lancaster Municipal Code (LMC) Chapter 15.64, Development Impact Fees, was adopted for the purpose of imposing mitigation fees on applicants seeking to construct development projects for the purpose of defraying the costs of public expenditures for capital improvements and operational services which would benefit such new development. Section 15.64.070, Water Improvements Fee, requires the payment of a



water improvements fee for all new development in the City. The purpose of the water improvements fee is to provide funding of capital improvements, including pump stations, water reservoir facilities, wells, treatment facilities, waterlines, and other related improvements to ensure a continuing supply of potable water.

### 5.17.1.3 Environmental Impacts

#### 5.17.1.3.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with water service and water supply. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant water service and water supply if it would:

**Threshold WS-1**      **Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects.**

**Threshold WS-2**      **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.**

#### 5.17.1.3.2 Methodology

Proposed major projects subject to certain requirements in the California Water Code Sections 10910-10915 require that a city or county identify any public water system that may supply water to a future project and request the public water system provide a WSA. The WSA is a determination by the water supplier that the demands associated with a project were included in its most recently adopted UWMP showing that there is an adequate 20-year water supply.

LACWD No. 40 is the water provider for the project. The Draft WSA for the Proposed Project was prepared by the City to meet the applicable requirements of State law as described above.<sup>13</sup> This Draft WSA has been submitted to LACWD for their review and approval. Significant references and data for the Water Supply Assessment are from the LACWD No. 40's 2015 UWMP. Available draft data for 2040 was provided by LACWD No. 40. The Proposed Project's water supply analysis included in this EIR is based upon the Draft WSA, which is incorporated herein by reference and included as Appendix K. The Draft WSA for the Proposed Project focuses on the adequacy of groundwater and other alternative water sources to supply

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13 California Water Code, Division 6. *Conservation, Development, and Utilization of State Water Resources*, Sections 10000 – 12999, Part 2.10. *Water Supply Planning to Support Existing and Planned Future Used*, Sections 10910 – 10915, Part 2.10 added by Stats. 1995, Ch. 881, Sec. 4.

amounts of water sufficient to meet the water demands of the Proposed Project. Additional water sources are considered as a supplement to groundwater in that they are used to recharge the aquifer and/or serve as a source substitution for groundwater. Once available to the project site, the project site will utilize recycled water on site to supplement non-potable water demands.

The available supplies and water demands for LACWD No. 40 service area were analyzed to assess the region's ability to satisfy demands during three scenarios: a normal water year, a single dry year, and multiple dry years.

### **5.17.1.3.2 Project Impacts**

**Threshold WS-1      Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects.**

#### **Construction**

Proposed Project construction activities would result in a temporary increase in water demand. Demand for water would be associated with soil compaction and earthwork, dust abatement, mixing and placement of concrete, equipment and site cleanup, and water line testing and flushing. These activities would occur incrementally throughout construction of the Proposed Project and would be temporary in nature. The amount of water used during construction would vary depending on the conditions of soils, weather, size of the construction site, and site-specific operations.

Additionally, new on-site domestic water infrastructure to serve each new individual project proposed under the Master Plan would connect to the LACWD No. 40's off-site domestic water system. Construction impacts associated with domestic water infrastructure would primarily be confined to trenching for miscellaneous utility lines and connections to public infrastructure. Installation of domestic water and fire infrastructure, if required, would be limited to on-site connections and minor off-site work associated with connections to the public main. As such, construction activities could potentially impact vehicles traveling to the project site and nearby uses along surrounding streets due to lane closures associated with the off-site construction work. However, as discussed in Section 5.15: Transportation and Traffic of this EIR, implementation of Mitigation Measure MM TRAF-1 would require the preparation of traffic management plans to ensure emergency and nonemergency vehicle access during all aspects of Proposed Project construction. Overall, when considering impacts resulting from the installation of any required domestic water infrastructure, all impacts are of a relatively short-term duration (i.e., months) and would cease to occur once the installation is complete. Thus, with the implementation of MM TRAF-1 in Section

5.15 of this EIR, construction activities associated with the Proposed Project would not impair or physically interfere with vehicle access. With mitigation, impacts would be less than significant.

### **Operation**

Connections would be required for each new individual development project proposed within the project site as permitted by the proposed Master Plan. The water system would be a public system with the exception of water lines within the hospital area, which would be privately owned and maintained. All improvements related to water service would be completed in accordance with City and LACWD No. 40 standards which would preclude any interruptions in existing service of the surrounding properties. Therefore, impacts to water infrastructure within the project site would be less than significant.

Furthermore, LMC Section 15.64.070, Water Improvements Fee, requires the payment of a water improvement fee for all new development in the City. The purpose of the water improvements fee is to provide funding of capital improvements, including pump stations, water reservoir facilities, wells, treatment facilities, waterlines, and other related improvements to ensure a continuing supply of potable water. Payment of the fees would further reduce potential impacts to water facilities associated with the proposed development. Impacts would be less than significant in this regard.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

**Threshold WS-2            Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.**

Development of the Proposed Project would result in an overall net increase in water demand from the project site during operation. Table 5.17.1-5: Proposed Project Multifamily Residential Demand, identifies the estimated total water demand for multi-family uses at buildout of the Proposed Project to result in a net increase of approximately 391.96 afy.

The total increase in water demand for the proposed uses within the project site at buildout were estimated. Based on these calculations presented in the Draft WSA prepared for the Proposed Project (see Appendix K), the increase in water demand would total approximately 899.91 afy, as shown in Table 5.17.1-6: Total Estimated Water Demand of the Proposed Project. The net increase in the Proposed Project's water demand would be 836.05 afy after deductions for the existing hospital and credit for TTM 22804.

**Table 5.17.1-5  
Multifamily Residential Demand**

Unit Type	% of Units	# of Units	Population per Unit	Total Population <sup>a</sup>	Demand (gpd)	Demand (afy)
Studio	10	135	1	135	10,935	12.25
1-Bedroom	30	405	2	810	65,610	73.49
2-Bedroom	50	675	4	2,700	218,700	244.98
3-Bedroom	10	135	5	675	54,675	61.24
<b>Total</b>		<b>1,350</b>		<b>4,320</b>	<b>349,920</b>	<b>391.96</b>

Source: Draft WSA for the Lancaster Health District Master Plan Project (Proposed Project), December 2020., refer to Appendix K of the EIR.

<sup>a</sup> Based on 81 gallons per capita per day and occupant loads as identified by Los Angeles County Waterworks District No. 40.  
Abbreviations: gpd =gallons per day; afy = acre-feet per year.

**Table 5.17.1-6  
Total Estimated Water Demand of the Proposed Project**

Land Use	Existing Size	Demand Factor	Gallons Per Day	Total Demand (afy)
Single-Family Residential	250 du	0.82 afy/du	—	205.00
Multifamily Residential	1,350 du	81 gal/day/person	349,920.00	391.96
Commercial/Office	842,000 sf <sup>a</sup>	4.17 afy/39,999 sf bldg	—	87.71
Hotel	180 rooms	81 gallons/day/person <sup>b</sup>	18,590	20.83
Conference Center	70,000 sf <sup>c</sup>	4.17 afy/39,999 sf bldg.	—	7.29
Hospital	300 beds	156 Gal/day/bed	46,875	52.51
Acute/Sub-Acute Care	364 beds	156 Gal/day/bed	57,031	63.88
Continuum of Care	400 beds	156 Gal/day/bed	62,500	70.01
<b>Total</b>				<b>899.91</b>
			Less Existing Hospital	59.86
			Less Credit for TTM 22804	4.00
			<b>Net Increase in Water Demand</b>	<b>836.05</b>

Source: Draft WSA for the Lancaster Health District Master Plan Project (Proposed Project), December 2020. Refer to Appendix K of the EIR.

Note: Refer to Table 5.17.1-5 for the multifamily residential total demand calculation.

<sup>a</sup> Assumed 21.05 buildings at 39,999 sf per building.

<sup>b</sup> Assumed 1.5 people per room at 85 percent occupancy.

<sup>c</sup> Assumed 1.75 buildings at 39,999 sf per building.

Abbreviations: afy = acre feet per year; du = dwelling units; sf = square feet; bldg = building; gal = gallons.

As shown in Table 5.17.1-7: Impact of Proposed Project Demand on Groundwater Supply (af), the increase in water demand for the Proposed Project is estimated to be approximately 899.91 afy, which represents approximately less than 1 percent of the total anticipated urban demand of 144,390 afy in LACWD No. 40’s urban water system projected for 2035. Further, the net increase in water demand for the Proposed Project is estimated to be approximately 836.05 afy, which represents approximately less than 1 percent of the 2035 anticipated urban water demand.<sup>14</sup> It should also be noted that the Proposed Project is a planned development that has been accounted for in the 2015 UWMP as indicated in the Draft WSA. Through a combination of existing supply, groundwater banking, new supply, and recycled water, the 2015 UWMP projects that total supply will meet demand, including the demand generated by the Proposed Project, through 2040 under normal, single-dry, and multiple-dry year water conditions. As shown in Table 5.17.1-3 above, supply meets demand since the LACWD No. 40’s purchases additional water on an ‘as-needed’ basis.

**Table 5.17.1-7  
Impact of Proposed Project Demand on Groundwater Supply (af)**

	<b>2035</b>
Total Supply	144,390
Proposed Project Demand	899.91
<b>Percent of Supply</b>	<b>0.62 %</b>

As previously mentioned, in order to acquire sufficient water supplies for future demands, the LACWD No. 40 has established, through a MOU with AVEK, a New Water Supply (Developer Fee) for new developments, which provides a method to acquire additional imported water supplies. The method creates a coordination effort between the developer, the LACWD No. 40, and AVEK. The developer and the LACWD No. 40 work together to determine the volume of new water supply needed, which the developer then pays AVEK to receive a letter of commitment from the LACWD No. 40 for the new water supply. AVEK then designates this new water supply to the LACWD No. 40 for the developer over and above the LACWD No. 40’s current allocation of supplies. Developers may secure entitlements by entering into agreements with the LACWD No. 40 to purchase a permanent water supply. Individual projects proposed under the Master Plan would be required to adhere to the latest CALGreen code including complying with regulatory measures such as, installing Low Impact Design (LID) standards to all interior

<sup>14</sup> Net Increase in Proposed Project water demand = 836.05 acre-feet per year (afy). Total supply = 144,390 acre-feet per year (afy). Proposed Project percent of Supply would be approximately 0.60 percent.

and exterior plumbing features in order to conserve water to the furthest extent feasible. In order to ensure impacts would remain less than significant and that the Proposed Project would have adequate water supply, each individual project proposed under the Master Plan would be required to obtain a New Water Supply Entitlement Acquisition Agreement with the LACWD No. 40 for any water beyond existing use consistent with existing City requirements.

Based on the information, analysis, and findings documented in the Draft WSA for the Proposed Project, and the 2015 UWMP, there is substantial evidence to support a determination that there will be sufficient water supplies to meet the demands of the Proposed Project. Thus, the Proposed Project impacts would be less than significant as it relates to water supply.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts to water supply would be considered less than significant.

### **5.17.1.3.3 Cumulative Impacts**

Similar to the Proposed Project, individual development projects would be required to provide the on-site water infrastructure and connections necessary to serve the proposed development. Similar to the Proposed Project, cumulative development projects would be required to pay the water improvement fee to fund capital improvements, including pump stations, water reservoir facilities, wells, treatment facilities, waterlines, and other related improvements to ensure a continuing supply of potable water. Payment of the fees would reduce potential impacts to water facilities associated with the project and cumulative development. Thus, the Proposed Project's incremental effects would not be cumulatively considerable.

Regional development of residential, commercial, and industrial sites will result in an increased demand on the potable water supply. The entire service area for the LACWD No. 40 utilizes the Antelope Valley Groundwater Basin (6-44). Therefore, cooperation between regional communities and LACWD District 40 is required to prevent depletion of this water supply.

Further, the volume of new water supply needed to serve cumulative development would be determined by LACWD No. 40 upon review of water demand calculations submitted by developers. The developers would be required to pay the deposit prior to obtaining a will-serve from LACWD No. 40. LACWD No. 40 would transfer the deposit to AVEK to acquire the new water supply, which would be allocated to the LACWD No. 40. As the WSA has determined that projected water supplies would meet the projected water

demand for the Proposed Project and future developments would be required to pay the deposit to secure water supplies prior to development, impacts to water supplies associated with the Proposed Project would be less than significant. Therefore, Proposed Project implementation would not result in cumulatively considerable impacts to water supplies.

**Mitigation Measures**

No mitigation measures are required.

**Level of Significance**

Cumulative impacts would be less than significant.

**5.17.1.4 Summary of Significance**

The Proposed Project’s construction and operation related impacts to water services and water supply would be less than significant. Cumulative impacts would be less than significant.

## 5.17.2 WASTEWATER COLLECTION AND TREATMENT

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This section of the Environmental Impact Report (EIR) describes the existing wastewater infrastructure and treatment facilities that serve the project site. The analysis describes the existing wastewater systems, calculates the wastewater to be generated by the Proposed Project, and evaluates whether sufficient capacity is available and would be available to meet the Proposed Project's estimated wastewater generation. The existing conditions relevant to wastewater in the project area are described, along with the methodology and the regulatory framework that guided the evaluation of wastewater-related infrastructure.

### 5.17.2.1 ENVIRONMENTAL SETTING

#### 5.17.2.1.1 Existing Conditions

##### *a. Wastewater Service and Treatment*

Collection, treatment, and disposal of wastewater within the City and adjacent unincorporated areas are under the jurisdiction of the Sanitation Districts of Los Angeles County (Sanitation District) No. 14. Sanitation District No. 14 owns, operates, and maintains the trunk sewers that form the backbone of the regional wastewater conveyance system and the Lancaster Water Reclamation Plant (WRP). The Lancaster WRP's service area includes most of the City, parts of the neighboring City of Palmdale, and unincorporated areas of Los Angeles County. The regional wastewater conveyance system conveys and treats wastewater generated by residential, commercial and industrial areas of the City. The Sanitation District's trunk main network consists of approximately 64 miles of pipeline. Trunk sewer pipelines, which are 24-inches in diameter or smaller, are usually constructed of vitrified clay pipe. Larger trunk sewers are typically reinforced concrete pipe. The boundary of the Sanitation District No. 14 includes a majority of the project site.

Wastewater collected in the City initially flows through the local sewer pipelines owned and maintained by the City.<sup>1</sup> Wastewater collected from the vicinity of the project site is conveyed to and treated by the Lancaster WRP located at 1865 Avenue D. The Lancaster WRP provides tertiary treatment with a wastewater treatment capacity of 18 million gallons per day (mgd).<sup>2</sup> The average wastewater flow currently treated by the Lancaster WRP is 14.3 mgd.<sup>3</sup>

Currently, public and private sewer lines are located within, and along, the boundary of the project site, including along 20th Street West, Avenue J, 15th Street West, and 17th Street West. The size of the sewer

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1 City of Lancaster, *General Plan, July 14, 2009*, <https://www.cityoflanasterca.org/home/showdocument?id=9323>.

2 Sanitation Districts of Los Angeles County, "Lancaster Water Reclamation Plant," accessed June 2020, [https://www.lacsd.org/wastewater/wwfacilities/antelope\\_valley\\_water\\_reclamation\\_plants/lanaster\\_wrp.asp](https://www.lacsd.org/wastewater/wwfacilities/antelope_valley_water_reclamation_plants/lanaster_wrp.asp).

3 NOP response received from the County Sanitation Districts of Los Angeles County on May 1, 2020.



lines range from 8- to 15-inches and ultimately connect to Sanitation District’s wastewater conveyance system.

The project site is currently occupied by the existing Antelope Valley Hospital which contains 342 beds within 489,930 square feet (sf) with a 78-bed Woman and Infant Facility within approximately 277,000 sf for a total of 420 beds within 691,930 sf. The project site contains 59 single-family attached units and 376 multifamily units, for a total of 435 housing units. There is also a total of 1,040,430 sf of office and commercial space and 230,000 sf of medical office space within the project site. The existing wastewater generated by the project site is identified in Table 5.17.2-1: Existing Wastewater Generation. As shown in Table 5.17.2-1, the existing uses on-site generate approximately 628,115 gallons per day (gpd) or 0.628 million gallons per day (mgd).

**Table 5.17.2-1  
Existing Wastewater Generation**

Land Use	Existing Size	Generation Rate	Total Generation (gpd)	Total Generation (mgd)
Single-Family Residential	59 du	260 gpd per du	15,340	0.015
Multifamily Residential	376 du	156 gpd per du	58,656	0.059
Office/Commercial	1,040,430 sf	325 gpd per 1,000 sf	338,140	0.338
Medical Office	230,000 sf	300 gpd per 1,000 sf	69,000	0.069
Hospital	489,930 sf	300 gpd per 1,000 sf	146,979	0.208
<b>Total</b>			<b>628,115</b>	<b>0.628</b>

Source: Los Angeles County Sanitation District, Table 1: Loadings for Each Class of Land Use  
Abbreviations: gpd = gallons per day; mgd = million gallons per day; du = dwelling unit, sf = square feet

### 5.17.2.1.2 Regulatory Setting

#### a. State

##### Sewer System Management Plan

On May 2, 2006, the State Water Resources Control Board (SWRCB) adopted the Statewide General Waste Discharge Requirements for publicly owned sanitary sewer systems greater than 1 mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in California. Under the Statewide General Waste Discharge Requirements, the owners of such systems must

comply with the following requirements: (1) acquire an online account from the SWRCB and report all sanitary sewer overflows online; and (2) develop and implement a written plan referred to as a Sewer System Management Plan (SSMP) to control and mitigate sanitary sewer overflows, and make the plan available to any member of the public upon request in writing.

**b. Regional and Local**

**Sanitation Districts of Los Angeles County**

The Sanitation Districts are authorized by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Sanitation Districts' sewerage system or for increasing the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the sewerage system to accommodate a proposed project. Payment of a connection fee is required before a permit to connect to the sewer is issued.

**City Sanitary Sewer Management Plan**

The City's first SSMP was certified in May 2009.<sup>4</sup> In 2015, the City updated the 2009 SSMP in order to comply with State and federal requirements, setting forth goals and actions to be followed and guidelines for various activities involved in managing, operating, maintaining, repairing, replacing, and expanding the sewer system.<sup>5</sup>

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent Sanitary Sewer Overflow (SSO), as well as mitigate any SSOs that do occur. The City is committed to providing high quality and cost-effective operation and management of its sanitary sewer system for the public.

**City of Lancaster General Plan**

Many of the municipal services in the City, such as sewage treatment, water, and solid waste management, are provided by other agencies or private companies. The Plan for Municipal Services and Facilities sets forth policies and programs for the rational and cost-efficient provision and extension of public services, infrastructure, and facilities to serve the existing community and support planned development and protect natural resources within the City. The following are the General Plan objective and policy that address wastewater and wastewater facilities:

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4 City of Lancaster, *Sewer System Management Plan*, February 2009  
<https://www.cityoflanasterca.org/Home/ShowDocument?id=9634>

5 City of Lancaster, *Sewer System Management Plan*, May 2015.

Objective 15.1: Achieve and maintain the following levels of service: Remain within the rated capacity of the treatment facility. (Sewage Treatment)

Policy 15.1.5: Ensure sufficient infrastructure is built and maintained to handle and treat wastewater discharge.

### **Lancaster Municipal Code**

Lancaster Municipal Code (LMC) Chapter 13.08: Sanitary Sewers and Industrial Waste was adopted to protect the public health and safety, and to prevent endangerment of public and private property. Pursuant to Section 13.08.030, Plan Approval Prerequisite to Issuance, no sewer construction permit shall be issued until the director has checked and approved the plans.

LMC Section 13.08.035, Tapping Fee Payment Required When, establishes fees for connection to the local sewer system:

- a) When, in the opinion of the director, it is necessary to connect a house lateral to a public sewer at a point where no connection facility has been provided, application for a city encroachment permit shall be submitted and a fee shall be paid by the applicant before the permit is issued for the construction and inspection of the house lateral.
- b) Tapping of the public sewer as required on sewer plans approved by the director shall be constructed by a licensed contractor under inspection of the director.

Pursuant to Section 13.08.050(A), Excessive Discharge of Sewage states:

Any person proposing to have sewage discharged from any property to a public sewer in quantities or at a rate greater than the capacity for which the sewer was designed, when proportioned to such property, and which such additional quantity will immediately overload the sewer, shall be denied a permit to connect any facilities to the sewer which will discharge more than the proportionate share allotted to the property. However, if such additional discharge will not immediately but may in the future overload the sewer, a conditional permit to connect to the sewer may be issued after the owner of the property agrees by a covenant satisfactory to the director recorded against the land to construct or share in the cost of construction of additional sewer capacity at such future time as the director determines that an overhead situation exists or is imminent.

## 5.17.2.2 ENVIRONMENTAL IMPACTS

### 5.17.2.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with wastewater. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant impact related wastewater if it would:

**Threshold WW-1**      **Require or result in the relocation or construction of new or expanded wastewater treatment, the construction or relocation of which could cause significant environmental effects.**

**Threshold WW-2**      **Result in a determination by the wastewater treatment provider which serves or may serve the project that is has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.**

### 5.17.2.2.2 Methodology

Information was obtained from the Sanitation District as needed to define the existing system’s conveyance and treatment capacities. Based on Sanitation District wastewater generation information for sanitary sewer service, an estimate was made as to the wastewater generation of the Proposed Project. Given the Proposed Project’s future generation, an assessment was made of the impacts to the Sanitation District and City’s off-site sanitary sewers and the Lancaster WRP. To evaluate potential impacts relative to wastewater treatment capacity, this analysis evaluates whether adequate treatment capacity within the Lancaster WRP area would be available to accommodate the Proposed Project based on the estimate of the Proposed Project’s wastewater generation, and data from the Sanitation District.

### 5.17.2.2.3 Project Impacts

**Threshold WW-1**      **Require or result in the relocation or construction of new or expanded water, wastewater treatment, the construction or relocation ow which could cause significant environmental effects.**

#### ***Wastewater Treatment***

Development of the Proposed Project would result in a net increase in wastewater flows from the project site. Wastewater generated by the Proposed Project was estimated using wastewater generation factors provided by the Sanitation District for each of the proposed uses within the project site, as shown in Table 5.17.2-2: Proposed Project Wastewater Generation. As shown in Table 5.17.2-2, at full buildout the

Proposed Project would generate approximately 1,009,390 gpd or 1.01 mgd in wastewater flows from the project site.

As mentioned previously, the City is served by Sanitation District No. 14. The wastewater generated by the Proposed Project would be treated at the Lancaster WRP, which has a current treatment capacity of 18 mgd and currently treats an average of 14.3 mgd.<sup>6</sup> Thus, the remaining treatment capacity of the Lancaster WRP is approximately 3.7 mgd. The Proposed Project’s increase in wastewater generation of approximately 1,009,390 gpd, or approximately 1.01 mgd, would increase the average wastewater flow currently treated by the Lancaster WRP from 14.3 mgd to 15.3 mgd, thus still remaining below the capacity of 18 mgd. Additionally, the Proposed Project at buildout would equate to approximately 27.3 percent of the remaining capacity of the Lancaster WRP. Thus, the Proposed Project would not affect the treatment capacity of the Lancaster WRP and the Proposed Project’s impacts would be less than significant.

**Table 5.17.2-2  
Proposed Project Wastewater Generation**

Land Use	Existing Size	Generation Rate	Total Generation (gpd)	Total Generation (mgd)
Single-Family Residential	250 du	260 gpd per du <sup>1</sup>	65,000	0.065
Multifamily Residential	1,350 du	156 gpd per du <sup>2</sup>	210,600	0.211
Commercial	242,000 sf	325 gpd per 1,000 sf <sup>3</sup>	78,650	0.079
Office	600,000 sf	300 gpd per 1,000 sf <sup>4</sup>	180,000	0.180
Hotel	180 rooms	125 gpd per room <sup>5</sup>	22,500	0.023
Hospital	700,000 new sf	300 gpd per 1,000 sf <sup>6</sup>	210,000	0.210
Acute, Sub-Acute, & COC	808,800 sf	300 gpd per 1,000 sf <sup>6</sup>	242,640	0.243
<b>Total</b>			<b>1,009,390</b>	<b>1.009</b>

Source: Los Angeles County Sanitation District, Table 1: Loadings for Each Class of Land Use.

<sup>1</sup> Based upon “Single Family Home” land use description.

<sup>2</sup> Based upon “Five or More Units” land use description.

<sup>3</sup> Based upon “Shopping Center” land use description.

<sup>4</sup> Based upon “Professional Building” land use description.

<sup>5</sup> Based upon “Hotel/Motel/Rooming House” land use description.

<sup>6</sup> Based upon “Professional Building Category” land use description because there is no medical-related land use description.

Abbreviations: gpd = gallons per day; mgd = million gallons per day; du = dwelling unit, sf = square feet, COC = continuum of care.

6 NOP response received from the County Sanitation Districts of Los Angeles County on May 1, 2020.

### ***Wastewater Infrastructure***

The Proposed Project would ultimately connect to the domestic system operated by Sanitation District No. 14 via connections to the City's sewer system. As mentioned previously, there are existing sewer lines ranging in diameter from 8 inches along 20th Street West, Avenue J, and 17th Street West, to 15 inches along 15th Street West.

The development associated with implementation of the proposed Master Plan would require the installation of new sewer lines. Pursuant to LMC Section 13.08.030, Plan Approval Prerequisite to Issuance, no sewer construction permit shall be issued until the director has checked and approved the plans. Further, LMC Section 13.08.035, Tapping Fee Payment when, in the opinion of the director, it is necessary to connect a house lateral to public sewer to a point where no connection facility has been provided, application for a city encroachment permit shall be submitted and a fee shall be paid by the applicant before the permit is issued for the construction and inspection of the house lateral. These sections establish fees for connection to the local sewer system to ensure the sewage discharged from any property does not exceed the system's capacity. Thus, each individual project proposed under the Master Plan would be required to comply with these Sections of the LMC prior to issuance of building permits.

The uses proposed under the Master Plan may require an amendment to a Sanitation District permit for Industrial Wastewater Discharge, or may require a permit for industrial wastewater discharge. Thus, each individual project would be required to forward copies of final plans and supporting information for the project to the Sanitation District No. 14 for review and approval prior to project construction. Thus, each individual project's compliance with Sanitation District No. 14's regulations would result in less than significant impacts to wastewater conveyance and treatment facilities.

Additionally, for those portions of the project site that are located outside of the jurisdictional boundaries of the Sanitation District No. 14, annexation would be required prior to the provision of sewerage service to the project site. Thus, each individual project that is located outside of the jurisdictional boundaries of the Sanitation District No. 14 would be required to be annexed into Sanitation District No. 14. Furthermore, the Sanitation Districts would charge a fee for the privilege of connection (directly or indirectly) to the Sanitation Districts' Sewerage System or for increasing the strength or quantity of wastewater discharged from connected facilities for each individual project proposed under the Master Plan. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct incremental expansion of the Sewerage System to accommodate individual projects proposed as part of the Master Plan. Payment of a connection fee would be required before a permit to connect the sewer is issued. Thus, each individual project's compliance with Sanitation District No. 14's regulations would result in less than significant impacts to wastewater conveyance and treatment facilities.

Installation of the Proposed Project's on-site and off-site sewer conveyance facilities would result in physical impacts to the environment during installation; however, these impacts are considered an inherent part of the construction phase and are evaluated throughout this EIR accordingly. In instances where potentially significant impacts are identified for the Proposed Project's construction phase for which feasible mitigation is available, mitigation measures are recommended in each applicable subsection of this EIR.

The Proposed Project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities. Less than significant impacts related to wastewater are expected.

**Mitigation Measures**

No mitigation measures are required.

**Level of Significance**

Impacts would be less than significant.

**Threshold WW-2      Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's project demand in addition to the provider's existing commitments?**

As discussed above under Threshold WW-1, the Proposed Project's wastewater generation would be approximately 1,009,390 gpd, or approximately 1.01 mgd. Wastewater flows generated by the Proposed Project would be conveyed to the Lancaster WRP. This would increase the average wastewater flow currently treated by the Lancaster WRP from 14.3 mgd to 15.3 mgd, thus still remaining below the capacity of 18 mgd. Additionally, the Proposed Project at buildout would equate to approximately 27.3 percent of the remaining capacity of the Lancaster WRP. Thus, the Proposed Project would not affect the treatment capacity of the Lancaster WRP and the Proposed Project's impacts would be less than significant.

**Mitigation Measures**

No mitigation measures are required.

**Level of Significance**

Impacts would be less than significant.

#### 5.17.2.2.4 Cumulative Impacts

The Proposed Project and related projects would cumulatively generate wastewater, thus potentially resulting in cumulative impacts on wastewater conveyance facilities and treatment at the Lancaster WRP.

Payment of any fees in accordance with the LMC would reduce potential impacts to wastewater facilities associated with each individual project proposed under the Master Plan. Individual development projects would be required to provide the on-site wastewater infrastructure and connections necessary to serve the proposed development. Similar to the Proposed Project, cumulative development would be required to pay any fees in accordance with the LMC. Thus, the Proposed Project's incremental effects would not be cumulatively considerable.

Furthermore, in order for the Sanitation District No. 14 to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of Sanitation District No. 14 wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). All expansions of the Sanitation District No. 14 facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecasts. The available capacity of the Sanitation District No. 14's treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. The Sanitation District No. 14 would only provide service up to the levels that are legally permitted.

However, all new development projects within the City, including individual projects proposed as part of the Master Plan, as well as other cumulative development projects, would be required to pay all applicable sewage connection fees and development impact fees, which would fund new or incremental wastewater conveyance and/or treatment facility expansion, if warranted. Moreover, similar to the Proposed Project, other cumulative development through the buildout of the General Plan would be required to determine their wastewater production to ensure that sufficient capacity is available to accommodate each project. The available capacity of the Sanitation Districts, specifically District 14 treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. Compliance with mandatory fees and sewer study requirements would ensure that the cumulative development projects, including individual projects associated with the Proposed Project would not result in wastewater flows that would exceed the capacity of the existing wastewater system, including wastewater treatment facilities. Therefore, the Proposed Project would result in a less than significant cumulative impact to wastewater facilities.

#### Mitigation Measures

No mitigation measures are required.



**Level of Significance**

Cumulative impacts would be less than significant.

**5.17.2.3 SUMMARY OF SIGNIFICANCE**

The Proposed Project would result in less than significant treatment capacity impacts. Adherence to provisions and compliance with the Sanitation District No. 14 regulations for new individual development projects proposed under the Master Plan would result in less than significant impacts. The Proposed Project's cumulative impacts would also result in less than significant impacts to wastewater.

This section of the Environmental Impact Report (EIR) addresses the Proposed Project’s impact on solid waste facilities. The analysis describes existing solid waste facilities and their associated capacities; estimates the amount of solid waste to be generated during Proposed Project construction and operation; and evaluates whether existing and planned solid waste facilities could accommodate Proposed Project generated waste. An assessment of the Proposed Project’s consistency with applicable solid waste regulations is also included in this section.

**5.17.3.1 ENVIRONMENTAL SETTING**

**5.17.3.1.1 Existing Conditions**

***a. Solid Waste Management***

Waste Management of Antelope Valley (Waste Management) is currently the sole franchise private hauler serving the City for waste collection. Residential, commercial, and industrial trash collection in the Cities of Lancaster and Palmdale, and unincorporated areas of Los Angeles County is currently hauled to the Antelope Valley Landfill or Lancaster Landfill and Recycling Center (Lancaster Landfill). The City’s solid waste is taken to the Lancaster and Antelope Valley landfills; however, other regional landfills in Los Angeles County and the counties of Ventura and Orange also accept solid waste from the City of Lancaster.<sup>1</sup>

The Antelope Valley Recycling and Disposal Facility is designated as a Class III landfill facility, which permits the disposal of nonhazardous waste. The estimated closure date for the Antelope Valley Recycling and Disposal Facility is the year 2042 based on the maximum permitted capacity. The landfill has a maximum permitted throughput of 3,600 tons per day (tpd). The remaining capacity of the landfill is 12,001,395 tons.<sup>2</sup> In 2018, the Antelope Valley Recycling and Disposal Facility accepted an average of 1,677 tpd.

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1 City of Lancaster General Plan, *Plan for Municipal Services and Facilities*, July 14, 2009.  
2 Los Angeles County Department of Public Works, *Countywide Integrated Waste Management Plan, “2018 Annual Report,”* December 2019, accessed November 2020, <https://www.ladpw.org/epd/swims/ShowDoc.aspx?id=12830&hp=yes&type=PDF>.

The Lancaster Landfill is designated as a Class III landfill facility.<sup>3</sup> The estimated closure date for the Lancaster Landfill is 2041 based on the landfill having a maximum permitted throughput of 3,000 tpd with a remaining capacity of 10,231,322 tons.<sup>4</sup> In 2018, the landfill accepted an average of 376 tpd.

The existing Mesquite Landfill, an out-of-County landfill, based on data presented in the 2018 CoIWMP Annual Report, has a maximum permitted daily capacity of 20,000 tons, with an estimated remaining life before landfill closure of 109 years. In addition, the Chiquita Canyon Landfill, an in-County landfill, has a permitted remaining capacity of approximately 60 million tons, with a daily maximum permitted capacity of 12,000 tons.

### **b. Project Site**

The City's 2018 annual solid waste disposal quantity was approximately 116,882 tons.<sup>5</sup> The project site is currently occupied by the existing Antelope Valley Hospital which contains 342 beds within 489,930 square feet (sf) with a 78-bed Woman and Infant Facility within approximately 277,000 sf for a total of 420 beds within 691,930 sf. The project site contains 59 single-family attached units and 376 multifamily units, for a total of 435 housing units. There is also a total of 1,040,430 sf of office and commercial space and approximately 230,000 sf of medical office space within the project site. The existing solid waste of the project site is identified in Table 5.17.3-1: Existing Solid Waste Generation. As shown in Table 5.17.3-1, the existing uses on-site generate approximately 19,663 pounds of solid waste per day, or approximately 3,188 tons per year.

**Table 5.17.3-1  
Existing Solid Waste Generation**

Land Use	Size (du/sq. ft./beds)	Solid Waste Generation Factor	Solid Waste Generation (lb/day)	Solid Waste Generation (tons/year)
Single-Family	59 du	12.23 lb/du/day	721.57	131.69
Multifamily	376 du	12.23 lb/du/day	4,598.48	839.22
Office/Commercial	1,040,430 sf	6.0 lbs/1,000 sf/day	6,242.58	811.54
Medical Office	230,000 sf	6.0 lb/1,000 sf/day	1,380.0	179.40
Hospital	420 beds	16 lb/bed/day	6,720.0	1,226.4

3 Los Angeles County Department of Public Works, *Countywide Integrated Waste Management Plan*, "2018 Annual Report," December 2019, accessed November 2020, <https://www.ladpw.org/epd/swims/ShowDoc.aspx?id=12830&hp=yes&type=PDF>.

4 Los Angeles County Department of Public Works, *Countywide Integrated Waste Management Plan*, "2018 Annual Report," December 2019, accessed November 2020, <https://www.ladpw.org/epd/swims/ShowDoc.aspx?id=12830&hp=yes&type=PDF>.

5 CalRecycle, Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility, 2018: Los Angeles – Lancaster, <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>. Accessed November 2020.

Land Use	Size (du/sq. ft./beds)	Solid Waste Generation Factor	Solid Waste Generation (lb/day)	Solid Waste Generation (tons/year)
Existing Solid Waste Generation			19,662.63	3,188.24

Source: CalRecycle, Estimated Solid Waste Generation Rates  
Abbreviations: du = dwelling units; sf = square feet; lb = pounds

### 5.17.3.1.2 Regulatory Setting

#### a. Federal

##### Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) is the nation’s primary law governing the disposal of solid and hazardous waste. The RCRA set national goals for reducing the amount of waste generated and for ensuring that wastes are managed in an environmentally sound manner. The Solid Waste Program encourages states to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal solid waste, sets criteria for municipal solid waste landfills, and prohibits the open dumping of solid waste. RCRA regulations encourage source reduction and recycling and promote the safe disposal of municipal waste. RCRA and the California Hazardous Waste Control Law regulations are enforced by the California Department of Toxic Substances Control, the State Division of Occupational Safety and Health, the County of Los Angeles Department of Health, and the Los Angeles County Fire Department.

#### b. State

##### California Integrated Waste Management Act of 1989 (AB 939)

In response to reduced landfill capacities, the State of California passed Assembly Bill (AB) 939, the California Integrated Waste Management Act, in 1989. This legislation requires cities and counties to reduce the amount of solid waste entering existing landfills through recycling, reuse, and waste prevention efforts. AB 939 also established the California Integrated Waste Management Board (CIWMB), the State agency that was designated to oversee, manage, and track California’s solid waste generation (replaced by CalRecycle). AB 939 requires jurisdictions to maintain 50 percent waste diversion. The purpose of AB 939 is to “reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible.”

AB 939 further requires jurisdictions to conduct a Solid Waste Generation Study and prepare a Source Reduction and Recycling Element to describe how it would reach the goals. The Source Reduction and Recycling Element contains programs and policies for fulfillment of the goals of AB 939, including the above noted diversion goals, and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste

stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to CalRecycle to update their progress toward the AB 939 goals.

CalRecycle is the State of California department concerned with the State's recycling and waste reduction efforts, including the implementation of AB 939. Officially known as the Department of Resource Recycling and Recovery, CalRecycle is a part of the California Natural Resources Agency and was created from a merger of the Department of Conservation, Division of Recycling and CIWMB.

### **California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327)**

The California Solid Waste Reuse and Recycling Access Act of 1991 is codified in Public Resources Code (PRC) Sections 42900-42911. As amended, AB 1327 requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional buildings; marinas; or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The sizes of these storage areas are to be determined by the appropriate jurisdictions' ordinance. If no such ordinance exists with the jurisdiction, the CalRecycle model ordinance shall take effect.

### **Assembly Bill 341**

On October 6, 2011, Governor Edmund G. Brown signed AB 341 establishing a State recycling goal of 75 percent by the year 2020. AB 341 makes "a legislative declaration that it is the policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020." AB 341 requires a business, defined to include a commercial or public entity that generates more than 4 cubic yards of commercial solid waste per week or a multifamily residential dwelling of 5 units or more to arrange for recycling services. Such business/residential development must: (1) source separate recyclable materials from the solid waste they are discarding; (2) either self-haul or arrange for separate collection of the recyclables; and (3) subscribe to a service that includes mixed waste processing that yields diversion results comparable to source separation.

### **Construction and Demolition Waste Materials Diversion Requirements (SB 1374)**

Construction and Demolition Waste Materials Diversion Requirements passed in 2002 added Section 42912 to the California PRC. Senate Bill (SB) 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The legislation also requires that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills.

### **Organic Recycling (Assembly Bill 1826)**

Effective April 1, 2016, AB 1826 requires businesses that generate more than four cubic yards of organic waste (food, green and non-hazardous wood waste) per week, and multi-family properties with five units or more, to provide separate recycling bins for organic waste, and requires that local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses.<sup>6</sup> Furthermore:

- a) Effective April 1, 2016, all businesses that generate eight cubic yards of organic waste per week shall arrange for organic waste recycling services.
- b) Effective January 1, 2017, all businesses that generate four cubic yards of organic waste per week shall arrange for organic waste recycling services.
- c) Effective January 1, 2019, all businesses that generate four cubic yards or more of commercial solid waste per week shall arrange for organic waste recycling services.
- d) Effective January 1, 2020, if statewide disposal of organic waste has not been reduced to 50 percent of the level of disposal during 2014, all businesses that generate two cubic yards or more of commercial solid waste per week shall arrange for organic waste recycling services.

### **Zero Waste California**

Zero Waste California is a State program launched by CalRecycle in 2002 to promote a new vision for the management of solid waste. Zero Waste provides that wasting resources is inefficient and that the efficient use of natural resources should be achieved. The concept requires maximizing existing recycling and reuse efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. The Zero Waste California program promotes the goals of market development, recycled product procurement, and research and development of new and sustainable technologies.

### **California Green Building Standards Code (CALGreen)**

Effective January 1, 2020, the latest State's Green Building Code, part of Title 24, the California Building Standards Code, requires developers of newly constructed buildings to develop a waste management plan to divert 65 percent of the construction waste generated by project construction.<sup>7</sup> Builders or developers are required to submit a construction waste management plan to the appropriate jurisdiction's

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<sup>6</sup> California Public Resources Code, Sections 42649.8 et seq.

<sup>7</sup> California Building Standards Commission, 2019 California Green Building Standards Code Residential and Nonresidential, Section 5.408, "Construction Waste Reduction, Disposal and Recycling", January 2020.

enforcement agency. The City adopted its green building ordinance to be consistent with the CALGreen Code.

**c. Regional and Local**

**Countywide Integrated Waste Management Plan (CoIWMP)**

Pursuant to AB 939, each County is required to prepared and administer a CoIWMP, including preparation of an Annual Report. The CoIWMP, per AB 939, is to compromise of the various counties' and cities' solid waste reduction planning documents, plus an Integrated Waste Management Summary Plan (Summary Plan) and a Countywide Sitting Element (CSE). The Summary Plan describes the steps to be taken by local agencies, acting independently and in concert, to achieve the mandated state diversion rate by integrating strategies aimed toward reducing, reusing, recycling, diverting, and marketing solid waste generated within the County. The County of Los Angeles' Department of Public Works is responsible for preparing and administering the Summary Plan and the CSE. The Summary Plan for the County was approved by CalRecycle on June 23, 1999. The latest CSE was approved by CalRecycle in 2012. A CoIWMP 2018 Annual Report was released in December 2019.<sup>8</sup>

The County continually evaluates landfill disposal needs and capacity as part of the preparation of the CoIWMP Annual Report. Within each annual report, future landfill disposal needs over the next 15-year planning horizon are addressed in part by determining the available landfill capacity. The most recent annual report, the CoIWMP 2018 Annual Report, published in December 2019, provides disposal analysis and facility capacities for 2018, as well as future projections through 2033.<sup>9</sup>

As stated within the CoIWMP 2018 Annual Report, the County is not anticipating a solid waste disposal capacity shortfall within the next 15 years under current conditions.<sup>10</sup> A variety of strategies, including mandatory commercial recycling, diversion of organic waste, and alternative technologies (e.g., engineered municipal solid waste conversion facilities or anaerobic digestion, etc.) would be implemented to ensure that the County would be able to accommodate the solid waste generated through the horizon year of 2033.<sup>11</sup>

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8 Los Angeles County Department of Public Works, *Countywide Integrated Waste Management Plan*, "2018 Annual Report," December 2019, accessed November 2020, <https://www.ladpw.org/epd/swims/ShowDoc.aspx?id=12830&hp=yes&type=PDF>.

9 Los Angeles County Department of Public Works, *Countywide Integrated Waste Management Plan*, "2018 Annual Report," December 2019, accessed November 2020, <https://www.ladpw.org/epd/swims/ShowDoc.aspx?id=12830&hp=yes&type=PDF>.

10 Los Angeles County Department of Public Works, *Countywide Integrated Waste Management Plan*, "2018 Annual Report," December 2019, p. 6.

11 Los Angeles County Department of Public Works, *Countywide Integrated Waste Management Plan*, "2018 Annual Report," December 2019, 37.

### City of Lancaster General Plan

The City has an adopted General Plan that includes the Plan for Municipal Services and Facilities which describes infrastructure and service providers and the future needs for such services and facilities. The applicable objective and policy related to the Proposed Project are provided below.

Objective 15.2: Minimize the negative impacts of solid waste disposal using a variety of methods including mitigating the disposal of waste from outside the Antelope Valley.

Policy 15.2.2: Minimize the generation of solid wastes as required by State law (AB 939) through an integrated program of public education, source reduction, and recycling.

### City of Lancaster Municipal Code

The City of Lancaster Municipal Code (LMC) Section 13.16.130, Recycling Waste Reduction Program, requires that all contractors comply with existing state and local mandates for reduction of waste stream and promoting recycling per specific provisions of the contract.

## 5.17.3.2 ENVIRONMENTAL IMPACTS

### 5.17.3.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with solid waste. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant solid waste impact if it would:

**Threshold SW-1**      **Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.**

**Threshold SW-1**      **Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.**

### 5.17.3.2.2 Methodology

The Proposed Project's potential solid waste impacts are based on an analysis of the estimated amount of waste anticipated to be generated during both construction and operation of the Proposed Project. The analysis examines the potential for the disposal of inert demolition and construction debris during the Proposed Project's construction phase and solid waste disposal during operation of the Proposed Project within Class III landfills in the County. The Proposed Project's solid waste generation is forecasted both for the total amount of waste generated by the Proposed Project, as well as the amount of solid waste that



would actually be disposed of at a landfill (i.e., the total amount of waste minus the materials diverted from landfills via recycling, reuse, or other methods). It is noted that during the construction period, non-construction and non-demolition waste (i.e., waste associated with existing on-site operations) would continue to be generated on the project site, as project construction would allow current uses to continue to operate throughout the construction period.

Construction waste from the development of the Proposed Project would be sent to a waste processing facility. Each waste processing facility is required to meet a minimum diversion of 65 percent of construction and demolition waste in accordance with the CALGreen Code, which the City adopted by reference.

Information regarding the current intake capacity of each facility was gathered to determine if the existing landfills in Los Angeles County could accommodate solid waste generated by the Proposed Project. Solid waste generation rates from CalRecycle<sup>12</sup> were used to determine the generation of solid waste by the Proposed Project. The results of these calculations are compared with the existing capacity of Class III landfills open to the City. The annual increase of solid waste generated by the Proposed Project that is disposed at local landfills was then compared to the following: (1) daily permitted disposal capacity of in-County Class III landfills open to the City; and (2) remaining capacity of in-County Class III landfills open to the City; and (3) remaining capacity at the out-of-County Class III landfill open to the City.

Solid waste disposal and recycling services for the City is provide by Waste Management of Antelope Valley (Waste Management). Solid waste and recycling from the Proposed Project would be hauled to the Antelope Valley Landfill or Lancaster Landfill.

### 5.17.3.2.3 Project Impacts

**Threshold SW-1      Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.**

#### **Construction**

Construction of the Proposed Project would involve demolition, grading and excavation, and new building construction activities. Collectively, these construction activities would generate typical construction and demolition wastes, including concrete, stucco, asphalt, rocks, building materials, wood, paper, glass, plastic, metals, cardboard, other inert wastes (i.e., wastes that are not likely to produce leachates of environmental concern), and green wastes. This construction-related waste would be recycled or collected

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12 CalRecycle, Estimated Solid Waste Generation Rates, accessed June 2020, <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>.

by the Lancaster Landfill. For purposes of analysis, the Antelope Valley Hospital would be relocated to a more central location within the project site. Additionally, to create buildable sites for potential future development, the demolition of existing buildings, in full or in part, may occur. While buildout of the Master Plan does not require demolition of the existing land uses, for a conservative analysis it was assumed that up to approximately 520,425 sf of existing buildings would be demolished to accommodate the future development. Construction activities would involve the development of new residential and nonresidential structures up to a total of 4,584,763 sf.

As shown in Table 5.17.3-2: Proposed Project Construction and Demolition Waste Generation, it is anticipated that construction of the Proposed Project, prior to any diversion from recycling, would generate approximately 79,818 tons of demolition debris and 9,901 tons of construction debris, for a combined total of 89,719 tons of construction phase-related waste generation to accommodate total sitewide development over the life of the Proposed Project. The Lancaster Landfill accepts construction and demolition debris and has a remaining capacity estimated at approximately 10.23 million tons. The Antelope Valley Recycling and Disposal Facility also accepts construction and demolition debris and has a remaining capacity of 12.0 million tons. The demolition and construction debris generated over the life of the Proposed Project, prior to any diversion from recycling, would account for approximately 0.8 percent of the estimated remaining capacity at the Lancaster Landfill and 0.7 percent of the Antelope Valley Recycling and Disposal Facility.

It was conservatively assumed that 65 percent of nonhazardous demolition and construction debris generated by the Proposed Project would be recycled and/or salvaged for reuse per the requirements of the CALGreen Code. Therefore, it is estimated that after diversion, a total of approximately 31,401.8 tons of construction-related waste would be disposed of at the County's unclassified landfill throughout construction of the Proposed Project. This represents approximately 0.3 percent of the estimated remaining disposal capacity at the Lancaster Landfill and 0.3 percent of the estimated remaining disposal capacity at the Antelope Valley Recycling and Disposal Facility. The County estimates that the life span of the Lancaster Landfill is 23 years based on the land use permit restriction and the Antelope Valley Recycle is 22 years.<sup>13</sup> The County's inert fill landfills would therefore have adequate capacity to accommodate Project-generated inert waste, and construction and demolition impacts relative to solid waste would be less than significant.

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13 Los Angeles County Department of Public Works, Los Angeles County Integrated Waste Management Plan: 2018 Annual Report, December 2019.

**Table 5.17.3-2  
Proposed Project Construction and Demolition Waste Generation**

Construction Phase <sup>a</sup>	Size (sf)	Generation Factor <sup>b</sup> (lb./sf)	Waste Generated (tons)
<b>Demolition (Building Area to be Demolished)</b>			
Non-Residential <sup>c</sup>	1,010,355	158	<b>79,818.05</b>
<b>Construction (Total New Building Area to be Constructed)</b>			
<b>New Building Area</b>			
Residential	1,904,763	4.39	4,085.7
Non-Residential <sup>d</sup>	2,680,000	4.34	5,815.6
<i>Subtotal</i>	<i>4,584,763</i>		<i>9,901.3</i>
<b>Total Construction Phase-Related Waste Prior to Recycling</b>			<b>89,719.36</b>
<b>Total Construction Phase-Related Waste Sent to Landfill (with 65 percent diversion)<sup>e</sup></b>			<b>31,401.78</b>

Notes: lb. = pounds; sf = square feet.

<sup>a</sup> Includes all proposed uses on the project site.

<sup>b</sup> Factors for nonresidential demolition and construction based on the US Environmental Protection Agency, Estimating 2003 Building-Related Construction and Demolition Materials Amounts, Tables 2-1 and 2-4, March 2009.

<sup>c</sup> Consists of approximately 489,930 square feet of the existing hospital and approximately 520,425 square feet of existing commercial/office space.

<sup>d</sup> Consists of approximately 2,680,000 square feet of commercial/office space, including 7000,000 square feet of new hospital space.

<sup>e</sup> A 65 percent diversion (recycling) factor was conservatively assumed based on the lowest construction and demolition recycling rate per the City's Green Building Code which adopted by reference the State's Green Building Code.

Construction waste generated by the Proposed Project would occur in response to market conditions through 2040, so it can be assumed that the daily construction-related waste would represent a fraction of the existing daily capacity at unclassified landfills. Since the County's unclassified landfills generally do not face daily capacity shortages and the County's unclassified landfills would be able to accommodate daily Proposed Project-generated construction and demolition waste, the Proposed Project would not result in the need for additional disposal facilities to adequately accommodate Proposed Project-related daily generated construction and demolition waste. Therefore, the Proposed Project would not need additional solid waste disposal facilities to adequately handle Project-generated inert waste and construction impacts to these facilities would be less than significant.

### **Operation**

Operation of the additional uses on the project Site would generate solid waste. As shown in Table 5.17.3-3: Project Solid Waste Generation, prior to any reduction to account for recycling, the Proposed Project

would generate approximately 7,290.4 tons of solid waste per year, or 28.04 tpd<sup>14</sup> (approximately 41,157.0 pounds per day). The Proposed Project would represent an approximate 56 percent increase in solid waste generation when compared to the existing average solid waste generated on the project site (as previously indicated in Table 5.17.3-1).

**Table 5.17.3-3  
Proposed Project Solid Waste Generation**

Land Use	Net New Building Area	Solid Waste Generation Factor	Solid Waste Generation (lb/day)	Solid Waste Generation (tons/year)
Residential	1,600 du	12.23 lb/du/day	19,568.0	3,571.2
Office	600,000 sf	6 lb/1,000 sf/day	3,600.0	468.0
Commercial	242,000 sf	2.5 lb/1,000 sf/day	605.0	78.7
Hospitality	180 beds	2 lbs/room/day	360.0	65.7
Hospital	300 beds	16 lb/bed/day	4,800.0	876.0
AC, SAC, COC	764 beds	16 lb/bed/day	12,224.0	2,230.9
<b>Proposed Project Solid Waste Generation</b>			<b>41,157.0</b>	<b>7,290.5</b>

Source: CalRecycle, *Estimated Solid Waste Generation Rates*, accessed June 2020.

<https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>.

Abbreviations: du = dwelling units; sf = square feet; lb(s) = pound(s); AC = acute care; SAC = sub-acute care; COC = continuum of care.

The Proposed Project's net increase in solid waste generation prior to any reduction in recycling would represent approximately 6.2 percent of the City's 2018 annual solid waste disposal quantity of approximately 116,882 tons. Project-generated solid waste would be collected by a private solid waste hauler and taken for disposal at either the Antelope Valley Recycling and Disposal Facility or the Lancaster Landfill. The permitted daily maximum capacity of the Antelope Valley Recycling and Disposal Facility is 3,600 tons per day and the permitted capacity of the Lancaster Landfill is 3,000 tons per day.<sup>15</sup> The 2018 average daily disposal was 1,667 tpd, with approximately 1,933 tpd of remaining permitted capacity, at the Antelope Valley Recycling and Disposal Facility and 376 tpd, or approximately 2,624 tpd of remaining daily capacity, at the Lancaster Landfill. The remaining average daily capacity at the Antelope Valley Recycling and Disposal Facility would be 1,905 tpd and 2,596 tpd at the Lancaster Landfill with buildout of the Proposed Project. In total, the Proposed Project would contribute an average of approximately 12.5 tpd, or 1.5 percent of remaining daily capacity at the Antelope Valley Recycling and Disposal Facility and 1.1 percent of the Lancaster Landfill. Accordingly, there would be adequate capacity to accommodate the

<sup>14</sup> The Proposed Project 7,290.4 tons per year delivered over the course of 260 operational days landfills accept solid waste.

<sup>15</sup> Los Angeles County Department of Public Works, Countywide Integrated Waste Management Plan, *2018 Annual Report*, December 2019, accessed November 2020, <https://www.ladpw.org/epd/swims/ShowDoc.aspx?id=12830&hp=yes&type=PDF>

Proposed Project's solid waste needs and would not generate solid waste in excess of State or local standards. Proposed Project development would have less than significant impacts on landfill disposal capacity at Proposed Project buildout.

The forecasts of available daily capacity do not include the availability of out-of-County landfills or the expansion of in-County landfills, which would substantially increase available daily disposal capacity and thus further reduce the percentage that Proposed Project solid waste would constitute of available daily disposal capacity. In terms of additional daily disposal capacity, the existing and operational Mesquite Landfill, an out-of-County landfill, has a maximum permitted daily capacity of 20,000 tons, with an estimated remaining life before landfill closure of 109 years. In addition, the Chiquita Canyon Landfill, an in-County landfill, has a permitted capacity of 60 million tons, with a daily maximum permitted capacity of 12,000 tons.

In addition, the County will continue to address landfill capacity through the preparation of annual CoIWMP reports. The preparation of each annual CoIWMP report provides sufficient lead time (15-years) to address potential future shortfalls in landfill capacity. Furthermore, in future years, it is anticipated that the rate of declining landfill capacity would slow considering the City's current diversion rate and recycling programs undertaken by jurisdictions throughout Los Angeles County.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

The Proposed Project would have less than significant impacts on landfill disposal capacity at buildout.

**Threshold SW-2            Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.**

The Proposed Project would comply with applicable statutes and regulations related to solid waste, including those pertaining to waste reduction and recycling, as summarized above in the Regulatory Framework subsection. Additionally, the Proposed Project's construction contractor would deliver all construction and demolition waste generated by the Proposed Project to a certified Construction and Demolition Waste Processing Facility in accordance with AB 939 Compliance Permit requirements. Thus, the Proposed Project would promote source reduction and recycling, consistent with the applicable federal, state, and local statutes and regulations related to solid waste. Therefore, construction of the Proposed Project would not conflict with applicable solid waste statutes and regulations. Impacts

associated with construction solid waste policies and objectives under the Proposed Project would be less than significant.

Each future applicant for an individual project would implement on-site recycling programs in accordance with the requirements of AB 341 and 1826 as appropriate, which would assist the City in achieving its State-mandated source reduction and recycling goals under AB 939. The Proposed Project would also provide adequate recycling area or room for the collection and removal of recyclable materials in accordance with AB 1327 and the LMC requirements. Each individual development project would adhere to the City's Green Building Code for new building construction. As such, the Proposed Project would be operated in a manner that would be consistent with all source reduction and recycling goals set forth by the City to achieve compliance with the applicable regulatory plans consistent with the City's obligations under AB 939, including but not limited to the requirements listed in the City's General Plan. The Proposed Project would not have a significant impact on City waste diversion policies and would continue to comply with applicable City waste diversion programs. Therefore, operation of the Proposed Project would not conflict with these solid waste policies and objectives and impacts associated with solid waste policies and objectives under the Proposed Project would be less than significant.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Level of Significance***

Impacts would be less than significant.

## **5.17.3.2.4 Cumulative Impacts**

### ***Construction***

Construction waste from the development of the related projects combined with the Proposed Project would result in the cumulative increase in inert construction waste requiring landfill capacity. As previously analyzed, the Proposed Project would generate a total of approximately 89,719.4 tons of construction-related waste prior to any reduction in recycling. The amount of construction and demolition waste generated by the Proposed Project would be sent to a facility that is required to divert at least 65 percent of construction and demolition waste received. Conservatively, assuming the minimum diversion rate of 65 percent, approximately 31,401.8 tons of construction-related waste would be disposed of at the County's unclassified inert landfill throughout the construction timeframe of the Proposed Project. It is anticipated that construction and demolition waste generated by future cumulative development within the City would also divert 65 percent of waste, which would reduce the amount of construction and demolition waste sent to the County's unclassified inert landfill. Furthermore, as described above, the

unclassified landfills do not face capacity issues and would be expected to have sufficient capacity to accommodate cumulative demand. Thus, cumulative impacts would be less than significant because Project-generated inert waste would represent, prior to any diversion from recycling, approximately 0.8 percent of the estimated remaining capacity at the Lancaster Landfill and 0.7 percent of the Antelope Valley Recycling and Disposal Facility. Therefore, cumulative impacts with respect to construction and demolition waste would be less than significant.

### **Operation**

Operation of the Proposed Project in conjunction with the forecasted growth in the County, and operation of the related projects would generate municipal solid waste. Thus, forecasted future growth would cumulatively increase the need for waste disposal at Class III landfills. The Countywide demand for landfill capacity is continuously evaluated by the County through the preparation of its CoIWMP Annual Reports, which assesses future landfill needs over a 15-year planning horizon. The preparation of each annual CoIWMP provides sufficient lead time (15 years) to address potential future shortfalls in landfill capacity. Thus, cumulative impacts would be less than significant because the Proposed Project would represent less than 1 percent of the cumulative waste disposal projected by year 2032, the remaining landfill capacity forecasted in 2032, the remaining life of the Antelope Valley Recycling and Disposal Facility and Lancaster Landfill, and the County's planning process that provides for 15 years of landfill capacity on an ongoing basis. In addition, the CoIWMP also calls for the establishment of 50 years of permitted landfill capacity.

With respect to regulatory consistency, it is anticipated that, similar to the Proposed Project, the related projects would implement recycling and waste reduction practices in compliance with applicable regulatory plans consistent with the AB 939, AB 341, and AB 1826, as appropriate, requirements on jurisdictions, and including but not limited to the City's General Plan and LMC. Therefore, cumulative impacts with regard to consistency with solid waste plans, policies, and programs would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Impacts would be less than significant.

## **5.17.3.3 SUMMARY OF SIGNIFICANCE**

No significant impacts have been identified and no mitigation measures are necessary. Cumulative impacts would also result in less than significant impacts related to solid waste.

This section of the Environmental Impact Report (EIR) addresses the potential for impacts to dry utilities (electricity, natural gas, and telecommunications). The analysis describes existing telecommunication, electricity, and natural gas facilities and evaluates whether existing and planned telecommunications, electricity, and natural gas facilities could accommodate the demand associated with Proposed Project uses. An assessment of the Proposed Project’s potential impacts on electricity and natural gas supplies is located in Section 5.5: Energy of this EIR.

**5.17.4.1 ENVIRONMENTAL SETTING**

**5.17.4.1.1 Existing Conditions**

Utilities and service systems are made available by a range of private companies, private enterprises acting as public utilities, and public agencies in the City. Major service systems providers in the City include the following: Southern California Edison (SCE) which provides and maintains the electrical infrastructure in the City; Lancaster Choice Energy (LCE) which procures energy sources to supply the electricity demands associated with existing and proposed uses within the City; the Southern California Gas Company (SoCalGas) which supplies natural gas and oversees natural gas infrastructure in the area; AT&T, Frontier Communications, Spectrum, and Verizon provide telecommunication and internet services to the City.

Section 5.2: Air Quality, Section 5.5: Energy, and Section 5.7: Greenhouse Gas Emissions of this EIR provide greater detail for estimated utility usage and associated environmental impacts. This section provides focused summaries of information found throughout this EIR associated with the capacities of and anticipated Project-generated demand telecommunications infrastructure.

**5.17.4.1.2 Regulatory Setting**

***Federal***

The Federal Energy Regulatory Commission (FERC) is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil. The Energy Policy Act of 2005 gave FERC additional responsibilities in this capacity. The Federal Communications Commission (FCC) regulates interstate and international communications by radio, television, wire, satellite, and cable in all 50 states.

***State***

**California Public Utilities Commission**

The California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies, in addition to



authorizing video franchises. The CPUC is responsible for regulating electric utility rates, electric power procurement and generation, some electric infrastructure, ratepayer-funded energy efficiency programs, and other areas. The CPUC evaluates the necessity for additional power generation by the regulated utilities in California in both the long and short term, accomplished using public input, data provided by the utilities, the California Energy Commission (CEC), the California Independent System Operator (CAISO), and following the regulations of the Commission, the Public Utilities Code, and FERC. The CPUC has primary ratemaking jurisdiction over the funding of distribution related expenditures, generally for power lines of 66 kV (kilovolts) or less. While the CPUC does not have ratemaking responsibility for transmission lines, CPUC does have a substantial role in permitting transmission and substation facilities.

The CPUC regulates natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering, and billing. Additionally, the CPUC regulates telecommunications and broadband operations and infrastructure in the State, being responsible for licensing, registration, and the processing of tariffs on local exchange carriers, competitive local carriers, and non-dominant interexchange carriers. It is also responsible for registration of wireless service providers and franchising of video service providers, among other duties.

## ***Local***

### **City of Lancaster General Plan**

Many of the municipal services in the City of Lancaster, such as water, sewage treatment, solid waste management, and telecommunications are provided by other agencies or private companies. The Plan for Municipal Services and Facilities sets forth policies and programs for the rational and cost-efficient provision and extension of public services, infrastructure, and facilities to serve the existing community and support planned development within the City. General Plan policy and implementation programs for the Wireless Master Plan are contained in the Plan for Municipal Services and Facilities.<sup>1</sup> The following General Plan policy addresses telecommunication facilities.

Policy 15.3.2:               Ensure that the City is proactive in addressing the infrastructure and service needs of the wireless communications industry.

### **Lancaster Municipal Code**

In response to the Federal Telecommunications Act of 1996, the City adopted Title 17, Chapter 17.40, Article XIII “Wireless Telecommunications Facilities” of the Municipal Code in 1999. The intent of the article was to establish standards for the placement and use of wireless telecommunications facilities

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<sup>1</sup> City of Lancaster, General Plan 2030, July 14, 2009, <https://www.cityoflanasterca.org/home/showdocument?id=9323>

within all zones where they are permitted. On January 14, 2020, the City adopted Ordinance 1070 which updated this Article to address the continually changing rules and regulations surrounding wireless telecommunication facilities.

## 5.17.4.2 ENVIRONMENTAL IMPACTS

### 5.17.4.2.1 Thresholds of Significance

The CEQA Guidelines Appendix G was utilized to assess potential environmental impacts associated with dry utilities. In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant dry utility impact if it would:

**Threshold UT-1            Require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**

### 5.17.4.2.2 Methodology

To evaluate potential impacts relative to dry utilities, this analysis evaluates whether adequate dry utilities within the project site would be available to accommodate the Proposed Project.

### 5.17.4.2.3 Project Impacts

**Threshold UT-1            Require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**

As mentioned previously, Section 5.5: Energy of this EIR provides greater detail for estimated utility usage and associated environmental impacts. This section provides focused summaries of information found throughout this EIR associated with the capacities of and anticipated project-generated demand telecommunications infrastructure.

#### ***Electricity***

The Proposed Project would increase use of electricity within SCE's service area, particularly the demand for electricity to light, heat, and air condition health, residential, commercial/office, and hotel uses. As development of the Proposed Project and/or surrounding developments occurs, even more electrical circuits may be necessary.

New electrical infrastructure may be required to serve each individual project proposed under the Master Plan. All new electrical distribution lines would be constructed concurrently with individual projects.

Therefore, impacts to the surrounding environment from the construction of on-site electrical infrastructure facilities are discussed throughout this EIR.

However, some interruption could occur to existing uses within the project site, thus resulting in a potentially significant impact if existing lines do not remain operable while replacement lines are being constructed or connected to the adjacent electrical infrastructure. Implementation of Mitigation Measure MM UT-1 would ensure that electrical service to existing users in the area is not interrupted while new and replacement lines are under construction. Thus, Proposed Project impacts to electrical infrastructure would be reduced to less than significant.

### ***Natural Gas***

New gas main extensions and/or lines would be required to serve each individual project proposed under the Master Plan. All new distribution lines would be constructed concurrently with Proposed Project development by phase. Therefore, impacts to the surrounding environment from the construction of on-site natural gas facilities are discussed throughout this EIR.

However, some interruption could occur to existing uses within the project site, thus resulting in a potentially significant impact if existing lines do not remain operable while replacement lines are being constructed or connected to the adjacent gas mains. Implementation of Mitigation Measure MM UT-1 would ensure that gas service to existing users in the area is not interrupted while new and replacement lines are under construction. Thus, Proposed Project impacts to natural gas infrastructure would be reduced to less than significant.

### ***Telecommunications***

The need for telecommunication services would increase as a result of the Proposed Project. AT&T, Frontier Communications, Spectrum, and Verizon provide telecommunication and internet services to the City and have existing infrastructure surrounding the project site that would provide accessible points of connection for each individual project proposed under the Master Plan. Due to the preliminary stage of review of the Proposed Project, in accordance with the LMC each project applicant would be required to coordinate with each telecommunications service/firm prior to the issuance of building permits. Thus, Proposed Project impacts on telecommunications infrastructure would be less than significant.

### **Mitigation Measures**

The following mitigation measure would be implemented to reduce potentially significant impacts to dry utility facilities to less than significant:

**UT MM-1** Electric and gas service shall remain available to all existing customers during construction of new and replacement electrical and/or gas lines within the project site.

### **Level of Significance**

Proposed Project impacts to electricity and natural gas infrastructure systems would be less than significant with implementation of Mitigation Measure MM UT-1. Proposed Project impacts to telecommunications would be less than significant.

### **5.17.4.2.4 Cumulative Impacts**

Development proposed at the project site would result in a permanent and continued use of electricity and natural gas resources as well as communication services. All related projects to be implemented in the City would include the need for additional utility services. Accordingly, each related project would be required to complete environmental analysis per CEQA, and to disclose and analyze any potentially significant impacts. Each related project would require coordination with the appropriate utility company, such as SCE, LCE, and/or SoCalGas, to ensure adequate electricity, natural gas, and telecommunications infrastructure systems are available. Compliance with City requirements prior to, and during construction, would ensure cumulative impacts would be less than significant. Therefore, there would be no significant cumulative impacts.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance**

Cumulative impacts would be less than significant.

### **5.17.4.3 SUMMARY OF SIGNIFICANCE**

Proposed Project impacts to electricity and natural gas infrastructure systems would be less than significant with implementation of Mitigation Measure MM UT-1. Proposed Project impacts to telecommunications would be less than significant. Cumulative impacts would also result in less than significant impacts related to dry utilities.

## 6.0 ALTERNATIVES

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### 6.1 INTRODUCTION

This section of the Environmental Impact Report (EIR) provides a comparative analysis of the environmental effects of alternatives to the proposed Health District Master Plan (Master Plan or Proposed Project). This analysis has been prepared in accordance with the guidance provided by the California Environmental Quality Act (CEQA). CEQA requires that an EIR describe a reasonable range of alternatives to the project, or to the location of the project, that would feasibly attain most of the basic objectives of the project while avoiding or substantially lessening any of the significant environmental impacts of the project. An EIR must include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project. This section identifies and describes alternatives to the Proposed Project, evaluates the environmental impacts that would result from each of these alternatives, and compares these with the Proposed Project, as required by CEQA.

Key provisions of the State CEQA Guidelines<sup>1</sup> relating to this alternatives analysis are summarized below:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be costlier.
- The No Project Alternative shall be evaluated along with its impact. The No Project analysis shall discuss the existing conditions at the time the notice of preparation was published. Additionally, the analysis shall discuss what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- If the project is a development project on an identifiable property, the No Project Alternative is the circumstance under which the project does not proceed. Discussion of this alternative shall compare the environmental effects of the property remaining in its existing state to the environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this No Project consequence should be discussed. In certain instances, the No Project Alternative means “no build,” wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical results of not approving the project rather than create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.<sup>2</sup>

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1 California Code of Regulations, tit. 14, *CEQA Guidelines*, sec. 15126.6.

2 CEQA Guidelines, sec. 15126.6.

- The range of alternatives required in an EIR is governed by the “rule of reason”; therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.<sup>3</sup>
- The range of feasible alternatives to a proposed project is to be selected and discussed in a manner that fosters meaningful public participation and informed decision-making. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the applicant could reasonably acquire, control, or otherwise have access to the alternative site.<sup>4</sup>

## 6.2 PROJECT OBJECTIVES

As stated above, an EIR must only discuss in detail an alternative that is capable of feasibly attaining most of the basic objectives associated with the action, while at the same time avoiding or substantially lessening any of the significant effects associated with the Proposed Project. Thus, the Proposed Project’s objectives as noted in Section 3.0: Project Description of this EIR are as follows:

- Surround the Antelope Valley Hospital with a variety of health- and wellness-related uses, thereby supporting and expanding the hospital’s medical facilities and treatment capabilities while accommodating the needs of patients and their families, staff, and the community.
- Take advantage of vacant and underutilized properties surrounding the hospital to encourage healthcare-related development, accommodate a wide range of wellness supportive businesses and activities, improve community health outcomes, and stimulate the local economy.
- Develop enhanced and expanded open space within the project site to encourage Antelope Valley Hospital patients, employees, and visitors to enjoy a healthy, active lifestyles and to support compact, mixed-use, transit-ready urban development patterns and forms.
- Upgrade and expand utilities and infrastructure necessary to support project site growth and development, while reducing negative impacts to the greater community.
- Implement buildings, public spaces and landscapes that complement and are responsive to Lancaster’s climate and natural environment, and that minimize consumption of non-renewable resources.

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3 CEQA Guidelines, sec. 15126.6(f)(3).

4 CEQA Guidelines, sec. 15126.6(f)(1).

- Support City and regional planning programs that emphasize sustainability and mobility by increasing development intensity and diversity of use in areas that are well served by transit.
- Improve and streamline multimodal transportation and access throughout the project site, including by foot, bicycle, car, shuttle and regional transit.
- Increase employee density in proximity to public transit while reducing or mitigating all net new greenhouse gas emissions from construction and operations.
- Provide proximate and shared parking facilities for patients, visitors and employees, including parking structures and surface lots distributed among the District's blocks and buildings to serve project site populations while reducing travel demand for internal car trips.

A summary of the Project impacts can be found in Table 6.0-4: Comparisons of Alternatives to the Proposed Project. As shown in Table 6.0-4, significant and unavoidable impacts would occur with implementation of the Proposed Project from operational impacts from air quality (regional air quality during operation at buildout of the Proposed Project and cumulative air quality impacts).

### 6.3 ALTERNATIVES INITIALLY CONSIDERED BUT DETERMINED TO BE INFEASIBLE

The State CEQA Guidelines<sup>5</sup> requires an EIR to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible and to briefly explain the reasons underlying the Lead Agency's determination. The State CEQA Guidelines states the following:

*The EIR should also identify any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the Lead Agency's determination... Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.*

One alternative to the Proposed Project that was considered as infeasible is discussed below.

**Alternate Site:** Under an Alternative Site Alternative, the Proposed Project would be constructed on a site other than the project site. The Antelope Valley Hospital and related medical facilities and offices are centrally located within the City of Lancaster (City) adjacent to major roadway networks including State Route (SR) 14, Avenue J, Avenue K, 20th Street West, and 15th Street West. In addition, the project site is currently designated and zoned for health care related uses, office and professional uses, commercial uses, multifamily residential uses, and mixed uses. The Proposed Project would amend the General Plan Land Use Map and Zoning Map with similar hospital and mixed-uses consistent with the existing land use

<sup>5</sup> CEQA Guidelines, sec. 15126.6(c).

and zoning designations within the project site. Other suitable and similar locations within the City would not be as centrally located and would be further from the existing location of the Antelope Valle hospital.

In general, any development of the size and type proposed by the project would have substantially the same impacts on air quality. Development at an alternative site would not avoid the Proposed Project's significant and unavoidable impacts regarding operational air quality emissions. Specifically, the daily emissions generated by mobile vehicle trips would be above the regional threshold even with implementation of mitigation measures to reduce operational vehicle trips. In addition, development of the Proposed Project at an alternative site could potentially produce other environmental impacts that otherwise would not occur at the project site. Specifically, development at an alternative site may have greater environmental impacts (e.g., biology, cultural resources, land use compatibility, transportation, aesthetics/views, etc.) than the project site. Thus, to the extent that another alternative site were available, Proposed Project impacts likely would shift to the alternative site and could be greater.

Additionally, locating the health care related uses within another portion of the City would not meet the Proposed Project's underlying purpose of surrounding the Antelope Valley Hospital with a variety of health and wellness related uses while taking advantage for vacant and underutilized properties surrounding the hospital. Furthermore, the site contains adequate infrastructure for future development to connect to; therefore, an alternative site is not likely to reduce impacts related to hydrology, public services, and utilities and service systems. The City does not contain another hospital facility where a health district could be developed in conjunction with supporting medical and mixed uses. Due to the lack of viable and comparable sites in the general area that would allow for development of the Proposed Project in a manner that would avoid or substantially lessen the Proposed Project's potentially significant impacts, development of the Proposed Project on an alternative site is not considered a feasible alternative. Finally, due to the location of the project site and the land use designation and zoning applicable to the project site, it is likely that the project site will be developed at some point in the future and, therefore, development of an alternative site would not avoid future development at the project site. Therefore, this alternative was eliminated from further detailed consideration.

## 6.4 ALTERNATIVES EVALUATED IN DETAIL

The following alternatives were selected for evaluation in this EIR:

- Alternative 1 – No Project/No Development
- Alternative 2 – No Project/General Plan Buildout
- Alternative 3 – Reduced Intensity

A more detailed description of each of these alternatives is provided below.



## 6.5 EVALUATION OF ALTERNATIVES

A comparison of the impacts of the Proposed Project and the alternatives selected for further evaluation is provided in this subsection for each of the environmental topics addressed in the EIR. This comparison of impacts assumes, for each topic, that comparable mitigation measures to those identified in this EIR for the Proposed Project would be incorporated into each alternative analyzed.

In accordance with the State CEQA Guidelines, the discussion of the environmental effects of the alternatives in an EIR may be less detailed than provided for in the project but should be sufficiently detailed to allow meaningful evaluation, analysis, and comparison with the project.<sup>6</sup>

### 6.5.1 Alternative 1—No Project/No Development

#### *a. Alternative Description*

The No Project/No Development Alternative (Alternative 1) assumes the proposed Health District Master Plan would not be adopted and the 272.4-acre site would remain in its current condition with its existing developed uses including the existing hospital, and the existing approximately 110 acres of vacant areas. None of the commercial/office space, hotel rooms, or residential units would be built. The hospital would not be re-developed. Further, the vacant and undeveloped land would not be developed in accordance with the City's General Plan 2030 Land Use Map.

None of the potentially significant impacts or significant and unavoidable impact associated with construction and operational activities would occur if Alternative 1 were selected.

#### *b. Comparative Impact Evaluation*

##### **Aesthetics**

Under this alternative, the existing visual character of the project site, including its approximately 110 undeveloped acres, would remain unchanged. As there would be no new development or operations on-site, no changes to existing scenic vistas, public views, or visual character would occur under Alternative 1. The project site is predominantly defined by built-up hospital, commercial, and residential areas. As such, no construction or operation impacts relative to aesthetics would occur, and impacts would be less than the Proposed Project, which would be less than significant during construction and operation.

##### **Air Quality**

The Proposed Project would result in significant and unavoidable impacts even with mitigation in regard to operational air quality emissions. Under this alternative, no emissions related to construction activities

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<sup>6</sup> California Code of Regulations, tit. 14, *CEQA Guidelines* sec. 15126.6(d).

and their respective equipment and vehicular travel from construction activities or construction-related vehicle trips would occur. As the proposed health care related, commercial, residential, and hospitality uses would not be built or operated, operational air quality impacts from vehicle trips and equipment would not occur. Thus, no impacts associated with air quality emissions would occur under this alternative, and impacts would be less than the Proposed Project's significant and unavoidable impacts.

### **Biological Resources**

The project site does contain a total of nine Joshua trees, a recently designated special-status species. No other special-status species or sensitive or designated critical habitats were identified on the project site. Under this alternative, the existing biological character of the project site would remain unchanged. The majority of the project site is developed with urban uses interspersed with undeveloped vacant land. The Proposed Project would potentially impact wildlife species if present on the site, however, measures have been identified to mitigate the potential impact of the Proposed Project on these species to a less than significant level. Thus, no impacts associated with biological resources would occur under this alternative, and impacts would be less than the Proposed Project's less than significant impacts with mitigation.

### **Cultural Resources**

Under this alternative, the project site would remain in its current condition and no significant impacts to cultural resources would occur because the site would not be graded or otherwise disturbed. This alternative would avoid the potential to disturb any potential resources of cultural significance such as archaeological resources, paleontological resources, or human remains. Therefore, impacts to cultural resources would be less than the Proposed Project's less than significant impacts with mitigation.

### **Energy**

The project site would remain mostly developed with interspersed vacant lots under Alternative 1. Accordingly, there would be no construction demand for energy and operational demand for energy from the existing uses within the project site would continue under this alternative. Thus, no construction impacts associated with energy resources would occur under this alternative and operational energy demand would be less under this alternative, impacts would be less than the Proposed Project's less than significant impacts.

### **Geology and Soils**

No development would occur under this alternative and, as such, no impacts related to geology and soils would occur. Thus, the project site would remain unchanged from existing conditions. Therefore, no impacts related to geology and soils would occur under this alternative, and impacts would be less than the Proposed Project's less than significant with mitigation impacts.

### **Greenhouse Gas Emissions**

No construction activities or construction related vehicle trips would occur with this alternative and greenhouse gas (GHG) emissions related to temporary construction activities would be avoided. Additionally, no increase in GHG emissions associated with operations would occur under this alternative. Therefore, no impacts related to GHG emissions would occur under this alternative and impacts would be less than the less than significant impacts of the Proposed Project.

### **Hazards and Hazardous Materials**

Under this alternative, no new construction would occur on the project site. All existing on-site uses would continue to operate on the project Site. Therefore, there would be no potential for new or increased use of hazardous materials, generation of hazardous waste, or uncovering of subsurface hazards. Therefore, no impacts related to hazards and hazardous materials would occur under this alternative, and impacts would be less than the Proposed Project's less than significant impacts with mitigation.

### **Hydrology and Water Quality**

Existing water quality conditions, groundwater supplies, drainage patterns, and runoff amounts would remain as is under this alternative since no new development would occur. This alternative would not introduce new sources of water pollutants to the project site (from either construction or operation phases of development projects). Therefore, no impacts to hydrology and water quality would occur under this alternative, and impacts would be less than the Proposed Project's less than significant impacts with mitigation.

### **Land Use and Planning**

No changes to the existing land uses on-site would occur under this alternative. Existing uses on the project site would continue to operate, and the land uses currently permitted under the existing zones would remain. No new land use approvals or permits would be required. Therefore, this alternative would not result in any substantial conflicts related to the consistency with existing land use plans and policies that govern the project site. With regard to land use compatibility, this alternative would not introduce new uses or new development to the project site. Thus, this alternative would not affect existing off-site land uses, and existing land use relationships would remain. Therefore, no impacts related to land use would occur under this alternative 1, and impacts would be less than the less than significant impacts of the Proposed Project.

## Noise

No construction activities would occur with this alternative, and potential temporary noise and vibration impacts from construction would be avoided. As this alternative would not result in new development, there would be no increase in traffic and traffic-related noise. In addition, this alternative would not include the introduction of additional stationary noise sources such as mechanical equipment, loading docks, or parking lots. Measures have been identified to mitigate all potential noise impacts identified for the Proposed Project. Nevertheless, impacts under this alternative would be less than the Proposed Project's less than significant impacts with mitigation.

## Population and Housing

Under this alternative, the project site would remain in its current state of predominantly urban uses with vacant land interspersed. Accordingly, no new housing units would be developed, and no resulting residential population would be generated. Additionally, no new employment opportunities for construction workers or permanent employment opportunities would be generated because no on-site construction activities or development would occur. Therefore, this alternative would have no potential to result in direct or indirect population, housing, or employment growth. Impacts would be less than the less than significant impacts of the Proposed Project.

## Public Services

### *Fire Services, Police Protection Services, Schools, Library Services*

Under this alternative, development of the project site would not occur and no new residents, employees, or visitors would be introduced to the project area. There would be no increase in demand on local public services, including fire services, police protection services, schools, and libraries and payment of development impact fees to fund these services would not be required. The existing public services that support the local area would remain as is, thus no potential significant impacts on public services would occur under this alternative. Impacts under this alternative would be less than the Proposed Project's less than significant impacts.

## Recreation

This alternative would not entail any development of the project site, thus the addition of new residents or employees to the project site would not occur. Therefore, there would not be an increase in demand for park or recreational facilities or services and payment of parkland fees would not be required. Recreation and parks impacts under this alternative would be less than the Proposed Project's less than significant impacts.

## **Transportation**

Under this alternative, the project site would remain in its current state and no new development would occur. No short-term (construction) or long-term (operational) vehicle trips would be generated on roadways transecting and surrounding the project site. Under this alternative, intersections and roadways evaluated would largely operate at acceptable standards. This alternative would avoid the construction- and operation-related traffic effects of the Proposed Project. Thus, construction related traffic and transportation impacts would be less than the less than significant with mitigation impacts of the Proposed Project.

## **Tribal Cultural Resources**

This alternative would not enable any development on the project site. Since this alternative would not result in any possible impacts to tribal cultural resources, impacts would be less than the less than significant impacts of the Proposed Project.

## **Utilities and Service Systems**

### ***Water***

Under this alternative, development of the project Site would not occur. There would be no increase in demand on water supplies. No new demand on local groundwater supplies would occur. Impacts associated with this alternative would be less than the Proposed Project's less than significant impacts.

### ***Wastewater***

Under this alternative, development of the project site would not occur. Thus, no new increase to the project site's wastewater flow would occur under this alternative. As a result, no impacts associated with wastewater conveyance or treatment or infrastructure improvements would occur under this alternative, and impacts would be less than the less than significant impacts of the Proposed Project.

### ***Solid Waste***

Under this alternative, no development on the project site would occur. Therefore, no new solid waste would be generated under this alternative and existing uses within the project site would continue to generate solid waste. In addition, no operational impacts to solid waste collection or disposal facilities would occur under this alternative. Therefore, no impacts would occur under this alternative and impacts would be less than the less than significant impacts of the Proposed Project.

### ***Dry Utilities***

Under this alternative, development of the project site would not occur. Therefore, no impacts on dry utilities would be generated under this alternative. In addition, no operational impacts to dry utilities would occur under this alternative. Therefore, no impacts would occur under this alternative and impacts would be less than the Proposed Project's less than significant impacts with mitigation.

### ***c. Summary of Comparative Impacts***

As described above, the No Project/No Development Alternative would eliminate the significant and unavoidable impact of the Proposed Project associated with operation-related air emissions. Compared to the Proposed Project, this alternative would result in reduced impacts related to aesthetics, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, noise, population and housing, public services, recreation, transportation, tribal cultural resources, and utilities and service systems.

### ***d. Relationship to Project Objectives***

No new development or land uses would be introduced on the project site under this Alternative, and the existing uses on the project site would continue to operate as they do currently. There would be no development on the project site that might improve the City's economic base and maintain economic competitiveness and fiscal sustainability. In summary, the No Project/No Development Alternative would not meet the majority of the Proposed Project objectives, community benefits, or the Proposed Project's underlying purpose to provide a variety of health and wellness related uses, supporting and expanding the hospital's medical facilities and treatment capabilities while accommodating the needs of patients and their families, staff, and the community.

## **6.5.2 Alternative 2—No Project/General Plan Buildout**

### ***a. Alternative Description***

The No Project/General Plan Buildout Alternative (Alternative 2) examines the impacts that would result from development of the project site with the type and density of land uses allowed by the current General Plan land use and zoning designations for the vacant areas of the project site. Under Alternative 2, development of up to approximately 91.3 acres of mixed-use uses, approximately 15.4 acres of health care uses, approximately 1.1 acres of office/professional uses, and approximately 2.2 acres of multi-residential uses would be permitted. Based on maximum permitted development within the 110 acres of vacant land within the project site, approximately 335,412 square feet (sf) of medical uses, 1,376,496 sf of commercial/office space uses, and 1,055 multi-family residential units could be developed as summarized in Table 6.0-1: Alternative 2: General Plan Buildout.

**Table 6.0-1  
Alternative 2: General Plan Buildout**

Land Use	Physical Use	Acres	Approximate Square Footage <sup>f</sup>	Approximate Units/Rooms
Mixed Use	Office/Commercial <sup>a</sup>	22.1	577,606	—
	Multi-Family Residential <sup>b</sup>	47.1	—	989
Commercial	Commercial <sup>a</sup>	22.1	770,141	—
	<i>Subtotal</i>	<i>91.3<sup>e</sup></i>	<i>1,347,746</i>	<i>989</i>
Health Care	Medical Offices <sup>c</sup>	15.4	335,412	—
	<i>Subtotal</i>	<i>15.4</i>	<i>335,412</i>	—
Office/Professional	Office/Commercial <sup>a</sup>	1.1	28,750	—
Multi-Residential	Multi-Family Residential <sup>d</sup>	2.2	—	66
	<i>Subtotal</i>	<i>3.3</i>	<i>28,750</i>	<i>66</i>
<b>Total</b>	—	<b>110.0</b>	<b>1,711,908</b>	<b>1,055</b>

<sup>a</sup> Assumed maximum floor to area (FAR) ratio of 1.0 with 20% dedicated to open space and/or landscaping.

<sup>b</sup> Assumed average density of 21 units per acre.

<sup>c</sup> Assumed 50% lot coverage with a height of five stories.

<sup>d</sup> Assumed maximum density of 30 units per acre.

<sup>e</sup> Assumed that residential uses would account for 50% of total acres, and other uses would account for 25% each.

<sup>f</sup> Building square footages were calculated using the Proposed Project's acres to square footage ratio.

Overall, Alternative 2 would permit approximately 968,092 fewer square feet of development and 545 less multifamily units when compared to the Proposed Project.

## **b. Comparative Impact Evaluation**

### **Aesthetics**

Under Alternative 2, the approximately 110 acres of vacant land contained within the project site would be developed with urban uses in accordance with the existing zoning on the subject site. This alternative would enable development of fewer medical uses, multifamily residential uses, and commercial and office space. Overall, the No Project/General Plan Buildout Alternative would result in a net decrease of approximately 35 percent less development than the Proposed Project.

Similar to the Proposed Project, views across the site from construction of Alternative 2 would be highly transitory and short-term, given the movement of construction equipment and materials within the construction area and the temporary nature of construction activities within the project site. While Alternative 2 represents a reduction in the overall development footprint compared to the Proposed Project, construction activities would nonetheless occur throughout the project site. Similar to the Proposed Project, impacts to aesthetics during construction of Alternative 2 would be less than significant

and would be reduced as a result of the shorter construction period when compared to the Proposed Project's less than significant impacts.

Alternative 2 would develop the project site with the same types of land uses as the Project but with a reduced amount of health related uses, commercial/office uses, and multifamily residential units. Overall Alternative 2 would appear similar to the Project. While some view obstruction would occur from public vantage points, these impacts would be limited in duration due to the transitory nature of pedestrian, bicycle, and vehicle travel, as well as the view orientation of the pedestrians, bicyclists, and motorists. Alternative 2, as is the case with the Proposed Project, would not obstruct views of scenic vistas or ridgelines and Alternative 2 would result in less than significant impacts with regard to aesthetics. Thus, Alternative 2 impacts to aesthetics after construction is completed would be less than significant and would be similar in comparison to the Proposed Project's less than significant impacts.

### **Air Quality**

Alternative 2 would permit approximately 35 percent fewer development of medical uses, commercial/office uses, and residential uses than the Proposed Project.

Construction activities under Alternative 2 would be reduced in scale compared to the Proposed Project due to the reduction in the development that would occur under Alternative 2. As with the Proposed Project, construction of this alternative would generate air emissions through the use of heavy-duty construction equipment as well as from off-site construction workers. While the overall amount of grading would be less and building construction would be less than that of the Proposed Project over the entire duration of the construction period, regional and local construction air quality impacts would be similar on days when maximum construction activities occur. Similarly, although overall site grading activities would decrease under Alternative 2, the intensity of site grading on maximum activity days would be similar to that of the Proposed Project. Because maximum daily and annual conditions are used for measuring the significance of regional and local air quality impacts, regional and local air quality impacts on these days would be similar to those of the Proposed Project and would be less than significant with comparable mitigation. Emissions throughout the construction period generally would occur over fewer days than those of the Proposed Project due to the reduced amount of development. Thus, less than significant impacts associated with air quality emissions would occur under this alternative, and impacts would be similar when compared to the Proposed Project's less than significant impacts with mitigation. Valley fever impacts under Alternative 2 also would be less than significant with comparable mitigation and impacts would be similar to the Proposed Project.

Alternative 2 would generate approximately 35 percent fewer trips per day when compared to the Proposed Project. The Proposed Project would generate approximately 178 pounds per day (lbs/day)/29



tons per year (tons/year) of volatile organic compounds (VOC); 393 lbs/day/61 tons/year of nitrous oxide (NO<sub>x</sub>); 665 lbs/day/87 tons/year of carbon monoxide (CO); 3 lbs/day/less than 1 ton/year of sulfur oxides (SO<sub>x</sub>); 252 lbs/day/38 tons/year of suspended particulate matter (PM<sub>10</sub>); and 71 lbs/day/12 tons/year of fine particulate matter (PM<sub>2.5</sub>). The Proposed Project's operational emissions would be significantly above the Antelope Valley Air Quality Management District (AVAQMD) operational thresholds of 137 lbs/day/25 tons/year for VOC; 137 lbs/day/25 tons/year of NO<sub>x</sub>; 548 lbs/day/100 tons/year of CO; 137 lbs/day/25 tons/year of SO<sub>x</sub>; 82 lbs/day/15 tons/year of PM<sub>10</sub>; and 65 lbs/day/12 tons/year of PM<sub>2.5</sub>. With the reduction of approximately 35 percent of development and associated trips under this alternative, emissions would decrease to 116 lbs/day/19 tons/year of VOC; 255 lbs/day/40 tons/year of NO<sub>x</sub>; 432 lbs/day/57 tons/year of CO; 2 lbs/day/less than 1 ton of SO<sub>x</sub> per year; 164 lbs/day/25 tons/year of PM<sub>10</sub>; and 46 lbs/year/8 tons/year of PM<sub>2.5</sub>. Thus, less than significant impacts associated with operational air quality emissions would occur under Alternative 2 for VOC, CO, SO<sub>x</sub>, and PM<sub>2.5</sub>, and impacts would be reduced when compared to the Proposed Project's significant and unavoidable VOC, CO, and PM<sub>2.5</sub> impacts. Significant and unavoidable NO<sub>x</sub> and PM<sub>10</sub> impacts under this alternative would remain, similar to the Proposed Project's significant and unavoidable NO<sub>x</sub> and PM<sub>10</sub> impacts.

### **Biological Resources**

Under Alternative 2, the project site would result in similar grading and disturbance activities as those of the Proposed Project. Similar to the Proposed Project, this alternative would result in development of the vacant portions of the project site. Thus, less than significant impacts to biological resources would occur under this alternative, and impacts would be similar to the Proposed Project's less than significant impacts with mitigation.

### **Cultural Resources**

Alternative 2 would fully develop the vacant portions of the project site with a mixture of commercial, office, hospital, and residential uses, as would the Proposed Project. This Alternative would have similar potential to uncover previously unknown historical resources, archeological resources, or human remains during ground-disturbing construction activities within vacant portions of the site. Therefore, there would be comparable impacts to cultural resources, for which applicable mitigation measures would be required to mitigate impacts to a less than significant level. The appropriate mitigation before, during, and after construction activities would ensure that development would not result in significant impacts to potential cultural resources. Therefore, Alternative 2 would result in less than significant impacts to cultural resources with mitigation, similar to the Proposed Project's less than significant impacts with mitigation.

## **Energy**

This Alternative would enable approximately 35 percent less development than the Proposed Project. Due to the decreased development, Alternative 2 would result in less demand for energy resources, including electricity and transportation-related fuels during both construction and operation and natural gas during operation. Accordingly, Alternative 2 is anticipated to result in less consumption of transportation-related fuels during operation. Therefore, impacts on energy resources associated with short-term construction activities and long term operation under Alternative 2 would be less than significant and would be less than the Proposed Project's less than significant impacts.

## **Geology and Soils**

Future development associated with implementation of Alternative 2 would decrease residential and non-residential land uses. These uses would be subject to strong seismic ground shaking as well as potential unidentified areas of unstable soils (i.e., hydro-collapse), similar to the Proposed Project. Construction-related activities associated with future development would also have the potential for subjecting additional lands to the effects of erosion or loss of topsoil. Following compliance with the Lancaster Municipal Code requirements, regulatory requirements (e.g., NPDES requirements), and the recommended mitigation measures, implementation of this alternative would result in less than significant impacts involving the exposure of persons or structures to seismic ground shaking, potential exposure to unstable soils, expansive soils, and increased effects of erosion or loss of topsoil during construction. Alternative 2 would result in similar less than significant impacts with mitigation when compared to the Proposed Project.

## **Greenhouse Gas Emissions**

As this alternative would result in an overall decreased amount of development, impacts related to the generation of GHG emissions are anticipated to be less than the Proposed Project. Moreover, the Proposed Project would be consistent with the measures and policies outlined in the City's Climate Action Plan (CAP) to develop and enhance alternative transportation infrastructure and encourage mixed-use, transit-oriented development in order to further reduce GHG emissions. Similar to the Proposed Project, this alternative would implement the City's CAP measures to reduce GHG emissions albeit to a lesser extent than the Proposed Project. Thus, less than significant impacts associated with operational GHG emissions would occur under Alternative 2, and impacts would be less than the Proposed Project's less than significant impacts.

## **Hazards and Hazardous Materials**

Alternative 2 would result in grading and excavating activities across the vacant portions of the project site. The temporary transport, storage, handling, use, and disposal of hazardous materials during construction of this alternative would compare to those activities of the Proposed Project. As with the Proposed Project, the residential and commercial uses associated with the operational activities of Alternative 2 would involve the limited use of potentially hazardous materials, which would be handled and disposed of in accordance with applicable standards and regulations. Additionally, this alternative would implement similar mitigation to reduce potentially significant impacts from hazard and hazardous materials during construction. This alternative would involve similar road closures during construction, but appropriate mitigation would reduce potential impacts related to impairment of operations of any emergency response plan. Therefore, this alternative would result in less than significant impacts with mitigation related to hazards and hazardous materials, which would be similar to the Proposed Project's less than significant impacts with mitigation.

## **Hydrology and Water Quality**

Implementation of the Proposed Project would facilitate the continued urbanization of the area, and would involve development of the vacant portions of the project site, including infrastructure and hardscapes, which could result in hydrology and water quality impacts associated with construction activities. Under this alternative, similar less than significant impacts to hydrology and water quality would occur during construction, as development of this alternative would be required to implement regulatory compliance measures similar to the Proposed Project to reduce potential hydrology and water quality impacts on- and off-site. Under this alternative, construction-related hydrology impacts would be reduced as a result of the shortened construction period. Thus, less than significant impacts associated with hydrology would occur under Alternative 2, and impacts would be reduced when compared to the Proposed Project's less than significant impacts.

Similar to the Proposed Project, this alternative would also be required to convey and retain/detain stormwater consistent with the pre-development peak flow rate and operational impacts associated with Alternative 2 would be considered similar to the Proposed Project. Impacts to groundwater quantity or quality under Alternative 2 would be similar to the Proposed Project's less than significant impacts.

## **Land Use and Planning**

Under the No Project/General Plan Buildout Alternative, there would be no changes in the existing permitted type and density of development currently enabled by the City's land use and zoning designations. Similar to the Proposed Project, Alternative 2 would be designed consistent with the City's existing regulations. Alternative 2 would develop approximately 35 percent fewer uses than the Proposed

Project. Because Alternative 2 includes elements similar to the Proposed Project, implementation of Alternative 2 would not physically divide the established community. This alternative would not be inconsistent with the applicable City plans, ordinances, and Southern California Association of Government (SCAG) policies. Impacts under this alternative would be similar to the Proposed Project's less than significant impacts.

### **Noise**

Alternative 2 would result in construction activities, including grading and excavating, across the vacant portions of the project site. Both this alternative and the Proposed Project would involve the use of heavy equipment, such as air compressors, backhoes, generators, graders, pavers, rollers, and scrapers. Construction equipment sources would potentially cause significant noise impacts to both on- and off-site receptors. The Proposed Project's construction noise and vibration impacts would be mitigated to less than significant levels through measures requiring noise abatement near sensitive receptors. Similar to the Proposed Project, implementation of applicable mitigation measures would be anticipated under this alternative to reduce construction noise and vibration impacts to a less than significant level. Accordingly, Alternative 2's construction related impacts would be similar to the Proposed Project's less than significant with mitigation impacts.

During operation of this alternative, single noise events from parking lots and loading docks could be an annoyance to on-site and surrounding residents during certain time periods such as evening and morning hours and may exceed local standards at receptor locations. Similar to the Proposed Project, implementation of mitigation measures would require sound attenuation measures be incorporated into the design of stationary noise sources to minimize noise levels which would reduce potentially significant noise impacts to a less than significant level. However, as this alternative would enable an overall decreased amount of development, trip generation is anticipated to be decreased as a result. Consequently, long-term operational noise generated by traffic under this alternative is anticipated to be less. While this alternative's impacts would remain less than significant with mitigation, noise impacts during operation are anticipated to be less than the Proposed Project's less than significant impacts with mitigation.

### **Population and Housing**

Alternative 2 would enable approximately 35 percent fewer development when compared to the Proposed Project. Based on 3.2 persons per household, it is estimated that approximately 3,376 residents would be anticipated to live within the project site and approximately 5,106 new jobs would be generated within the City, as shown in Table 6.0-2: Alternative 2 Summary of On-Site Employment. Under Alternative 2, it is anticipated that the new population added within the City would be approximately 3,376 residents

with 5,106 new jobs, or a decrease from the Proposed Project's residents of approximately 1,744 residents and a decrease of 1,341 employees.

**Table 6.0-2**  
**Alternative 2 Summary of On-Site Employment**

Land Use Designation	Proposed		
	SF/employee	SF	Total New Employees
Office/Commercial	319	1,376,496	4,315
Hospital	424	335,412	791
<b>Total</b>			<b>5,106</b>

Source: SCAG, *Employment Density Study, 2001*.

Notes:

<sup>a</sup> Based on average employees per acre for Los Angeles Low Rise Office.

Based on average employees per acre for Los Angeles Other Retail/Services.

Similar to the Proposed Project, this Alternative would be consistent with City and SCAG population and employment growth projections and policies. It should be noted that this alternative would not displace existing residents within the project site. Even though neither the Proposed Project nor Alternative 2 would result in a significant impact, impacts associated with Alternative 2 would be considered similar as compared to the Proposed Project's less than significant impacts as the growth is consistent with regional forecasts.

## Public Services

### *Fire Services*

Both Alternative 2 and the Proposed Project would increase demand on the Los Angeles County Fire Department (LACFD) for fire protection and emergency services due to the development of various residential, health related, and commercial/office uses on the project site. Under Alternative 2, there would be a decrease in population, which would ultimately result in a decreased demand on LACFD. Under this alternative, all residential and commercial development would comply with the most current adopted fire and building codes and standards and all applicable development impact fees would be paid to the appropriate jurisdiction. Therefore, fire protection-related service impacts would be less than significant under this alternative and impacts would be less than the Proposed Project's less than significant impacts.

### *Police Protection Services*

Alternative 2, like the Proposed Project, would increase demand on the Los Angeles County Sheriff's Department (Sheriff Department) for law enforcement services due to the development of various

residential, health related, and commercial/office uses on the site. Under Alternative 2, there would be a decrease in population, which would ultimately result in a decreased demand on Sheriff Department. Like the Proposed Project, in order to accommodate the alternative's increased demand for services, the Sheriff Department may require additional officers to service the site. Therefore, sheriff protection-related service impacts would be less than significant under this alternative and impacts would be less than the Proposed Project's less than significant impacts.

### ***Schools***

Similar to the Proposed Project, Alternative 2 would increase demand on the Lancaster School District (LSD) and the Antelope Valley Union High School District (AVUHSD) for school services due to development of residential units and commercial uses and the resultant generation of students. Under Alternative 2, there would be an increase in population, which would ultimately result in increased student generation; however, this alternative would generate approximately 35 percent fewer students than the Proposed Project. Therefore, Alternative 2 would result in decreased impacts than the Proposed Project. However, like the Proposed Project, this alternative's payment of applicable impact fees to LSD and AVUHSD would mitigate these impacts to less than significant levels. Therefore, education-related service impacts would be less than significant under this alternative and impacts would be less than the Proposed Project's less than significant impacts.

### ***Library Services***

Alternative 2, like the Proposed Project, would increase demand on the Los Angeles County Public Library for library services. Under Alternative 2, there would be an increase in population, which would ultimately result in an increase in library services. However, similar to the Proposed Project, this alternative would require payment of applicable development impact fees to the appropriate jurisdiction. Therefore, library-related facility impacts would be less than significant under this alternative and impacts would be less than the Proposed Project's less than significant impacts.

### **Recreation**

Alternative 2 would include fewer residential units when compared to the Proposed Project, which would result fewer demands for parks and recreational facilities serving the project site. Like the Proposed Project, implementation of Alternative 2 would provide recreation and open spaces throughout the project site available for residents and those visiting the project site. Similar to the Proposed Project, development would include payment of parkland fees to minimize recreational impacts. Impacts on parks and recreation facilities associated with the new residents would therefore be less than significant under Alternative 2, but impacts would be less than the Proposed Project's less than significant impacts.

## **Transportation**

Alternative 2 would involve buildout of the City's General Plan. As discussed in Section 5.15 of the EIR, construction related impacts would have the potential to impact the roadway system. Similar to the Proposed Project, Alternative 2 would implement comparable mitigation as the Proposed Project and construction related impacts under Alternative 2 would be similar to the Proposed Project's less than significant impacts with mitigation. Under Alternative 2, VMT would be reduced due to a reduced amount of development within the project site. Thus, Alternative 2 would be similar to the Proposed Project; albeit, less than the Proposed Project's less than significant VMT impacts.

## **Tribal Cultural Resources**

Alternative 2 would fully develop the vacant portions of the project site with a mixture of commercial, office, hospital, and residential uses, as would the Proposed Project. Similar to the Proposed Project, impacts related to tribal cultural resources would be less than significant with implementation of cultural resource mitigation measures. Impacts of Alternative 2 related to tribal cultural resources would be similar when compared with the Proposed Project's less than significant impacts.

## **Utilities and Service Systems**

### ***Water***

Similar to the Proposed Project, Alternative 2 would result in construction that would require water associated with soil compaction and earthwork, dust abatement, mixing and placement of concrete, equipment and site cleanup, and water line testing and flushing. Additionally, Alternative 2 would require new connections associated with the new development. Similar to the Proposed Project, this alternative would be required to adhere to regulatory requirements that ensure there is adequate water supply from Los Angeles County Waterworks District No. 40 (LACWD No. 40). Under Alternative 2, there would be a decrease in population, which would ultimately result in an decreased demand for water resources when compared to the Proposed Project. Thus, less than significant impacts associated with water distribution and infrastructure would occur under Alternative 2, and impacts would be less than the Proposed Project's less than significant impacts.

### ***Wastewater***

Similar to the Proposed Project, Alternative 2 would require new connections associated with the new development. Also similar to the Proposed Project, Alternative 2 would be required to adhere to regulations that ensure there is adequate wastewater treatment capacity at Sanitation Districts of Los Angeles County (Sanitation District) No. 14. Under Alternative 2, there would be a decrease in population, which would ultimately result in a decreased wastewater generation than the Proposed Project. Thus, less

than significant impacts associated with wastewater conveyance and infrastructure would occur under Alternative 2, and impacts would be less than the Proposed Project's less than significant impacts.

### ***Solid Waste***

Alternative 2 would decrease the overall amount of development as compared to the Proposed Project which would in turn, result in a decrease in solid waste generation. There is adequate capacity and expansion potential within the regional landfill system to accommodate the solid waste expected to be generated by this alternative. Closure dates of landfills for the existing landfills are estimates and subject to change depending on the actual tonnage that is received prior to their estimated closing date. While this alternative and the Proposed Project would increase demand for waste disposal services, impacts would remain less than significant. Therefore, solid waste-related impacts would be less than significant under this alternative and impacts would be less than the Proposed Project's less than significant impacts.

### ***Dry Utilities***

Similar to the Proposed Project, Alternative 2 would require submittal, review, and approval of plans through the City and relevant utility providers, which would ensure future utility demands would be manageable. Any further need for infrastructure upgrades associated with Alternative 2 would be accomplished through the required design review and approval of electricity, natural gas, and telecommunication plans for Alternative 2 through the City and the appropriate regulatory agencies and utility providers. Therefore, impacts to dry utilities would be less than significant with mitigation under this alternative and impacts would be similar to the Proposed Project's less than significant impact with mitigation.

## ***c. Summary of Comparative Impacts***

Implementation of Alternative 2, the No Project/General Plan Buildout Alternative, would represent an overall reduction of 35 percent in the amount of development when compared to the Proposed Project. As many of the Proposed Project's potential environmental impacts are directly related to the development footprint, amount, and use, Alternative 2 would reduce these types of impacts, including the Proposed Project's significant operational air quality impacts. Even though the Proposed Project's significant VOC, CO, and PM2.5 impacts would be reduced to less than significant under Alternative 2, NOx and PM10 emission levels would remain. In addition, Alternative 2 would reduce impacts related to: construction-related air quality emissions, energy, GHG emissions, construction-related hydrology and water quality, operation-related noise, public services, recreation, transportation related VMT, water supply and services, wastewater, and solid waste. Alternative 2 would result in similar impacts related to aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials,



operation-related hydrology and water quality, construction-related noise, population and housing, construction-related transportation, tribal cultural resources, and dry utilities.

**d. Relationship to Project Objectives**

As previously described, implementation of Alternative 2 would reduce the Proposed Project’s development within the project site. Alternative 2 would provide approximately 35 percent fewer commercial, office, health related, and residential uses when compared to the Proposed Project. The reduction in development would surround the Antelope Valley Hospital with a variety of health – and wellness-related uses, thereby supporting the hospital’s medical facilities and treatment capabilities but to a lesser degree than the Proposed Project. The reduction in medical related uses would accommodate a wide range of wellness supportive businesses and activities and stimulate the local economy to the extent of the Proposed Project or fully increase employee density in proximity to public transit. Finally, this alternative would partially support City and regional planning programs that emphasize sustainability and mobility by increasing development intensity and diversity.

Alternative 2, similar to the Proposed Project, develop enhanced and expanded open space within the project site to encourage a healthy, active lifestyle to support compact, mixed-use, transit ready urban development; upgrade and expand utilities and infrastructure necessary to support project site growth and development; would implement buildings, public spaces and landscapes that complement and are responsive to Lancaster’s climate and natural environment that minimize consumption of non-renewable resources; would improve and streamline multimodal transportation and access throughout the project site; and would provide proximate and shared parking facilities. Because this alternative would include fewer development and fewer multi-family housing units, the Proposed Project’s underlying purpose of surrounding the Antelope Valley Hospital with a variety of uses include those related to health and wellness, would only be partially met.

### 6.5.3 Alternative 3—Reduced Density

**a. Alternative Description**

The Reduced Density Alternative (Alternative 3) considers implementation of the Proposed Project, with a 50 percent reduction of density of all land uses except for the hospital which would remain similar to the Proposed Project. As shown in Table 6.0-3: Alternative 3 Land Use Summary, this alternative would implement the same land use categories as the Proposed Project but at a smaller scale: 382 beds within 404,400 sf of additional medical related uses, 597,100 sf of commercial and office space, a 90 room hotel, 125 single family attached units, and 675 multi-family units.

**Table 6.0-3  
Alternative 3 Land Use Summary**

<b>Land Use Category</b>	<b>Size</b>
Hospital Expansion	700,000 square feet
Medical Related Uses	382 beds / 404,400 square feet
Commercial and Office Space	597,100 square feet
Hotel Rooms	90 rooms
Single Family Attached	125 units
Multi Family	675 units

Under this alternative, the layout of the land uses would not change as compared to the Proposed Project.

### ***b. Comparative Impact Evaluation***

#### **Aesthetics**

Under this alternative, the same land use categories would be implemented across the project site as in the Proposed Project, with a 50 percent reduction of density of all land uses. The layout of the land uses under this alternative would not change as compared to the Proposed Project, but as a result of the reduced amount of development, building sizes would also be reduced across the site.

Impacts of the Proposed Project related to aesthetics were determined to be less than significant. This alternative is anticipated to follow the same integrated development pattern of the Proposed Project consisting of a gradual transition of building heights and intensity towards the site core. This building pattern would preserve views of scenic resources in the area to the greatest extent feasible. While the Proposed Project's increase in building height and density across the project site would be gradual and would not obstruct panoramic views of the broader geographic area, Alternative 3 would involve reduced development and smaller building sizes. Therefore, this alternative would have a reduced potential to block or interfere with scenic views in the project vicinity. Thus, Alternative 3 impacts to aesthetics would be less than significant and would be less than the Proposed Project's less than significant impacts.

#### **Air Quality**

Alternative 3 would permit approximately 50 percent fewer development of medical uses, commercial/office uses, and residential uses than the Proposed Project. Construction activities under this alternative would be reduced in scale compared to the Proposed Project due to the reduction in the development that would occur. As with the Proposed Project, construction of this alternative would

generate air emissions through the use of heavy-duty construction equipment as well as from off-site construction workers. While the overall amount of grading would be less and building construction would be less than that of the Proposed Project over the entire duration of the construction period, regional and local construction air quality impacts would be similar on days when maximum construction activities occur. Similarly, although overall site grading activities would decrease under Alternative 3, the intensity of site grading on maximum activity days would be similar to that of the Proposed Project. Because maximum daily and annual conditions are used for measuring the significance of regional and local air quality impacts, regional and local air quality impacts on these days would be similar to those of the Proposed Project and would be less than significant with comparable mitigation. Emissions throughout the construction period generally would occur over fewer days than those of the Proposed Project due to the reduced amount of development. Thus, less than significant impacts associated with air quality emissions would occur under this alternative, and impacts would be similar when compared to the Proposed Project's less than significant impacts with mitigation. Valley fever impacts under Alternative 3 also would be less than significant with comparable mitigation and impacts would be similar to the Proposed Project.

Alternative 2 would generate approximately 50 percent fewer trips per day when compared to the Proposed Project. The Proposed Project would generate approximately 178 lbs/day/29 tons/year of VOC; 393 lbs/day/61 tons/year of NO<sub>x</sub>; 665 lbs/day/87 tons/year of CO; 3 lbs/day/less than 1 ton/year of SO<sub>x</sub>; 252 lbs/day/38 tons/year of PM<sub>10</sub>; and 71 lbs/day/12 tons/year of PM<sub>2.5</sub>. The Proposed Project's operational emissions would be significantly above the AVAQM operational thresholds of 137 lbs/day/25 tons/year for VOC; 137 lbs/day/25 tons/year of NO<sub>x</sub>; 548 lbs/day/100 tons/year of CO; 137 lbs/day/25 tons/year of SO<sub>x</sub>; 82 lbs/day/15 tons/year of PM<sub>10</sub>; and 65 lbs/day/12 tons/year of PM<sub>2.5</sub>. With the reduction of approximately 50 percent of development and associated trips under this alternative, emissions would decrease to 89 lbs/day/15 tons/year of VOC; 197 lbs/day/31 tons/year of NO<sub>x</sub>; 333 lbs/day/44 tons/year of CO; 2 lbs/day/less than 1 ton of SO<sub>x</sub> per year; 126 lbs/day/19 tons/year of PM<sub>10</sub>; and 36 lbs/year/6 tons/year of PM<sub>2.5</sub>. Thus, less than significant impacts associated with operational air quality emissions would occur under Alternative 3 for VOC, CO, SO<sub>x</sub>, and PM<sub>2.5</sub>, and impacts would be reduced when compared to the Proposed Project's significant and unavoidable VOC, CO, and PM<sub>2.5</sub> impacts. Significant and unavoidable NO<sub>x</sub> and PM<sub>10</sub> impacts under this alternative would remain, similar to the Proposed Project's significant and unavoidable NO<sub>x</sub> and PM<sub>10</sub> impacts.

## **Biological Resources**

Under this alternative, the project site would undergo similar construction activities, including grading and other ground-disturbing activities, as those of the Proposed Project but to a lesser extent. Accordingly, impacts to biological resources contained on site would be similar to those of the Proposed Project. There

would be comparable impacts to limited sensitive habitat and wildlife, for which applicable mitigation measures would be required to mitigate impacts to a less than significant level. Under this alternative, similar mitigation would be needed to reduce any potential significant impacts to a less than significant level. Thus, less than significant impacts to biological resources would occur under this alternative, and impacts would result be similar to the Proposed Project's less than significant impacts with mitigation.

### **Cultural Resources**

This alternative would fully develop the vacant portions of the project site and redevelop already developed areas of the project site with a mixture of commercial, office, hospital, and residential uses, as would the Proposed Project. This alternative would have similar potential to uncover previously unknown historical resources, archeological resources, or human remains during ground-disturbing construction activities within vacant portions of the project site or potentially affect the status of unknown historical structures. Therefore, there would be comparable impacts to cultural resources, for which applicable mitigation measures would be required to mitigate impacts to a less than significant level. The appropriate mitigation before, during, and after construction activities would ensure that development would not result in significant impacts to potential cultural resources. Therefore, this alternative would result in less than significant impacts to cultural resources with mitigation, similar to the Proposed Project's less than significant impacts with mitigation.

### **Energy**

This alternative would involve a 50 percent reduction in density of all proposed uses across the project site. The Proposed Project would be required to meet regulatory compliance measures of local, State, and federal regulations. Similarly, this alternative would be constructed and designed in accordance with the most current version of Title 24, California's Energy Efficiency Standards for buildings and the State Energy Conservation Standards. Due to the 50 percent reduction in developable space, this alternative is anticipated to demand less energy during construction as building sizes would be reduced and activities would be adjusted accordingly. During operation, this alternative is anticipated to result in fewer residents and employees generated on site. Accordingly, this alternative is anticipated to have a proportionally reduced electricity and natural demand in addition to lessened fuel consumption by having fewer vehicle trips compared to the Proposed Project. Therefore, impacts on energy resources associated with short-term construction activities and long term operation under Alternative 3 would be less than significant and would be less than the Proposed Project's less than significant impacts.

### **Geology and Soils**

Future development associated with implementation of this alternative would increase residential and non-residential land uses, as well as roadways and other infrastructure within the project area. These uses

would be subject to strong seismic ground shaking as well as potential unidentified areas of unstable soils (i.e., hydro-collapse). Construction-related activities associated with future development would also have the potential for subjecting additional lands to the effects of erosion or loss of topsoil. Following compliance with the Lancaster Municipal Code requirements, regulatory requirements (e.g., NPDES requirements, etc.), and the recommended mitigation measures, implementation of this alternative would result in less than significant impacts involving the exposure of persons or structures to seismic ground shaking, potential exposure to unstable soils, expansive soils, and increased effects of erosion or loss of topsoil during construction, similar to the Proposed Project. This alternative would implement the same mitigation measures and regulatory compliance. Accordingly, Alternative 3 would result in similar less than significant impacts with mitigation when compared to the Proposed Project.

### **Greenhouse Gas Emissions**

Alternative 3 would result in short-term GHG emissions during construction. The decreased amount of development would result in a slightly shorter grading period than the Proposed Project, resulting in fewer overall construction emissions when compared to the Proposed Project. Thus, less than significant impacts associated with GHG emissions would occur under this alternative, and impacts would be less than the Proposed Project's be less than significant impacts. Operational activities under this alternative would differ from the Proposed Project, as this alternative would result in a 50 percent decrease in the amount of development and a corresponding decrease in GHG emissions. Similar to the Proposed Project, this alternative would not exceed the AVQMD's threshold of 100,000 MTCO<sub>2e</sub> per year. Further, this alternative, similar to the Proposed Project, would develop and enhance alternative transportation infrastructure and encourage mixed-use, transit-oriented development in order to further reduce GHG emissions, consistent with the City's CAP. As this alternative would result in less than significant impacts related to GHGs, impacts would be less than the impacts associated with the Proposed Project.

### **Hazards and Hazardous Materials**

This alternative would result in grading and excavating activities across the entire project site similar to the Proposed Project. The temporary transport, storage, handling, use, and disposal of hazardous materials during construction of this alternative would be similar to those activities of the Proposed Project. As with the Proposed Project, the residential and commercial uses associated with the operational activities of this alternative would involve the limited use of potentially hazardous materials, which would be handled and disposed of in accordance with applicable standards and regulations. Additionally, this alternative would implement similar mitigation to reduce potentially significant impacts from hazard and hazardous materials during construction.

The project site is not considered to be a hazardous materials site, nor would this alternative involve any uses that would cause a significant hazard to the occupants of the site, similar to the Proposed Project. This alternative would involve similar road closures during construction, but similar mitigation would reduce potential impacts related to impairment of operations of any emergency response plan. Therefore, this alternative would result in similar less than significant impacts with mitigation related to hazards and hazardous materials, which would be similar to the Proposed Project's less than significant impacts with mitigation.

### **Hydrology and Water Quality**

Under this alternative, similar less than significant impacts to hydrology and water quality would occur during construction, as development of this alternative would be required to implement regulatory compliance measures similar to the Proposed Project to reduce potential hydrology and water quality impacts on- and off-site. Under this alternative, construction-related hydrology impacts would be reduced as a result of the shortened construction period. Thus, less than significant impacts associated with hydrology would occur under Alternative 3, and impacts would be reduced when compared to the Proposed Project's less than significant impacts.

Similar to the Proposed Project, this alternative would also be required to convey and retain/detain stormwater consistent with the pre-development peak flow rate. However, it is acknowledged that potential water quality impacts may be slightly decreased as a result of the decreased development potential under this alternative. Even though neither the Proposed Project nor this alternative would result in a significant impact, impacts associated with this alternative would be considered similar to those of the Proposed Project's less than significant impacts.

### **Land Use and Planning**

This alternative would allow for development of the project site with the identical mixture of residential and commercial uses as the Proposed Project, but with a 50 percent reduction in the density of all land uses. Similar to the Proposed Project, this alternative would promote quality infill development that integrates on-site building intensity with surrounding development, and provide City residents with a broad mix of functionally integrated land uses to help meet their general healthcare, social, professional, and economic needs. This alternative would also be anticipated to develop and enhance vehicular, bicycle, and pedestrian connectivity in the region as envisioned in the City's General Plan.

However, as Alternative 3 would involve a reduction in allowable land use density, there would be less development on the project site that might improve the City's economic base. This alternative would not

be inconsistent with the applicable City plans, ordinances, and SCAG policies. Impacts under this alternative would be similar to the Proposed Project's less than significant impacts.

### **Noise**

Both this alternative and the Proposed Project would include earthmoving activities during construction and would involve the use of heavy equipment such as air compressors, backhoes, generators, graders, pavers, rollers, and scrapers. Construction equipment sources would potentially cause significant noise and vibration impacts to both on- and off-site receptors. The Proposed Project's construction noise and vibration impacts would be mitigated to less than significant levels through measures requiring noise abatement near sensitive receptors. Similar to the Proposed Project, implementation of applicable mitigation measures would be anticipated under this alternative to reduce construction noise and vibration impacts to a less than significant level. Accordingly, Alternative 3's construction related impacts would be similar to the Proposed Project's less than significant with mitigation impacts.

During operation of this alternative, the identical mixture of residential and commercial uses would be developed as under the Proposed Project, but with a reduction in density of all land uses. Single noise events from parking lots and loading docks could be an annoyance to on-site and surrounding residents during certain time periods such as evening and morning hours and may exceed local standards at receptor locations. Similar to the Proposed Project, implementation of mitigation measures would require sound attenuation measures be incorporated into the design of stationary noise sources to minimize noise levels which would reduce potentially significant noise impacts to a less than significant level. However, as this alternative would enable an overall decrease in the amount of development and generate fewer on-site residents and employees, trip generation is anticipated to be reduced as a result. Consequently, long-term operational noise generated by traffic under this alternative is anticipated to be less. Therefore, noise impacts of this alternative during operation would be less than the Proposed Project's less than significant impacts with mitigation.

### **Population and Housing**

Under this alternative, it is anticipated that the new population added within the City would be approximately 2,560 residents, a decrease from the Proposed Project of approximately 2,560 residents. Additionally, this alternative would add approximately 3,239 new jobs, a reduction of approximately 3,239 jobs when compared to the Proposed Project.

Similar to the Proposed Project, this alternative would be consistent with City and SCAG population and employment growth projections and policies. Even though neither the Proposed Project nor this alternative would result in a significant impact, impacts associated with this alternative would be

considered similar as compared to the Proposed Project's less than significant impacts as the growth is consistent with regional forecasts.

## **Public Services**

### ***Fire Services***

Both this alternative and the Proposed Project would increase demand on the LACFD for fire protection and emergency services due to the development of various residential and commercial uses on the project Site. Under this alternative, there would be a decrease in population over the Proposed Project, which would ultimately result in a decreased demand on LACFD when compared to the Proposed Project. Under this alternative, all residential and commercial development would comply with the most current adopted fire and building codes and standards and all applicable development impact fees would be paid. Therefore, fire protection-related service impacts would be less than significant under this alternative and impacts would be less than the Proposed Project's less than significant impacts.

### ***Police Protection Services***

This alternative, like the Proposed Project, would increase demand on the Sheriff Department for law enforcement services due to the development of various residential and commercial uses on the project site. Under this alternative, there would be a decrease in population and employees, which would ultimately result in a decreased demand on Sheriff Department when compared to the Proposed Project. Like the Proposed Project, in order to accommodate the alternative's increased demand for services, the Sheriff Department may require additional officers to service the site. Therefore, sheriff protection-related service impacts would be less than significant under this alternative and impacts would be less than the Proposed Project's less than significant impacts.

### ***Schools***

Similar to the Proposed Project, this alternative would increase demand on the LSD and the AVUHSD for school services due to development of residential units and commercial uses and the resultant generation of students. Under this alternative there would be a decrease in population when compared to the Proposed Project, which would ultimately result in a decreased demand on LSD and AVUHSD when compared to the Proposed. Therefore, this alternative would result in less impacts than the Proposed Project. However, similar to the Proposed Project, this alternative would pay applicable impact fees to LSD and AVUHSD which would mitigate these impacts to less than significant levels. Therefore, education-related service impacts would be less than significant under this alternative and impacts would be than the Proposed Project's less than significant impacts.



### ***Library Services***

This alternative, like the Proposed Project, would increase demand on the Los Angeles County Public Library for library services. Under Alternative 3, there would be an increase in population, which would ultimately result in an increase in library services. However, similar to the Proposed Project, this alternative would require payment of applicable development impact fees. Therefore, library-related facility impacts would be less than significant under this alternative and impacts would be less than the Proposed Project's less than significant impacts.

### **Recreation**

This alternative would implement similar uses on the project Site, but at a decreased density. Thus, this alternative would result in a decreased demand for parks and recreational facilities due to the decrease in residents and visitors on the project Site when compared to the Proposed Project. Similar to the Proposed Project, this alternative would be required to pay park impact fees to minimize recreational impacts. Impacts on parks and recreation facilities associated with the new residents would therefore be less than significant under this alternative, but impacts would be less than the Proposed Project's less than significant impacts.

### **Transportation**

This alternative would represent a 50 percent reduction in the amount of development. As discussed in Section 5.15 of the EIR, construction related impacts would have the potential to impact the roadway system. Similar to the Proposed Project, Alternative 3 would implement comparable mitigation as the Proposed Project and construction related impacts under Alternative 3 would be similar to the Proposed Project's less than significant impacts with mitigation. Under Alternative 3, VMT would be reduced due to a reduced amount of development within the project site. Due to the reduction in trips associated with this alternative, the less than significant VMT impacts would be reduced. Overall, impacts under Alternative 3 would be less than the Proposed Project's less than significant VMT impacts.

### **Tribal Cultural Resources**

This alternative would fully develop the entire project site with a mixture of commercial, office, hospital, and residential uses, as would the Proposed Project. Similar to the Proposed Project, impacts related to tribal cultural resources would be reduced to less than significant with implementation of cultural resource mitigation measures. Impacts of this alternative related to tribal cultural resources would be similar when compared to the Proposed Project's less than significant impacts.

## **Utilities and Service Systems**

### ***Water***

Similar to the Proposed Project, this alternative would result in construction that would require water associated with soil compaction and earthwork, dust abatement, mixing and placement of concrete, equipment and site cleanup, and water line testing and flushing. Additionally, this alternative would require new connections associated with the new development. Similar to the Proposed Project, this alternative would be required to adhere to regulatory requirements that ensure there is adequate water supply from LACWD No. 40. Under this alternative, there would be a decrease in population compared to the Proposed Project which would ultimately result in a decreased demand for water resources. Similar to the Proposed Project, this alternative would result in less than significant impacts. Thus, less than significant impacts associated with water distribution and infrastructure would occur under Alternative 3, and impacts would be less than the Proposed Project's less than significant impacts.

### ***Wastewater***

Similar to the Proposed Project, this alternative would require new connections associated with the new development. Also similar to the Proposed Project, this alternative would be required to adhere to regulations that ensure there is adequate wastewater treatment capacity at Sanitation District No. 14. Under this alternative, there would be a decrease in population compared to the Proposed Project which would ultimately result in a decreased wastewater generation than the Proposed Project. Thus, less than significant impacts associated with wastewater conveyance and infrastructure would occur under Alternative 3, and impacts would be less than the Proposed Project's less than significant impacts.

### ***Solid Waste***

This alternative would decrease the amount of development as compared to the Proposed Project which would in turn, result in a decrease in solid waste generation. There is adequate capacity and expansion potential within the regional landfill system to accommodate the solid waste expected to be generated by this alternative or the Proposed Project. Closure dates of existing landfills are estimates and subject to change depending on the actual tonnage that is received prior to their estimated closing date. While this alternative and the Proposed Project would increase demand for waste disposal services, impacts would remain less than significant. Therefore, solid waste-related impacts would be less than significant under this alternative and impacts would be less than the Proposed Project's less than significant impacts.

### ***Dry Utilities***

This alternative would decrease the amount of development as compared to the Proposed Project; however, it would continue to develop the whole project site and thus would require the same or similar

extension of infrastructure. Similar to the Proposed Project, this alternative 3 would require submittal, review, and approval of plans through the City and relevant utility providers, which would ensure future utility demands would be manageable. Any further need for infrastructure upgrades associated with this alternative 3 would be accomplished through the required design review and approval of electricity, natural gas, and telecommunication plans through the City and the appropriate regulatory agencies and utility providers. Therefore, impacts to dry utilities would be less than significant with mitigation under this alternative and impacts would be similar to the Proposed Project's less than significant impact with mitigation.

**c. *Summary of Comparative Impacts***

Implementation of Alternative 3, the Reduced Density Alternative, would represent an overall reduction of 50 percent in the amount of development when compared to the Proposed Project. As many of the Proposed Project's potential environmental impacts are directly related to the development footprint, amount, and use, Alternative 3 would reduce these types of impacts, including the Proposed Project's significant operational air quality impacts. Even though the Proposed Project's significant VOC, CO, and PM2.5 impacts would be reduced to less than significant under Alternative 3, NOx and PM10 emission levels would remain. In addition, Alternative 3 would reduce impacts related to: aesthetics, construction-related air quality emissions, energy, GHG emissions, construction-related hydrology and water quality, operation-related noise, public services, recreation, operation-related transportation, water supply and service, wastewater, and solid waste when compared to the Proposed Project. This alternative would result in similar, less than significant impacts with mitigation related to biological resources, cultural resources, geology and soils, hazards and hazardous materials, operation related hydrology and water quality, construction related noise and vibration, population and housing, construction-related transportation, tribal cultural resources, and dry utilities.

**d. *Relationship to Project Objectives***

As described above, implementation of Alternative 3 would reduce the Proposed Project's development within the project site. Alternative 3 would provide approximately 50 percent fewer commercial, office, health related, and residential uses when compared to the Proposed Project. The reduction in development would surround the Antelope Valley Hospital with a variety of health – and wellness-related uses, thereby supporting the hospital's medical facilities and treatment capabilities but to a lesser degree than the Proposed Project. The reduction in medical related uses would accommodate a wide range of wellness supportive businesses and activities and stimulate the local economy to the extent of the Proposed Project or fully increase employee density in proximity to public transit but to a lesser degree than the Proposed Project. Finally, this alternative would partially support City and regional planning

programs that emphasize sustainability and mobility by increasing development intensity and diversity but to a lesser degree than the Proposed Project.

Alternative 3, similar to the Proposed Project, develop enhanced and expanded open space within the project site to encourage a healthy, active lifestyle to support compact, mixed-use, transit ready urban development; upgrade and expand utilities and infrastructure necessary to support project site growth and development; would implement buildings, public spaces and landscapes that complement and are responsive to Lancaster’s climate and natural environment that minimize consumption of non-renewable resources; would improve and streamline multimodal transportation and access throughout the project site; and would provide proximate and shared parking facilities. This alternative would meet these objectives.

Because this alternative would include fewer development and fewer multi-family housing units, the Proposed Project’s underlying purpose of surrounding the Antelope Valley Hospital with a variety of uses include those related to health and wellness, would only be partially met.

## 6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As previously discussed, analysis of a reasonable range of alternatives is required by CEQA. The purpose of the alternatives analysis is to explain potentially feasible ways to avoid or minimize the significant effects identified for the Proposed Project. Furthermore, State CEQA Guidelines, Section 15126.6(e)(2) requires an EIR to identify an environmentally superior alternative among those evaluated in an EIR.

A summary comparison of impacts associated with the Proposed Project alternatives is provided in Table 6.0-4: Comparison of Alternatives to the Proposed Project. As indicated in Table 6.0-4, the first line compares the Alternative’s incremental increase, decrease, or similarity in impacts to the Proposed Project’s identified impact. The second line below that describes the anticipated level of significance of the alternative’s impact relative to the respective topical area. Of the alternatives, the No Project/No Development Alternative is environmentally superior to the other alternatives because it would avoid the significant and unavoidable impacts identified for the Proposed Project.

According to the State CEQA Guidelines, if the No Project/No Development Alternative is identified as the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Of the other alternatives considered, Alternative 3, the Reduced Density Alternative, would be considered environmentally superior because it would result in the greatest incremental reduction of the overall level of impact when compared to the Proposed Project. Alternative 3 would eliminate the Proposed Project’s significant and unavoidable impacts related to regional air quality emissions of VOC, CO, and PM2.5 and substantially reduce NOx and PM10 emissions. Further,

Alternative 3 would reduce impacts related to: aesthetics, construction-related air quality emissions, energy, GHG emissions, construction-related hydrology and water quality, operation-related noise, public services, recreation, operation-related transportation, water supply and service, wastewater, and solid waste when compared to the Proposed Project. This alternative would result in similar, less than significant impacts with mitigation related to biological resources, cultural resources, geology and soils, hazards and hazardous materials, operation related hydrology and water quality, construction-related noise and vibration, population and housing, construction-related transportation, tribal cultural resources, and dry utilities.

While the Reduced Density Alternative would include all of the components proposed by the Project, such components would be reduced by 50 percent under this alternative. This alternative would develop all of the land uses and features included in the Proposed Project, thus would be consistent with the objectives to surround the Antelope Valley Hospital with a variety of health- and wellness-related uses, promote quality infill development that integrates on-site building intensity with surrounding development, and provide City residents with a broad mix of functionally integrated land uses to help meet their general healthcare, social, professional, and economic needs. Since this alternative would involve a 50 percent reduction in allowable land use intensity, there would be reduced development on the project site that might improve the City's economic base. However, this alternative would meet these objectives to a lesser extent than the Proposed Project; thereby only partially meeting these objectives.

As such, the Reduced Density Alternative would not be as effective in meeting the Proposed Project's purpose to create a regional healthcare district that stimulates economic development opportunities for the City and the greater community. Overall, the Reduced Density Alternative would not meet the Proposed Project's purpose and the objectives that support the proposed Master Plan's purpose to the same extent as the Proposed Project.

**Table 6.0-4  
Comparison of Alternatives to the Proposed Project**

<b>Environmental Issue Area</b>	<b>Proposed Project</b>	<b>Alternative 1 No Project/No Development</b>	<b>Alternative 2 No Project/General Plan Buildout</b>	<b>Alternative 3 Reduced Density</b>
Aesthetics	Less than Significant	Less (No impact)	Similar (Less than Significant)	Less (Less than Significant)
Air Quality	Construction – Less than Significant with Mitigation	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)
	Operation - Significant and Unavoidable with Mitigation		Less (Significant and Unavoidable)	Less (Significant and Unavoidable)
Biological Resources	Less than Significant with Mitigation	Less (No impact)	Similar (Less than Significant with Mitigation)	Similar (Less than Significant with Mitigation)
Cultural Resources	Less than Significant with Mitigation	Less (No impact)	Similar (Less than Significant with Mitigation)	Similar (Less than Significant with Mitigation)
Energy	Less than Significant	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)
Geology and Soils	Less than Significant with Mitigation	Less (No impact)	Similar (Less than Significant with Mitigation)	Similar (Less than Significant with Mitigation)
Greenhouse Gas Emissions	Less than Significant	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)
Hazards and Hazardous Materials	Less than Significant with Mitigation	Less (No impact)	Similar (Less than Significant with Mitigation)	Similar (Less than Significant with Mitigation)
Hydrology and Water Quality	Less than Significant	Less (No impact)	Less – Construction (Less than Significant) Similar – Operation (Less than Significant)	Less – Construction (Less than Significant) Similar - Operation (Less than Significant)

<b>Environmental Issue Area</b>	<b>Proposed Project</b>	<b>Alternative 1 No Project/No Development</b>	<b>Alternative 2 No Project/General Plan Buildout</b>	<b>Alternative 3 Reduced Density</b>
Land Use and Planning	Less than Significant	Less (No impact)	Similar (Less than Significant)	Similar (Less than Significant)
Noise	Construction - Less than Significant with Mitigation  Operation – Less than Significant with Mitigation	Less (No impact)	Similar – Construction (Less than Significant with Mitigation)  Less – Operation (Less than Significant with Mitigation)	Similar – Construction (Less than Significant with Mitigation)  Less – Operation (Less than Significant with Mitigation)
Population and Housing	Less than Significant	Less (No impact)	Similar (Less than Significant)	Similar (Less than Significant)
Fire Services	Less than Significant	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)
Police Protection Services	Less than Significant	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)
Schools	Less than Significant	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)
Library Services	Less than Significant	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)
Recreation	Less than Significant	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)
Transportation	Construction – Less than Significant with Mitigation  Operation: VMT – Less than Significant	Less (No Impact)	Similar – Construction (Less than Significant with Mitigation)  Less – Operation (Less than Significant)	Similar – Construction (Less than Significant with Mitigation)  Less – Operation (Less than Significant with Mitigation)
Tribal Cultural Resources	Less than Significant	Less (No impact)	Similar (Less than Significant)	Similar (Less than Significant)
Water	Less than Significant	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)

<b>Environmental Issue Area</b>	<b>Proposed Project</b>	<b><u>Alternative 1</u> No Project/No Development</b>	<b><u>Alternative 2</u> No Project/General Plan Buildout</b>	<b><u>Alternative 3</u> Reduced Density</b>
Wastewater	Less than Significant	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)
Solid Waste	Less than Significant	Less (No impact)	Less (Less than Significant)	Less (Less than Significant)
Dry Utilities	Less than Significant with Mitigation	Less (No impact)	Similar (Less than Significant with Mitigation)	Similar (Less than Significant with Mitigation)



## 7.0 GROWTH-INDUCING IMPACTS

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As previously discussed in Section 2.0: Introduction of this Environmental Impact Report (EIR), the City, acting as the Lead Agency for the planning and environmental review of the Proposed Project, has decided to prepare this EIR in compliance with California Environmental Quality Act (CEQA) Guidelines. According to CEQA Guidelines Section 15126.2e, a project may foster economic or population growth, or additional housing, either directly or indirectly, in a geographical area if it meets any one of the following criteria below<sup>1</sup>:

- A project would remove obstacles to population growth.
- Increases in the population may tax existing community service facilities, causing significant environmental effects.
- A project would encourage and facilitate other activities that could significantly affect the environment.

CEQA does not consider growth inducement to be necessarily detrimental, beneficial, or of little significance to the environment. Typically, the growth-inducing potential of a project is considered significant if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies. Significant growth impacts could also be manifested through the provision of infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies.

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization (MPO) for a six-county region (Ventura, Los Angeles, Orange, Riverside, San Bernardino, and Imperial Counties) in Southern California and is charged by the federal government to research and prepare plans for transportation, growth management, hazardous waste management, and air quality. One of the many responsibilities mandated to SCAG by the State is the development of demographic projections, which are outlined in Section 5.12: Population and Housing of this EIR.

### 7.1 GROWTH-INDUCING IMPACT ANALYSIS

#### 7.1.1 Remove Obstacles to Population Growth

Growth in an area may result from the removal of physical impediments or restrictions to growth, as well as the removal of planning impediments resulting from land use plans and policies. In this context, physical growth impediments may include nonexistent or inadequate access to an area or the lack of essential

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1 California Public Resources Code, Title 14, Division 6, Chapter 3, *California Environmental Quality Act Guidelines*, Section 15126.2(e).

public services (e.g., water service, etc.), while planning impediments may include restrictive zoning and/or general plan designations. The implementation of land use policies will incrementally increase demands for public services, utilities, and infrastructure, and the need for medical, education, and recreation facilities.

The Proposed Project is located in an area that contains established land uses and supporting infrastructure and is considered an in-fill project. Construction of the Proposed Project may require the modification of off-site infrastructure and the development of on-site infrastructure in order to support the increased land use intensity associated with the Proposed Project.

Growth projections contained in the 2016-2040 RTP/SCS are based on a compilation of county and local projections. The Regional Transportation Plan (RTP) forecasts are then used in the formulation of regional plans dealing with regional air quality, housing, transportation/circulation, and other infrastructure issues. SCAG does not provide a specific methodology for establishing the consistency of a proposed project with its regional growth forecasts. However, the SCAG Regional Comprehensive Plan (RCP) contains policies that support the use of these forecasts in the preparation and review of local and regional plans and projects.

The City has an estimated 2019 population of 161,604 residents. With full development of the uses allowed by the General Plan, the City anticipates a maximum population of approximately 259,696 residents by 2030. The Proposed Project would add 5,120 new residents to the project site and indirectly 6,447 new residents based on the increase in jobs at the project site. The Proposed Project would bring an estimated total of 11,597 new residents to the City, which represents only 7.2 percent increase over the Department of Finance's (DOF's) estimated 2019 City population. This growth in population was anticipated by the City's General Plan. Accordingly, the anticipated population increase from the Proposed Project could be accommodated in City and within the regional growth forecasts (see discussion in Section 5.12: Population and Housing). As discussed in Section 5.12, cumulative population, housing, and employment growth within the SCAG region would total 2,475,800 residents, 954,300 households, and 1,457,500 jobs between 2020 and 2040. The Proposed Project's population, housing, and employment growth would represent 0.47 percent, 0.17 percent, and 0.44 percent of the population, housing, and employment forecasts in the SCAG region between 2020 and 2040, respectively. Additionally, the Proposed Project's cumulative housing and employment growth provides benefits for the jobs/housing ratio, regional housing goals that promote housing production, General Plan Housing Element goals regarding the mixture of residential densities, and the General Plan's economic goals to promote the provision of quality medical facilities and services to meet the needs of residents and businesses.

Primary internal street network connections include the extensions of existing roadways to provide north-south and east-west connectivity through the plan area. All internal roadways would be two-lane facilities with bike lanes and sidewalks. Construction of roadway network improvements would be sequenced in coordination with individual developments and construction of the new hospital building; however, the primary backbone network would be constructed by the City.

The water, wastewater, electrical, and natural gas infrastructure required to support the Proposed Project would be available to the project site from internal and surrounding streets. Potable water would be provided to the project site from the Los Angeles County Waterworks District No. 40. The Proposed Project would tie into an existing mains which run along Avenue J, 15th Street West, and Avenue J-8, as well as internal mains within the project site. The Proposed Project would connect into the existing Los Angeles County Sanitation District's sewer main beneath Avenue J and served by the Lancaster Water Reclamation Plant. Existing stormwater drainage facilities within the City are maintained by the Development Services Department. Storm water would generally be conveyed by topography to the northern portion of the project site. As discussed in Section 5.9: Hydrology and Water Quality of this EIR, the Proposed Project's drainage design would collect, convey, and retain what occurs within the project site boundaries, and each individual project would be required to comply with the City's regulations. The City requires the incorporation of drainage facilities into project design and the preparation of a hydrology study approved by the City engineer that demonstrates the proposed streets and existing downstream streets are designed to carry a 50-year storm, top of curb to top of curb, and one 100-year storm within the right-of-way.

Water and wastewater infrastructure upgrades are intended to meet Proposed Project-related demand. The new water and wastewater lines would be designed to provide for the Proposed Project and would not generate substantial capacity that would induce growth within the area. The water mains and sewer mains would connect to and directly serve the project site, which is surrounded by existing development to the north, south, east, and west. As such, the development of the potable and wastewater systems would not induce growth within the immediate area.

Natural gas transmission infrastructure presently exists within roadways surrounding the project site to the north, east, and south, as well as within the project site. During development of the Proposed Project, natural gas lines would be constructed on site to connect existing Southern California Gas Company gas mains in surrounding roadways, as appropriate for each individual project proposed under the Master Plan. Electrical infrastructure in the City is maintained by Southern California Edison (SCE). Each individual project proposed under the Master Plan would connect to existing power lines during on-site utility infrastructure improvements. AT&T, Frontier Communications, Spectrum, and Verizon provide telecommunication and internet services to the City. Natural gas, electricity, and telecommunication

infrastructure upgrades are intended to meet Proposed Project-related demand. Each individual project proposed under the Master Plan would require submittal to utility providers for review and approval of connection plans. The new natural gas, electrical, and telecommunication lines would be designed to provide for the Proposed Project and would not generate substantial capacity that would induce growth within the area. No growth-inducing impacts due to the connection of natural gas, electrical, or telecommunication service lines would occur with the development of the Proposed Project.

In summary, the design and construction of roadways, water, sewer, electrical, natural gas, and telecommunication infrastructure needed to accommodate the Proposed Project would not induce growth within areas surrounding the project site.

### **7.1.2 Tax Existing Community Service Facilities, Causing Significant Environmental Effects**

A project would indirectly induce growth by either the demand not satisfied by a project or the creation of surplus infrastructure not utilized by a project. Examples would be increasing the capacity of a sewer treatment plant or a roadway beyond the capacity needed to meet existing demand or extending a water or sewer line to a project where other properties could also use that line extension.

As discussed in Section 5.13: Public Services, the Los Angeles County Sheriff's Department (Sheriff's Department) provides law enforcement services to the project site out of their Lancaster Station. According to the Sheriff's Department, implementation of the Proposed Project is projected to require an increased demand for police protection services, such as an increased number of sworn officers servicing the project site. However, response times and officer-to-population service ratios would be maintained to City standards upon implementation of the Proposed Project and payment of applicable development impact fees, so additional police protection facilities would not be required.

The Los Angeles County Fire Department (LACFD) indicated that the two closest fire stations would meet the performance standards set by LACFD and are able to provide the project site with a sufficient amount of services and facilities. Additionally, the proposed Project would increase demand for Sheriff Department services, schools, and libraries. Payment of the development impact fees would further ensure that the Proposed Project would not reduce acceptable levels of Sheriff Department services and maintain library facilities in the project area. The City is served by four different school districts: Lancaster School District, Westside Union School District, Eastside Union School District, and Antelope Valley Union High School District. The Lancaster School District provides elementary and middle school services that would serve the residents of the project site and the Antelope Valley Union High School District provides high school services that would serve the residents of the project site. As discussed in Section 5.13.3: School Services,

individual development projects proposed under the Master Plan would be required to pay applicable development impact fees to offset future student demand on each school district.

Construction of the Proposed Project would create an array of employment opportunities for the region, such as health, office, commercial/retail, resort-serving, and construction-related jobs. This direct, growth-inducing effect for construction employment would last until the Proposed Project's anticipated buildout in 2040. The health-related aspect of the Proposed Project accounts for the relocation and expansion of the Antelope Valley Hospital, with up to 300 beds within a new approximately 700,000 square feet (sf) facility with a new 12,000 sf plant facility; and up to 80 beds within approximately 91,000 sf of acute care facilities. Further, the proposed Master Plan would allow additional development of up to 284 beds within 249,800 sf of sub-acute care facilities; 400 rooms within 480,000 sf of continuum of care space; 400,000 sf of medical office space, 200,000 sf of office space, 151,000 sf of retail space, 91,000 sf of restaurant space; 180 hotel rooms with 70,000 sf of conference center space; 250 single family condominium units and 1,350 multifamily apartment units, for a total of 1,600 housing units. Direct, growth-inducing effects for the health-related, commercial/retail, and resort-serving employment would be permanent and last throughout the life of the Proposed Project. Additionally, this increase in mixed-use development would stimulate a major new source of tax base for the region. As discussed in Section 5.12, development of the Proposed Project would generate an estimated 6,447 jobs. With the provision of a total of 1,600 residential units and current anticipated vacancy rates remaining stable, the jobs/housing ratio for the Proposed Project would be approximately 4.05 jobs per residence within the project site. New residents of the Proposed Project would also have available opportunities for health-related services, shopping, recreation, and employment outside of those offered by the Proposed Project. This would not represent a significantly increased demand for economic goods and services within the region. Therefore, the Proposed Project would not induce significant growth within the surrounding area.

### **7.1.3 Encourage and Facilitate Other Activities That Could Significantly Affect the Environment**

A project would directly induce growth if it would remove barriers to population growth such as a change to a jurisdiction's general plan and Zoning Ordinance that allowed new residential development to occur.

The project site is currently surrounded by predominantly urban, developed uses and utility infrastructure largely exists in or adjacent to surrounding roadways. New utility connections enabled by the Proposed Project would serve on-site uses. Accordingly, development of the project site would not eliminate potential constraints for future development or encourage and facilitate other activities that could significantly affect the environment.

As discussed in Section 5.10: Land Use and Planning and consistent with the project site's General Plan land use designations, the City's zoning map applies the Commercial (C), Health Care/Hospital (H), Office Professional (OP), Commercial Planned Development (CPD), High Density Residential (HDR), Mixed Use Neighborhood (MU-N), and Mixed Use Commercial (MU-C) zoning designations to the project site.<sup>2</sup> Also, the density and intensity standards expressed in the General Plan are the same as those expressed in the zoning designations. The Proposed Project would involve amending the City's General Plan consistent with a requested General Plan Amendment and Zone Change to Mixed Use and Mixed Use-Health District designations, respectively. The Proposed Project would allow development of health related, residential, commercial/office, and hotel-related uses, generally consistent with those currently enabled by the City's existing zoning/land use designations.

As explained in Section 5.12, this overall population growth is consistent with City projections and can be accommodated by existing and planned future infrastructure. Moreover, the intensity and uses enabled by the Proposed Project are considered consistent with the spirit and intent of current General Plan land use/zoning designations for the project site.

Finally, no changes to any of the City's building safety standards (i.e., building, grading, plumbing, mechanical, electrical, and fire codes) are proposed or required to implement the Proposed Project. Mitigation Measures have been identified in Sections 5.1 to 5.17 to ensure that site-specific development projects comply with all applicable plans, policies, and ordinances. Pressures to develop vacant, interspersed properties surrounding the project site would be dependent upon regional economic conditions and market demands for housing, commercial office, and industrial land uses that are not directly or indirectly influenced by the Proposed Project. Therefore, approval of the Proposed Project would not involve a precedent setting action that would be applied to other properties and thereby encourage or facilitate growth that would not otherwise occur. Accordingly, the Proposed Project would not be considered growth inducing.

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2 City of Lancaster, *Zoning Map*, adopted July 13, 2010 and last revised January 22, 2019, accessed June 2019, <https://www.cityoflancasterca.org/home/showdocument?id=12653>.

## 8.0 OTHER ENVIRONMENTAL IMPACTS

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This section provides a brief discussion of the reasons that various possible significant effects of a Proposed Project were determined not to be significant and were therefore not discussed in detail in the EIR. This section also discusses the significant irreversible environmental changes that would be caused by the Proposed Project, including the use of nonrenewable resources, as well as the primary and secondary impacts, which generally commit future generations to similar uses.

## 8.1 EFFECTS NOT FOUND TO BE SIGNIFICANT

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As previously discussed in Section 2.0: Introduction of this Environmental Impact Report (EIR), the City acting as the Lead Agency for the planning and environmental review of the Proposed Project, has decided to prepare this EIR in compliance with the California Environmental Quality Act (CEQA), including the CEQA Guidelines. Section 15128 of the CEQA Guidelines requires a brief description of any possible significant effects that were determined not to be significant and were not analyzed in detail within the environmental analysis. Therefore, this section has been included in this EIR as required by CEQA.

The discussion below presents the analysis of the effects related to agriculture and forestry resources, mineral resources, and wildfires not found to be significant. Although the Notice of Preparation (NOP) prepared for the Proposed Project (see Appendix A: Notice of Preparation and Comment Letters) utilized the 2019 CEQA Guidelines Appendix G Checklist criteria, this EIR incorporates the latest available criteria thresholds outlined in the 2020 CEQA Guidelines Appendix G. These updated thresholds reflect the City's efforts to align with current directives and guidance provided by the Governor's Office of Planning and Research. Any items not addressed in this section are addressed in Section 5.0: Environmental Impact Analysis of this EIR.

### 8.1.1 AGRICULTURE AND FORESTRY RESOURCES

**Threshold:** Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

The project site is designated as Other Land by the California Department of Conservation (DOC), Farmland Mapping and Monitoring Program.<sup>1</sup> As shown in Figure 4.0-3: Existing Zoning Designations in Section 4.0: Environmental Setting, the project site does not contain rural residential zones. The land surrounding the project site is primarily designated as Urban and Built-Up Land to the north, east, south, and west, with minor additional areas designated as Other Land to the north, east, south, and west. Although the City does not have an agricultural zone,<sup>2</sup> rural residential zones in the City allow for agricultural use. Implementation of the Proposed Project would not involve changes that would result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural uses. No impacts would occur.

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1 California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, *Los Angeles County Important Farmland Map 2016*, (Map published July 2017).

2 City of Lancaster, *General Plan Land Use Map*, <https://www.cityoflancasterca.org/home/showdocument?id=9333>.



**Threshold: Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

The City's General Plan 2030 Land Use Map designates portions of the project site as Commercial (C), Mixed Use (MU), Health Care (H), Office/Professional (OP), and Multi-Residential (MR2).<sup>3</sup> As previously noted, the project site and surrounding development are not currently used for agricultural uses. The project site is not designated or zoned for agricultural use, used for agriculture, or subject to a Williamson Act contract.<sup>4</sup> Therefore, the Proposed Project would not conflict with any uses zoned for agricultural uses or subject to any Williamson Act contracts. No impacts would occur.

**Threshold: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

As defined by the Public Resources Code (PRC) Section 12220(g), forestland is land that can support 10 percent native tree cover of any species under natural conditions and that allows for management of one or more forest resources. Given that the City does not contain forest lands and is not currently zoned as, or would cause rezoning of, forestland or timberland; the Proposed Project would not affect any forestlands or timberland as defined by the PRC Section 12220(g). No impacts would occur.

A Timberland Production Zone is defined by the Government Code Section 51104(g) as an area that is zoned for the sole purpose of growing and harvesting timber. Because the City does not contain any timber resources, nor does the City designate zoning for timberland or timberland production area, the Proposed Project would not conflict with timberland or Timberland Production areas as defined by Government Code Section 51104(g). No impacts would occur.

**Threshold: Result in the loss of forest land or conversion of forest land to nonforest use?**

The project site is not located in an area zoned or designated for forest or timberland, nor is it used for forestry operations. Therefore, the Proposed Project would not result in the loss of forestland or result in the conversion of forestland to nonforest uses. No impacts would occur.

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3 City of Lancaster, *General Plan 2030 Land Use Map*, adopted July 14, 2009 and last revised January 22, 2019, accessed June 2020, <https://www.cityoflancasterca.org/home/showdocument?id=9333>.

4 California Department of Conservation, Division of Land Resource Protection, *State of California Williamson Act Contract Land*, 2017.

**Threshold:** **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to nonforest use?**

As previously discussed, the project site is not designated for agricultural uses nor would the Proposed Project result in conversion of Farmland. Additionally, there is no forestland located in or near the project site and the Proposed Project would not result in the loss of forestland or result in the conversion of forestland to nonforest uses. No impacts would occur.

### 8.1.2 MINERAL RESOURCES

**Threshold:** **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

According to the City's Master Environmental Assessment (MEA), part of the project site is designated within a Mineral Resource Zone. However, it is not considered likely that the Lancaster area has large, valuable mineral and aggregate deposits. The primary local source of aggregate materials for construction (principally sand and gravel) is outside of the City and to some degree outside of the Antelope Valley region. Mineral resources used for construction such as sand, gravel, and stone have to be imported from the Little Rock Creek fan, located approximately 13 miles southeast of Lancaster and from the Big Rock Creek fan, approximately eight miles farther east.<sup>5</sup> As the project site is not located within or near these areas, implementation of the Proposed Project would not result in the loss of a classified mineral resource. Therefore, impacts would be less than significant.

**Threshold:** **Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

The project site and surrounding areas are characterized by features typical of the urban landscape and include various medical, commercial and retail, and residential uses. As previously mentioned, the project site is within a mineral resources zone, meaning the significance of the deposits that may likely exist, is undetermined and contains no known resources. In addition, as stated above, locally important mineral resource recovery sites are only found outside of the City. Therefore, the Proposed Project would not affect the availability of a locally important mineral resource. No significant impacts would occur.

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5 City of Lancaster, *General Plan 2030 Master Environmental Assessment*, April 2009.

### 8.1.3 WILDFIRE

If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:

**Threshold:** Substantially impair an adopted emergency response plan or emergency evacuation plan?

**Threshold:** Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

**Threshold:** Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

**Threshold:** Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, postfire slope instability, or drainage changes?

The project site is located in a developed and urbanized area of the City that does not contain wildlands or high fire hazard terrain. The project site, and the majority of the City, are not located in or near a State responsibility area or on lands classified as very high fire hazard severity zones.<sup>6</sup> Additionally, the City would coordinate with the Los Angeles County Fire Department (LACFD) as part of the building permit process, for each site plan for future development on a project-by-project basis, which would ensure that adequate emergency access is provided. As part of these processes, the LACFD would recommend specific ingress/egress and roadway dimensions for appropriate emergency access/circulation and compliance with applicable code and ordinance requirements. Therefore, upon compliance with the City's development review process and the Municipal Code, impacts related to emergency response would be reduced to less than significant.

Additionally, the project site consists of developed land characterized by a variety of commercial, retail, and medical facilities with vacant, undeveloped parcels interspersed. The project area is relatively flat, ranging in elevation from approximately 2,350 to 2,360 feet above mean sea level (amsl). Due to the fairly level slope, developed areas, and relatively disturbed vacant parcels within the project site, the Proposed Project would not expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread

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<sup>6</sup> CalFire, *Los Angeles County Very High Fire Hazard Severity Zones in LRA Map*, accessed August 2020, [https://osfm.fire.ca.gov/media/6705/fhszs\\_map19.pdf](https://osfm.fire.ca.gov/media/6705/fhszs_map19.pdf).

of a wildfire nor would the Proposed Project expose people or structures to downslope or downstream flooding or landslides as a result of runoff, postfire slope instability, or drainage changes. Further, the Proposed Project would not require the installation or maintenance of wildfire related infrastructure that would exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Impacts would be less than significant.

## 8.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

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In accordance with Section 15126.2(d) of the CEQA Guidelines, an Environmental Impact Report (EIR) is required to evaluate the significant irreversible environmental changes that would be caused by implementation of the Proposed Project. As stated in CEQA Guidelines Section 15126.2(d):

*Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.*

The Proposed Project would necessarily consume limited, slowly renewable, and nonrenewable resources, resulting in irreversible environmental changes. This consumption would occur during construction of the Proposed Project and would continue throughout its operational lifetime. The development of the Proposed Project would require a commitment of nonrenewable resources or could be related to an environmental accident that would include: (1) building materials and associated solid waste disposal effects on landfills; (2) water; (3) energy resources (e.g., petroleum-based fuels, etc.) for electricity, natural gas, and transportation; and (4) environmental hazards. In addition, the Proposed Project would occur within a predominantly developed site and land designated for residential, mixed-use, commercial/office, and health care uses and would occur at a location that would support the objectives of City and regional planning programs that emphasize sustainability and mobility through the creation of a transit oriented development (TOD). As demonstrated below, the Proposed Project would consume a limited commitment of natural resources and would not result in significant irreversible environmental changes.

### 8.2.1 BUILDING MATERIALS AND SOLID WASTE

Construction of the Proposed Project would require consumption of resources that do not replenish themselves or which may renew so slowly as to be considered nonrenewable. These resources would include certain types of lumber and other forest products, aggregate materials used in concrete and asphalt (e.g., sand, gravel and stone, etc.), metals (e.g., steel, copper and lead, etc.), and petrochemical construction materials (e.g., plastics, etc.).

As discussed in Section 5.17.3: Solid Waste of this EIR, each applicant for an individual project would implement on-site recycling programs in accordance with the requirements of Assembly Bill (AB) 341 and 1826 as appropriate, which would assist the City in achieving its State-mandated source reduction and recycling goals under AB 939. The Proposed Project would also provide an adequate recycling area or room

for the collection and removal of recyclable materials in accordance with AB 1327 and the Lancaster Municipal Code (LMC) requirements. Each individual development project would adhere to the City's Green Building Code for new building construction. Thus, the consumption of nonrenewable materials would be reduced. As such, the Proposed Project would be operated in a manner that would be consistent with all source reduction and recycling goals set forth by the City to achieve compliance with the applicable regulatory plans consistent with the City's obligations under AB 939, including but not limited to the requirements listed in the City's General Plan.

### **8.2.2 WATER**

Proposed Project consumption of water during construction and operation of the Proposed Project is addressed in Section 5.17.1: Water Service and Supply of this EIR. As evaluated therein, the water demand generated by construction activities for the Proposed Project would be substantially less than the new water consumption of the Proposed Project at buildout, and would be temporary in nature. In addition, as set forth in the Draft Water Supply Assessment (WSA) for the Proposed Project provided in Appendix K of this EIR, it is anticipated that the Proposed Project's operational water demand falls within the projected water supplies for normal, single-dry, and multiple-dry years, and that Los Angeles County Waterworks Districts (LACWD), District 40 will be able to meet the water demand for the Proposed Project in addition to the existing and planned water demands of its future service area. Furthermore, the Proposed Project would implement a variety of water conservation features including, but not limited to, the use of drought tolerant landscaping and high-efficiency toilets and fixtures. Thus, as evaluated in Section 5.17.1 of this EIR, while Proposed Project operation would result in the irreversible consumption of water, the Proposed Project would not result in a significant impact related to water supply.

### **8.2.3 ENERGY CONSUMPTION**

Proposed Project consumption of nonrenewable petroleum-based fuels for energy use during Proposed Project construction and operation is addressed in Section 5.5: Energy of this EIR. As evaluated therein, during construction of the Proposed Project, petroleum-based fuels, such as diesel and gasoline, would represent the primary energy source with electricity as a secondary energy source. As the consumption of petroleum-based fuels during the Proposed Project's construction period would represent a relatively small amount of total available supplies, impacts related to the consumption of petroleum-based fuels during Proposed Project construction would be less than significant.

During ongoing operation of the Proposed Project, electricity would represent the primary energy source. Petroleum-based fuels would also be consumed by the Proposed Project-related traffic and hospital, commercial/office, residential, and hotel related activities. In regard to operations, the Proposed Project would be designed to meet the applicable requirements of the State's Green Building Standards Code and

the City's Green Building Code. Additionally, the Proposed Project would incorporate elements within the proposed Master Plan that implement measures identified in the City's Climate Action Plan (CAP) that may include, but are not limited to, transportation design measures such as promoting roundabouts, bike lanes, pedestrian amenities, and road sizing; incorporation of solar panels; potential use of recycled water; zero net energy housing; xeriscaping; and infill development to further the City's sustainability goals. Furthermore, as discussed in Section 5.7: Greenhouse Gas Emissions, the Proposed Project would result in a per capita reduction of GHG emissions and vehicle miles traveled (VMT) and the proposed mix of land uses would be consistent with the SCAG 2016-2040 RTP/SCS. In terms of transportation-related energy conservation, the Proposed Project would be consistent with the energy efficiency policies emphasized by both the City's CAP and the 2016-2040 RTP/SCS. The guiding policies for the 2016 RTP/SCS are intended to focus future investments on the best-performing projects and strategies to preserve, maintain, and optimize the performance of the existing transportation system. Additionally, one of the strategies proposed by the 2016 RTP/SCS is to focus new growth and infill development around transit areas to promote "Complete Communities."<sup>1</sup> This goal would guide the development of additional housing and jobs near transit areas while protecting the viability of existing single-family areas. Specifically, the proposed Master Plan would emphasize mixed-use development in targeted areas and cluster places of work, living, and enjoyment. These land use patterns heighten the efficient use of land resources by clustering uses and reducing the necessity of automobile trips and resultant VMT. As discussed in Section 5.15: Transportation and Traffic, the proposed Master Plan would further reduce total vehicle miles traveled by approximately 0.5 percent when compared to buildout without the Proposed Project in the Antelope Valley. Moreover, the design of the project site is transportation-oriented, offering internal pedestrian and bicycle linkages, interfacing with surrounding mobility networks, and being located proximate to public transportation. Therefore, the consumption of petroleum-based fuels during construction and operation would be less than significant.

As discussed in Section 5.5 of this EIR, the Proposed Project's increase in electricity and natural gas demand would be within the anticipated service capabilities of Southern California Edison (SCE) and Lancaster Choice Energy (LCE), SoCalGas. In addition, future development projects proposed within the project site would be designed to comply with the City's Green Building Code, as applicable. Further, as identified in Section 5.7 of this EIR, the City's CAP identifies various methods to help the City achieve reduction in GHG emissions consistent with those measures identified in all applicable regulations, plans, and policies. With the implementation of the measures identified within the CAP, energy would not be used in a wasteful manner and long-term impacts associated with the consumption of petroleum fuels, electricity, and natural gas would not be significant under the Proposed Project. Thus, while Proposed Project

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1 A "Complete Community" is a mixed-use district located in a strategic growth area.

development would result in an irreversible commitment of energy resources, it would not preempt future energy development or future energy conservation.

Reductions in energy consumption would also result as the Proposed Project expands an existing infill mixed-use site that is in close proximity to bus and rail transit opportunities as well as being located in proximity to residential areas and a wide variety of commercial services. As a result, these locational attributes create opportunities for reductions in both the number and length of vehicle trips. Further, the Proposed Project's pedestrian and bicycle improvements reduce vehicle trips and vehicle miles traveled. These reductions in vehicle trips and vehicle miles traveled would reduce Proposed Project gas and diesel fuel consumption on an annual basis.

With the implementation of the recommended air quality mitigation measures, the Proposed Project would have a significant long-term impact on the region's ability to meet State and federal air quality standards because the Proposed Project would exceed daily Antelope Valley Air Quality Management District significance thresholds for volatile organic compounds (VOC), nitrous oxides (NO<sub>x</sub>), carbon monoxide (CO), suspended particulate matter (PM<sub>10</sub>) and fine particulate matter (PM<sub>2.5</sub>) and the annual significance threshold for VOC, NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>.

The Proposed Project's consumption of energy resources during construction would fall within the available and projected energy supplies and would account for a small percentage of these supplies over the Proposed Project's construction period. Implementation of the Proposed Project's mitigation measures and the City's CAP measures would minimize the long-term use of energy resources when compared to conditions without mitigation. Specifically, the Proposed Project's reduction in VMT would reduce petroleum consumption by 0.6 percent over the life of the Proposed Project compared to development under the existing General Plan. Natural gas consumption would also be reduced with compliance to City and State green building codes over the life of the Proposed Project. These measures align with the State's long-term goals to achieve carbon neutrality no later than 2045. Thus, the Proposed Project's short-term gains would not hinder the long term energy resource planning efforts over the Proposed Project's lifetime.

With implementation of the Proposed Project's mitigation measures, energy would not be used in a wasteful manner and long-term impacts associated with the consumption of petroleum-based fuels would not be significant. Furthermore, the Proposed Project would support the City's goals, objectives, and policies to reduce VMT which also contribute to improved air quality in the region.



## 8.2.4 ENVIRONMENTAL HAZARDS

As discussed in Section 5.8: Hazards and Hazardous Materials of this EIR, the Proposed Project has the potential to increase the acquisition, use, handling, and storage of hazardous materials on-site. It is possible that both the number of hazardous materials users and the quantity of hazardous materials being used would increase under the Proposed Project. The proposed operations would be similar to those operations occurring presently on-site and, in all likelihood, would not involve the use of large quantities of substantially different types of materials than those which are currently used (e.g., fuels, paints, compressed gases, oil-based lubricants, etc.).

Hazardous materials stored and used on-site are currently under the jurisdiction of the County of Los Angeles Fire Department (LACFD) acting as the Certified Unified Program Agency (CUPA) pursuant to California Environmental Protection Agency (CalEPA) regulations.

Under the Proposed Project all hazardous materials on the project site would be acquired, handled, used, stored, and disposed of in accordance with all applicable local, State, and federal regulation including but not limited to the requirement of the Unified Program such as implementation of a Risk Management Plan, Hazardous Material Business Plan, Spill Prevention, Control and Countermeasures (SPCC) plan, and a Storm Water Pollution Prevention Plan (SWPPP), as applicable. Compliance with regulations and standards would serve to protect against significant and irreversible environmental change that could result from the accidental release of hazardous materials.

## 8.2.5 CONCLUSION

Based on the above, Proposed Project construction and operation would require the irretrievable commitment of limited, slowly renewable, and nonrenewable resources, which would limit the availability of these resources, and the project site is already committed the types of uses that compose the Proposed Project. At the same time, the Proposed Project would contribute to a land use pattern that would reduce reliance on private automobiles and reduce VMT; therefore, reducing the consumption of nonrenewable resources when considered in a larger context. Most notably, the Proposed Project would represent an urban infill development that would provide health, residential, and mixed uses within an existing developed site that includes both vacant and developed property. Both types of property currently include similar types of uses that are also located in close proximity to existing on- and off-site commercial, residential, health and retail destinations and existing public transit stops. The project site is located within 1 to 2-miles the Metrolink station, which further promotes the use of alternative transportation options which reduce VMT and related consumption of renewable resources, among other goals. Given its location, the Proposed Project would support pedestrian access to a considerable range of health, employment, and commercial activities. These factors would contribute to a land use pattern that is considered to reduce the consumption of nonrenewable resources. Additionally, the consumption of such

resources would not be considered substantial and would be consistent with regional and local growth forecasts and development goals for the area. These goals are intended to promote smart growth that would reduce resource consumption by reducing vehicle trips and incorporating sustainable design features. The loss of such resources would not be highly accelerated when compared to existing conditions and such resources would not be used in a wasteful manner. Additionally, all hazardous materials on the project site would be acquired, handled, used, stored, and disposed of in accordance with all applicable local, State, and federal regulation which serve to protect against significant and irreversible environmental change that could result from the accidental release of hazardous materials. Therefore, although irreversible environmental changes would result from the Proposed Project, such changes to the environment related to the consumption of nonrenewable resources would not be significant, and the limited use of nonrenewable resources is justified.

## 9.0 TERMS, DEFINITIONS, AND ACRONYMS

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AAM	American Association of Museums
AB	Assembly Bill
ACC	Advanced Clean Cars
ACHP	Advisory Council on Historic Preservation
ACM	asbestos containing materials
ACOE	Army Corps of Engineers
ADA	Americans with Disabilities Act
ADT	average daily trips
afy	acre-feet per year
AQMP	Air Quality Management Plan
ARFVTP	Alternative and Renewable Fuel and Vehicle Technology Program
ARPA	Archaeological Resources Protection Act
ASR	aquifer storage and recovery
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
AV	Antelope Valley
AVAQMD	Antelope Valley Air Quality Management District
AVEK	Antelope Valley East Kern Water Agency
AVTA	Antelope Valley Transit Authority
AVUHSD	Antelope Valley Union High School District
BAAQMD	Bay Area Air Quality Management District
BLM	Bureau of Land Management
BMP	best management practice
BP	before present
BRC	BioResource Consultants
BRT	bus rapid transit
CA	California
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
Cal-ARP	California Accidental Release Prevention Program
CAPCOA	California Air Pollution Control Officers Association
CalEPA	California Environmental Protection Agency
CalSites	Site Mitigation and Brownfields Reuse Program Database
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Governor's Office of Emergency Services

CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBIA	California Building Industry Association
CBSC	California Building Standards Commission
CCR	California Code of Regulations
CDC	Center for Disease Control and Prevention
CDCA	California Desert Conservation Area
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CESA	California Endangered Species Act
cf	cubic feet
CFC	chlorofluorocarbons
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGC	California Government Code
CGP	Construction General Permit
CHRIS	California Historical Resources Information System
City	City of Lancaster
CIWMB	California Integrated Waste Management Board
CMP	Congestion Management Program
CNDBB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
Cortese	Hazardous Waste and Substances Sites List
CPD	Commercial Planned Development
CPTED	Crime Prevention Through Environmental Design
CPUC	California Public Utilities Commission
CREC	controlled recognized environmental condition
CSE	Countywide Siting Element

CUPA	Certified Unified Program Agency
CWA	Clean Water Act
DC	District Core
DE	District Edge
DG	District General
DHS	Department of Health Services
DPM	Diesel Particulate Matter
DPR	Department of Parks and Recreation
DOC	Department of Conservation
DOI	Department of the Interior
DOF	California Department of Finance
DOT	Department of Transportation
DPW EPD	Department of Public Works, Environmental Programs Division
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	environmental impact report
EISA	Energy Independence and Security Act of 2007
EMFAC	CARB's 2014 modeler for estimating emissions
Environmental Setting	the physical conditions that exist at the present time and that may influence or affect the issue under investigation
EOP	Emergency Operations Plan
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
FWSS	Fourwing Saltbush Scrub
GC	Government Code
General Plan	Lancaster General Plan 2030
General Plan EIR	Lancaster General Plan 2030 Program Environmental Impact Report
GHG	greenhouse gas
GIS	geographic information system

GPA	General Plan Amendment
GPS	global positioning system
GSA	groundwater sustainability agencies
GWh	gigawatt hours
HASP	Health and Safety Plan
HAZNET	Hazardous Waste Information System
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HCS	highway capacity software
HDR	High Density Residential
HHMD	Health Hazardous Materials Division
HMBP	Hazardous Materials Business Plan
HREC	historical recognized environmental condition
HSC	Health and Safety Code
HUD	US Department of Housing and Urban Development
HVAC	Heating, Cooling, and Ventilation
HWCA	Hazardous Waste Control Act
HWW	Household Hazardous Waste and Electronic Collection Program
ICU	Intersections Capacity Utilization
ips	inches per second
IRWMP	Integrated Regional Water Management Plan
IRUWMP	Integrated Regional Urban Water Management Plan
ITE	Institute of Transportation Engineers
JPA	Joint Powers Authority
LA	Los Angeles
LACC	Los Angeles County Code
LACFD	Los Angeles County Fire Department
LACPH	Los Angeles County Public Health
LACWD	Los Angeles County Waterworks Districts
LAQMP	Local Air Quality Management Plan
LASD	Los Angeles County Sheriff's Department
LAVA	Lancaster Alternative & Virtual Academies
LBP	lead-based paint
LCE	Lancaster Choice Energy
LDA	light-duty automobiles
Lead Agency	City of Lancaster
LEPC	local emergency planning committee

LEV	Low-Emission Vehicle
LID	low impact design
LIUNA	Laborer’s International Union of North America
LLC	limited liability company
LMC	Lancaster Municipal Code
LOS	level of service
LRWQCB	Lahontan Regional Water Quality Control Board
LUST	leaking underground storage tank
LUSTIS	Leaking Underground Storage Tank Information System
Master Environmental Assessment	Lancaster General Plan 2030 Master Environmental Assessment
Master Plan	Lancaster Health District Master Plan
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
MCY	motorcycles
MDAB	Mojave Desert Air Basin
MDR	Medium Density Residential
MDV	medium-duty vehicles
MEA	Master Environmental Assessment
MG/RTH	Mediterranean Grass/Russian Thistle Scrub
MLD	Most Likely Descendent
MM	mitigation measure
MMcf	million cubic feet
MMLOS	Multi-Modal Level of Service
MND	Mitigated Negative Declaration
MOE	Measures of Effectiveness
MOU	Memorandum of Understanding
MPH	miles per hour
MPO	Metropolitan Planning Organization
MR2	Multi-Residential
MU	Mixed Use
MU-C	Mixed-Use Commercial
MU-N	Mixed Use Neighborhood
MWD	Metropolitan Water District of Southern California
MY	model year
NACTO	National Association of City Transportation Officials
NAHC	Native American Heritage Commission

NCCP/HCP	Natural Community Conservation Plan/Habitat Conservation Plan
NCHRP	National Cooperative Highway Research Program
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFRAP	No Further Remedial Action Plan
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NIMS	National Incident Management System
NIOSH	National Institute for Occupational Safety and Health
NOAA	National Marine Fisheries Service
NOI	Notice of Intent
NOP	Notice of Preparation
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPPA	Native Plant Protection Act
NZE	Near-zero emission
NTIS	National Technical Information Service
OEHHA	Office of Environmental Health Hazard Assessment
OP	Office/Professional
OPR	Office of Planning and Research
OHP	Office of Historic Preservation
OHV	Off-Highway Vehicle
OPEC	Organization of the Petroleum Exporting Countries
OPR	Office of Planning and Research
OS	Open Space
OSHA	Occupational Safety and Health Administration
OWSC	one-way stop control
PCB	polychlorinated biphenyls
PFC	perfluorocarbons
PHEV	plug-in hybrid electric vehicle
PL	public law
PM	particulate matter
PM10	respirable particulate matter
PM2.5	fine particulate matter
Post Office	United States Postal Service Office
POC	Pollutants of concern
PPD	pounds per person per day



PPV	peak particle velocity
PRC	Public Resources Code
Project	Lancaster Health District Master Plan
Project Site	The 272.4-acre Master Plan site designated for development of the Lancaster Health District Master Plan
Proposed Project	Lancaster Health District Master Plan Project
PWCP	Phased Water Conservation Plan
PWRP	Palmdale Water Reclamation Plan
QSP/D	Qualified SWPPP Practitioner/Developer
RCA	Soil and Water Resources Conservation Act
RACT SIP	Reasonably Available Control Technology — State Implementation Plan
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
RCRIS (or RCRAInfo)	Resource Conservation and Recovery Act Information System
REC	Recognized Environmental Concern
Regulatory Setting	the laws, ordinances, regulations, and standards that apply to the Project
RFS	Renewable Fuel Standard
REC	recognized environmental condition
RHNA	Regional Housing Needs Assessment
RHNP	Regional Housing Needs Plan
Riverside County Parks	Riverside County Regional Park and Open-Space District
RMP	Risk Management Plan
ROB	single-lane roundabout
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategies
RWQCB	Regional Water Quality Control Board
RWWTP	Rosamond Wastewater Treatment Plan
SAFE	<i>Safer Affordable Fuel-Efficient</i>
SAFE Vehicles Rule	<i>Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks</i>
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South-Central Coastal Information Center

SCE	Southern California Edison
SCS	Sustainable Communities Strategies
SD	School District
SDWA	Safe Drinking Water Act
SEA	Significant Ecological Area
SEATAC	Significant Ecological Area Technical Advisory Committee
SEMS	Standardized Emergency Management System
SENL	single event noise level
SERC	State Emergency Response Commission
SF	square feet
SGMA	Sustainable Groundwater Management Act of 2014
SHC	California Streets and Highways Code
SHRC	State Historical Resources Commission
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SMBMI	San Manual Band of Mission Indians
SMP	Soil Management Plan
SNMP	Salt and Nutrient Management Plan
SOI	Sphere of Influence
SOx	sulfur dioxide
SPCC	Spill Prevention, Control and Countermeasures
SR	State Route
SSC	Species of Special Concern
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
STEAM	Science, Technology, Engineering, Arts, and Math
SWMP	Storm Water Management Plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCR	Tribal Cultural Resource
TDF	Travel Demand Forecasting
TMDL	total maximum daily load
TNM	traffic noise model
TOD	transit-oriented development
TRI	Toxics Release Inventory

Trustee Agency	a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California
TWLT	two-way left-turn lane
UB	urban buses
US	United States
USC	United States Code
USDA	United States Department of Agriculture
USDOE	United States Department of Energy
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USPS	United States Postal Service
UST	underground storage tank
UWMP	Urban Water Management Plan
UWMPA	Urban Water Management Planning Act
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compounds
WMP	West Mojave Plan
WQCP	Water Quality Control Plan
WQMP	Water Quality Management Plan
WQS	Water Quality Standard
WRP	Water Reclamation Plant
WSA	Water Supply Assessment
ZE	zero-emission
ZEV	zero-emission vehicle

## 10.0 ORGANIZATIONS AND PERSONS CONSULTED

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This Draft Environmental Impact Report (EIR) was prepared by the City of Lancaster with the assistance of Meridian Consultants LLC. Report preparers and consultants are identified as follows, along with agencies and individuals that provided information used to prepare this EIR.

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