DRAFT ENVIRONMENTAL IMPACT REPORT

SCH# 2016031090

OLIVE VIEW-UCLA MEDICAL CENTER CAMPUS MASTER PLAN

PREPARED FOR:

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Acronyms and Abbreviations

°C	Celsius
µg/m^3	micrograms per cubic meter
µPa	microPascals
2016 RTP/SCS or Plan	2016–2040 Regional Transportation Plan/ Sustainable Communities Strategy
2018 Plan	2018 Strategic Fire Plan for California
2035 General Plan	Los Angeles County 2035 General Plan
AB	Assembly Bill
AB 1327	California Solid Waste Reuse and Recycling Access Act of 1991
ACA	Affordable Care Act
ACMs	asbestos containing materials
ADT	average daily traffic
AERMOD	American Meteorological Society/Environmental Protection Agency Regulator Model
AMI	Advanced Metering Infrastructure
amsl	above mean sea level
AQMP	Air Quality Management Plan
ATCS	Adaptive Traffic Control System
ATSAC	Automated Traffic Surveillance and Control
AVR	average vehicle ridership
BACT	Best Available Control Technology
Basin	South Coast Air Basin
Bcf	billion cubic feet
BLM	Bureau of Land Management
BMPs	best management practices
BOS	Bureau of Sanitation
BP	Before Present
Bureau of Engineering	Department of Public Works, Bureau of Engineering
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards

CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
Cal-EPA	California Environmental Protection Agency
CALGreen	2010 California Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CA-MUTCD	California Manual on Traffic Control Devices
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Code
CCA	California Coastal Act
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CEC	California Energy Commission
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CGS	California Geological Survey
CH_4	methane
CHMIRS	California Hazardous Material Incident Report System
CIWMP	Los Angeles County Integrated Waste Management Plan
CMA	Critical Movement Analysis
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO Plan	Federal Attainment Plan for Carbon Monoxide
CO_2	carbon dioxide

CO_2e	carbon dioxide equivalent
COHb	carboxyhemoglobin
Commission	California Building Standards Commission
County	County of Los Angeles
County Flood Control	Los Angeles County Flood Control District
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRMMP	Cultural Resource Monitoring and Mitigation Plan
CSE	Countywide Siting Element
CUP	Central Utility Plant
CUPA	Certified Unified Program Agency
CW	cold water
CWA	Clean Water Act
CWCG	California Wildland Fire Coordinating Group
CWPP	Community Wildfire Protection Plans
CWS	California Water Service
DCTWRP	Donald C. Tillman Water Reclamation Plant
DDTs	dichlorodiphenyltrichloroethane
DOT	Department of Transportation
DPFs	Diesel Particulate Filters
DPM	diesel exhaust particulate matter
Draft EIR	draft environmental impact report
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EE	energy efficiency
EFZs	Earthquake Fault Zones
EG	electric generation
EIR	environmental impact report
EMI	Emissions Inventory Data
EMS	Emergency Medical Services
EOO	Emergency Operations Organization

EOR	enhanced oil recovery
EOs	Executive Orders
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESA	Environmental Sensitive Area
ESA	Environmental Site Assessment
EUI	energy usage intensity
EV	electric vehicle
EWS	emergency water supply
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FINDS	Facility Index System/Facility Registry System
Fire Code	City of Los Angeles Fire Code
Framework	City of Los Angeles General Plan Framework Element
FRAP	Fire and Resources Assessment Program
GHG	greenhouse gas
gsf	gross square feet
GWP	global warming potential
HAZNET	Facility and Manifest Data
HBMS	Hazardous Building Materials Survey
HCM	Historic-Cultural Monuments
HCM	Highway Capacity Manual
HCM	Historic-Cultural Monument
HFC	hydrofluorocarbon
HHMP	Habitat Mitigation Monitoring Plan
HMA	Hazardous Materials Assessment
HMAs	Hillside Management Areas
HMP	Hazard Mitigation Plan
HOT	High-occupancy toll
HRA	health risk assessment
HSC	Health and Safety Code

HTP	Hyperion Treatment Plant
HVAC	heating, ventilation and air conditioning
Hz	Hertz
I	Interstate
I-210	Foothill Freeway
I-5	Golden State Freeway
IPCC	Intergovernmental Panel on Climate Change
IPM	Integrated Pest Management
IRPs	integrated resource plans
IRWMP	Integrated Regional Water Management Plan
IWRP	Integrated Water Resources Plan
kBtu/sf-yr	British Thermal Units per square foot per year
kHz	kilohertz
LACFCD	Los Angeles County Flood Control District
LACFD	County of Los Angeles Fire Department
LACM	Los Angeles County Museum of Natural History
LACOE	Los Angeles County Office of Education
LACPRD	Los Angeles County Parks and Recreation Department
LACPWD	Los Angeles County Department of Public Works
LADOT's	Los Angeles Department of Transportation's
LADRP	City of Los Angeles Department of Recreation and Parks
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAMC	Los Angeles Municipal Code
LAPL	Los Angeles Public Library
LASD	Los Angeles County Sheriff's Department
LAUSD	Los Angeles Unified School District
LBP	lead based paint
LCFS	low carbon fuel standard
LCSFVRS	La Cienega San Fernando Valley Relief Sewer
LDVs	Light Duty Vehicles

LEED	Leadership in Energy and Environmental Design
L_{eq}	equivalent sound level
LID	low impact development
LOS	levels of service
Los Angeles County HMS	Los Angeles County Industrial Waste and Underground Storage Tank Sites
LRA	Local Responsibility Area
LST	localized significance threshold
LUST	Leaking Underground Storage Tanks
Master Plan	Olive View-UCLA Medical Center Campus Master Plan
MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
Metro	Los Angeles County Metropolitan Transportation Authority
mgd	million gallons per day
MLD	most likely descendant
Mmax	maximum moment magnitude
MMcf/day	million cubic feet per day
MMRP	Mitigation Monitoring and Reporting Plan
$MMTCO_2e$	million metric tons of CO2e
mpg	miles per gallon
MRI	magnetic resonance imaging
MS4	Municipal Separate Storm Sewer System
msl	mean sea level
MT	metric-ton
$MTCO_2e$	metric tons of carbon dioxide-equivalent
MWD	Metropolitan Water District
MWh	million megawatt hours
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCPA	Natural Community Conservation Planning Act
NEIS	East Interceptor Sewer

NFPA	National Fire Protection Association
NHIS	North Hollywood Interceptor System
NO	Nitric oxide
NO_2	nitrogen dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NOP/IS	notice of preparation/initial study
NOS	North Outfall System
NO_X	nitrogen oxides
NPC	Nonstructural performance category
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRC	noise reduction coefficient
NRHP	National Register of Historic Places
O&M	Operations and Maintenance
O_2	oxygen
O_3	ozone
OA	Operational Area
OAERP	Operational Area Emergency Response Plan
OEM	Office of Emergency Management
OHP	Office of Historic Preservation
OS	open space
OSHA	Occupational Safety and Health Administration
OSHPD	Office of Statewide Health Planning and Development
OVMC	Olive View Medical Center
Pb	lead
PBDB	PaleoBiology Database
PEC	Potential Environmental Concern
PF	public facilities
PFCs	perfluorocarbons
PFYC	Potential Fossil Yield Classification

PIRP	Power Integrated Resource Plan
PM	particulate matter
PM10	particulate matter 10 microns or less in diameter
PM2.5	particulate matter 2.5 microns or less in diameter
Porter-Cologne or the Act	Porter-Cologne Water Quality Control Act
ppb	parts per billion
PPV	peak particle velocity
PRC	Public Resources Code
proposed project	Olive View-UCLA Medical Center Campus Master Plan Project
proposed project or Master Plan	Olive View-UCLA Medical Center Campus Master Plan Project
RAP	Recreation and Parks
RCNM	Roadway Construction Noise Model
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act of 1976
RCRA-LQG	Resource Conservation and Recovery Act Large Quantity Generator
RECs	Recognized Environmental Concerns
RP	Recommended Practice
RPS	Renewables Portfolio Standard
RTP	Residential Treatment Program
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCA	Southern California Association of Governments
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCS	sustainable communities strategies
SDWA	Safe Drinking Water Act
SF_6	sulfur hexafluoride
SFM	State Fire Marshal
SHPO	State Historic Preservation Officer

SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	Short-Lived Climate Pollutant
SMMC	Santa Monica Mountains Conservancy
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SPC	structural performance category
SPL	sound pressure level
SR-	State Route
SRA	Source Receptor Area
SRA	State Responsibility Area
SSOs	Sanitary Sewer Overflows
STC	sound transmission class
Summary Plan	Waste Management Summary Plan
SurveyLA	Los Angeles Historic Resources Survey
SWEEPS UST	Statewide Environmental Evaluation and Planning System
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
Sylmar Basin	Sylmar Groundwater Basin
TAC	Toxic air contaminants
TCRs	Tribal Cultural Resources
TDM	Transportation Demand Management
the Board	Board of Forestry and Fire Protection
TIA	traffic impact analysis
TMDL	Total Maximum Daily Load
TMN	Traffic Noise Model
tpd	tons per day
TSS	Total suspended solids
UBC	Uniform Building Code
UCMP	University of California Museum of Paleontology

ULARA	Upper Los Angeles River Area
Unified Program	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program
US AIRS AFS	Aerometric Information Retrieval System Facility Subsystem
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGBC	United States Green Building Council
USGS	United States Geological Survey
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
V/C	volume-to-capacity
VH FHSZ	Very High Fire Hazard Severity Zones
VMT	vehicle miles traveled
VOC	volatile organic compounds
WDRs	waste discharge requirements
WRCC's	Western Regional Climate Center's
WSA	Water Supply Assessment
ZEV	Zero Emission Vehicle

ES1.1 Introduction and Background

This draft program environmental impact report (EIR) evaluates potential environmental impacts that could result from implementation of the proposed Olive View–UCLA Medical Center Campus Master Plan project (proposed project) in the city of Los Angeles, California. The proposed Master Plan envisions and will guide development of a series of improvements to the medical center campus over the coming decades.

The Olive View–UCLA Medical Center is the only County-sponsored hospital option in northern Los Angeles County and currently serves the residents in the San Fernando and Santa Clarita Valleys. It has played an active and integral role in the health of Los Angeles County since the mid-1900s, increasing its presence and services as the need for quality health care grew with the county's population.

The anticipated increased demand for health care services and resulting challenges facing the campus, as well as other county hospitals, will be even greater than private-sector hospitals because of the Olive View–UCLA Medical Center's role as a safety-net hospital.

In January 2014, the County of Los Angeles (County) began preparing the Olive View–UCLA Medical Center Campus Master Plan Report (Master Plan), which summarized the research, findings, observations, and proposals for master planning options at the Olive View–UCLA Medical Center and identified seven principles to determine the quality and effectiveness of the different options. Five Master Plan options were developed, which were based on an evaluation of the existing site, understanding of proposed program development, input from community residents and County stakeholders, and vision for the site. A preferred Master Plan option (the proposed project), the Nature's Edge option, was subsequently selected based on community input. In 2018 and 2019, the Master Plan figures was updated to reflect the inclusion and development of the proposed Restorative Care Village. Please see Chapter 2, *Project Description*, in this EIR (Environmental Impact Report) and the Master Plan in Appendix B of this EIR for more details.

ES1.2 Proposed Project Summary

ES1.2.1 Project Location

The Olive View–UCLA Medical Center campus is located at 14445 Olive View Drive on several parcels of land owned by the County of Los Angeles. The campus is located within the community of Sylmar, at the north end of the San Fernando Valley, in the city of Los Angeles, California. Specifically, the site is bounded by the Angeles National Forest and Wilson Canyon Debris Basin on the north, Olive View Drive on the south, Los Angeles County Flood Control District facilities and Wilson Canyon Park on the east, and Bucher Avenue to the west. Kennedy Road and Cobalt Street intersect the project site. The site is located east of the I-5 freeway and north of the Foothill Freeway (I-210) freeway.

Figure ES-1, below, depicts the regional location of the proposed project, and Figure ES-2, below, depicts the boundaries of the Master Plan.

ES1.2.2 Proposed Project

The proposed project is intended to guide development of the campus over a period of 20+ years and the delivery of health care services and health related community programs. The Master Plan provides alternate paths for that development and flexibility to allow it to adapt to changes over time. The Master Plan also includes an analysis and assessment of existing campus infrastructure and buildings, future considerations and recommendations for the campus' land use, and a series of design guidelines that guide building placement, form, and materiality. Figure ES-3 provides an overview of the proposed uses that could be developed under the proposed Master Plan.

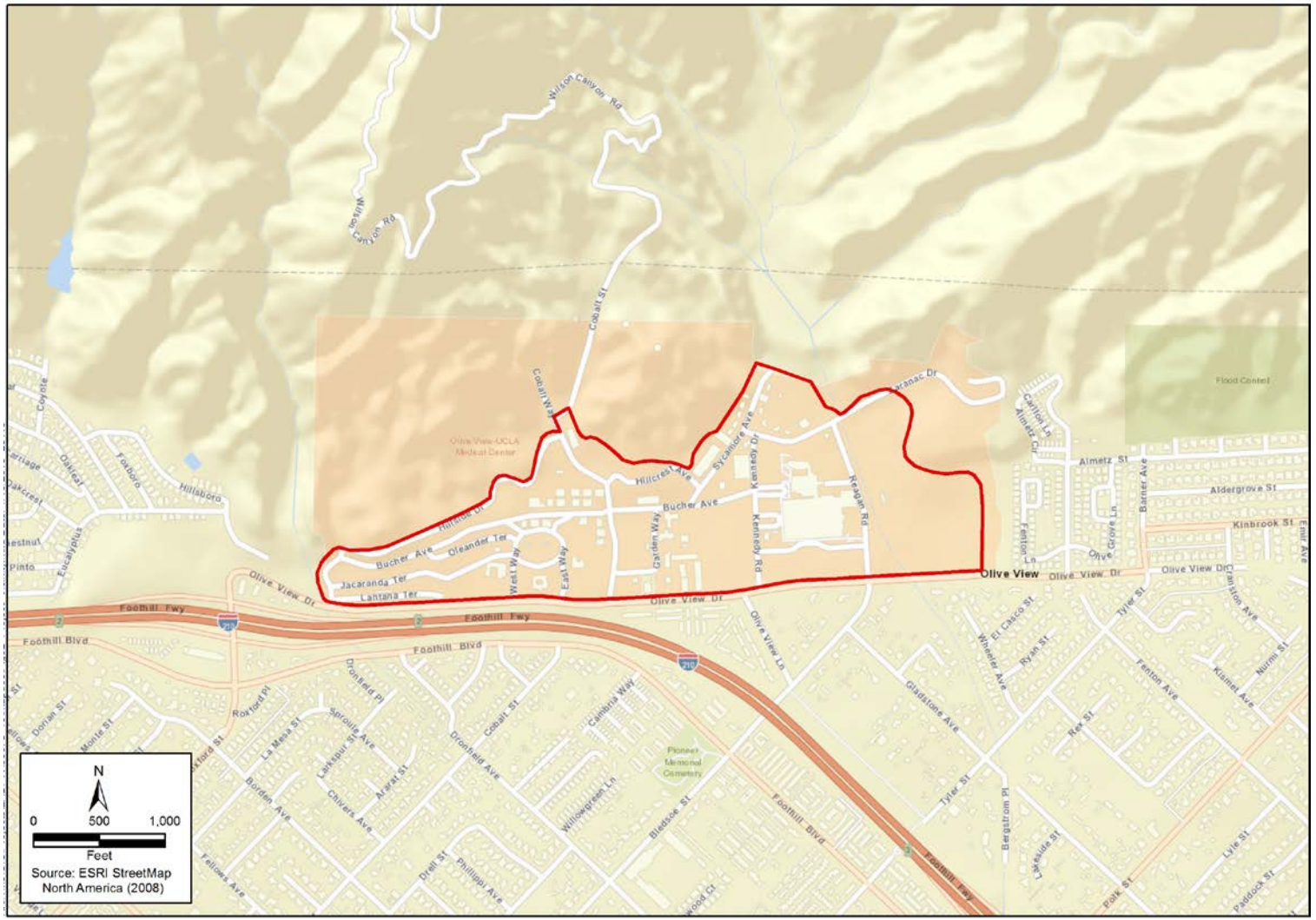
The objectives of the proposed project, which are based on those identified in the Master Plan (see Appendix B of this EIR) are to:

1. Provide for development opportunities that are consistent with the goals and policies of the County's General Plan.
2. Reorganize, expand, and integrate outpatient services with the specific goal of meeting the community's health needs, providing patient-centered care, and improving the operational throughput to meet increasing demands.
3. Locate inpatient and outpatient services into dedicated buildings to optimize the quality of care and improve operational effectiveness, while reducing administrative, operational, and maintenance costs.
4. Comply with the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983 (Senate Bill [SB] 1953) required by the Office of Statewide Health Planning and Development in order to ensure that the hospital can maintain its license as an inpatient care facility beyond the year 2030.
5. Identify feasible opportunities to exceed state energy requirements and pursue green building sustainable design to the maximum extent possible.
6. Develop resources that are consistent with the needs of the 2035 planning horizon.
7. Provide new medical facilities, including a new replacement hospital, to meet state standards and code requirements.
8. Provide integrated direct and coordinated care, including physical health, behavioral health, social, and other supportive services to the County's most vulnerable populations, such as those suffering from mental illness, addiction, or physical disabilities, in facilities located in a welcoming campus setting with green spaces to:
    a. ensure a seamless transition upon discharge to home or other housing options, and help patients avoid cycling in and out of emergency interventions and establish a sustainable functional life;
    b. reduce morbidity and costs, while restoring function and dignity; and
    c. improve the quality of life for the people and communities of Los Angeles County.

Figure ES-1. Regional Location Map

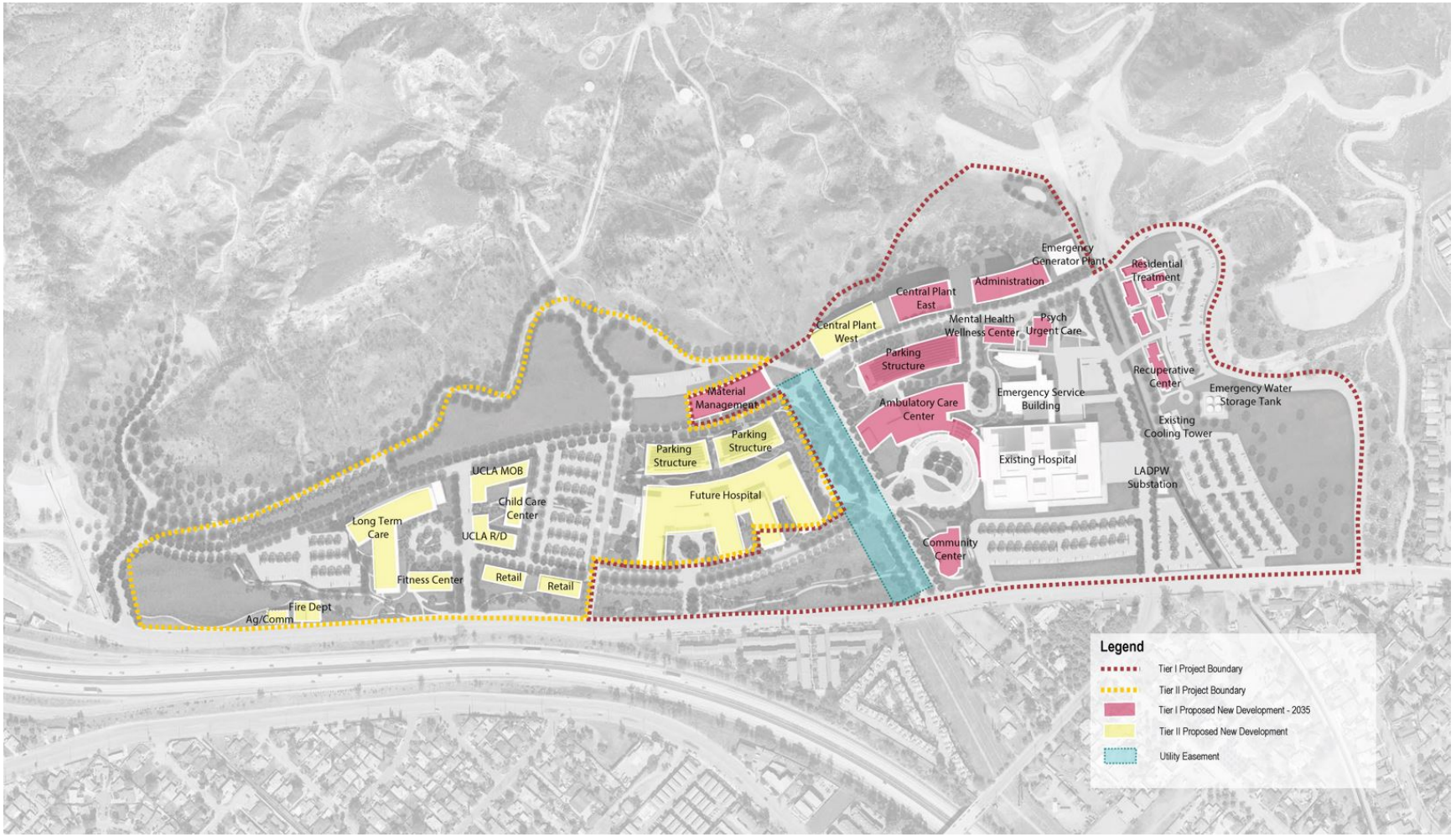
Source: ICF 2016.

Figure ES-2. Project Vicinity Map



Source: ICF 2016.

Figure ES-3. Master Plan Site Plan–Tier I and Tier II Development



Source: Perkins Eastman 2019; SmithGroup JJR 2016.

For the purposes of the EIR, two tiers of development have been defined and analyzed. Tier I entails near-term projects that are better defined and could be constructed subject to securing the necessary approvals and funding, as well as other subsequent development that could occur over the next 17 years or through the year 2035. Tier I development, which is described in greater detail below, could include the Restorative Care Village, which is composed of the Recuperative Care Center, the Residential Treatment Program facility, the new Mental Health Urgent Care Center, and the Mental Health Wellness Center; an Ambulatory Care Center; a Community Center; improvements to the existing hospital; new parking facilities; and other campus improvements that would be located predominantly in the eastern half of the current campus. Tier II development would occur beyond 2035 and could include the construction of a new inpatient hospital, support services building, retail space, a long-term care facility, County department buildings, and the renovation and reuse of the existing inpatient hospital for other purposes. Full build-out of the Master Plan could result in a net increase of approximately 1.3 million square feet of development throughout the campus. The Master Plan components described above are represented visually in Figure ES-3 and are described in further detail in Chapter 2, *Project Description*, of this EIR.

ES1.2.3 Alternatives Considered

The following alternatives to the proposed project were considered and are evaluated in Chapter 5, *Alternatives Analysis*, of this EIR:

Alternative A–No Project: For the purposes of this EIR, two no-project scenarios have been defined. Under both scenarios, the Master Plan would not be implemented. However, the first (No Project/No Build) assumes that no new development would occur on the campus in the future (other than projects currently approved but not yet constructed; see Chapter 2, *Project Description*, of this EIR, for a list of other related campus projects) and consequently, environmental conditions on the campus would remain largely unchanged. The second no project scenario considers what is more likely and could reasonably occur in the future if the proposed Master Plan were not approved, i.e., individual projects would be proposed, approved, and implemented on an ad hoc basis similar to how development has occurred on the campus in the past.

Alternative B–Reduced Development (Modified Tier I and Tier II Development): Alternative B would result in reduced development, as compared to the proposed Master Plan. Under this alternative, a number of Tier I and Tier II buildings proposed under the Master Plan would be modified, reduced in size, or eliminated, as further described below. Under Tier I, the administrative services building would be reduced in size, the East and West Central Utility Plants would be consolidate into one consolidated central utility plant, and the New Materials Management/Supply Services Building would be eliminated. Under Tier II, the existing hospital would accommodate several proposed Tier II facilities rather than constructing new buildings in the western half of the campus as would occur under the proposed Master Plan. These Master Plan facilities would include the Long-Term Care facility, UCLA Medical Office and research and development buildings, child care center, fitness center, and retail uses. Accommodating these facilities and uses in the repurposed existing hospital would reduce the Tier II building square footage by approximately 315,000 square feet. Other Tier II Master Plan improvements, including new community open space and landscaping, parking, vehicular and pedestrian circulation enhancements, and utility infrastructure improvements on the western half of the campus, would also be implemented under this alternative, but potentially to a lesser extent than would occur under the proposed Master Plan.

ES1.3 Issues to Be Resolved

As described in Chapter 2, *Project Description*, of this EIR, the proposed project is intended to guide the development of the campus and help shape the delivery of health care services and health-related community programs over a period of 20+ years. As a result, the facilities and improvements proposed under the Master Plan, with the exception of the Restorative Care Village, are conceptual in nature. Therefore, the designs for these facilities and improvements, including the project locations and footprints, will be refined in the future when the individual projects are proposed and have received funding.

ES1.4 Areas of Controversy

During the EIR public scoping meeting and other public meetings held for the proposed project, the public expressed concerns about safety, air quality impacts, and wildfire hazards. These concerns are described in further detail below.

Safety concerns expressed by the public centered on the patients who will receive care at the proposed Restorative Care Village, how and where they would be discharged, and whether the proposed Restorative Care Village, including the subsequent increase in the homeless and indigent patients it would serve at is facilities, would result in an increase in the local community's homeless population.

Public concerns were also expressed about the potential cumulative air quality impacts (specifically dust) that could happen should construction of Master Plan projects occur concurrently with ongoing operations, including trucks hauling sediment and debris to the Sediment Placement site northeast of the campus.

Lastly, the public expressed their concerns about wildfire hazards and the adequacy of the existing level of fire protection in the area and their desire for additional fire protection facilities in the community.

ES1.5 Summary of Environmental Impacts

The proposed project would result in environmental impacts. Table ES-1 provides a summary of the environmental impacts that would occur and the mitigation measures that would be implemented under the proposed project and identifies the level of significance of impacts before and after implementation of proposed mitigation measures.

Table ES-1. Summary of Environmental Impacts of the Proposed Project

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Aesthetics			
Impact AES-1: *Would the Proposed Project Have a Substantial Adverse Effect on Scenic Vistas?* During construction of Master Plan projects, construction materials and activities may be visible from trails within the San Gabriel Mountains and Angeles National Forest that offer sweeping views of greater Los Angeles. New Master Plan buildings would also be visible from these trails and would introduce visual changes to existing viewsheds and scenic vistas. I-210, which is located approximately 300 feet south of the existing campus, is listed as a Designated Scenic Highway in the City's General Plan and is an eligible State Scenic Highway. Despite the proximity of the highway, views of the campus and future construction activities and new buildings under Tiers I and II of the Master Plan would be limited, and, where available, fleeting due to the I-210's below-grade configuration and intervening landforms and development.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact	None required.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact
Impact AES-2: *Would the Proposed Project Substantially Damage Scenic Resources Including, but not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway?* I-210 near the proposed project site is an eligible State Scenic Highway. No off-campus improvements are proposed that could affect scenic resources within the I-210	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact	None required.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
freeway. Most mature trees on the campus would remain, however, some trees may have to be removed to accommodate Master Plan improvements and buildings. New landscaping, including trees and other vegetation, would be provided in accordance with Master Plan landscaping guidelines, to improve the appearance of the campus.			
Impact AES-3: *In Non-Urbanized Areas, would the Proposed Project 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, conflict with applicable zoning and other regulations governing scenic quality?* During construction, the temporary presence of construction-related vehicles, equipment, barricading and cranes, etc., and construction-related excavation and grading, would result in changes to the visual setting. New Master Plan buildings, landscaping, and infrastructure improvements would change the visual setting of the campus. However, new buildings and landscaping would comply with the Master Plan design and landscaping guidelines.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	None required.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact AES-4: *Would the Proposed Project Create a New Source of Substantial Light or Glare that Would Adversely Affect Day or Nighttime Views in the Area?* Construction activities, which would be temporary, are expected to occur during daytime, consistent with County and city regulations and, therefore, would not introduce substantial new sources of light or glare. New Master Plan buildings and development would introduce new sources of light in an area where there are numerous existing sources of light and glare. However, new development would comply with the Master Plan Lighting Design Guidelines.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact	None required.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact
Air Quality			
Impact AQ-1: *Would the Proposed Project Conflict or Obstruct Implementation of the Applicable Air Quality Plan?* The proposed project would be generally supportive of the relevant policies in the applicable local and regional plans. Therefore, pursuant to SCAQMD guidelines, because the project would be consistent with the land use designations in the relevant plans and regional planning documents (SCAG RTP/SCS), the proposed project is considered consistent with the region's Air Quality Management Plan (AQMP).	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact	None required.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact
Impact AQ-2: *Would the Proposed Project Result in a Cumulatively Considerable Net Increase in a Criteria Pollutant for which the Project Region Is a Nonattainment Area for an Applicable Federal or State Ambient Air*	Construction Tier I–Significant impact Tier II–Significant	**Tiers I and II** **MM-AQ-1**: To reduce VOC emissions during construction, the County (or its contractors) will	Construction Tier I–Less than significant impact Tier II–Potentially

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Quality Standard? Construction of the proposed project would generate air pollutant emissions from the use of heavy-duty construction equipment, construction worker vehicle trips, material deliveries, and trips by heavy-duty haul trucks. In addition, earthwork activities would result in fugitive dust emissions, and paving operations would release VOCs from off-gassing. Maximum daily project-related criteria and precursor pollutant emissions would not exceed any SCAQMD regional construction-period thresholds with the exception the VOC standard during the Architectural Coatings phase. Operation of the proposed project would result in emissions associated with motor vehicle trips; on-site consumption of natural gas for space and water heating; onsite use of solvents and consumer products; and emissions associated with landscaping. However, maximum daily project-related criteria pollutant emissions over existing conditions are not expected to exceed SCAQMD operations-period thresholds for any pollutant under Tier I of the Master Plan. Similarly, maximum daily project-related criteria pollutant emissions over future no-project conditions are not expected to exceed SCAQMD operations-period thresholds for any pollutant. Because details about Tier II are unknown, emissions associated with operational activities under Tier II have not been quantified. Emissions under Tier II could exceed operational thresholds for regional and localized pollutant emissions depending	impact <u>Operational</u> Tier I–Less than significant impact Tier II–Potentially significant impact	use low-VOC coatings that go beyond the requirements of SCAQMD Rule 1113, and have a VOC content of 25 grams per liter (g/L) or less during construction of Tier I projects. Tier II **MM-AQ-2**: In the event that construction-period emissions under Tier II exceed regional or localized emissions standards in effect at the time that Tier II project details are known, the County (or its contractors) will implement the following or more effective measures to achieve emissions reductions: a. For exceedances of particulate matter or NOX regional or localized significance thresholds, the County (or its contractors) shall: b. Use off-road equipment that meets or exceeds U.S. Environmental Protection Agency Tier 4 off-road emissions standards for equipment rated at 50 horsepower or greater during all phases of construction; c. Outfit all off-road equipment with Best Available Control Technology (BACT) devices including, but not be limited to, CARB certified Level 3 Diesel Particulate Filters (DPFs); and d. Require that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year or newer trucks (e.g., material delivery trucks and soil	significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Potentially significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
on project details.		and aggregate import/export) that meet CARB's 2010 engine emission standards of 0.01 gram per brake horsepower-hour (g/bhp-hr) of PM and 0.20 g/bhp-hr of NOX emissions or newer, cleaner trucks. **MM-AQ-3**: In the event that operational emissions under Tier II exceed regional or localized emissions standards in effect at the time that Tier II project details are known, the County (or its contractors) will implement the following to achieve emissions reductions upon construction: 1. Increase energy efficiency by at least 10 percent beyond the Title 24 standard in place at the time of construction, unless demonstrated to be infeasible. 2. Utilize low VOC coatings (VOC content less than or equal to 25 grams per liter) for periodic painting and facility upkeep. 3. Install solar water heaters. 4. Maximize interior day light and utilize high efficiency lighting. 5. Increase roof/ceiling insulation beyond the American Society of Heating, Refrigeration and Air Conditioning Engineers Standard 90.1-2010. 6. Install weather-based irrigation controllers to reduce outdoor water consumption. 7. Implement travel demand reduction measures (TDM) for employees, including, but not necessarily limited to measures such as: o Providing bicycle parking for at least five percent of full-time-equivalent campus employees. o Providing preferential carpool spaces	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		within proposed parking structures on the campus. o Provide shuttles for visitors and employees from Metrolink and/or Metro Rail stations to reduce vehicle trips. 8. Incorporate onsite renewable energy production, including installation of photovoltaic cells or other options.	
Impact AQ-3: *Would the Proposed Project Expose Sensitive Receptors to Substantial Pollutant Concentrations?* Construction activities, including the use of diesel-fueled equipment, haul trucks, and fugitive dust emissions, under Tier I would occur near sensitive receptors. None of the Tier I project elements would exceed localized significance thresholds (LSTs) established to identify potential impacts on receptors near sources of pollutant emissions. Additionally, under Tier I, none of the maximum construction-related health risks would exceed SCAQMD's maximum incremental cancer risk threshold for TACs of 10 in 1 million. As discussed above for Tier I, the implementation of Tier II would result in the generation of air pollutant emissions during construction activities. Such emissions could exceed construction thresholds and expose sensitive receptors to substantial pollutant concentrations depending on the schedules, equipment used, and material movement required. Operational activities under Tier I would generate pollutant emissions; however, emissions would not exceed the applicable	<u>Construction</u> Tier I–Less than significant impact Tier II-Potentially significant impact <u>Operational</u> Tier I–Less than significant impact Tier II-Potentially significant impact	See **MM-AQ-1** through **MM-AQ-3**, above.	<u>Construction</u> Tier I–Less than significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Potentially significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
LST for operation, which were established to identify potential impacts on receptors near sources of pollutant emissions. Operation of Tier II would involve emissions of air pollutants from building natural gas use, stationary sources, worker and visitor vehicle trips, and other sources. Because details about Tier II operations are unknown, emissions associated with operational activities under Tier II have not been quantified. Therefore, emissions under Tier II could exceed operational thresholds for regional and localized pollutant emissions depending on project details.			
Impact AQ-4: *Would the Proposed Project Result In Other Emissions (Such As Those Leading to Odors Adversely Affecting a Substantial Number Of People)?* During the construction period, some limited odors may result from asphalt paving activities, which may be detectable by people immediately adjacent to work sites. However, asphalt paving would occur for a limited time period at each excavation site (less than 1 week), and the locations of paving activities would be distributed over several excavation sites.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	None required.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Biological Resources			
Impact BIO-1: *Would Implementation of the Proposed 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 CDFW or USFWS?* The removal or modification of abandoned	<u>Construction</u> Tier I–Potentially significant impact to bat species; less than significant for other species and habitats Tier II–Potentially significant impact to	**MM-BIO-1**: Prior to the commencement of construction activities, a habitat assessment will be done by a qualified bat biologist to identify buildings within the project area that are suitable roosting habitat for bats. The following measures would apply to structures with bat roost potential, as determined by a qualified biologist: To avoid impacts to roosting bats, preconstruction	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
buildings that provide suitable roosting habitat within the project area may result in impacts on two bat species: pallid bat and Townsend's big-eared bat. Construction activities may also affect other special-status species, including coast horned lizard, silvery legless lizard, and San Diego woodrat; these species occur throughout Southern California. Tier I improvements at the eastern end of the campus that are less clearly defined (e.g., recreational trails and facilities) may result in some permanent loss of suitable California sagebrush habitat that may be used by coastal California gnatcatcher. Lighting, noise, traffic, or other operational impacts from new Master Plan development and activities may affect California gnatcatcher, if present, in the suitable California sagebrush habitat at the eastern end of the campus.	bat species; less than significant for other species and habitats <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	surveys will be conducted prior to work occurring within the vicinity of, or removal of, vacant buildings. A qualified bat biologist will be retained to conduct bat and bat roosting site surveys between May 1 and July 30 prior to commencement of construction activities. This pre-construction survey will be conducted at the non-vacant and vacant buildings determined to be potentially suitable for roosting bats. The survey must occur during maternity season to confirm whether Townsend's big-eared bat is present in the vacant buildings, the only locations with potential for this species. The survey at the buildings will involve exit counts and acoustic surveys to determine whether a structure supports a nursery or roost and by which species. For the non-vacant buildings, a structure inspection will be performed by a bat biologist to look for bat sign (e.g., guano, wall streaking). Preconstruction bat surveys will include evening emergence surveys performed at dusk using active full spectrum acoustic monitoring. Work will be performed by qualified biologists who have knowledge of the natural history of the bat species that could occur in the project area and experience conducting surveys and using full spectrum acoustic equipment. During surveys, biologists will avoid unnecessary disturbance of occupied roosts. Evening (i.e., dusk) emergence surveys will consist of at least one biologist stationed on at different vantage points from the structure, watching for emerging bats from a half hour before sunset to 1-2 hours after sunset or until visibility is no longer optimal. Full-spectrum acoustic detectors will be used during emergence surveys to assist in species identification. All emergence surveys will be conducted during favorable weather conditions (i.e., calm nights with temperatures conducive to bat	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		activity [55° F and above] and no precipitation predicted). If roosting sites or bats are not found, a report confirming their absence will be sent to the CDFW, and no further action will be required. If it is determined that structures in the project area are being used by bats as roost sites, the following protective measures will be implemented: Disturbance of maternity roosting structures or trees (e.g., structure removal, construction equipment operation near roosts, tree trimming or removal) will not occur between April 15 and the following September 15 (the maternity period) to avoid impacts on reproductively active females and active maternity roosts (whether colonial or solitary). The maternity roost will remain undisturbed from the time it is located until the following September 15 or a qualified biologist has determined the roost is no longer active. No construction work will occur at the roost or within a 100-foot-wide buffer zone (or an alternative width, as determined in consultation with CDFW) until September 15. Exclusion devices may be installed outside of the maternity period (i.e., between September 16 and April 14) to preclude bats from occupying buildings during construction. Exclusionary devices will only be installed by or under the supervision of an experienced bat biologist. A Bat Management Plan (see **MM-BIO-2**) will be developed if a bat maternity roost, including Townsend's big-eared bat, is found in the vacant building(s), no construction work within a 250-foot-wide buffer zone (or an alternative width, as determined in consultation with CDFW) will occur between April 1 and September 30.	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		MM-BIO-2: A Bat Management Plan will be developed to ensure mortality to bats does not occur. The following items will be included in the plan, at a minimum: For each location confirmed to be occupied by bats, the plan will provide details both in text and graphics where exclusion devices will need to be placed, type(s) of exclusion material to be used, the timing for exclusion work, and the timeline and methodology needed to exclude the bats. Monitoring activities and schedule will be included, including frequency of monitoring, which structures would need to be monitored, and reporting requirements. The plan will be reviewed and approved by CDFW.	
Impact BIO-2: *Would Implementation of the Proposed Project Have a Substantial Adverse Effect on State or Federally Protected Wetlands through Direct Removal, Filling, Hydrological Interruption, or Other Means?* Construction activities could affect a small amount of potential jurisdictional waters on the campus, including two blue line concrete box culverts and nine blue line and non-blue line features. These features have limited functions and values and are ephemeral in nature.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact	**MM-BIO-3**: Prior to construction of individual Master Plan projects, a jurisdictional delineation will be conducted within the project site for jurisdictional features, including wetlands. If the jurisdictional features are not present, there is no potential for impacts to occur and no further action will be needed. If a jurisdictional feature is found within the project limits, then the following measures would be triggered: **Full avoidance**: This may be possible if the jurisdictional feature is found in portions of the project site that can be avoided. In this instance, Environmental Sensitive Area (ESA) fencing will be placed between the work area and the location of the features. A biologist will be present during the placement of the fencing. **Impact**: If avoidance of jurisdictional features is not feasible, permits/agreements will be obtained from appropriate agencies (i.e., RWQCB, USACE, CDFW) prior to work within the features.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact
Impact BIO-3: *Would Implementation of the*	Construction	**MM-BIO-1** and **MM-BIO-2** are proposed to mitigate	Construction and

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Proposed Project Result in Substantial Interference 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? The removal or modification of the buildings that provide suitable roosting habitat within the project site may result in impacts to maternity bat roosts. Construction activities may also result in direct and indirect impacts to nesting birds protected under the Migratory Bird Treaty Act and temporarily cause portions of the site to be inaccessible to bird species in the area.	Tier I–Potentially significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	construction impacts to bat maternity roosts under **Impact BIO-3**. The following measure is proposed to mitigate construction impacts to nesting birds: **MM-BIO-4**: The nesting season for birds will be avoided or preconstruction nesting bird surveys will be conducted if construction activities are carried out during the nesting season. To ensure compliance with the MBTA and similar provisions under Sections 3503, 3503.5, 3505, 3800, and 3801.6 et seq.of the California Fish and Game Code, the County of Los Angeles, through the general contractor, will conduct all vegetation removal during the non-breeding season, between September 1 and February 14, or implement the following: If the removal of vegetation, demolition of buildings, or noise-generating construction activities are scheduled between February 15 and August 31, the proponent or construction contractor will retain a qualified biologist experienced with conducting nesting bird surveys who will conduct a nesting bird survey prior to the start of vegetation removal, building demolition, or noise-generating construction activities within any potential nesting habitat (i.e., all vegetation, buildings, etc.). The size of the nesting bird survey area will be determined by a qualified biologist at the time of the survey and include the entire limits of disturbance. It will also include a buffer area if deemed necessary by the biologist. The preconstruction nesting bird survey will be conducted no more than 7 days prior to initiation of vegetation removal, building demolition activities, or noise-generating construction activities. If no active nests are detected during these surveys, no restrictions on project activities will be necessary. If active nests are not found, then no potential for	<u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		impact to nesting birds (or raptors) will occur and no further action will be needed. If an active nest(s) is observed, then an appropriate buffer (no-construction activity buffer) will be established by the biologist to ensure nest abandonment does not occur due to the construction activities. All no-construction activity buffer areas will be clearly demarcated in the field with stakes and flagging that are visible to construction personnel.	
Impact BIO-4: *Would Implementation of the Proposed Project Conflict with Any Local Policies or Ordinances to Protect Biological Resources, such as a Tree Preservation Policy or Ordinance?* Construction of proposed Master Plan facilities and structures could result in damage to or removal of vegetation on the project site, including native oak trees that have been planted in ornamental areas. These trees are protected under the Los Angeles County Oak Tree Ordinance. Operation of facilities and buildings proposed under the Master Plan would include routine maintenance and pruning of ornamental vegetation and trees.	<u>Construction</u> Tier I–Potentially significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	**MM-BIO-5**: Prior to construction of Master Plan projects that could result in tree removal or pruning, a qualified arborist will inventory native oak trees on the project site in support of an oak tree permit, if required. Oak tree permit requests require a property owner to file an application with the Department of Regional Planning and provide a filing fee, an oak tree report, site plans for the property, and maps of the surrounding area. The oak tree report will include information about the protection of oak trees that may be adjacent to construction activities that are to remain. The oak tree report will also include the proposed replanting plan, in accordance with the required replacement ratio, for any oak trees that are to be removed.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Impact BIO-5: *Would the Proposed Project Have a Substantial Adverse Effect on Any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, or Regulations or by CDFW or USFWS?* Construction may result in temporary minor impacts due to dust or construction debris and may result in permanent loss of sagebrush scrub habitat due to pedestrian	<u>Construction</u> Tier I–Potentially significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–Less than significant impact	**MM-BIO-6**: Prior to construction within the eastern portion of the project site that could temporarily affect California sagebrush scrub as identified in Figure 3.3-3 of the Master Plan EIR, a Habitat Mitigation Monitoring Program (HHMP) will be created. The Plan will include, at a minimum, the following requirements: Vegetation monitoring will be performed in the spring-summer, or as specified in the HMMP, within California sagebrush scrub habitat proposed for	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
trails and related small recreational facilities that may be constructed at the eastern end of the campus. In addition, construction may require removal of coast live oak trees.	Tier II–Less than significant impact	temporary impact. A list of the native species present will be compiled, and the absolute percent cover of each species will be estimated. This information will set the performance standards and success criteria for the HMMP. The HMMP will provide a map showing the location of each area proposed for impact and the absolute percent cover of each native species within the impact area. Restoration monitoring for five years or until success criteria are met with monitoring every quarter for the first two years and annually thereafter. The monitoring will include annual vegetation sampling beginning after the first year. The sampling will occur in the window of March to June, or as specified within the HMMP. The sampling will provide absolute percent cover of native shrubs and forbs/grasses. Also, see **MM-BIO-5** for measure to mitigate impacts to coast live oak trees.	
Impact BIO-6: *Would the Proposed Project 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 project site is not encompassed within any adopted habitat conservation plans.	Construction and Operational Tier I–No impact Tier II–No impact	None required.	Construction and Operational Tier I–No impact Tier II–No impact
Cultural Resources			
Impact CR-1: *Would the Proposed Project Cause a Substantial Adverse Change in the Significance of a Historical Resource, Pursuant to Section 15064.5 of the State CEQA Guidelines?*	Construction and Operational Tier I–No impact Tier II–No impact	None required.	Construction and Operational Tier I–No impact Tier II–No impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
There are no known historical resources on the Olive View–UCLA Medical Center campus.			
Impact CR-2: *Would the Proposed Project Cause a Substantial Adverse Change in the Significance of an Archaeological Resource, as Defined in Section 15064.5 of the State CEQA Guidelines?* Based on consultation with a tribal representative of the Fernandeño Tataviam Band of Mission Indians in 2017 (see Section 3.16, *Tribal Cultural Resources*, of this EIR), it has been determined that the campus is located within the known use radius of two tribal cultural resources as well within the vicinity of natural springs and mature oak trees. As a consequence and given the campus' location along the foothills of the mountains, there is an increased potential for subsurface tribal cultural resources in the campus vicinity. Therefore, the possibility exists that structural demolition and grading and excavation for new building foundations, new internal roadways, and utility infrastructure, as well as excavation for parking structures, could affect unknown buried archaeological resources. Operation of the Olive View–UCLA Medical Center campus under the proposed Master Plan would not affect archaeological resources.	<u>Construction</u> Tier I–Potentially significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–No impact Tier II–No impact	**MM-CR-1**: Train Construction Personnel. Prior to any ground disturbance activities, all construction personnel will be trained regarding the recognition of possible buried cultural and tribal cultural resources during construction ground-disturbing activities. Training will inform all construction personnel of the procedures to be followed upon the discovery of cultural and tribal cultural resources, including Native American burials. Training will also inform all construction personnel that unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order and that violators will be subject to prosecution under the appropriate state and federal laws, and violations will be grounds for removal from the project. **MM CR-2**: Cultural Resources Monitoring. Cultural resources monitoring of ground-disturbing activities within undisturbed native soils will be conducted by a qualified archaeologist familiar with the types of cultural and tribal cultural resources that could be encountered within the proposed project area. The monitor will be under the direct supervision of an archaeologist who meets the national standards for archaeology as set by the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation. Ground-disturbing activities include but are not limited to: auguring, excavation, geotechnical investigations, vegetation clearing, ground surface leveling, trenching, and conventional mass grading. A single monitor will be assigned to observe two or more simultaneous ground-disturbing activities that occur less than 50 feet away from each other.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–No impact Tier II–No impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Additional monitors will be assigned if two or more simultaneous ground-disturbing activities occur more than 50 feet away from each other. Monitors will complete a daily monitoring activity log. **MM-CR-3:** Native American Tribal Monitoring. If intact prehistoric cultural resource deposits, as determined by the project archaeologist, and/or tribal cultural resources, in consultation with the Fernandeño Tataviam Band of Mission Indians and the County, are identified during ground-disturbing activities within native soils, Native American tribal monitoring will be conducted by a Native American monitor from the Fernandeño Tataviam Band of Mission Indians. A single tribal monitor will be assigned to observe two or more simultaneous ground-disturbing activities that occur less than 50 feet away from each other. Additional tribal monitors will be assigned if two or more simultaneous ground-disturbing activities occur more than 50 feet away from each other. The tribal monitors will represent the Tribes' interests and will follow the Native American Heritage Commission's Guidelines for Tribal Monitors, which will include completion of a Native American monitoring daily activity log. **MM-CR-4**: Discovery of Cultural and Tribal Cultural Resources. If cultural resources or tribal cultural resources are encountered during ground-disturbing activities, cultural and tribal monitors are empowered to divert ground-disturbing activities within 50 feet of the discovery until a qualified archaeologist can evaluate whether the resource is a unique archaeological resource or historical resource as defined in Public Resources Code Section 21083.2 and/or 14 C.C.R. Section 15064.5, or, in consultation with the Tribe, a tribal cultural resource as defined in Public Resources Code	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Section 21074. Work may continue in other areas. Tribal monitors will cooperate with the qualified archaeologist to locate all cultural materials exposed during ground-disturbing activities. All cultural resources recovered will be documented on California Department of Parks and Recreation Series 523 Forms. **MM-CR-5**: Treatment of Cultural and Tribal Cultural Resources. If the qualified archaeologist determines that the discovery is a historical resource (as defined in MM CR-4) of an archaeological nature, or, in consultation with the Tribe and the County, a tribal cultural resource, then the mitigation standards of 14 C.C.R 15126.4(b) which specifies that preservation in place will be the preferred manner of mitigation. If preservation in place is not feasible, a cultural and/or tribal cultural resources treatment plan will be prepared pursuant to 14 C.C.R 15126.4(b) and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. The treatment plan will include (i) provisions for assessment and treatment of the resources identified; (ii) reporting of results in a timely manner; and (iii) the opportunity for the Tribe to engage in the recovery of material and (iv) to provide comments on the draft report. The Tribe will be afforded the opportunity to review the plan prior to implementation. The plan will be submitted to the Los Angeles County Department of Public Works prior to the treatment of the historical resource, unique archaeological resource, or tribal cultural resource. A preliminary draft monitoring compliance report will be submitted within three months of the end of project construction activity. The report will be prepared by a qualified archaeologist and include	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		documentation and interpretation of resources identified or recovered. Interpretation will include full evaluation of the eligibility of the resources identified for listing on the California Register of Historical Resources (CRHR). All surface and subsurface artifacts and features will be mapped and described in the report. The Tribe will be afforded the opportunity to provide comments for inclusion in the final report. The final report will be filed at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. One copy of the final report will be provided to the Tribe. **MM-CR-6**: Human Remains. In accordance with California Health and Safety Code Section 7050.5, if human remains are encountered no further disturbance will occur within 50 feet of the find(s) until the Los Angeles County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resource Code Section 5097.98(b) remains will be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Los Angeles County Coroner determines the remains to be Native American, the Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then identify the most likely descendant(s) (MLD). The MLD will make recommendations concerning the treatment of the remains within 48 hours as provided in Public Resources Code 5097.98. If the County cannot come to an agreement with the MLD, Public Resources Code Section 5097.98(e) requires the County to "reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance."	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CR-3: *Would the Proposed Project Disturb Any Human Remains, Including Those Interred Outside of Formal Cemeteries?* Ground-disturbing activities have the potential to unearth human remains. Implementation of the Master Plan and operation of proposed facilities would not affect buried human remains.	Construction Tier I–Potentially significant impact Tier II–Potentially significant impact Operational Tier I–No impact Tier II–No impact	**MM-CR-6** would be implemented, as described above.	Construction Tier I–Less than significant impact Tier II–Less than significant impact Operational Tier I–No impact Tier II–No impact
Energy			
Impact ENERGY-1: *Would the Proposed Project Result in the Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources during Project Construction or Operation?* Construction of the project would require the use of energy resources including natural gas, electricity, and transportation fuels. It is anticipated that construction contractors, to reduce costs, would implement energy conservation practices including using fuel efficient vehicles and equipment to the extent practicable and maintaining construction equipment in accordance with manufacturers' specifications so equipment performance would not be compromised. New and renovated buildings and facilities that may occur under the Master Plan could result in long-term increases in energy consumption. However, the proposed Master Plan includes more energy efficient project elements such as solar electric power, solar thermal and hot water, as well as ground source heating energy for various	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact	None required.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
facilities. In addition, the proposed project would comply with Title 24's energy conservation standards for new construction.			
Impact ENERGY-2: *Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency?* As detailed above, construction activities are not expected to result in wasteful, inefficient, or unnecessary consumption of energy in meaningful amounts. Furthermore, a goal of the proposed project is to identify feasible opportunities to exceed state energy requirements and pursue green building sustainable design to the maximum extent possible, exceed state energy requirements, and to promote efficient energy use. The project would also be compliant with Title 24, Part 6 of the California Code of Regulations and the 2010 California Green Building Standards Code.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	None required.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Geology/Soils			
Impact GEO-1: *Would the Proposed Project Directly or Indirectly Cause Potential Substantial Adverse Effects, including the Risk of Loss, Injury, or Death, Involving Earthquake Fault Rupture, Seismic Shaking, Ground Failure, or Landslides?* The campus is located within the vicinity of known active earthquake faults, including the Santa Susana Fault less than 0.1 mile from the site, the Northbridge Blind Thrust 0.5 miles from the site, and the Sierra Madre (San Fernando) fault 1.7 miles from the site. Moreover, the project site was previously subjected to substantial surface rupture	<u>Construction</u> Tier I–Potentially significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–Potentially significant impact Tier II–Potentially significant impact	**MM-GEO-C1**: All recommendations included in the preliminary Geotechnical Evaluation prepared for the proposed project (see Appendix F.1 of this EIR) will be followed. A detailed subsurface geotechnical evaluation will be performed to address site-specific conditions at the locations of the planned improvements and provide detailed recommendations for design and construction. The geotechnical evaluation will include the following measures to mitigate potential fault rupture, seismic ground shaking, ground failure, and liquefaction hazards identified under Impacts **GEO-1** and **GEO-2**. *Fault Rupture*: Future geologic investigations to	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
resulting from the 1971 Sylmar Earthquake. Therefore, there is a possibility for seismic surface rupture to occur at the site. Because active faults lay in the project vicinity, the project area could result in strong ground shaking which could affect the project site. The northeastern portion of the project site near the mouth of Wilson Canyon is located within in area that is considered susceptible to liquefaction. Due to the presence of steep hillside areas and a previously mapped earthquake, which induced landslides in the northern portion of the project site, there is potential for landslides, mudflows, or seismic slope instability. Earthquake-induced landslides could also be caused by construction activities, such as grading that undercuts the toe of a slope or induces loading at the top of a slope.		evaluate the location and relative activity of potentially active fault splays at the project site and the feasibility of locating future site improvements will be conducted by geologic consultants prior to design of structure locations. Fault investigations will be conducted by a California State Certified Engineering Geologist and reviewed by the CGS. Appropriate building setback zones will be established in locations deemed not feasible for construction of occupied structures. *Seismic Ground Shaking*: Structural elements of future improvements will be designed to resist or accommodate appropriate site-specific ground motions and conform to the current seismic design standards, including those set forth by the 2013 California Building Code (CBC) and the County of Los Angeles building regulations. *Ground Failure*: Assessment of liquefaction potential at the project site will be evaluated by subsurface geotechnical exploration prior to detailed design and construction of project improvements and will be incorporated into the design, as appropriate. Structural design will be developed to reduce the potential impacts of liquefaction, including the incorporation of techniques such as structural design, in-situ ground modification, or supporting foundations with piles at depths designed specifically for seismically induced settlement. *Landslides*: A detailed assessment of the landslide and mudflow potential in areas of project improvements will be performed prior to design and construction of improvements and incorporated into the design, as appropriate. Methods for construction in areas with a potential liquefaction hazard may include excavation of potentially unstable material for a more stable slope configuration; reduction of landslide driving forces	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		by removal of earth materials at the top of the landslide; construction of a buttress and/or stabilization fills; construction of retailing walls, installation of rock bolts on the face of the slope, or installation of protective wire mesh on the slope face; the construction of debris impact walls at the toe of the slope to contain rock fall debris; and/or supporting foundations with piles at depths designed specifically for seismically induced settlement. Graded slopes created for future project site developments will also be designed to reduce the potential for landslides or mudflows. The geotechnical evaluation will include the following measures to mitigate unstable soil impacts identified under Impact **GEO-3**. *Groundwater*: Excavations for foundations in areas with shallow perched groundwater may need to be cased/shored and/or dewatered to maintain stability of the excavations and adjacent improvements and provide access for construction. All recommendations included in the preliminary geotechnical evaluation pertaining to groundwater will be followed. Onsite infiltration of storm water related to Low Impact Development guidelines will be evaluated during the detailed design phase of the project. Further study, including subsurface exploration, will also be performed during the detailed design phase of planned improvements to evaluate the presence of seepage and/or perched groundwater, and to evaluate the potential for stormwater infiltration at the site, and the potential impacts on design and construction of project improvements. Techniques such as casing, shoring, and/or construction dewatering will be incorporated. *Collapsible Soils/Settlement*: Assessment of soil settlement will be performed prior to detailed	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		design and construction or project improvements and techniques will be developed, as appropriate, to reduce impacts related to settlement. Surface reconnaissance and subsurface evaluation will be performed. Site-specific geotechnical evaluations will also be performed to assess the settlement potential of onsite natural soils and undocumented fill, which may include drilling of exploratory borings or test pits and laboratory testing of soils, where appropriate, to evaluate site conditions. Examples of possible mitigation measures for soils with the potential for settlement could include removal of the compressible/collapsible soil layers and replacement with compacted fill, surcharging to induce settlement prior to construction of improvements, allowing for a settlement period after or during construction of new fills, and specialized foundation design, including the use of deep foundation systems to support structures. Various in-situ soil improvement techniques are also available, such as dynamic compaction (heaving tamping) or compaction grouting. The geotechnical evaluation will include the following measures to mitigate the expansive and corrosive soils hazards identified under **Impact GEO-4**. *Expansive Soils*: Assessment of the potential for expansive soils will be performed during the design phase of the project through subsurface exploration and mitigation techniques such as over-excavation and replacement with non-expansive soils, soil treatment, moisture management, and/or specific structural design for expansive soil conditions will be developed, as appropriate, to reduce impacts to expansive soils.	
Impact GEO-2: *Would the Proposed Project*	Construction	**MM-GEO-C2**: A Storm Water Pollution Prevention	Construction and

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Result in Substantial Soil Erosion or the Loss of Topsoil? During the construction period, excavation, grading, and trenching would occur, creating the potential for erosion. Additionally, portions of the campus are currently undeveloped and subject to potential water and wild soil erosion. Implementation of a Stormwater Pollution Prevention Plan (SWPPP) that incorporates best management practices (BMPs) in compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements would ensure that sediment would be confined to the construction area. During operation of proposed developments, improvements at the project site and incorporation of BMPs would ensure that onsite soil erosion would be minimized.	Tier I–Potentially significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	Program incorporating BMPs for erosion control will be prepared prior to the start of construction in accordance with governing agencies. Long-term erosion management practices and drainage provisions will also be incorporated into the design and maintenance of the project following development of site improvements. BMPs may include surface drainage measures for erosion due to water, such as the use of erosion prevention mats or geofabrics, silt fencing, sandbags and plastic sheeting, and temporary drainage devices. Positive surface drainage will be accommodated at project construction sites to allow surface runoff to flow away from site improvements or areas susceptible to erosion. Wetting of soil surfaces and/or covering exposed ground areas and soil stockpiles will also be considered during construction operations, as appropriate, to reduce wind-related erosion (see air quality impacts and mitigation measures). Project design will address reducing concentrated run-off conditions that could cause erosion and affect the stability of the project.	<u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Impact GEO-3: *Would the Proposed Project Be Located on a Geologic Unit or Soil that Is Unstable or that Would Become Unstable, Potentially Resulting in an Onsite or Offsite Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse?* For a discussion of landslide and liquefaction hazards during construction, see **Impact GEO-1**, above. For both construction and operation, the potential for subsidence on the project site is relatively low. However, groundwater may be encountered during excavation activities, which could cause soil instability.	<u>Construction</u> Tier I–Potentially significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–Potentially significant impact Tier II–Potentially significant impact	See **MM-GEO-C1**, above.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
In addition, compressible/collapsible soils at the site would result in differential settlement and may contribute to soil instability.			
Impact GEO-4: *Would the Proposed Project Be Located on Expansive Soil, as Defined in Table 18-1-B of the UBC (1994), or Corrosive Soils, Creating Substantial Direct or Indirect Risks to Life or Property?* According to the Preliminary Geotechnical Evaluation prepared for the proposed project, the near-surface soils at the project site are predominantly comprised of sandy, coarse-grained materials. These soils typically have a low expansion potential. However, clayey soils may be present in areas of the project site.	Construction Tier I–Potentially significant impact Tier II–Potentially significant impact Operational Tier I–Potentially significant impact Tier II–Potentially significant impact	**See MM-GEO-C1**, above.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact
Impact GEO-5: *Would the Proposed Project Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature?* Structural demolition and grading and excavation for new foundations and access routes, as well as excavation for parking structures, have the potential to affect paleontological resources. Surface grading or shallow excavations in the uppermost few feet of the younger Quaternary alluvium in the proposed project area are unlikely to uncover significant fossil vertebrate remains. However, deeper excavations in the proposed project area that extend down into older sedimentary deposits, as well as any excavations in the Pacoima Formation in the northern portion of the campus may well encounter and consequently, could	Construction Tier I–Potentially significant impact Tier II–Potentially significant impact Operational Tier I–No impact Tier II–No impact	**MM-GEO-C3**: Due to the moderate paleontological potential of the Pacoima Formation, monitoring will be conducted during all earthmoving activities affecting native sediments of the Pacoima Formation to reduce potential impacts to a less-than-significant level. Excavations will be monitored on a full-time basis by a qualified paleontological monitor under the supervision of the qualified paleontologist. Additionally, periodic paleontological spot checks should initially be conducted when excavation exceeds depths of five feet into areas mapped as Quaternary alluvium to determine if older, paleontologically sensitive sediments are present. If present, full time monitoring will be implemented. Monitoring may be reduced if some of the potentially fossiliferous units described herein are, upon exposure and examination by qualified paleontologic personnel, determined to have a low potential for containing fossil resources.	Construction Tier I–Less than significant impact Tier II–Less than significant impact Operational Tier I–No impact Tier II–No impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
damage or destroy significant vertebrate fossils. Operation of the Olive View–UCLA Medical Center campus under the proposed Master Plan would not affect paleontological resources.		The paleontologic monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays and remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor will have authority to temporarily divert grading away from exposed fossils to recover the fossil specimens professionally and efficiently and collect associated data. All efforts to avoid delays in project schedules will be made. To prevent construction delays, paleontological monitors will be equipped with the necessary tools for the rapid removal of fossils and retrieval of associated data. This equipment will include handheld global positioning system receivers, digital cameras, and cell phones as well as a tool kit with specimen containers, matrix sampling bags, field labels, field tools (e.g., awls, hammers, chisels, shovels, etc.), and plaster kits. At each fossil locality, field data forms will be used to record pertinent geologic data, stratigraphic sections will be measured, and appropriate sediment samples will be collected and submitted for analysis. Fossils collected, if any, will be transported to a paleontological laboratory for processing where they will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility such as LACM. Following analysis, a Report of Findings with an appended itemized inventory of specimens will be prepared, which, when submitted to the appropriate lead agency. along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will complete the program to mitigate impacts on paleontological resources.	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Greenhouse Gas Emissions			
Impact GHG-1: Would the Proposed Project Generate GHG Emissions, Either Directly or Indirectly, that May Have a Significant Impact on the Environment? Construction of the proposed project would generate emissions of CO2, CH4, and N2O associated with mobile and stationary construction equipment exhaust as well as employee and haul truck vehicle exhaust, which would contribute to cumulative GHG impacts. Operation of the proposed project would generate long-term emissions of CO2, CH4, and N2O associated with area sources, energy consumption, motor vehicles, waste generation, and water consumption, which would contribute to cumulative GHG impacts.	Construction and Operational Tier I–Significant impact Tier II–Significant impact	**MM-GHG-C1**: The County (or its contractors) will implement the following diesel emission-reduction measures during project construction: • All equipment and delivery truck idling times will be limited by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. Clear signage will be installed at all delivery driveways and loading areas regarding the limitation on idling time. • All construction equipment will be maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities using diesel-powered vehicles or equipment, the County's construction contractors will verify that all vehicles and equipment have been checked by a certified mechanic and determined to be running in proper condition prior to admittance into the project site. A report by the certified mechanic of the condition of the construction and operations vehicles and equipment will be submitted to the County prior to their use. • Alternative-fuel (e.g., biodiesel, electric, compressed natural gas) construction vehicles/equipment (comprising at least 15 percent of the fleet) will be used, to the extent feasible. • Renewable diesel fuel will be used for all diesel-powered heavy construction equipment and on-road vehicles to the extent that it is readily available from a local supplier in the Southern California region. • Local building materials (at least 10 percent) and recycled products, including cement and concrete made with recycled products, will be used, to the	Construction and Operational Tier I–Significant impact Tier II–Significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		extent feasible. • A construction waste management plan will be implemented to divert landfilled waste by requiring the recycling of a minimum of 65 percent of all non-hazardous construction waste. **MM-GHG-O1:** The County will implement the following GHG reduction measures for all new development within the campus: • The County (or its contractors) will implement the following water conservation measures, which are in addition to those required by codes and ordinances: o Install public bathroom faucet aerators (non-residential & residential over 6 stories) with a flow rate of 0.4 gallons per minute (gpm), o Install cooling tower conductivity controllers or cooling tower pH conductivity controllers, o Install rotating sprinkler nozzles for landscape irrigation 0.5 to 1.0 gpm, o Install drip/subsurface irrigation (i.e., micro-irrigation), o Implement proper hydro-zoning (i.e., groups plants with similar water requirements together), o Install zoned irrigation, o Contour landscaping to minimize precipitation runoff, o Install drought tolerant plants in 50 percent of total new landscaping, o Install water conserving turf in 100 percent of new turf added to landscaping, and o Use recycled water for stationary equipment that requires water cooling, to the extent feasible. • Install a stormwater retention and filtration	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		system. • Pursue a net zero water building design for new campus buildings, to the extent feasible. • Develop a recycled water strategy and implementation plan that increases the campus's use of alternative water sources, such as rainwater, greywater, stormwater, and recycled water. • Achieve a minimum solid waste diversion rate of 85 percent by 2035 by implementing measures including, but not necessarily limited, to: o Installing a food waste diversion program at the campus, o Installing an onsite recycling program at the campus, • Incentivize the use of recycled materials in new and renovated campus buildings • Prioritize the use of food vendors with certifications for sustainable agricultural practices related to water and energy use, to the extent feasible. • Provide plant-based menu options at new and existing campus food facilities, to the extent feasible. • Pursue zero waste certification requirements for the campus, to the extent feasible. • Install Energy Star-rated appliances. • Install electric-only appliances and HVAC (e.g., no natural gas heating or cooling) systems, to the extent feasible. Where natural gas appliances need to be installed, these appliances will meet high-efficiency standards. • Establish an energy and water use data collection program to benchmark and report energy and water use at the campus, demonstrating an increase in energy and water efficiency over the	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		lifetime of the project. • Implement travel demand reduction measures (TDM) for employees, including, but not necessarily limited to measures such as: o Providing bicycle parking for at least 5 percent of full-time-equivalent campus employees. o Providing preferential carpool spaces within proposed parking structures on the campus. • Dedicate 5 percent of new parking spaces for clean-air vehicles and equip those spaces with electric vehicle charging equipment. • Purchase new zero-emission passenger vehicles for use by the campus. • Install a high-efficiency lighting system that takes advantage of natural daylighting, augmented by daylighting controls and occupancy sensors that turn off the lights in unoccupied spaces. • Maximize the installation of solar systems on new and renovated buildings to the extent these systems are cost-effective. • Install, in proposed new buildings containing more than 10,000 gsf of space, high-performance glazing with a low solar heat gain coefficient value that reduces the amount of solar heat allowed into the building, without compromising natural illumination. • Install cool roofs with an R value (i.e., the measurement of the effectiveness of thermal insulating materials) of 30 or better on proposed new buildings, to the extent feasible. • Implement a net zero carbon building design for all new building developments and building renovations at the campus, to the extent feasible. • Develop an urban heat island mitigation strategy and implementation plan to guide all future	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		development of the campus. • Increase urban tree canopy cover to provide shade to a minimum of 40 percent of the length of sidewalks on all campus streets. • Use electric powered landscaping equipment, rather than fossil-fuel powered landscaping equipment, to the extent feasible. • Focus selection on native plants and trees to provide new, water-wise landscaping that blends the campus with the ecology of the surrounding natural environment. • Provide ongoing sustainability education and training for campus employees.	
Impact GHG-2: *Would the Proposed Project Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs?* The proposed project would not conflict with the County of Los Angeles CCAP, AB 32 and its Scoping Plan, and SB 32 and the 2017 Scoping Plan.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact	See **MM-GHG-C1** and **MM-GHG-O1**.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact
Hazards and Hazardous Materials			
Impact HAZ-1: *Would the Proposed Project Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials?* During the construction period, routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and fuels would occur. Such transport, use, and disposal must be compliant with applicable regulations such as the regulations outlined in section 3.8.2 *Regulatory Setting*, of this EIR, and with	Construction Tier I–No or less than significant impact Tier II–No or less than significant impact Operational Tier I–Less than significant impact Tier II–Less than significant impact	None required.	Construction Tier I–No or less than significant impact Tier II–No or less than significant impact Operational Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
construction BMPs implemented in accordance with a site specific SWPPP required as part of the NPDES General Construction Permit. Operation of proposed new facilities could increase the use of hazardous materials, including regulated medical waste; however, it's expected they would use, store, handle, and dispose of hazardous materials in a manner similar to how they're used by existing campus facilities, including the hospital, and their handling and storage would be subject to all hazardous materials laws and regulations already being adhered to.			
Impact HAZ-2: *Would the Proposed Project Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment?* Construction would require the transport, use, and disposal of hazardous materials, which could result in upset or accidents that could release hazardous materials into the environment. Such transport, use, and disposal must be compliant with applicable regulations such as the regulations discussed in section 3.8.2 Regulatory Setting of the Draft EIR and with construction BMPs implemented in accordance with a site specific SWPPP required as part of the NPDES General Construction Permit. The Los Angeles County Fire Station #04, located within the proposed project footprint, was listed on the LUST database	<u>Construction</u> Tier I–Potentially significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	**MM-HAZ-1**: Encountering Contaminated Soils. If odiferous, stained, or discolored soil is encountered near the fire station, USTs, or spray booth a professional environmental consultant specializing in the identification and handling of hazardous materials will be retained by the County to assess the site. Identification of possible hazardous materials would typically involve soil samples and laboratory analysis. The suspect soil will be isolated, covered, and avoided by construction personnel until analytical results are reviewed by qualified personnel. Soils identified as hazardous or contaminated will be handled, transported, and treated in accordance with all federal, state, and local existing hazardous materials regulations (as mentioned under Section 3.7.2, *Regulatory Setting*, of this EIR) and based on the professional environmental consultant's recommendations. Only when the site has been released by the professional environmental consultant and the applicable oversight agencies (such as the Los Angeles County Fire Department's Health Hazardous Materials	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
with contaminated soil, which was identified as a Potential Environmental Concern (PEC). The presence of USTs in the hospital loading lock and the presence of a paint and solvent spray booth were also identified as PECs. Demolition of structures built prior to 1980 may result in the exposure of the public and/or the environment to lead based paint (LBP) and/or asbestos containing materials (ACMs) in buildings. Also see the discussion of operational impacts under **Impact HAZ-1** above.		Division) will construction activities be allowed to continue on the affected site. **MM-HAZ-2**: Engineering Controls and Best Management Practices During Construction. To minimize human exposure to potentially contaminated soils during construction, contractors will employ the use of engineering controls and BMPs. Engineering controls and construction BMPs will include, but are not limited to, the following. Contractor employees working on site handling potentially contaminated media will be certified in the Occupational Health and Safety Administration's 40-hour Hazardous Waste Operations and Emergency Response training. Contractors will water or mist soil as it is being excavated and stockpiled or loaded onto transportation trucks. Contractors will place any stockpiled soil in areas shielded from prevailing winds or cover stockpiles with staked and/or anchored sheeting. **MM-HAZ-3**: Encountering Asbestos-Containing Materials and Lead Based Paint. In order to minimize exposure, prior to demolition activities, a Hazardous Building Materials Survey (HBMS) and evaluations for asbestos-containing materials and lead-based paint will be conducted in buildings that are to be demolished or renovated. Abatement measures will be implemented in accordance with the recommendations of these evaluations. Asbestos surveys will be conducted in accordance with SCAQMD Rule 1403, which specifies that all surveys are to be carried out by a Cal/OSHA-certified asbestos consultant and will follow established survey protocols, notification, and work practice requirements. Lead-based paint surveys will be carried out by California Department of Public	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Health(CDPH)-certified inspector/assessor. If necessary, a lead abatement plan would be prepared by the CDPH-certified project monitor or supervisor, and demolition activities would be performed by CDPH-certified workers. **MM-HAZ-4**: Project-Level Hazardous Materials Sites Assessment Prior to Construction Activities. To avoid exposure of construction workers, the public, or the environment to contaminated media, prior to any ground-disturbing activities, contractors will be required to retain a professional environmental consultant specializing in hazardous materials impact assessment to conduct a project-level analysis to determine if there are existing hazardous materials conditions in the vicinity of the construction site and potential for existing hazardous materials conditions to affect construction. This assessment will consist of a search for environmental-related information present in publicly accessible databases. The information will be reviewed to determine if the construction footprint or adjacent properties are listed in the databases. If the construction footprint or adjacent properties are listed in the databases, the professional environmental consultant will determine the potential risk to construction workers, the public, or the environment from rehabilitation activities and identify all necessary avoidance, abatement, remediation, cleanup, disposal, monitoring, reporting, notifications, and/or other measures to prevent significant impacts. The contractor will implement all measures as directed by the professional environmental consultant.	
Impact HAZ-3: *Would the Proposed Project Emit Hazardous Emissions or Involve Handling Hazardous or Acutely Hazardous*	Construction and Operational	None required.	Construction and Operational

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Materials, (Which is Hazardous Material Found to be Fatal to Humans in Low Doses), Substances, or Waste within 0.25 Mile of an Existing or Proposed School? There are no schools within 0.25 mile of the proposed project. The closest existing school is PUC Lakeview Charter High School, approximately 0.60 mile to the southwest of the proposed project site.	Tier I–No impact Tier II–No impact		Tier I–No impact Tier II–No impact
Impact HAZ-4: *Would the Proposed Project Be Located on a Site that Is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5 and, as a Result, Create a Significant Hazard to the Public or the Environment?* The Los Angeles County Fire Station #04, which currently contains office and hazardous materials operations, is a PEC within the vicinity of the site and could potentially be disturbed by construction activities. Operation of the proposed project would not create any impacts associated with being included on list of hazardous materials site.	<u>Construction</u> Tier I–Potentially significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	See **MM-HAZ-1**, **MM-HAZ-2**, and **MM-HAZ-4**, above.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Impact HAZ-5: *Would the Proposed Project Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan?* During construction activities, the proposed project would be required to comply with applicable requirements set forth by the Los Angeles County Operational Area Emergency Response Plan, the Los Angeles County Fire Department, and the Los Angeles County Sherriff's Department.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–No or less than significant impact Tier II–No or less than significant	None required.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant or no impact Tier II–Less than

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Additionally, project construction would be confined within the existing campus boundaries. Therefore, construction of the proposed project would not conflict with an emergency response plan or emergency evacuation plan. Operation of the proposed project would also occur within the campus footprint and would not interfere with emergency response or evacuation in the project vicinity.	impact		significant or no impact
Hydrology and Water Quality			
Impact HYD-1*: Would the Proposed Project Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Substantially Degrade Surface or Ground Water Quality?* During construction, site grading activities and exposed surfaces could cause erosion, temporarily increasing the amount of suspended solids in sheet flow or runoff, which would enter the storm drain system. However, the proposed project would be required to obtain and comply with the Construction General Permit from the SWRCB. The analysis for the proposed project included a drainage area discharge model which calculated that peak discharge flow rates would decrease with the implementation of the proposed project, for both Tier I and Tier II.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	None required.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact HYD-2: *Would the Proposed Project Substantially Decrease Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such that the Project May Impede Sustainable Groundwater Management of the Basin?* It is possible that the groundwater in the project area is shallower than 125 feet, however construction is not expected to encounter groundwater and substantial dewatering is not required. Additionally, any water used during construction would be temporary and limited in quantity. Proposed new development and landscaping would result in an increase in amount of water consumed during operation.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact	**MM-HYD-C1**: Where groundwater seepage could occur, permanent monitoring wells will be installed during construction within and around the perimeter of each building to monitor the groundwater level and evaluate the performance of the dewatering system. Before starting dewatering operations, a baseline conditions survey will be made of all adjacent foundations and structures to assess the impact of deep excavation dewatering on adjacent structures. All signs of existing distress will be recorded. **MM-HYD-O1**: Irrigation water demands above existing irrigation demands will be met by alternative supply sources to the maximum extent technically and financially feasible. The use of alternative water supply sources for irrigation will be maximized to reduce the use of potable water for irrigation and approximate existing irrigation demands. Alternative water supply sources include, but are not limited to, gray water and harvested rainwater (stormwater).	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact
Impact HYD-3: *Would the Proposed Project 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 that Would Result in Substantial Erosion or Siltation, Flooding On- or–Offsite, Exceed the Capacity of Existing or Planned Stormwater Drainage Systems, Impede or Redirect Flood Flows?* Grading and excavation would be required for building foundations, which could affect drainage on the project site, but standard construction-phase BMPs would decrease the potential for any significant erosion or	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact	None required.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
sedimentation from soil disturbance. During operation, new and improved storm drainage pipes and the installation of LID features (bioretention and permeable pavement) would decrease stormwater discharge rates and sediment loads into local storm drains.			
Impact HYD-4: *Would the Proposed Project be Located in Flood Hazard, Tsunami, or Seiche Zones and Risk Release of Pollutants Due to Project Inundation?* The project site is located approximately 28 miles from the Pacific Ocean, so there is no risk to the site from tsunamis and the project would not exacerbate tsunami hazards. The Pacoima Reservoir, located 4.5 miles east of campus, is unlikely to produce seiches that would affect the project site and the proposed project would not exacerbate seiche hazards at the reservoir. During construction, erosion of surface materials could increase TSS and other pollutants, as mentioned in the discussion under **Impact HYD-1** above. Sedimentation and siltation of runoff during the construction period would be addressed through the implementation of standard construction-phase BMPs and compliance with permit and regulatory requirements	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	None required.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Impact HYD-5: *Would the Proposed Project Conflict With or Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan?* The proposed project would include improvements to stormwater quality through the implementation of a campus-	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	**MM-HYD-02**: An O&M Plan will be developed for LID features at the site during the design of the initial development projects and expanded as development progresses and different LID features are added. The plan will consider impacts on water quality and address issues related to Integrated Pest Management (IPM) or organic maintenance	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
wide stormwater management system. The proposed project would be required to adhere to NPDES drainage control requirements during construction and operation as well as to County drainage control requirements.		practices, including those for hand weeding. **MM-HYD-O3**: For any proposed LID features located within an area of potential liquefaction, structural design modifications should be included to mitigate the potential impacts of liquefaction on the performance and operation of the LID features and to maintain the water quality performance as originally design. The O&M Plan should include provision for inspection, repair, maintenance, and/or reconstruction after liquefaction events for any LID features located within an area of potential liquefaction.	
Land Use/Planning			
Impact LU-1: *Would the Proposed Project Conflict with any Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect?* The proposed project would be generally supportive of, or consistent with, and therefore, would not conflict with the relevant environmental policies and objectives of the County of Los Angeles General Plan Land Use Element, Mobility Element, and the city of Los Angeles Sylmar Community Plan. In addition the proposed project would be consistent with the current land use designation of Public Facilities and zoning designation of Public Facilities–PF.	<u>Construction and Operational</u> Tier I–No impact Tier II–No impact	None required.	<u>Construction and Operational</u> Tier I–No impact Tier II–No impact
Noise			
Impact NOI-1: *Would the Proposed Project Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels in the Vicinity of the Project in Excess of Standards Established in a Local General Plan*	<u>Construction and Operational</u> Tier I–Potentially significant impact	**MM-NOI-C1**: Reduce Construction Noise to the Extent Possible. The County will implement the following noise reduction measures during construction:	<u>Construction</u> Tier I–Potentially significant impact Tier II–Potentially

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
or Noise Ordinance or Applicable Standards of Other Agencies? Noise from construction activities could exceed established thresholds and adversely affect noise-sensitive uses residential uses in the vicinity of the campus. If pile driving occurs during construction, the number of offsite noise-sensitive uses adversely affected by construction activities would increase. Project operational noise sources would include traffic on the surrounding streets and onsite noise sources such as mechanical equipment, parking lot activities, deliveries, and activities at proposed outdoor spaces such as trails and gardens. Because the Master Plan is conceptual and programmatic in nature, the final type, location, and configuration of mechanical equipment is unknown and the possibility exists that some onsite mechanical equipment would increase ambient noise levels and exceed the applicable noise standards at offsite sensitive receptors.	Tier II–Potentially significant impact	Construction activities will be limited to between the hours of 7:00 a.m. to 7:00 p.m. on Monday through Friday or 8 a.m. to 6 p.m. on Saturdays, and will not occur at any time on Sundays or legal holidays. Construction personnel will not be permitted on the job site, and material or equipment deliveries and collections will not be permitted outside of these hours. To the fullest extent practicable, the quietest available type of construction equipment will be used. Newer equipment is generally quieter than older equipment. The use of electric powered equipment typically is quieter than diesel or gasoline powered equipment, and hydraulic powered equipment typically isquieter than pneumatic power. Where possible, impact pile driving will be replaced with other piling techniques, such as vibratory pile driving, or vibration–and percussive-free methods (examples include hydraulic press-in piles or cast-in-drilled-hole piles). All mobile and fixed noise-producing equipment used on the proposed project that is regulated for noise output by a local, state, or federal agency will comply with such regulation while in the course of project activity. All construction equipment will be properly maintained. Poor maintenance of equipment can cause excessive noise levels. All construction equipment, stationary and mobile, will be equipped with properly operating and maintained mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc welders, air	significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		compressors) will be equipped with shrouds and noise control features that are readily available for that type of equipment. All noisy equipment will be operated only when necessary, and will be switched off when not in use. The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only. To the extent practicable, temporary barriers will be employed around the project site and/or around noisy construction equipment. For barriers to be effective they will break the line-of site between the equipment and any noise-sensitive receiver. These barriers may be constructed as follows: From commercially-available acoustical panels lined with sound absorbing material (the sound absorptive faces of the panels will face the construction equipment). From common construction materials such as plywood and lined with sound absorptive material (the sound absorptive material will face the construction equipment). From acoustical blankets hung over or from a supporting frame. The blankets will provide a minimum sound transmission class (STC) rating of 28 and a minimum noise reduction coefficient (NRC) of 0.80 and will be firmly secured to the framework with the sound absorptive side of the blankets oriented toward the construction equipment. The blankets will be overlapped by at least 6" at seams and taped so that no gaps exist. The largest blankets available will be used in order to minimize the number of seams. The blankets will be draped to the ground to eliminate any gaps at the base of the barrier. Construction contractors will ensure that	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		construction employees are trained in the proper operation and use of the equipment. Storage, staging, parking, and maintenance areas will be located away from sensitive receptors. Where this is not possible, the storage of waste materials, earth, and other supplies will be positioned in a manner that will function as a noise barrier to the closest sensitive receivers. Stationary noise sources such as generators and compressors will be positioned as far away as possible from noise-sensitive areas. Construction equipment will be stored on the project site while in use. This will eliminate noise associated with repeated transportation of the equipment to and from the site. To the extent possible haul roads should not be designated through noise-sensitive areas. **MM-NOI-O1**: Design Project Facilities to Ensure All Mechanical Equipment Complies with Chapter XI of the city of Los Angeles Municipal Code. During the architectural and engineering design phase of each new facility (building, central plant, etc.) that would introduce new mechanical equipment to the project site, and prior to the issuance of any building permits for the facility, the County will retain an acoustical consultant to evaluate the design and provide recommendations, as necessary, to ensure that the mechanical equipment complies with Chapter XI of the city of Los Angeles Municipal Code. Such recommendations may include, but are not limited to: changes in equipment locations, upgrades to central plant buildings, rooftop parapet walls, acoustical louvers or screens, or intake and exhaust silencers.	
Impact NOI-2: *Would the Proposed Project Generate Excessive Groundborne Vibration or*	<u>Construction</u> Tier I–Potentially	**MM-NOI-C2**: Reduce Construction-Generated Groundborne Vibration to the Extent Possible. The	<u>Construction</u> Tier I–Potentially

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Groundborne Noise Levels? Heavy construction equipment has the potential to produce groundborne vibration levels that are perceptible to people in the surrounding area. Estimated groundborne vibration levels due to construction of Master Plan facilities could exceed established thresholds at offsite sensitive residential uses. If pile driving occurs during construction, a greater number of offsite residential uses could be affected. Activities associated with operation of proposed Master Plan facilities are not expected to expose sensitive receptors to excessive groundborne vibration or noise.	significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–No impact Tier II–No impact	County will implement the following vibration reduction measures during construction: Where possible, impact pile driving will be replaced with other piling techniques, such as vibratory pile driving or, preferably, vibration–and percussive-free methods (examples include hydraulic press-in piles or cast-in-drilled-hole piles). To the extent possible, heavy construction equipment will not be operated within 140 feet of onsite or offsite sensitive receptors.	significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–No impact Tier II–No impact
Impact NOI-3: *Would the Proposed Project be Located in the Vicinity of a Private Airstrip or an Airport Land Use Plan area, or, Where Such a Plan has not Been Adopted, Within Two Miles of a Public Airport or Public Use Airport, and Expose People Residing or Working in the Project Area to Excessive Noise Levels?* The project site is not located within an airport land use plan or within 2 miles of a public airport or public use airport. The existing helipad on the campus would remain in the same location northeast of the existing hospital and emergency services buildings. Flight paths associated with the helipad are not anticipated to change and the overall number of helipad operations are not expected to increase as a result of the proposed project.	<u>Construction</u> Tier I–No impact Tier II–No impact <u>Operational</u> Tier I–No impact Tier II–No impact	None required.	<u>Construction</u> Tier I–No impact Tier II–No impact <u>Operational</u> Tier I–No impact Tier II–No impact
Population/Housing			
Impact POP-1: *Would the Proposed Project*	<u>Construction and</u>	None required.	<u>Construction</u>

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Induce Substantial Population Growth in an Area, either Directly (e.g., by Proposing New Homes and Businesses) or Indirectly (e.g., through the Extension of Roads or Other Infrastructure)? Because of the highly specialized nature of most construction projects, workers are likely to be employed on the job site only for as long as their skills are needed to complete a particular phase of the construction process. Additionally, the County has a large pool of construction labor from which to draw within commuting distance of the project site. Therefore, most construction workers would not relocate their households to work on proposed Master Plan development and improvement projects. Tier I would include the development of a 48-bed Recuperative Care Center and an 80-bed Residential Treatment Program. Both facilities would provide short-term (less than three months) housing. The grow inducement impacts of this small increase in the residential population would be minor. The SCAG projections anticipate countywide population growth of 19.2 percent by 2035. The increases in the on-campus employee and residential populations that could occur with buildout of the Master Plan would not contribute substantially to any population growth in the area beyond what SCAG has projected in its regional and city forecasts. Additionally, the proposed project does not include the extension of roads or other infrastructure improvements outside the boundaries of the campus that would induce	<u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact		Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant or no impact Tier II–Less than significant or no impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
growth in the surrounding area.			
Impact POP-2: *Would the Proposed Project Displace Substantial Numbers of Existing Housing Units, Necessitating the Construction of Replacement Housing Elsewhere?* All development and facilities proposed under the Master Plan would be constructed within the existing boundaries of the medical center campus. There are currently no permanent housing units on campus. Thus, no displacement of existing housing would occur as a result of anticipated development under the Master Plan.	Construction and Operational Tier I–No impact Tier II–No impact	None required.	Construction Tier I–No impact Tier II–No impact
Public Services			
Impact PS-1: *Would the Proposed Project Result in Substantial Adverse Physical Impacts Associated with the Provision of New or Physically Altered Government Facilities, Need for New or Physical Altered Government Facilities, the Construction of Which Could Cause Significant Environmental Impacts, in Order to Maintain Acceptable Services Ratios, Response Times or Other Performance Objectives for Any of the Public Services?* Construction could temporary increase demand for fire protection services, but would not result in the need for new or altered fire protection facilities. Emergency access to the project site could be affected by Master Plan construction activities. Temporary lane closures and construction related-traffic could delay or obstruct the movement of emergency vehicles. New development under the Master Plan is not expected to substantially increase the demand for public services and require	Construction Tier I–Potentially significant impact Tier II–Potentially significant impact Operational Tier I–Less than significant impact Tier II–Less than significant impact	**MM-PS-1**: The Los Angeles County project manager and construction contractor will regularly notify and coordinate with the LAFD, LASD and LAPD on project construction design, activities, and scheduling, including any on and off campus street or lane closures related to the proposed developments before construction begins.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
construction of new or altered facilities to maintain acceptable service ratios.			
Recreation			
Impact REC-1: *Would the Proposed 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?* It is unlikely that construction of the proposed project would result in the relocation of a substantial number of construction workers and their families such that the use of existing parks would increase to the point of substantial deterioration. Development of proposed Master Plan facilities would increase the number of employees and campus visitors and would include a new Recuperative Care Center and the Residential Treatment Program facility that would provide treatment in a residential setting for short-term stays. Because local recreational resources are most frequently used by local residents rather than campus employees or visitors or hospital patients, development is not expected to directly result in a substantial increase in use of local parks.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	None required.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact REC-2: *Would the Proposed Project Include Recreational Facilities or Require the Construction or Expansion of Recreational Facilities that Would Have a Substantial Adverse Physical Effect on the Environment?* Construction of new landscaped open space areas or other passive or recreational spaces on the medical center campus, as proposed under the Master Plan, would be limited to the project site. Staging for construction equipment and activities would not occur within any off-campus parkland or recreational facility. As discussed in Impact REC-1, because local recreational resources are most frequently used by local residents rather than campus employees or visitors or hospital patients, operation of proposed Master Plan facilities is not expected to directly result in a substantial increase in use of local parks.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact	See air quality and noise mitigation measures above.	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant impact
Transportation/Traffic			
Impact TRAF-1: *Would the Proposed Project Conflict with a Program Plan, Ordinance, or Policy Addressing the Circulation System, including Transit, Roadway, Bicycle, and Pedestrian Facilities?* Construction of the proposed project could involve intermittent lane and sidewalk closures, which could impede vehicle, pedestrian, equestrian, and bicycle circulation. However, no long-term closure of offsite roadways, bicycle or equestrian paths, or sidewalks are anticipated. Operation of the proposed project would increase the volume of vehicles and the amount of traffic at intersections, freeway	Construction and Operational Tier I–Less than significant impact Tier II–Less than significant	**MM-TRAF-1**: The County will develop and implement traffic control measures for Master Plan projects that would result in lane or sidewalk closures, removal of parking, or similar traffic disruptions. Temporary traffic control during construction will meet the requirements of the *California Manual on Traffic Control Devices* (CA-MUTCD). Daytime closures will be covered by the applications shown in Chapter 6 of the manual. Overnight closures, long-term closures, and detours will require a Traffic Control Plan, which will be prepared as part of the project design package according to CA-MUTCD requirements. The Traffic Control Plan may include, but is not limited to, the elements listed below. Note that some of these	Construction and Operational Tier I–Less than significant impact Tier II–Potentially significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
mainlines, and freeway ramps. The proposed project would also result in a minor increase in transit patronage and use of available transit capacity. Proposed new pedestrian paths and sidewalks within the campus and along the north side of Olive View Drive would improve local pedestrian circulation.		elements may not be feasible or appropriate in all circumstances. The project-level environmental analysis will identify the appropriate measures for each project as applicable. Provide a roadway layout that shows the locations of construction activity and surrounding roadways to be used as detour routes, including special signage. Establish detour routes in coordination with the city of Los Angeles to minimize disturbances to local traffic conditions; review potential detour routes to make sure adequate capacity is available. Avoid creating additional delay at intersections that are currently operating under congested conditions either by choosing routes that avoid these locations or constructing during non-peak times of day. Maintain access to existing residences at all times. Work with LASD, LAFD, and LAPD to coordinate all construction-related plans and minimize disturbances to local EMS providers; ensure that alternative evacuation and emergency routes are designed to maintain response times during construction. Provide adequate off-street parking areas at designated staging areas for construction-related vehicles. Work with local and regional transit providers to maintain access and circulation routes to existing stops and stations during construction phases and identify appropriate detours to provide traffic rerouting during construction while minimizing disturbance to bus services. Work with the city of Los Angeles to maintain continuity and operation of existing pedestrian and bicycle facilities during construction.	

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact TRAF-2*: Would the Proposed Project Substantially Increase Hazards Due to a Geometric Design Feature (e.g., Sharp Curves or Dangerous Intersections) or Incompatible Uses (e.g., Farm Equipment)?* The increased mixture of heavy construction vehicles and general purpose traffic during construction can result in safety hazards due to a higher proportion of heavy trucks. These hazards are temporary and intermittent however, and implementation of construction contractor safety plans, best management practices, and proposed mitigation measure MM-TRAF-1 would ensure potential hazards would be minimalized. The Master Plan would improve sidewalks and pedestrian walking paths throughout campus. There will also be improvements to the general orientation of campus facilities, which would improve safety for motorists, pedestrians, and bicyclists as they travel to and around campus.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	See **MM-TRAF-1**, above.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Impact TRAF-4: *Would the Proposed Project Result in Inadequate Emergency Access?* Construction could require temporary road or lane closures, which could affect emergency vehicle access. However emergency vehicle access will be maintained. Impacts however will be less than significant with coordination with EMS providers that serve the campus and surrounding communities as described in MM-TRF-1. Operations of the proposed facilities will not substantially affect emergency access to the campus and	<u>Construction</u> Tier I–Potentially significant Tier II–Potentially significant <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	See **MM-TRAF-1**, above.	<u>Construction and Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
surround community.			
Tribal Cultural Resources			
Impact TCR-1: *Would the Proposed Project Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, Defined in Public Resources Code Section 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:* *i. 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* *ii. 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 will Consider the Significance of the Resource to a California Native American Tribe?* The proposed project has a moderate potential to affect tribal cultural resources (TCRs) in areas on the campus not previously disturbed because there are three TCRs, including two villages in the vicinity of the campus.	<u>Construction</u> Tier I–Potentially significant Tier II–Potentially significant <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	**MM-CR-1** through **MM-CR-6**, described above under Cultural Resources would be implemented.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Utilities and Service Systems			
Impact UTL-1: *Would the Proposed Project*	<u>Construction</u>	See measures identified above to mitigate potential	<u>Construction</u>

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Require or Result in the Relocation or Construction of New or Expanded Water or Wastewater Treatment or Stormwater Drainage, Electric Power, Natural Gas, or Telecommunications Facilities, the Construction or Relocation of Which Could Cause Significant Environmental Effects? During construction of individual projects implemented under the Master Plan, water would be consumed by construction workers and activities, e.g., cement mixing and dust suppression, wastewater would be generated by construction workers, and electricity and fuels would be consumed. However, the incremental increase in the consumption of utilities or generation of wastewater during construction would not be permanent and it's not expected that new utility infrastructure would be required to meet this incremental increase in demand. Construction of new development and facilities under Tier I would require new on-campus infrastructure to accommodate that development, including new water or sewer lines to new on-campus buildings. If construction of new water lines occurs at depths where undisturbed native soils would be encountered, the potential exists that unknown buried archaeological or paleontological resources could be encountered and damaged or destroyed (see Section 3.4, *Cultural Resources*, and Section 3.5, *Geology/Soils*, of this EIR, for a detailed discussion of impacts to archaeological resources and paleontological resources, respectively.) The development and operation of proposed	Tier I–Potentially significant impact Tier II–Potentially significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Potentially significant impact	impacts to archaeological and paleontological resources during construction of new underground water or sewer lines. **MM-UTL-1**: Prior to issuance of a building permit for any future development project under the Master Plan that could result in an increase in wastewater generation, the County will coordinate with the city of Los Angeles Bureau of Sanitation to conduct further detailed gauging and evaluation to identify a specific sewer connection point with sufficient capacity. If the public sewer has insufficient capacity, then the County will be required to build a sewer line to a point in the sewer system with sufficient capacity. **MM-UTL-2**: In conjunction with preparation of a subsequent CEQA environmental document for any future individual development project under the Master Plan that is proposed in the year 2040 or beyond that is defined as a "water-demand project" in Section 15155 of the CEQA Guidelines, the County will request, pursuant to Section 15155, that the water provider determine whether the projected water demand associated with the project was included in the most recently adopted urban water management plan. If required pursuant to Section 15155 and SB 610, the County will request that LADWP prepare a water assessment for the proposed project. The County will determine, pursuant to Section 15155, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.	Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Potentially significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Master Plan facilities would increase the consumption of utilities. Future water supplies, based on a Water Supply Assessment prepared for the proposed project, are expected to be adequate and can accommodate future demand under the Master Plan. However, the increase in water supply consumption for projects that could be developed far into the future under Tier II of the Master Plan is not accounted for in the Urban Water Management Plan projections, which end in 2040. When future projects (i.e., Tier II development projects that would occur beyond the year 2040), are proposed and building plans are developed, LACDPW will be required to coordinate with the water provider, LADWP, to confirm that adequate water supplies exist to serve these future Master Plan projects. It is anticipated that the sewer system should be able to accommodate the total flow that would occur under the proposed project. However, if public sewer lines serving the campus have insufficient capacity, then the County will be required to build sewer lines to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit will be made at that time. If BOS determines that there is insufficient capacity in the local sewer lines that would serve an individual future project, then the impact would be considered to be significant. The amount of impervious cover would decrease and landscaped areas would increase as a result of proposed Master Plan improvements. As a result, new off-campus			

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
stormwater drainage facilities or expansion of existing facilities would not be required. Increased electricity, natural gas, and telecommunications due to the development and operation of proposed new Master Plan facilities is not expected to require new or expanded offsite electrical or natural gas infrastructure to meet the increased demand.			
Impact UTL-2: *Would the Proposed Project Have Sufficient Water Supplies Available to Serve the Proposed Project and Reasonably Foreseeable Future Development During Normal, Dry and Multiple Dry Years?* Construction under the proposed project would use water for various purposes; however, the incremental increase in water use would be temporary and not substantial, therefore existing water supplies would be sufficient. The potential increase in consumption due to development under the Master Plan would be consistent with the Los Angeles Department of Water and Power's Urban Water Management Plan (UWMP). However, UWMP projections end in 2040, while the Master Plan provides a framework for development beyond 2040. Therefore, water supply impacts for projects constructed beyond the year 2040 could be potentially significant. Accordingly, when future projects (i.e., Tier II development projects that would occur beyond the year 2040), are proposed and building plans are developed, LACDPW will be required to coordinate with the water provider, LADWP, to confirm that	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Potentially significant impact	See **MM-UTL-2**, above.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Potentially significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
adequate water supplies exist to serve these future Master Plan projects.			
Impact UTL-3: *Would the Proposed Project Result in a Determination by the Wastewater Treatment Provider that Serves or May Serve the Project that it Does Not Have Adequate Capacity to Serve the Project's Projected Demand in Addition to the Provider's Existing Commitments?* Construction would generate a minor incremental increase in wastewater flows to the city's wastewater system. The city of Los Angeles BOS has conducted a preliminary evaluation of potential impacts of the proposed project and concluded that the sewer system might be able to accommodate total flow of the proposed project, but that further detail gauging and evaluation may be needed as part of the permit process for individual projects to identify a specific sewer connection point. Operation of facilities proposed under the Master Plan would result in increased wastewater flows. All wastewater generated on the campus would ultimately be conveyed to the Hyperion Treatment Plant, which has sufficient capacity to accommodate the project as well as existing commitments.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Potentially significant impact Tier II–Potentially significant impact	See **MM-UTL-2**, above.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Impact UTL-4: *Would the Proposed Project 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?* Given demolition debris and solid waste generated by construction activities would	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u>	None required.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u>

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
be finite and limited to the construction periods, the proposed project would not generate waste in excess of state or local standards or in excess of capacity of local infrastructure. During Tier I operation of the proposed project, it is expected that the project site would be served by a landfill that has sufficient permitted capacity to accommodate the project's solid waste disposal needs. Since Tier II development would include those projects proposed far in the future, beyond the year 2035, it's not possible to determine whether landfills serving the project site would have sufficient remaining capacity that far in the future. Therefore, solid waste impacts for Tier II projects could be potentially significant.	Tier I–Less than significant impact Tier II–Potentially significant impact		Tier I–Less than significant Tier II–Potentially significant impact
Impact UTL-5: *Would the Proposed Project Comply with Federal, State, and Local Management and Reduction Statutes and Regulations Related to Solid Waste?* Development under the Olive View–UCLA Medical Center Master Plan would be subject to and comply with AB 939 and other solid waste regulations such as the Industrial Waste Control Ordinance of the Los Angeles Municipal Code, the city of Los Angeles Sewer Allocation (Ordinance No. 166060), and the California Solid Waste Reuse and Recycling Access Act, which governs building permits that oversee the transfer, receipt, storage, and loading of recyclable materials.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	None required.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Wildfire Hazards			
Impact WF-1: *Would the Proposed Project Substantially Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan?* Construction is not expected to result in any substantial traffic queuing or temporary or permanent closure of roadways that would interfere with emergency response or evacuation. However, during construction, emergency access to facilities within the campus could be temporarily affected. Temporary lane closures and construction related-traffic within the campus could delay or obstruct the movement of emergency vehicles. Operations would not result in structures or activities that would substantially obstruct or interfere with emergency vehicles or impair emergency response or evacuation plans.	<u>Construction</u> Tier I–Potentially significant Tier II–Potentially significant <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	**MM-PS-1**, described above under Public Services would be implemented	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Impact WF-2: *Would the Proposed Project due to Slope, Prevailing Winds, and Other Factors, Exacerbate Wildfire Risks of, and thereby Expose Project Occupants to, Pollutant Concentrations from a Wildfire or the Uncontrolled Spread of a Wildfire?* Construction equipment would require the use of flammable fuels and solvents and operation of construction equipment that could result in sparks, thereby increasing fire risks. However, implementation of best management practices during construction and adherence to County and City regulations and requirements would reduce potential risks.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	None required.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Under existing conditions, the project site includes many potential fire issues. However, implementation of the proposed Master Plan would result in conversion of existing ignitable fuels to maintained landscapes and would include new ignition-resistant development. In addition, construction would adhere to building codes and improve accessibility within the campus.			
Impact WF-3: *Would the Proposed Project 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 on the Environment.* Implementation of the proposed Master Plan would reduce the potential flammability of the existing campus landscape by converting existing undeveloped vacant spaces containing ignitable fuels to maintained landscapes and replacing older buildings with new buildings constructed to current codes. All development would be limited to the confines of the existing campus.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact	None required.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than significant impact Tier II–Less than significant impact
Impact WF-4: *Would the Proposed Project Expose People or Structures to Significant Risks, Including Downslope or Downstream Flooding or Landslides, as a Result of Runoff, Post-Fire Slope Instability, or Drainage Changes?* The proposed project would not substantially exacerbate or expose people to	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than	None required.	<u>Construction</u> Tier I–Less than significant impact Tier II–Less than significant impact <u>Operational</u> Tier I–Less than

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
significant new wildfire risks or hazards and could reduce the risk of on-campus fires by converting existing undeveloped vacant spaces containing ignitable fuels to maintained landscapes and replacing older buildings with new buildings constructed to current codes.	significant impact Tier II–Less than significant impact		significant impact Tier II–Less than significant impact
Source: ICF 2019.			

Chapter 1
Introduction

This draft environmental impact report (EIR) has been prepared by the County of Los Angeles (County) to assess the potential environmental impacts that could result from the implementation of the proposed Olive View–UCLA Medical Center Campus Master Plan project (proposed project or Master Plan) in Sylmar, California. The County is the lead agency for the proposed project, pursuant to the California Environmental Quality Act (CEQA).

For the purposes of this EIR, the development that could occur under the proposed Master Plan has been divided into two tiers, which are described in greater detail in Chapter 2, Project Description of this EIR. Tier I includes the more near-term development and campus improvements that could occur over the next 10 to 15 years or through the year 2035. Potential Tier I development includes a new Restorative Care Village that would consist of a Recuperative Care Center, Residential Treatment Program facility, Mental Health Urgent Care Center, and Mental Health Wellness Center; ambulatory care center; renovations to the existing hospital; community center; central utility expansion; materials management building; administrative services building; community open space and landscaping improvements;, and appurtenant parking facilities.

Tier II development under the proposed project could include the construction of a new inpatient hospital, research and development buildings, long-term care facility, supply services building, County department buildings, senior center, fitness center, child care center, retail space, parking facilities, and community open space and landscaping improvements. Tier II development and improvement projects are expected to occur much further in the future or beyond the year 2035.

Since Tier II components of the proposed project would likely occur far in the future, they're less well defined, and have therefore been discussed at a programmatic level in the EIR, as permitted under Section 15168 of state CEQA Guidelines. Once detailed future development plans for Tier II components are known, the individual projects will be examined, consistent with CEQA guidelines, in light of the program EIR analysis to determine whether additional environmental document(s) must be prepared.

As such, this EIR provides a dual-level analysis for the proposed project. A project-level analysis has been prepared for Tier I, and a program-level analysis has been conducted for Tier II.

1.1 Background

The Olive View–UCLA Medical Center was originally established as a tuberculosis sanitarium in 1920, and later converted to an acute care hospital in 1970. After suffering severe damage in the 1971 San Fernando Earthquake, also known as the Sylmar earthquake, the hospital was rebuilt and reopened in 1987. Changes in medical delivery, outpatient care, infrastructure demands, and community and patient expectations are some of the factors driving the need for a Master Plan.

The Olive View–UCLA Medical Center Campus, which serves the residents in the San Fernando, Santa Clarita, and Antelope valleys, is an acute care hospital that provides a full range of medical-surgical inpatient and outpatient services. It is currently the only County-sponsored hospital option

in the northern Los Angeles County region. The Master Plan addresses projected growth in the region that will place additional pressure on individual programs and the hospital as a whole.

The campus has experienced sporadic development since the 1900s, which is reflected in its fragmented appearance. The natural setting has been lost, and thus the Master Plan envisions the re-capture of nature in a design that incorporates the Angeles National Forest and the San Gabriel Mountains.

In January, 2014, the County began preparing the Olive View–UCLA Medical Center Campus Master Plan. One of the County's primary goals for the Master Plan is to redevelop the Olive View–UCLA Medical Center Campus to provide an integrated healthcare delivery model in the County's San Fernando Valley Cluster/Valley Care Area. The campus master planning focused on creating a more community-based and patient-centered campus that reclaims nature and provides opportunities for open space. The proposed Master Plan summarized the research, findings, observations, and proposals for master planning options at the Olive View–UCLA Medical Center Campus.

Five Master Plan options were developed during the planning process and were based on an evaluation of the existing site, understanding of proposed program development, input from stakeholders, contributions from community residents and businesses, and a vision for the site. The five options were presented at community outreach meetings, and a preferred Master Plan option was subsequently selected (see Chapter 2, *Project Description*, of this EIR for a description of the preferred Master Plan).

1.2 Overview of the CEQA EIR Process

The California Environmental Quality Act (CEQA) was adopted in 1970 so that the significant environmental effects of proposed actions would be disclosed to decision-makers and the public. CEQA applies to all discretionary activities proposed to be carried out or approved by California public agencies. Approval of the proposed project is a discretionary act by a public agency, in this case the Los Angeles County Board of Supervisors (Board), acting on behalf of the County of Los Angeles as the lead agency for the project. Therefore, compliance with CEQA is required.

An environmental impact report (EIR) is the informational document prepared in compliance with CEQA that describes the proposed project's significant environmental effects, measures to mitigate those effects, and alternatives for avoiding or minimizing the effects. The lead agency under CEQA for this EIR for the proposed Master Plan is the County of Los Angeles. The major steps that have been and will be taken by the County in preparing and processing the EIR in compliance with CEQA regulations are described below.

1.2.1 Notice of Preparation and Scoping Period

The County, in accordance with CEQA, prepared a Notice of Preparation (NOP), which was released to the public and filed with the State Clearinghouse (SCH No. 2016031090) in the Office of Planning and Research on March 28, 2016. The NOP provided notice to the public and public agencies that an EIR would be prepared, described the proposed project that would be evaluated in detail in the EIR, listed the probable environmental effects of the proposed project, and identified the date, time, and location for a scoping meeting, which was held on April 14, 2016, at the Olive View–UCLA Medical Center Campus.

The NOP was distributed to involved public agencies and interested parties for a 30-day public review period, which began on March 28, 2016, and ended on May 2, 2016.

A copy of the NOP is included in Appendix A of this EIR, along with comments provided by the public and public agencies in response to the NOP. Comments received in response to the NOP during the scoping period were considered in preparing this EIR.

1.2.2 EIR Public Review and Comment Period

This EIR is now being distributed to the public and interested or affected agencies for review. Release of the EIR to the public begins a 45-day comment period, extending from May 23rd, to July 8th, 2019. During that timeframe, members of the public and public agencies are asked to review the EIR and provide comments on the document, as well as the adequacy of the impact analyses.

The EIR can be reviewed on the County's website (ftp://dpwftp.co.la.ca.us/pub/pmd/OVMC/), and copies of the EIR have been made available for general public review at the following locations:

Olive View–UCLA Medical Center Hospital First Floor Room 1C-114 (Right side of Lobby Information Desk) 14445 Olive View Drive Sylmar, CA 91342 (747) 210-3001 Open 10 a.m. to 3 p.m. (Monday–Friday)	Sylmar Branch Library 14561 Polk Street Sylmar, CA 91342 (818) 367-6102 Open 10 a.m.–8 p.m. (Monday, Wednesday) 12 p.m. to 8 p.m. (Tuesday, Thursday), 9:30 a.m.–5:30 p.m. (Saturday, Sunday)	Los Angeles Mission College Library 13356 Eldridge Avenue Sylmar, CA 91342 (818) 364-7600 ext. 7105 Open 8 a.m. to 8 p.m. (Monday–Thursday); 10 a.m. to 2 p.m. (Saturday)	County of Los Angeles Public Information Office Room 358, Kenneth Hahn Hall of Administration 500 W. Temple Street Los Angeles 90012 (213) 974-1234 Open 8 a.m.–to 5p.m. (Monday–Friday)

Any individuals or parties can provide written comments on the EIR. Written comments on the EIR must be postmarked by Monday, July 8, 2019 and should be addressed to:

Hoda El Sokkary
Project Manager County of Los Angeles Department of Public Works
Senior Capital Projects Manager
900 S. Fremont Ave. Project Management Division 1, 5th Floor
Alhambra, CA 91803-1331
E-mail: OVMCEIR@dpw.lacounty.gov

Public notice of the availability of the EIR was provided in the following publications:

- *Los Angeles Daily News*
- *San Fernando Business Journal*
- *San Fernando Sun/El Sol*

1.2.3 Preparation of the Final EIR and Project Approval

Upon completion of the 45-day EIR public review period, a Final EIR will be prepared, which will include comments on the EIR received during the formal public review period, as well as written responses to those comments. The Final EIR will also contain corrections to the text of the EIR, if needed. This EIR and the Final EIR will make up the EIR for the proposed project.

If the decision-making body of the lead agency (here, the Board) approves the proposed project, CEQA requires the Board adopt findings with respect to each significant effect identified in the EIR (Public Resources Code Section 21081, state CEQA Guidelines Section 15091). For each significant effect, CEQA requires the approving agency to make one or more of the following findings:

- Changes or alterations have been required for, or incorporated into, the project that avoid or substantially lessen the significant environmental effect, as identified in the Final EIR.
- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

In the event that the County, as the lead agency, concludes that the proposed project would result in significant effects that would not be lessened substantially or avoided by feasible mitigation measures and alternatives, the County must adopt a statement of overriding considerations (Public Resources Code Section 21081, subd. (b); state CEQA Guidelines Section 15093). Under CEQA, such statements are intended to provide a written means by which the lead agency balances the benefits of the proposed project and any significant and unavoidable environmental impacts arising from its implementation. Where the lead agency concludes that the economic, legal, social, technological, or other benefits outweigh the unavoidable significant environmental impacts, the lead agency may find such impacts acceptable and approve the project. In addition, pursuant to Section 21081.6 of the Public Resources Code, public agencies, when approving a project, must also adopt a program for monitoring or reporting the changes that were incorporated into the project or made a condition of project approval, for mitigating or avoiding significant effects on the environment. The purpose of the monitoring and reporting program is to ensure mitigation measures and project revisions identified in the EIR are implemented. The program, which will be referred to as the Mitigation Monitoring and Reporting Plan (MMRP) for the proposed project, will be recommended for adoption by the Board at the time it considers its project approval.

1.3 About This EIR

1.3.1 Program EIR

This EIR for the proposed project is a program EIR. A program EIR is described in Section 15168 of the state CEQA Guidelines as an EIR that:

> "May be prepared on a series of actions that can be characterized as one large project and are related either geographically, as logical parts in the chain of contemplated actions, [or] in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program…"

Because the proposed project consists of a Master Plan with components that would be implemented over a period of years, the County determined that a program EIR would be the appropriate document for the proposed project. However, Tier I has been evaluated at a project level: additional environmental documents are not anticipated to be necessary under Tier I.

According to the state CEQA Guidelines, a program EIR can provide the following advantages:

- Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;
- Ensure consideration of cumulative impacts that may be slighted on a case-by-case basis;
- Avoid duplicative reconsideration of basic policy considerations;
- Allow the lead agency to consider broad policy alternatives and program-wide mitigation measures at an earlier time, when the agency has greater flexibility to deal with basic problems or cumulative impacts; and
- Allow a reduction in paperwork.

Subsequent activities (or projects) in the program or plan requiring further discretionary approvals would be examined in light of the program EIR to determine whether an additional environmental document should be prepared, as well as the appropriate format for the documentation. If the lead agency finds that the subsequent activity or project would not result in new effects or require new mitigation measures, the lead agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required. If an EIR is required for a subsequent activity, the subsequent EIR can focus solely on new effects that were not considered in the program EIR.

1.3.2 Organization and Content of This EIR

This EIR conforms to the content requirements of the state CEQA Guidelines. A list of the chapters and a brief description of their content is provided here to assist the reader in locating information.

Executive Summary: Provides a brief description of the proposed project, including an overview of the impact analysis, recommended mitigation measures, and net residual impact; summary information regarding the proposed project and key conclusions is also provided.

Chapter 1: Introduction: Provides a general orientation regarding the purpose of CEQA, as well as this EIR, and includes information on the CEQA EIR process.

Chapter 2. Project Description: Presents a statement of the proposed project objectives, a description of the location and setting for the project, a detailed description of the proposed project's components, and related information regarding implementation.

Chapter 3. CEQA Environmental Impact Analysis: Analyzes potential impacts under CEQA that could occur as the result of approval and implementation of the proposed project. The impact discussion is organized into 18 topical issues that have the potential to result in impacts on the environment. This chapter also addresses cumulative impacts from the project and related projects.

Chapter 4. Other Analysis Required by CEQA: Discusses other topics required by CEQA, including a listing of impacts found not to be significant, growth-inducing impacts, and irreversible changes that might occur as a result of the project.

Chapter 5. Alternatives Analysis: Discusses proposed alternatives to the proposed project and the comparative merits of each, in accordance with state CEQA Guidelines Section 15126.6. The chapter also discusses alternatives that were considered, but rejected as infeasible, and identifies the environmentally superior alternative.

Chapter 6. List of Preparers: Lists persons who contributed directly to the preparation of this EIR.

Chapter 7. References: Lists the sources of information that were referenced for the analyses contained within this EIR.

This EIR also includes a number of appendices, including copies of the Notice of Preparation (NOP), public responses to the NOP, and the technical analyses that were the basis for the evaluation of project impacts presented in Chapter 3, *CEQA Environmental Impact Assessment*, of this EIR.

Chapter 2
Project Description

2.1 Introduction

This chapter describes the proposed Olive View–UCLA Medical Center Campus Master Plan Project (proposed project). It includes a description of the project location and an overview of the existing environmental setting and discusses the project objectives, project elements, and construction schedule. A list of related projects is also provided.

2.2 Project Location and Environmental Setting Overview

The Olive View–UCLA Medical Center Campus is located at 14445 Olive View Drive on several parcels of land owned by the County of Los Angeles. The campus is located within the community of Sylmar, at the north end of the San Fernando Valley, in the city of Los Angeles, California. Specifically, the site is bounded by the Angeles National Forest and Wilson Canyon Debris Basin on the north, Olive View Drive on the south, Los Angeles County Flood Control District facilities and Wilson Canyon Park on the east, and Bucher Avenue to the west. Kennedy Road and Cobalt Street intersect the project site. The site is located east of the I-5 freeway and north of the I-210 freeway. Figure 2-1 depicts the regional location of the proposed project, and Figure 2-2 depicts the boundaries of the Master Plan.

2.2.1 Surrounding Land Uses

The 230-acre Olive View–UCLA Medical Center Campus abuts the foothills of the San Gabriel Mountains, which are a part of the Angeles National Forest. Horse trails and hiking trails run along the northern edge of the campus. Predominantly single-family residential neighborhoods are located approximately 200 feet east of the campus. A mix of single-family residences (including ranch-style homes with equestrian facilities), multifamily residences, and some commercial uses are located approximately 100 feet south of the campus across Olive View Drive. Residential uses are also located approximately 900 feet west of the campus, north of the I-210 freeway. Sylmar Leadership Academy (K–8), which is the closest school to the campus, is located approximately 0.4 miles south of the campus.

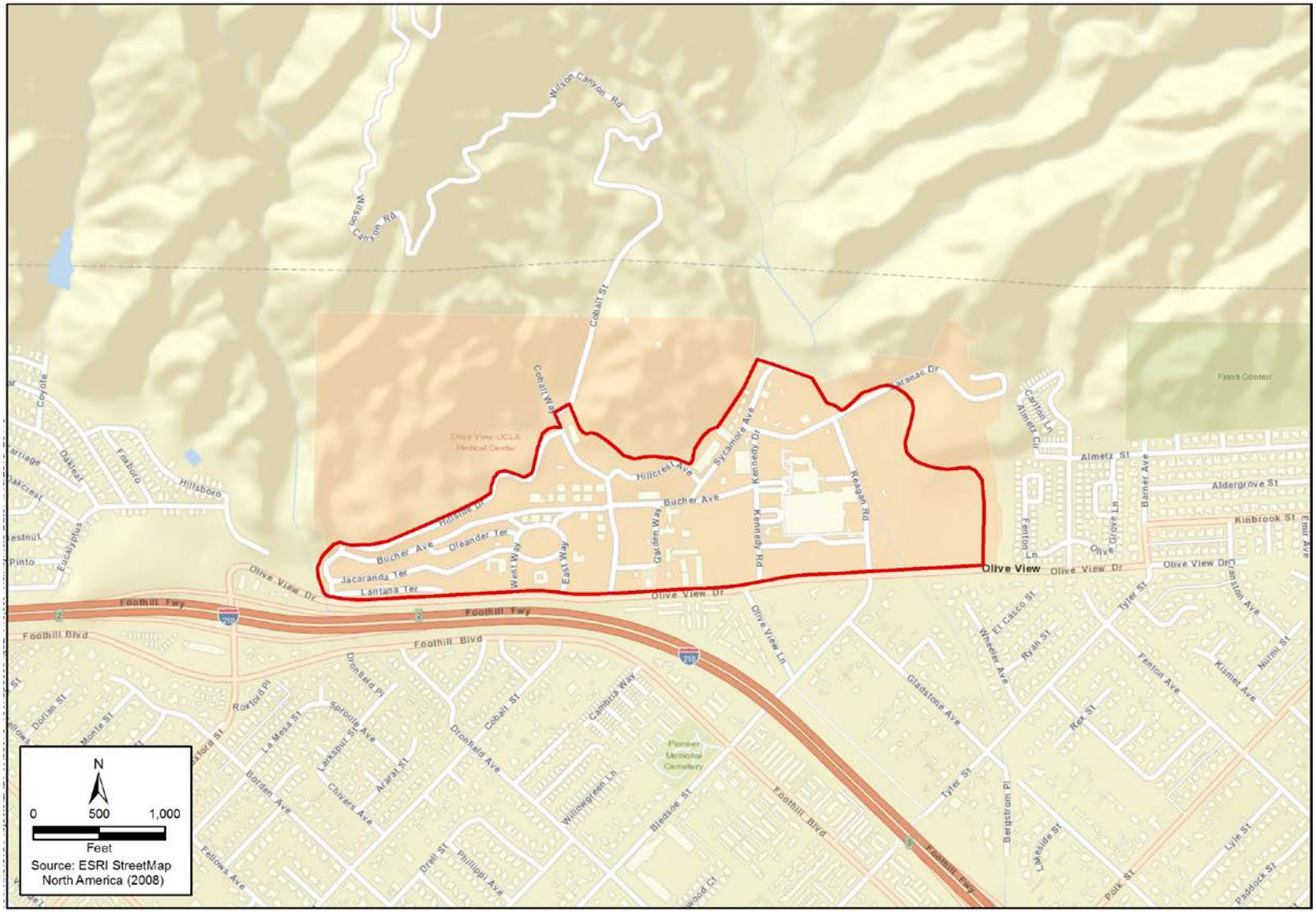
2.2.2 Existing General Plan and Zoning

The proposed site is located within the Sylmar Community Plan (Sylmar Plan) planning area; the Sylmar Plan is a part of the city of Los Angeles's Citywide General Plan (City General Plan). The properties that compose the Olive View–UCLA Medical Center Campus are zoned for public facilities (PF), with the portion that is Wilson Canyon Channel zoned for open space (OS) by the city of Los Angeles; however, it should be noted that the County is immune from the city's zoning regulations and requirements under sovereign immunity. The areas to the west and east of the campus are designated for single-family uses.

Figure 2-1. Regional Location Map

Source: ICF International 2016.

Figure 2-2. Project Vicinity Map



Source: ICF International 2016.

2.3 Overview of Existing Campus Facilities

The Olive View–UCLA Medical Center, which is the largest public facility in Sylmar, was historically established as a tuberculosis sanitarium in October 1920, and was later converted to an acute care hospital in 1970. The San Fernando Earthquake of 1971, also known as the Sylmar Earthquake, damaged the hospital beyond repair, prompting the construction of the current hospital in the 1980s. In 1992, the medical center incorporated UCLA into its name, representing the collaboration with the David Geffen School of Medicine at UCLA. In 2008, the Sayre fire damaged more than 40 buildings on the campus, including the child care center, which was destroyed.

The campus currently consists of 31 permanent buildings and 29 trailers and other modular structures. The buildings range in age from 5 to 80 years, and therefore exhibit a wide range of architectural styles. The oldest buildings, particularly the bungalows on the north side of the campus, have been repurposed for campus support uses. The modular structures and trailers, which provide office space and additional storage, are scattered throughout the campus. Most of the buildings on the campus were identified by the Master Plan as candidates for eventual demolition. The exception is the existing hospital, which would remain; if a new hospital is built, the existing hospital would be repurposed.

Completed in 1987, the hospital is the dominant structure on the campus. Its main six-story tower, located in the eastern third of the campus, houses inpatient and outpatient services. Emergency services, which are provided 24 hours a day, seven days a week, are housed directly north of the main tower; the imaging center is to the west. Directly attached to the emergency services building is the isolation unit, which serves as a regional treatment center for tuberculosis. These buildings are connected to facilitate functional collaboration between the related programs. This cluster of buildings is located east of Kennedy Road and is surrounded by surface parking lots.

Buildings west of Kennedy Road mostly house campus support, administration, storage, and materials management services. There are also various parking lots and trailers in the western portion of campus. A new child care center has been built on East Way and is licensed for 68 children. The community mental health building, constructed in 2011, is at the far west end of the site, adjacent to West Way. This one-story building serves as a psychiatric urgent care center.

As evidenced by the medical center's name, the Olive View–UCLA Medical Center is a major affiliate of the David Geffen School of Medicine at UCLA. The hospital operates post-graduate residency training programs in 22 medical specialties, sponsored either directly or by UCLA. The medical center also operates an on-campus School of Nursing.

2.4 Proposed Project

The proposed project is intended to guide development of the campus over a period of more than 20 years, including the expansion of health care delivery services and health related community programs. The Master Plan (see Appendix B for a copy of the draft 2015 Master Plan and the 2019 update) provides alternate paths for that development and flexibility to allow the Master Plan to adapt to changes over time. The Master Plan also includes an analysis and assessment of existing

campus infrastructure and buildings, future considerations and recommendations for the campus's land use, and a series of design criteria that guide building placement, form, and materials.

The purpose of this Environmental Impact Report (EIR) is to analyze impacts to the environment, in compliance with the requirements of the California Environmental Quality Act (CEQA), that could occur if the Master Plan is approved by the Los Angeles County Board of Supervisors (the Board) and the development and other campus improvements identified and envisioned in the Master Plan are constructed and operated in the future.

For the purposes of the EIR, two tiers of development have been defined and analyzed. Tier I entails near-term projects that are better defined and could be constructed subject to securing the necessary approvals and funding, as well as other subsequent development that could occur over the next 17 years, through the year 2035. Tier I development, which is described in greater detail below, could include the Restorative Care Village, which is composed of the Recuperative Care Center, Residential Treatment Program facility, Mental Health Wellness Center, and the new Mental Health Urgent Care Center, as well as the Ambulatory Care Center, Community Center, improvements to the existing hospital, new parking facilities, and other campus improvements that would be located predominantly in the eastern half of the current campus. Tier II development would occur beyond 2035 and could include the construction of a new inpatient hospital, Long-Term Care facility, support services building, retail space, County department buildings, and the renovation and reuse of the existing inpatient hospital for other purposes. If build-out of the campus occurs as envisioned under the Master Plan, the net increase in building square footage would be approximately 1.3 million square feet, which would occur throughout the campus.

The environmental impacts of Tier I development are analyzed in detail at a project level in Chapter 3 of this EIR; it is anticipated that no additional environmental documentation will be required, pursuant to CEQA, unless there are substantial changes as defined in Section 15162 of the CEQA Guidelines. Because Tier II projects are more speculative, due to the fact that they would occur much further in the future, and it is likely that the County's program needs will evolve and change over time, the environmental impacts of the Tier II development projects are analyzed at a programmatic level and are described qualitatively in Chapter 3 of this EIR. As a consequence, subsequent environmental documents may need to be prepared, in compliance with CEQA regulations, for individual Tier II projects when they are proposed and better defined.

2.4.1 Master Plan Objectives

The objectives of the proposed project, which are based on those identified in the Master Plan (see Appendix B) are to:

1. Provide for development opportunities that are consistent with the goals and policies of the County's General Plan.
2. Reorganize, expand, and integrate outpatient services with the specific goal of meeting the community's health needs, providing patient-centered care, and improving the operational throughput to meet increasing demands.
3. Locate inpatient and outpatient services into dedicated buildings to optimize the quality of care and improve operational effectiveness, while reducing administrative, operational, and maintenance costs.

4. Comply with the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983 (Senate Bill [SB] 1953) required by the Office of Statewide Health Planning and Development in order to ensure that the hospital can maintain its license as an inpatient care facility beyond the year 2030.
5. Identify feasible opportunities to exceed state energy requirements and pursue green building sustainable design to the maximum extent possible.
6. Develop resources that are consistent with the needs of the 2035 planning horizon.
7. Provide new medical facilities, including a new replacement hospital, to meet state standards and code requirements.
8. Provide integrated direct and coordinated care, including physical health, behavioral health, social, and other supportive services to the County's most vulnerable populations, such as those suffering from mental illness, addiction, or physical disabilities, in facilities located in a welcoming campus setting with green spaces to:
    a. ensure a seamless transition upon discharge to home or other housing options, and help patients avoid cycling in and out of emergency interventions and establish a sustainable functional life;
    b. reduce morbidity and costs, while restoring function and dignity; and
    c. improve the quality of life for the people and communities of Los Angeles County.

    ○

2.4.2 Elements of the Master Plan

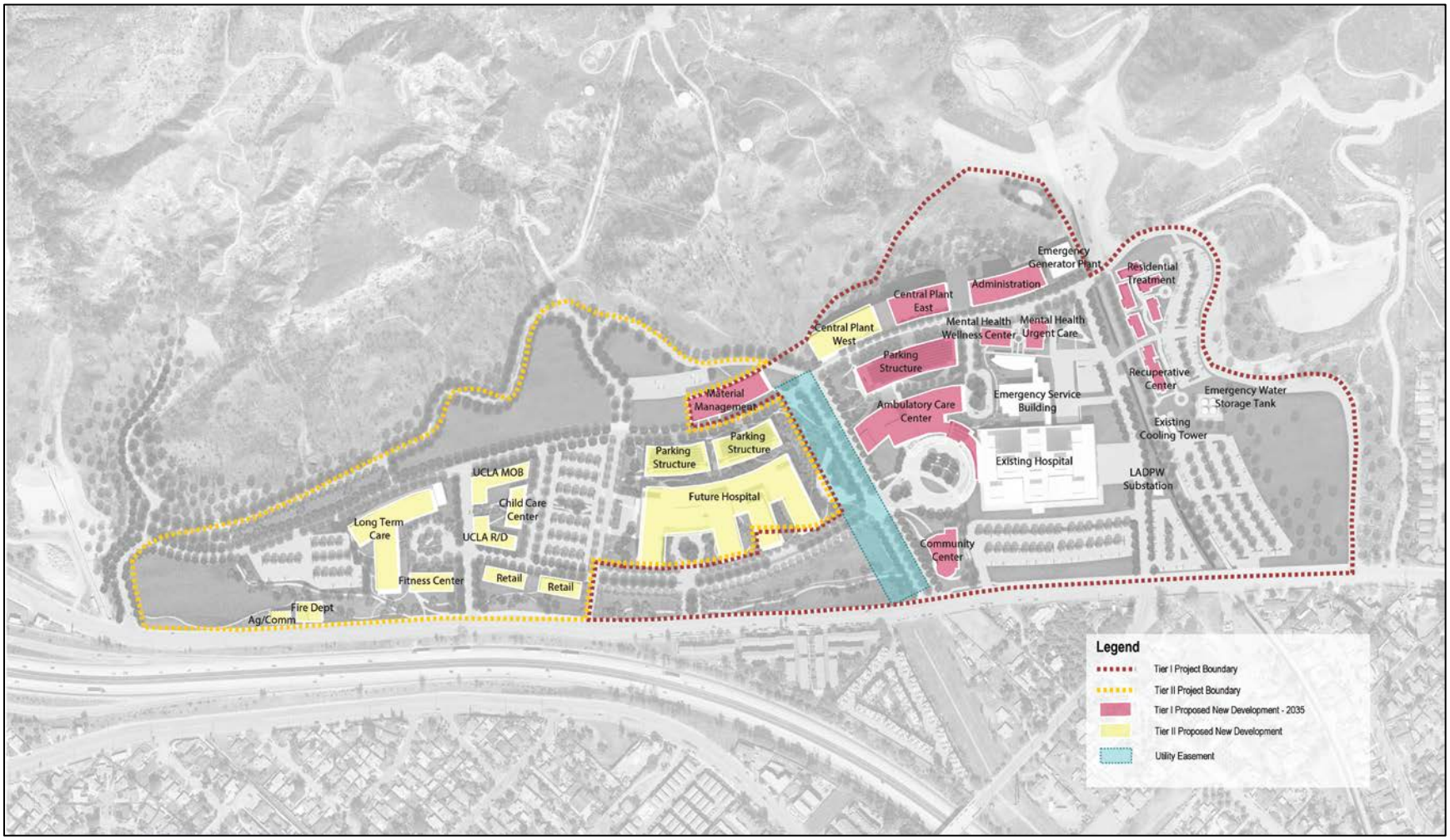
As identified above, for the purposes of this EIR, development under the Master Plan is described as occurring in two tiers, Tier I and Tier II. The primary elements of the Master Plan that could occur under each of the development tiers are described below. Figures 2-3 and 2-4 present an illustrative vision or concept of the campus upon completion of Tier I and Tier II development and improvement projects. Table 2-1 provides a summary of proposed Master Plan land uses.

2.4.2.1 Tier I Development

Restorative Care Village

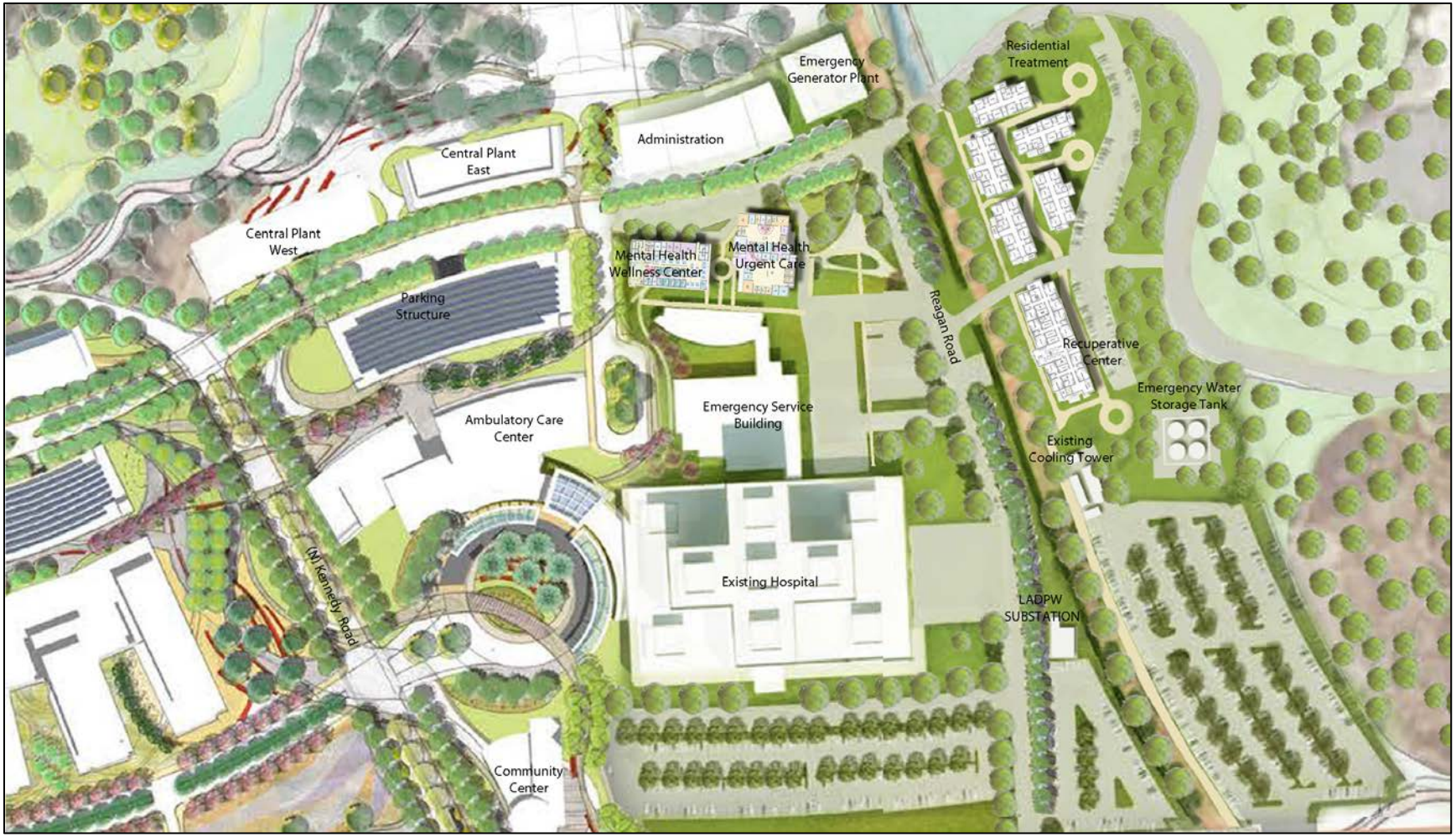
The Restorative Care Village (see Figure 2-4) would be constructed under Tier I on mostly undeveloped lots located north and east of the existing emergency services and main hospital buildings. The Restorative Care Village would be composed of the Recuperative Care Center, Residential Treatment Program (RTP) facility, Mental Health Wellness Center, and the new Mental Health Urgent Care Center. Each of the facilities would be built within close proximity to one another and would collectively provide a continuum of care for clients. A description of each facility, based on preliminary conceptual plans that may be further refined, as well as each of their anticipated activities, is provided below. Development of Restorative Care Village facilities would also include new landscaping, utility improvements (water, sewer, electrical, etc., lines necessary to serve the facilities), and surface parking lots.

Figure 2-3. Master Plan Site Plan – Tier I and Tier II Development



Source: Perkins Eastman 2019; SmithGroup JJR 2016.

Figure 2-4. Restorative Care Village Site Plan



Source: Perkins Eastman 2019.

Table 2-1. Summary of Proposed Master Plan Land Uses

Building Program	Existing	Tier I (2035) Proposed Demolition	Tier I (2035) Proposed New Development	Tier II (beyond 2035) Proposed Demolition	Tier II (beyond 2035) Proposed New Development
Recuperative Care Center	–	–	16,356	–	–
Residential Treatment Program facility	–	–	47,035	–	–
Mental Health Urgent Care Center	–	–	10,000	–	–
Mental Health Wellness Center	–	–	10,000	–	–
Ambulatory Care Center	–	–	296,000	–	–
Inpatient hospital	534,300	4,300	–	–	600,000
Community Center	9,300[1]	–	20,000	9,300	20,000[3]
Central Utility Plant East Central Utility Plant West	51,000	51,000	77,000	–	77,000
Materials Management/ Supply Services	32,500	32,500	68,100	–	–
Administration[2]	108,000	52,300	96,000	55,700	–
Support services buildings	16,800	16,800	–	–	–
Research and development	–	–	–	–	120,000
Long-Term Care facility	–	–	–	–	135,000
Retail	–	–	–	–	40,000
Mental health	11,000	–	–	11,000	–
Storage trailers (vacant during survey)	61,000	–	–	61,000	–
Total Building Square Feet	**823,900**	**156,900**	**640,491**	**137,000**	**992,000**

Parking Facilities	Existing	Tier I	Tier I + II
Surface stalls	2,672	1,369	1,400
Stalls in structure	0	674	1,584
Surface square footage	1,256,000	643,400	658,000

Notes:
[1] Existing, recently built child care center.
[2] Administration square footage to be demolished includes finance building and bungalow square footage.
[3] Includes new child care center, fitness center, and senior center.
Source: ICF, Walker Consultants, County of Los Angeles 2019; SmithGroup JJR 2016.

Recuperative Care Center

Under Tier I, the two-story, 16,356-square-foot Recuperative Care Center would be constructed just north of the hospital cooling towers and Lot G (see Figure 2-4). The center would provide short-term care for individuals recovering from an acute illness or injury who no longer require inpatient hospital care. Recuperative care offers an environment for individuals to further recuperate and heal, which helps free up hospital inpatient acute care resources. Services would include medical monitoring, meals, case management, access to supportive housing for those that need it, and

transportation. The facility clients could stay up to 3 months, with an anticipated average length of stay of 30 to 45 days. The proposed facility would provide 48 beds in 24 bedrooms, shared space for clients and staff, staff rooms, a reception area, and facility support spaces.

Residential Treatment Program Facility

The RTP facility would provide ongoing inpatient mental health care to patients in need, until they are able to recover and become self-sufficient. Care coordination and discharge planning from dedicated support staff would help ensure seamless transition of care to their home or other housing options. RTP services are designed to resolve the immediate crisis and improve the functioning level of the individuals to allow them to return to less intensive community living. Stays at County RTP facilities are voluntary and generally do not exceed 30 days.

The proposed RTP facility on the Olive View–UCLA Medical Center Campus would consist of five two-story, 9,407-square-foot buildings (47,035 square feet total). Each 9,407-square-foot building would contain a maximum of 16 beds, a total of 80 beds in 40 rooms (2 beds per room), for the entire facility. In addition, each building would provide shared space for clients and staff, staff rooms, a nurse's office, and support space. The RTP facility would be located immediately north of the proposed recuperative care center (see Figure 2-4).

Mental Health Urgent Care Center

The Mental Health Urgent Care Center, which currently exists on the campus, would be relocated closer to the hospital to enhance access to 24/7 mental health services. The continued focus is to stabilize patients and provide them with a discharge plan that would include housing and ongoing care coordination/case management. The center would serve as an intermediary level of service between psychiatric emergency rooms, psychiatric hospitals, and the network of community mental health providers.

The center would occupy a proposed new one-story, 10,000-square-foot structure. The main components of the facility would include rooms for patients and group therapy and nurse stations. The facility would include a 16-bed stabilization unit (capable of providing involuntary psychiatric services for up to 23 hours). In addition, the facility would include a reception area, waiting room, restrooms, and other amenities.

The Mental Health Urgent Care Center would be located near the eastern end of the campus, within an existing parking lot, immediately north of the existing emergency services building, and adjacent to the proposed Mental Health Wellness Center facility. Figure 2-4 depicts the approximate footprint and location of the center. The existing mental health urgent care center on the west end of the campus would be reused for other purposes once the new center is constructed.

Mental Health Wellness Center

The Mental Health Wellness Center would provide patients with an array of outpatient mental health and supportive services. The proposed facility would be a one-story, 10,000-square-foot structure. The main components of the facility would include rooms for patients, staff, and conferences. In addition, the facility would include a reception area, waiting room, restrooms, and other amenities.

The proposed Mental Health Wellness Center would be located near the eastern end of the campus, within an existing parking lot, immediately north of the existing emergency services building, and

adjacent to the proposed Mental Health Urgent Care Center. Figure 2-4 depicts the approximate footprint and location of the facility.

Ambulatory Care Center

Upgrading outpatient services has been identified as one of the top priorities and objectives for the campus. As a consequence, the new Ambulatory Care Center is proposed to accommodate the increased demand for outpatient services up to the 2035 planning horizon. Services provided in the proposed new 296,000-square-foot facility, which would be located east of Kennedy Road (see Figure 2-3), would range from primary care practice to outpatient surgery. Construction of the center will allow for the vacating of an estimated 71,500 square feet of space in the existing hospital, which would be reused for inpatient service improvements.

Inpatient Services (Existing Hospital)

Once the ambulatory care center is completed, improvements to inpatient services within the existing hospital would begin under Tier I. One of the main objectives for inpatient services is the complete renovation of the existing 534,300-square-foot hospital building or construction of a new building by the deadline to meet non-structural performance category (NPC) 4D and 5[1] rating requirements by January 1, 2030. Under the proposed Master Plan, the existing hospital building would be dedicated to inpatient services. Four options (described below and numbered 1 through 4) have been proposed for inpatient renovation, ranging from minimal renovation (under Tier I) to complete replacement (see discussion Tier II discussion below).

1. Minimal renovation would include the renovation of areas identified for SB1953 NPC 4D and 5 compliance upgrades and would maintain the existing semi-private/private bed accommodations in the current hospital.
2. Partial renovation would involve selectively identifying areas to renovate in addition to pending upgrade to SB1953 NPC 4D and 5 compliance, prioritizing areas found to be operationally or space constrained, reusing available space with minimal intervention, and potentially using the space as an "empty chair."
3. Complete renovation would involve renovating the entire existing hospital to house updated inpatient services, which would include taking advantage of all the areas made available by the decanting of outpatient services, providing a higher standard of care with private rooms, and investing capital into extending the useful life of the existing building.
4. Complete replacement (see Tier II discussion below).

[1] In terms of NPC ratings, Olive View has performed the renovation and upgrade work to meet the criteria to comply with NPC 2 and 3 requirements. NPC 4D is a new performance category that will allow hospitals to explore the possibilities of upgrading some current SPC-1 and SPC-2 buildings to a new performance level that is not as rigorous as the current requirement to upgrade to SPC-5. to meet NPC 5 criteria, onsite supplies of water and holding tanks for sewage and liquid waste, sufficient to support 72 hours of emergency operations integrated into the building plumbing system, onsite electrical emergency system incorporated into the building electrical system for critical care areas, and radiological service and an onsite fuel supply for 72 hours of acute care operation, must all be provided by January 1, 2030 (see Appendix B, *Master Plan*, of this EIR).

Community Center

Under Tier I, development of the Community Center is proposed, which would be approximately 20,000 square feet in size and located along Olive View Drive, south of the Ambulatory Care Center (see Figure 2-3).

Central Utility Expansion

Additional infrastructure would be provided to support future development proposed under the Master Plan. The existing central plant does not have sufficient capacity to support long-term planned growth on the campus. The existing plant houses the gas turbine generators, heat recovery systems, chillers, heat exchangers, steam generators, fuel-oil systems, compressors, reverse osmosis units, distribution pumps, and miscellaneous equipment.

Under the Master Plan, two central utility plants would be built: Central Utility Plant East (under Tier I of the Master Plan) and Central Utility Plant West (under Tier II of the Master Plan). These two utility plants would allow for an increase in central plant capacity and additional space to support the central plant equipment required for full buildout of the Master Plan. Under Tier I, Central Utility Plant East, which would be approximately 77,000 square feet and would be located north of the existing hospital (Figure 2-4), would be constructed. Once Central Utility Plant East is completed under Tier I, the existing central utility plant would be demolished.

Materials Management/Supply Services Building

The 68,100-square-foot Materials Management/Supply Services Building is proposed under Tier I to consolidate related functions to increase efficiency and promote sustainable practices on the campus. The building would contain offices, maintenance shops, and storage facilities and would be located northwest of the new hospital and co-located with a new Central Utility Plant East and Central Utility Plant West to potentially share a large delivery truck tarmac and dock facilities (see Figure 2-3). Linen, food, and pharmacy supplies would be delivered to this building and then stored or sent out to other locations on campus. A loading dock, which will allow for trucks to easily load and unload campus supplies, would include hydraulic dock levelers, roll-up dock doors, dock bumpers, dock lights, and truck restraints. The building would also contain a waste management center for general (solid) waste and regulated medical waste (RMW, sometimes referred to as biomedical or red bag waste). Major equipment anticipated at the waste management center would consist of an RMW sterilization system, general waste and RMW self-contained compactor/container unit, recycled waste self-contained compactor/container unit, and cardboard waste self-contained compactor/container unit.

Administrative Services

Most current administrative services are housed in the existing hospital, with the remainder dispersed at locations throughout the campus. The Master Plan proposes to consolidate and right size the fragmented administrative program into a single building to reduce operational and maintenance costs and maximize operational effectiveness. The proposed 96,000-square-foot administrative building, which would allow for growth and flexibility in the future, would be located directly north of the existing hospital (Figure 2-4). Financial services, employee health, environmental health and safety, and other clerical services would be accommodated within this building.

Community Open Space and Landscaping

The landscaping improvements under the Master Plan would integrate the natural setting of the campus into its design. Proposed landscaping designs will take sustainability and water conservation, resiliency to fire and flood, and viability into account. Plantings and landscaping would also be provided to help easily identify building entrances and assist in wayfinding, as well as provide shade and hierarchy throughout the site. Outdoor healing gardens, courtyard gardens, and gathering spaces would be developed. Landscaping would also be used to create screens and buffers for parking areas, storage areas, trash and recycle enclosures, and to provide separation between uses or activities. Proper lighting in surrounding trails and campus would facilitate wayfinding throughout the project site.

Planting guidelines propose using plant palettes of California native species, and plants that help reduce water consumption, maintenance, and hardscape repair costs. Plantings would be appropriate to the micro climate and function of the space in which they are developed. Tree canopies would be used to create different outdoor spaces, with thought given to color, mature growth characteristics, and spacing.

Landscaping improvements under Tier I, which could include riparian and wildflower gardens and other vegetation, would be concentrated along Olive View Drive to improve the appearance of the campus as viewed from the neighborhoods from the south and to improve wayfinding for motorists traveling from the freeway along Olive View Drive to the main hospital (Figure 2-5).

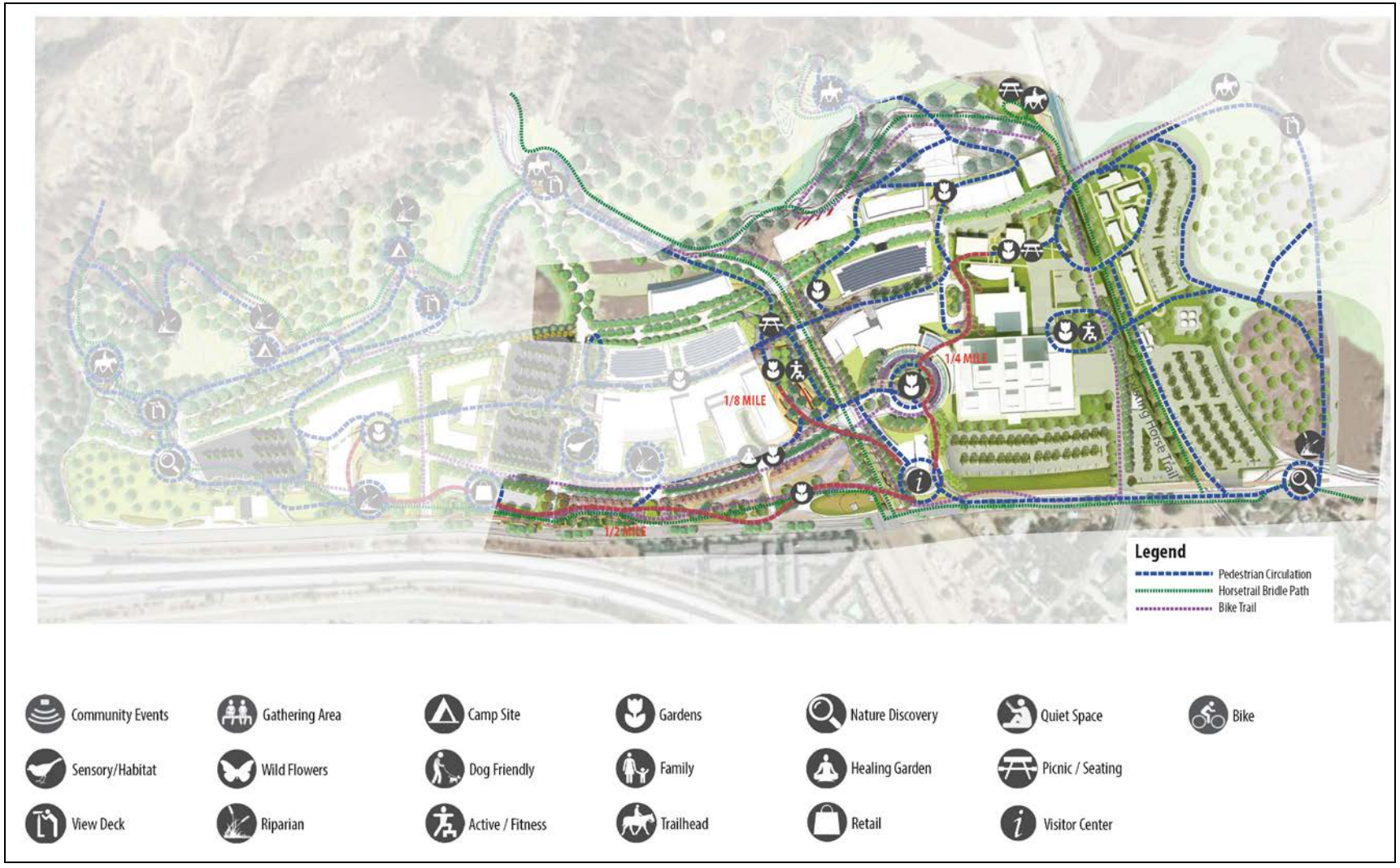
Proposed pedestrian, equestrian, and bike paths would be provided along Olive View Drive under Tier I and would be ultimately incorporated throughout the campus (under Tier II) (Figure 2-6). Each path would have a separate, distinguished lane to ensure safety by avoiding conflicts between the users. The intent of these Wellness Trails is to bring community and patients closer to nature, while providing transitions between vehicular traffic and hospital facilities that are safer and more convenient to move throughout the campus.

The Master Plan also proposes spaces for therapeutic significance, to provide play or relaxation, rest and respite, conversation, and seating areas (Figure 2-7). Courtyards would be provided that are specific, welcoming, and accommodating to children, families, the elderly, and individuals with mobility and medical needs. Multiple healing gardens, including a shared community garden area, a fitness and therapy area, and sculpture garden are proposed in the Master Plan (Figure 2-7). A green amphitheater (Figure 2-8) located in the circular drop-off adjacent to the ambulatory care center and existing hospital would be created for community engagement, along with habitat education areas, and community garden areas.

Figure 2-5. Tier I Landscaping Plan

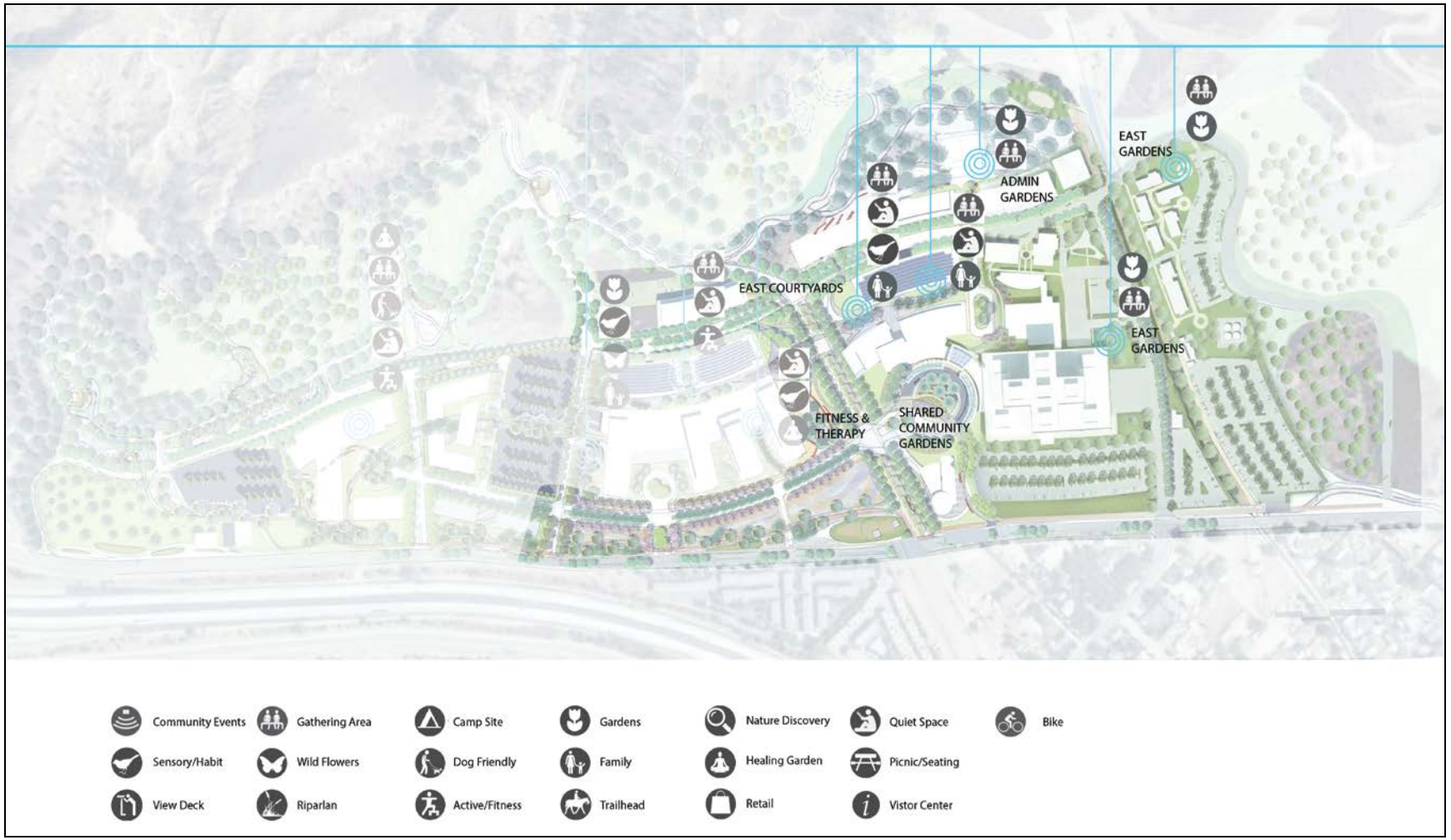
Source: Perkins Eastman 2019; SmithGroup JJR 2016.

Figure 2-6. Tier I Wellness Trails



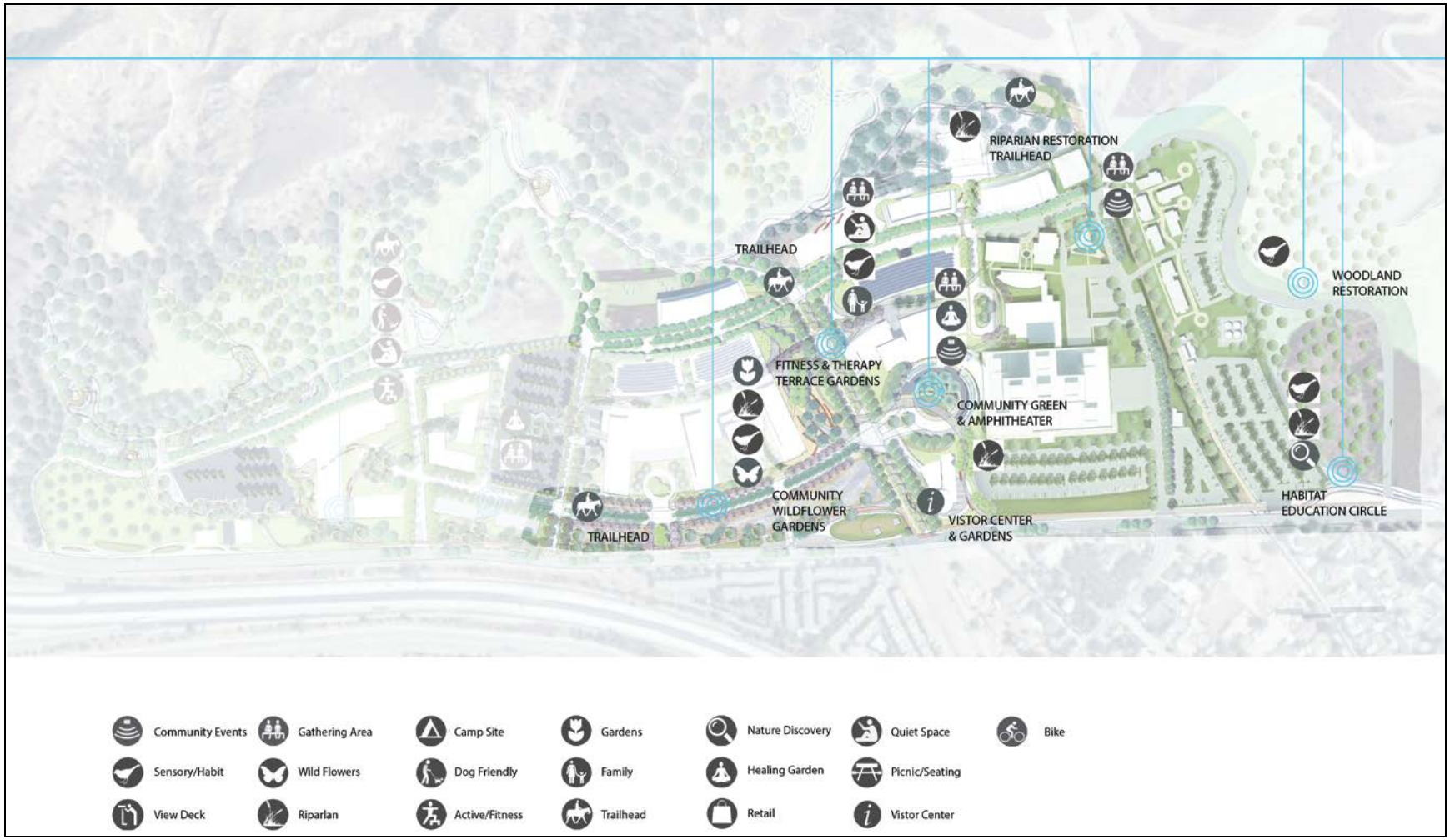
Source: Perkins Eastman 2019; SmithGroup JJR 2016.

Figure 2-7. Tier I Healing Gardens



Source: Perkins Eastman 2019; SmithGroup JJR 2016.

Figure 2-8. Tier I Community Open Space, Recreation, and Restoration



Source: Perkins Eastman 2019; SmithGroup JJR 2016.

Parking, Vehicle Circulation, and Pedestrian Circulation

The Master Plan includes the improvement of parking and vehicle circulation at the Olive View–UCLA Medical Center Campus. New parking structures and surface lots are proposed, as well as drop-offs at each main building entry to help reduce walking distances. Drop off areas would be located at each of the major buildings on the campus with the intent of being immediately visible upon entering the campus. Additionally, each zone of the campus would have a dedicated entry spot from Olive View Drive, which would be supplemented by clear signage and landmarks. Emergency vehicles would be provided a direct route to the emergency department.

Under Tier I, 674 spaces would be housed within a new parking facility north of the Ambulatory Care Center. An additional 1,369 parking spaces in surface lots would remain on campus under Tier I (see Table 2-1).

The existing campus is difficult for pedestrians to navigate; thus the Master Plan includes improvements to walking distances throughout campus. Various walking, biking, and equestrian paths would be developed to make the campus more inviting and easily traversed.

Utility Infrastructure

Development of the Master Plan would require new or upgraded sewer, water, storm drains, and telecommunication infrastructure. Approximately 500,000 square feet of utility improvements would occur under Tier I. For further information regarding utility infrastructure improvements that would occur under the Master Plan, see Appendix 04*, Engineering Systems,* of the Olive View–UCLA Medical Center Campus Master Plan document.

2.4.2.2 Tier II Development

Tier II consists of development that could occur beyond 2035 under the Master Plan. Because this development would occur much further in the future, the County's program needs will likely evolve and change over time. Therefore, the environmental impacts of the Tier II projects are analyzed at a programmatic level and are qualitatively described in Chapter 3 of this EIR. It is anticipated that subsequent environmental documents may need to be prepared, in compliance with CEQA regulations, for individual Tier II projects when they are proposed and better defined. Additionally, future maintenance activities including repairs and upgrades would be addressed separate from and outside the scope of this EIR.

Inpatient Services (Future Hospital)

Tier II development could include a new hospital to house inpatient services. The new hospital would be approximately 600,000 square feet and located centrally on the project site. The replacement hospital would create an opportunity to integrate inpatient and outpatient care, minimize operational costs and downtime, improve operational performance, and create a state-of-the-art facility to serve the community. Upon completion of the new hospital, the existing hospital would be renovated and reused for other purposes. For the purposes of the analysis in this EIR, it has been assumed that a new future inpatient hospital would have the same number of beds as the existing hospital.

UCLA Faculty Offices and Medical Office Building, Educational Facilities, and Research Facilities

The Master Plan proposes the continuation of the on-campus relationship between the Olive View Medical Center and UCLA. Under Tier II, proposed development to accommodate the David Geffen School of Medicine at UCLA post graduate residency training programs and needs could include buildings for faculty and medical offices, educational facilities, and research facilities, which would be located to the west of the future hospital and child care center (Figure 2-3). The two research and development buildings that could be constructed under Tier II would total approximately 120,000 square feet.

Senior, Fitness, and Child Care Centers

The Master Plan would provide facilities in response to community requests that would serve and support the shifting population age in the area surrounding the Olive View–UCLA Medical Center Campus. These facilities could include a new child care center and fitness center in the western portion of campus. It also allows flexibility in the areas identified as zoning for community buildings, including areas in the proximity of the fitness center, to support future community development. This may include space for mental health day care/classes for Alzheimer's and stroke residents, a senior center with table tennis, gym, cafeteria, lounge, and game room, or a community building (gym, indoor walking or running tracks, saltwater swimming pool, game room for younger kids). The Master Plan also suggests facilities contain cool rooms for the community to use during heat waves.

Long-Term Care

Under Tier II of the Master Plan, the Long-Term Care facility could be constructed, which would provide skilled nursing care and supportive care to patients whose primary need is for availability of such services. The care would include, at a minimum, physician, nursing, pharmaceutical services, and an activity program. The building would be a maximum of three stories and could contain approximately 135,000 square feet of space.

Retail Space

Under Tier II, the Master Plan has proposed 40,000 square feet of retail space along Olive View Drive to benefit the staff and community.

Community Open Space and Landscaping

Tier II would further develop wellness-oriented, community, and recreation space located throughout the campus. Pedestrian, bicycle, and equestrian trails would be extended throughout to create fluid and complete circulation. Riparian zones along wellness trails in the northern area of campus would allow for the restoration of ecological communities, while providing the community with access to a wilderness experience. Tier II also includes a proposed campus art program to incorporate art or playful design elements using large-scale games, bocce courts, and functional art pieces that would be integrated into the landscape. These open spaces would serve to further connect the hospital with the community. Multiple gardens, including a bird and butterfly garden, meditation garden, healing garden, garden courtyard, and retail courtyards are proposed in the Master Plan under Tier II.

Parking, Vehicle Circulation and Pedestrian Circulation

Under Tier II, two additional parking structures would be constructed north of the future hospital, each housing 437 parking spaces. An additional 1,400 spaces would remain in surface lots on campus.

County Fire Department, Agricultural Commissioner, and Sheriff's Buildings

Relocation of the County Fire Department (currently used for office and hazardous materials operations), the Agricultural Commissioner, and the Sheriff's buildings would be required as part of the long-term development of the campus. Relocation of each will require further program analysis and development before location and size can be determined. For the purposes of the EIR, the locations of these buildings are assumed to be along Olive View Drive, at the far west end of the campus. Development would occur under Tier II.

2.4.2.3 Proposed Design Guidelines

The Olive View–UCLA Medical Center Master Plan campus design guidelines provide a framework to unify the campus fabric.

Architectural Design Guidelines

The Master Plan envisions architecture that reclaims the natural setting and scale of the campus and the surrounding region. A composition of gardens, buildings, and outdoor rooms is intended to transform the medical center campus into a healing campus. The architecture would work in collaboration with landscape design by emphasizing forms that shape outdoor space to enhance the pedestrian experience and circulation patterns on campus. Under the design guidelines, no building, except for the existing and future hospitals, should exceed four stories, and no building should exceed 100 feet in height. Building facades should be broken down into base, middle, and top components to provide a scale that is appealing and approachable for pedestrians. Main entrances should be clearly defined to enhance wayfinding. Consistent exterior cladding throughout the campus should complement the natural landscape and create a sense of unity and continuity. Buildings should also utilize orientation as the best passive means for controlling energy usage. Sun shades and the type of glass used should be considered to control sun exposure.

Landscape Design Guidelines

Landscaping will follow the Tier 1 guidelines described above under Community Open Space and Landscaping.

Lighting Design Guidelines

The proposed Master Plan includes lighting guidelines and goals that address safety and comfort, sustainability, lamp/luminaires, lighting levels, maintenance, lighting controls, and product requirements. The overall goal of the lighting guidelines for the Olive View–UCLA Medical Center Campus is to create a unified experience as one travels through the campus. Lighting would help to establish zones and campus identity and assist in wayfinding, especially at night. Light would also be utilized to create areas of visual hierarchy and interest. Light levels would be developed based on the illuminance criteria set forth in the Illuminating Engineering Society of America (IENSA)

Lighting Handbook, 10th Edition (2011), and will incorporate best practices found in the applicable Illuminating Engineers Society (IES) Recommended Practice (RP) manuals.

Signage Design Guidelines

The Master Plan includes guidelines for exterior signage on the campus. The intent of this program is to identify the site, buildings, and parking facilities and to provide directional information to patients, visitors, and staff. The sign guidelines describe the family of sign types and outline the intent of each sign. The goal is to have a sign program that works with the landscape and hardscape elements and helps create a seamless and intuitive experience for the visitor. In accordance with the signage design guidelines, signs would be located logically and within the line of sight, and be easy to understand. Additional directional signs would be located at all key decisions points, yet over-signing will be avoided.

2.5 Construction Scenario

Construction of campus buildings, facilities, and open space and infrastructure improvements under the Master Plan would occur over a number of years and could continue beyond the year 2035.

The precise timing for most of the individual project elements over this timeframe is not known, as they are dependent on securing necessary funding, among other factors.

2.5.1 Tier I Construction

The initial Tier I projects, to be developed and constructed within the next two years, are the Restorative Care Village facilities. Other Tier I projects would be constructed as funds become available and approvals are obtained in subsequent years; consequently their schedules have not yet been determined.

Staging areas for construction activities will be determined by the construction contractors in consultation with County staff but would likely be located on vacant parcels or existing parking lots on the campus, in the immediate vicinity of the construction sites.

2.5.2 Tier II Construction

Tier II development includes those buildings, structures, and other campus improvements that are expected to be constructed beyond 2035 and could include the construction of a replacement inpatient hospital and the development of the western portion of campus. To meet projected future parking demand, two new parking structures would be built north of the new hospital. Other Tier II facilities, as described above in Section 2.4.2.1, include new research and development buildings, and a second new central utility plants. Retail building space is also proposed, but can be developed at any phase when deemed appropriate by the campus. New County buildings for the Departments of Agriculture and Commerce, Fire (office space), and Sherriff may also be constructed. The current Fire department offices, old lab, trailers, nursing building, fitness center, warehouse, child care center, vivarium, police department, community mental health, and administration buildings would be demolished. Given that these projects would likely be developed far in the future, they are contingent upon securing necessary funding, and as the fact the County's needs are likely to evolve over time, the schedules for the Tier II projects are not yet known.

2.6 Project Approvals and Intended Uses of the EIR

Implementation of the proposed project would include the following discretionary actions and permits, but not be limited to the following approvals:

State of California

- Regional Water Quality Control Board–National Pollutant Discharge Elimination System (NPDES) Construction General Permit
- California Office of Statewide Health Planning and Development

is County of Los Angeles

- Approval of Master Plan
- Certification of the Final EIR
- Project approval
- Funding approval
- Applicable building and safety permits, including, but not limited, to grading, excavation, and building

Others

- Approval of permits for temporary construction activities associated with off-site infrastructure and/or traffic system improvements within other jurisdictions (if such improvements are ultimately necessary), including the city of Los Angeles
- Haul Route Permit
- South Coast Air Quality Management District (SCAQMD) Air Quality Permit

2.7 Related Projects

A list of related projects has been developed. All projects that are proposed (i.e., with pending applications), recently approved, under construction, or reasonably foreseeable that could produce a cumulative impact on the local environment when, considered in combination with the proposed project, are included in an EIR. These projects can include, if necessary, projects outside of the control of the lead agency. Section 15130 of the State CEQA Guidelines stipulates that EIRs must consider the significant environmental effects of a proposed project as well as *cumulative* impacts, defined as impacts created as a result of the project evaluated in the EIR combined with the impacts of other projects, thereby causing related impacts (State CEQA Guidelines Section 15355). As stated in the State CEQA Guidelines, Section 15130(a)(1), the cumulative impacts discussion in an EIR need not discuss impacts that do not result in part from the project evaluated in the EIR. Cumulative impacts may be analyzed by considering past, present, and probable future projects with related or cumulative impacts (State CEQA Guidelines Section 15130(b)(1)(A)).

In this Draft EIR, cumulative impact analyses are provided for each environmental issue discussed in Chapter 3, *CEQA Environmental Impact Assessment*, of this EIR. The study areas for the cumulative impact analyses vary by impact. These can be found in each respective subsection (e.g., Air Quality,

Transportation, and Traffic, etc.). Table 2-2, Related Projects, and Table 2-3, Related Projects on the Olive View–UCLA Medical Center Campus, list the related projects that were considered in the cumulative impact analyses. The locations of the Table 2-2 related projects are depicted in Figure 2-9, Related Projects Map.

Table 2-2. Related Projects in the Vicinity of the Olive View – UCLA Medical Center Campus

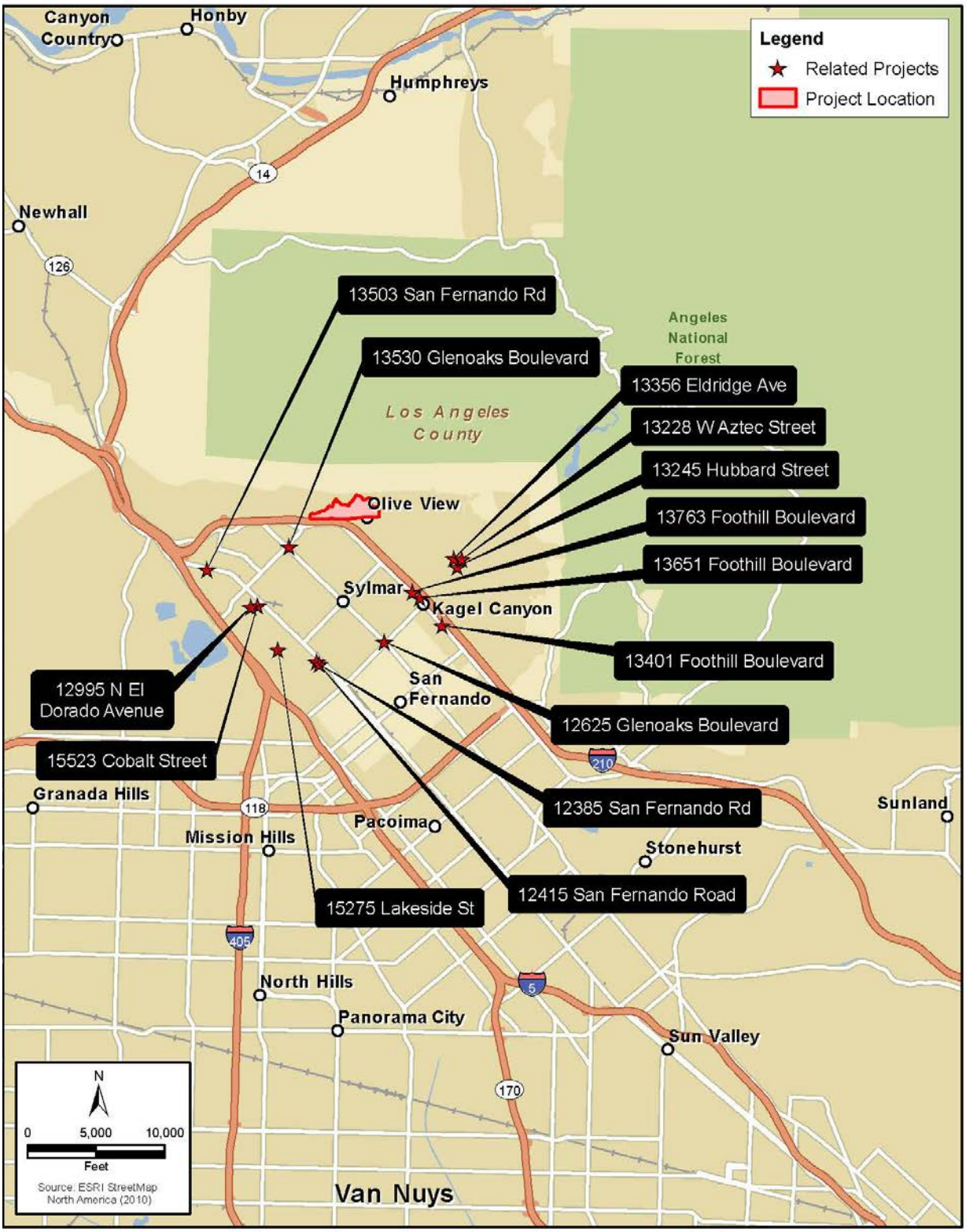
Map Ref. No.	Status	Project Title	Project Type Project Description/Scope	Environmental Document and Permits	Project Location/Limit
1	Design / planning phase	Sylmar Industrial Project	Industrial, 225.000 KSF Recreation facility, 9.9 acres		13503 San Fernando Rd.
2	Design phase	Lakeside Park	Park, size N/A	N/A—in design phase	15275 Lakeside St.
3			Retail, 7.486 KSF		13530 Glenoaks Blvd.
4	Project approved/ pre-construction	Sylmar Court	Senior housing, 150 units medical office, 25,000 KSF	Mitigated Negative Declaration	12415 San Fernando Rd.
5	Design/planning phase		Condominiums, 246 units Single family home, 1 unit Shopping center, 9.000 KSF General office, 0.900 KSF Auto care center, 2.000 KSF	Mitigated Negative Declaration	12385 San Fernando Rd.
6	Project approved/ pre-construction		Gas station, 5 fueling positions	Mitigated Negative Declaration, Conditional Use	12625 Glenoaks Blvd.
7	Constructed	Starbucks	Coffee with drive thru, 2.240 KSF Specialty retail, 7.000 KSF	Mitigated Negative Declaration, Conditional Use	13651 Foothill Blvd.
8	Project approved/ pre-construction		Condominiums, 250 units	Mitigated Negative Declaration	13401 Foothill Blvd.
9	Elements of the Master Plan in construction	Los Angeles Mission College Master Plan	College, size N/A	LAMC Master Plan EIR (2009), 2014 Facility Master Plan Update & EIR Addendum	13356 Eldridge Ave.
10	Design/planning phase		High school, 500 students	Mitigated Negative Declaration, Planning and Land Use Management Committee Report	13245 Hubbard St.
11	Design/planning phase		Fast food, 4.150 KSF		13763 Foothill Blvd.
12			Single family residences, 12 units		1523 W Cobalt St.
13			Single family residences, 3 units		13228 W Aztec St.
14			Single family residences, 3 units		12995 N El Dorado Ave.

Note: KSF = thousand square feet
Source: ICF: Fehr & Peers 2019.

Table 2-3. Related Projects on the Olive View–UCLA Medical Center Campus

Project Title	Project Type; Project Description/Scope
General Radiology and Angiography/Interventional Radiology Suite renovation	The General Radiology Rooms 18 and 19, and Angiography/Interventional Radiology Suite renovation are the second phase of the overall radiology program to replace and update the radiology equipment throughout the County. General Radiation Room 18 and 19 project consists of the renovation of an existing radiology room to receive the upgraded "General Radiation" radiology equipment. The Angiography/Interventional Radiology Suite project consists of the renovation of an existing radiology room to receive the upgraded Interventional Radiology equipment.
Agriculture Commission Trailer	The Agriculture Commission Trailer project will provide new office space for 18 employees and a new garage and carport for equipment storage.
Women and Children's Medical Clinic Modular Building	The Women and Children's Medical Clinic project will provide a licensed outpatient women and children's medical clinic to serve approximately 5,000 women and children in the community.
Fire Alarm and Nurse Call Systems Upgrade	Replacement of the fire alarm and nurse-call systems throughout the hospital to meet current code and licensing requirements. The project will include upgrades to both low voltage and line voltage systems at the hospital.
Emergency Power Upgrade	Project to purchase and install a new stand by 2000kW/2500kVA emergency generator. This generator will augment the existing (2) generators currently in operation at the hospital. This generator was previously planned and has a pad and connectivity available.
GI Upgrade	Remodel the existing GI department to create a third GI Procedure room. The remodel will also provide a space for pre-and post-operative care for about (6) patients, nurses station, waiting room, GI clinic, and support spaces.
SB1953 Compliance	The project will bring the hospital into compliance with all NPC ratings: NPC-3, NPC-4D, and NPC-5, under the jurisdictional agency review. The proposed project will certify the hospital as NPC-3 and NPC-4D. It will also include refurbishing an existing water storage tank and retrofit the existing sewer system with a holding tank for sewage and liquid waste to support 72 hours of emergency operations to meet the NPC-5 rating.
Source: ICF, County of Los Angeles, 2019.	

Figure 2-9. Related Projects Map



Source: ICF 2019.

Chapter 3
Environmental Analysis

This chapter describes the existing environmental conditions in the project area, the thresholds used to determine the significance of potential impacts, the construction and operational impacts that could occur due to the projected level of development under the Master Plan, measures to mitigate impacts that are identified as significant, and potential cumulative impacts. The thresholds that have been identified to determine the significance of project impacts are generally based on the environmental checklist questions in Appendix G of the State CEQA Guidelines. Where agencies that have jurisdiction over resources that could be affected by the proposed project have established specific quantifiable thresholds, those thresholds have been used to determine the significance of project impacts. The initial study attached to the notice of preparation (NOP) (see Appendix A of this EIR) and public responses to the NOP were used to identify those impacts requiring further analysis in this chapter. Please see Chapter 4 of this Draft EIR for a list of environmental categories where no impacts would occur, and therefore no further analysis was required.

3.1 Aesthetics

3.1.1 Introduction

This section describes the potential of the proposed Olive View–UCLA Medical Center Campus Master Plan project to affect aesthetics and visual resources within the project's visual setting.

The Olive View–UCLA Medical Center Campus is located at 14445 Olive View Drive on several parcels of land owned by the County of Los Angeles. The campus is located within the community of Sylmar, at the north end of the San Fernando Valley, in the city of Los Angeles, California. Because the viewshed for evaluating aesthetics extends beyond the Olive View–UCLA campus and includes areas within the adjoining neighborhood that fall under city of Los Angeles jurisdiction, the Regulatory Setting includes both County and city of Los Angeles aesthetics-related policies.

3.1.2 Regulatory Setting

3.1.2.1 Federal

There are no federal regulations pertaining to aesthetics and visual resources that are applicable to the proposed project.

3.1.2.2 State

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires an evaluation of scenic resources when considering project effects on the environment. Such evaluations consider site-specific history, context, and area sensitivity, such as whether light and glare, demolition, and new development could potentially change visual character, affecting scenic views and natural and manmade visual resources.

California Scenic Highways Program

The California Department of Transportation (Caltrans) established and implemented the California Scenic Highway Program to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment (Streets and Highways Code, Section 260 et seq.).

Caltrans defines a State Scenic Highway as any freeway, highway, road, and other public right-of-way that "traverses an area of outstanding scenic quality, containing striking views, flora, geology, and other unique natural attributes" (Caltrans 2008).

Once a highway has been designated a state or national scenic highway or corridor, special consideration must be made whenever a project proposes to develop the surrounding area.

No officially designated state scenic highways have been identified in the vicinity of the project site. The closest such route is SR-2 (Angeles Crest Highway) in the city of Azusa, approximately 16 miles to the southeast of the project site (Caltrans, 2016). However, I-210 is located approximately 300

feet south of the existing campus and is identified as an Eligible State Scenic Highway–Not Officially Designated.

3.1.2.3 Local

Los Angeles County General Plan

The current Los Angeles County 2035 General Plan provides the policy framework for how and where unincorporated areas will grow, and establishes goals, policies, and programs to protect neighborhood character and promote aesthetically pleasing, sustainable development. Although the project site is owned by the County, it is located within the city of Los Angeles. The city's regulations and guidelines are discussed below.

Chapter 9 of the General Plan, *Conservation and Natural Resources Element*, guides the long-term conservation of natural resources and preservation of available open space areas. The Element addresses the preservation of valuable designated scenic areas, vistas, and roadways. Goal 13 of the Element aims to protect visual and scenic resources. The following policies related to scenic resource protection and hillside management are included under Goal 13:

- **Policy C/NR 13.1**: Protect scenic resources through land use regulations that mitigate development impacts.
- **Policy C/NR 13.2**: Protect ridgelines from incompatible development that diminishes their scenic value.
- **Policy C/NR 13.3**: Reduce light trespass, light pollution, and other threats to scenic resources.
- **Policy C/NR 13.4**: Encourage developments to be designed to create a consistent visual relationship with the natural terrain and vegetation.
- **Policy C/NR 13.5**: Encourage required grading to be compatible with the existing terrain.
- **Policy C/NR 13.6**: Prohibit outdoor advertising and billboards along scenic routes, corridors, waterways, and other scenic areas.
- **Policy C/NR 13.7**: Encourage the incorporation of roadside rest stops, vista points, and interpretive displays into projects in scenic areas.
- **Policy C/NR 13.8**: Manage development in hillside management areas to protect their natural and scenic character and minimize risks from natural hazards, such as fire, flood, erosion, and landslides.
- **Policy C/NR 13.9**: Consider the following in the design of a project that is located within a hillside management area, to the greatest extent feasible:
    - Public safety and the protection of hillside resources through the application of safety and conservation design standards;
    - Maintenance of large contiguous open areas that limit exposure to landslide, liquefaction, and fire hazards and protect natural features, such as significant ridgelines, watercourses, and seas.
- **Policy C/NR 13.10**: To identify significant ridgelines, the following criteria must be considered:

- Topographic complexity;
- Uniqueness of character and location;
- Presence of cultural or historical landmarks;
- Visual dominance on the skyline or viewshed, such as a ridgeline's height and elevation; and
- Environmental significance to natural ecosystems, parks, and trail systems.

The Land Use Element is another element of the General Plan that includes policies or guidelines, such as community design standards that are relevant to a discussion of aesthetic impacts. As described in the Land Use Element, successful community design standards build upon the characteristics of both the natural and manmade environments that are unique to each community. Examples of community design elements include consistent landscaping for streets or uniform signage that designates a special district within a community in an urbanized setting, large minimum lot sizes, standards to minimize the visual impact of man-made structures on the rural landscape, and design standards for equestrian trails in a rural setting. The General Plan provides general community design policies that are intended to help create a sense of place and uniqueness within the diverse communities of the unincorporated areas.

Los Angeles Municipal Code

The Los Angeles Municipal Code (LAMC) sets forth regulations and standards regarding the allowable type, density, height, and design of new development projects. In particular, Chapter 1 of the LAMC, *General Provisions and Zoning*, provides development standards for the various zoning districts in the city of Los Angeles. In addition, the LAMC also sets forth the following specific regulation regarding lighting: "Chapter 1, Article 2, Section 12.21 General Provisions, paragraph A, Section 5, Part (k) restricts light spill onto adjacent properties and provides minimum luminance levels for safety within and around parking facilities."

As part of the LAMC, the city of Los Angeles Planning and Zoning Code includes standards for different land uses and identifies which land uses are allowed in various zoning districts. The project site has a city of Los Angeles zoning designation of Public Facilities (PF) (City of Los Angeles 2017). The PF zoning district allows public health facilities, including clinics and hospitals. PF-1 zoning does not have restrictions regarding the heights of buildings or any specific front-, side-, or rear-yard setbacks.

City of Los Angeles Walkability Checklist

The 2008 Walkability Checklist for Entitlement Review was developed by the City Planning Department's Urban Design Studio to encourage city planning staff, project proponents, and community stakeholders to pursue high quality urban design that provides enhanced pedestrian movement, access, comfort, and safety, both in the public right-of-way and on private properties. It specifies urban design guidelines that are generally applicable to all projects requiring discretionary approval for new construction. The Walkability Checklist consists of objectives, goals, and implementation strategies regarding various design elements that are intended to improve the pedestrian environment, protect neighborhood character, and promote high quality urban form. Such topics as sidewalks, crosswalks/street crossings, on-street parking, utilities, building orientation, off-street parking and driveways, onsite landscaping, building façades, and building signage and lighting are addressed and should be considered in the design of a project.

City of Los Angeles General Plan

The city of Los Angeles General Plan is a comprehensive, long-range declaration of purposes, policies, and programs for the development of the city of Los Angeles.

The Transportation Element of the city's general plan (1998) provides a list of scenic highways and streets. I-210 is listed as a designated scenic highway, which, as mentioned above, is approximately 300 feet south of the existing campus (Los Angeles General Plan Transportation Element). Views of the project site are limited from I-210. Sightlines to the crests of the foothills of the San Gabriel Mountains are somewhat available, depending upon the position and angle of the viewer, although, due to the grading (which creates an elevation difference where the freeway roadbed is approximately 15 feet below Olive View Drive), existing vegetation, and residences long south Olive View Drive, visual elements on the existing campus are much more difficult to detect.

The City's general plan is composed of a series of 35 community plans that provide more specific development policy guidance for each community. The Sylmar Community Plan (Sylmar Plan) governs physical development policy in the project area.

Sylmar Community Plan

The Sylmar Plan area is a unique semi-rural suburban community situated at the foothills of the San Gabriel Mountains. In the northeast corner of the San Fernando Valley, this 12-square-mile community is located at the northern border of the city of Los Angeles, approximately 28 miles north of downtown Los Angeles. Sylmar is a stable, semi-rural bedroom community at the edge of the city that is home to nearly 80,000 residents and the few remaining equestrian communities in the city. It is a working class community with many multi-generational families, a variety of residential neighborhoods, a mix of commercial uses and services, a thriving light industrial economy, and many natural, cultural, and civic amenities and resources. The general purpose of the plan is to preserve and enhance the character of Sylmar by strengthening the viability and identity of its neighborhoods and communities and improving the quality of life for all its residents (City of Los Angeles 2012). In addition, the Sylmar Plan also sets forth the following specific regulations related to aesthetic and visual quality:

- **LU13.2. Height Limits**. Design new commercial structures to be compatible in height with surrounding residential neighborhoods.
- **M7.2. Development**. Require development, including signs, adjacent to a scenic highway to protect public views of scenic vistas to the maximum extent feasible; be adequately landscaped to soften the visual impact of the development, restrict height, and establish design controls in order to maintain the integrity of scenic highways within Sylmar.

Citywide General Plan Framework Element

The 2009 Los Angeles General Plan Framework provides a series of policies, objectives, and goals addressing urban design topics throughout the city of Los Angeles. As it relates to the evaluation of aesthetics and views, the Framework's *Urban Form and Neighborhood Design* chapter establishes a goal of creating a livable city for existing and future residents with interconnected, diverse neighborhoods (Goal 5A). Also within the General Plan Framework, the *Open Space and Conservation* chapter calls for the use of open space to enhance community and neighborhood character (Objective 6.2). The policies in this chapter recognize that there are communities where open space and recreational resources are currently in short supply and, therefore, suggest that pedestrian-

oriented streets and small parks, where feasible, might serve as important resources for meeting the open space and recreation needs of residents (Policy 6.2.1).

Applicable objectives from the *Urban Form and Neighborhood Design* and *Open Space and Conservation* chapters address such issues as pedestrian activity and orientation, transitions in building height, landscaping and landscape buffers, ground floor uses, sidewalks and other streetscape elements, and open space.

3.1.3 Environmental Setting

3.1.3.1 Overview of the Project Area

Project Area

The Olive View–UCLA Medical Center Campus is located in the community of Sylmar, within the Los Angeles basin and the Peninsular Ranges Geomorphic Province, a geomorphic unit that extends through Los Angeles, south to the tip of Baja California. A product of largely flat to gently southeast sloping alluvial deposits, the basin is bounded by the San Gabriel Mountains and Elysian Hills on the north and northeast, Repetto Hills to the immediate south, and, in Orange County, the Santa Ana Mountains and San Joaquin Hills to the far southeast and south, respectively.

Within this overall geomorphic setting, the immediate project area occupies a range of relatively flat to rolling and hilly terrain ranging, on the south edge of the campus, from approximately 1,432 feet above mean sea level (msl), to approximately 1,553 feet above msl on the northeast near the Wilson Canyon Debris Basin. Immediately north of the campus, the San Gabriel Mountains rise abruptly to an elevation of approximately 4,000 above msl and provide a prominent visual backdrop to the campus. Due to this topographic variation, views of portions of the campus can be acquired from various vantage points in Sylmar, particularly those at higher elevations from hiking trails and lookout points within the San Gabriel Mountains/Angeles National Forest trail system. Similarly, the campus offers a number of vantages, at higher elevations and from the upper stories of the taller buildings, from which dramatic, informal (i.e., not officially recognized), offsite views are also possible, such as north-facing views of the hillsides of the San Gabriel Mountains.

Physical development within the project area has been shaped by its proximity to the Angeles National Forest/San Gabriel Mountains and by its general location within the larger Los Angeles basin. The community of Sylmar initially developed as an agricultural outgrowth of the city of San Fernando, with quality soil, an underground water supply, and a year-round warm climate that supports olive and citrus trees. Sylmar has grown significantly since its olive growing days and is now a semi-rural bedroom community that includes a variety of residential neighborhoods, including a number of homes that contain equestrian facilities, a mix of commercial uses and services, a light industrial economy, and natural, cultural, and civic amenities and resources.

The medical center campus uses occur within a semi-rural, partially developed setting transected by the Foothill Freeway (I-210), which is just south of Olive View Drive, and runs east/west until it banks southeast at Bledsoe Street in Sylmar. The I-210 has a partially below-grade (depressed) configuration, which, at its closest point, is approximately 150 feet south of the southern perimeter of the existing Olive View–UCLA Medical Center Campus.

The closest (non-campus) residential uses are on south Olive View Drive. These primarily single-family residential units are approximately 75 feet south of the campus and abut the I-210 on their

south side. Views of the existing campus can be had from these residences. Other nearby residences occur in more developed single- and multifamily residential neighborhoods south and east of campus, where views to the Olive View–UCLA Medical Center Campus are less available. Depending upon the position and angle of the viewer, the San Gabriel Mountains and existing main hospital tower form the most prominent visual elements north of the I-210.

The Campus

The Olive View–UCLA Medical Center Campus, located at the northern edge of Sylmar at the base of the San Gabriel Mountains, was historically established as a tuberculosis sanitarium in October 1920 and was later converted to an acute care hospital in 1970. The San Fernando Earthquake of 1971 (also known as the Sylmar Earthquake) damaged the hospital beyond repair, prompting the construction of the current hospital in the 1980s.

The existing six-story hospital building is the dominant visual presence on the campus. One- and two-story support buildings and parking lots are located in the surrounding areas and are dispersed throughout the campus. The 31 permanent buildings and 29 trailers on the campus exhibit a wide range of architectural styles and include single-story wood trailers that date back to the 1920s. The six-story hospital building, which houses inpatient and outpatient services, is located in the eastern third of the campus. As described in the Master Plan, the hospital tower is clad with .25-inch tempered vision glass with reflective solar cool bronze on all exterior façades from the third floor to the sixth floor. The first and second floor façades consists of ribbed concrete on all sides. Emergency services is housed directly north of the main tower, and the imaging center is to the west. Located north of the Main Hospital are various bungalows and trailers utilized primarily for administrative and hospital support functions; the Community Mental Health Urgent Care Center building is located at the far west end of the campus. The modular structures and trailers that are scattered throughout the campus provide additional space and storage needs for the medical center.

Landscaping on the campus does not have a prominent role in defining the its visual character. Generally, the landscaping lacks an overall cohesiveness and clarity, largely due to the random arrangement of buildings, variety of architectural styles, and expansive portions of the campus that have been consumed by surface parking lots developed over the years to serve the growing employee and visitor populations. Except for several mature pines along Olive View Drive and Kennedy Road, there are not many significant tree canopies at the site. Dominant tree species that remain include eucalyptus, pines, and coast live oaks. Trees damaged by the 2008 Sayre fire are still present in some areas of the campus near Wilson Canyon at Saranac Lane and along the west at Hillside Drive. Several stands of olive trees are evident at the northern edge of the Edison easement and a small group of Mexican fan palm trees have been randomly placed midway along Bucher Avenue at Sycamore Avenue. Ground vegetation is almost non-existent, except at the northern portion of the Edison easement and at two areas maintained or protected by part of the building:the turf area west of the education center and the small turf area west of the existing emergency wing of the hospital building. There is a small area of chaparral vegetation at the bottoms of slopes along the north edge of the campus and where areas have been left undisturbed for quite some time.

Photos 1 through 14B on the following pages (Section 3.1.3.3, *Visual Character and Quality*, of this EIR) illustrate the visual setting and key viewsheds within the campus and the immediate project area. buildings west of Kennedy Road house mostly campus support, administration, storage, and materials management services. There are also various parking lots and trailers in the western portion of campus. A new child care center (Photo 11) has been built on East Way and is licensed for

82 children. The Community Mental Health building (Photos 13A and 13B), constructed in 2011, is at the far west end of the site, adjacent to West Way. As discussed, this one-story building serves as a mental health urgent care center. Overall, because of topographical changes and the sporadic development, the design setting is marked by abrupt changes in design character and land uses as the viewer looks across the viewshed (i.e., all the surface areas visible from an observer's viewpoint). There is a visual divide between campus built features and landscape components, which create disjointed and unique viewsheds throughout the grounds, upon the position and angle of the viewer.

3.1.3.2 Scenic Vistas

A scenic viewshed provides a scenic vista from a given location, such as a highway, a park, a hiking trail, river/waterway, or even from a particular neighborhood. The boundaries of a viewshed are defined by the field of view to the nearest ridgeline. Scenic viewsheds vary by location and community and can include ridgelines, unique rock outcroppings, waterfalls, ocean views, or various other unusual or scenic landforms.

No officially designated scenic vistas were identified in the immediate project vicinity, although dramatic, informal (i.e., not officially recognized) views of the San Gabriel Mountains are present from locations throughout the immediate project area and from various vantage points within the campus, particularly those from the upper stories of the taller campus buildings, including the existing hospital. The mountain ridgelines and hillsides, with gray-green colored chaparral and/or modest woodland and grassland vegetation, provide a vivid backdrop element to the campus when viewed from nearby land uses to the south, including residential uses.

While views to these ridgelines provide scenic relief for those on/near campus and at lower elevations, views from trails in the Angeles National Forest and on the San Gabriel Mountains also provide scenic viewsheds in the immediate project area.

3.1.3.3 Scenic Resources

According to Appendix G of the State CEQA Guidelines, scenic resources could include, but are not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. Scenic resources could also include natural vegetation other than trees, manmade landscaping, aesthetically noteworthy structures, large public artworks, and unique or topographically interesting landforms. Generally, scenic resources in the project area consist of designated scenic highways and routes/corridors (i.e., the Foothill Freeway/I-210), hillsides, and ridgelines, such as the San Gabriel Mountains, Verdugo Hills, Santa Susana Mountains, Simi Hills, Santa Monica Mountains, and Puente Hills. On-campus scenic resources are limited. Prominent visual elements within the medical center campus include the existing hospital building, a limited number of mature trees, and sightlines to the San Gabriel Mountains and ridgelines. although these are the more prominent on-campus visual elements, due to their overall lack of cohesion and/or contribution to a viewshed of substantially high visual quality, they are not considered to be scenic resources for this analysis.

3.1.3.4 Visual Character and Quality

To describe the visual character of the campus and immediate project area, 23 representative views were identified (see Figure 3.1-1, below, for the locations of these views). In describing these views

and viewsheds, consideration was given to characteristics such as land use, topography, scale, form, and color present in the views.

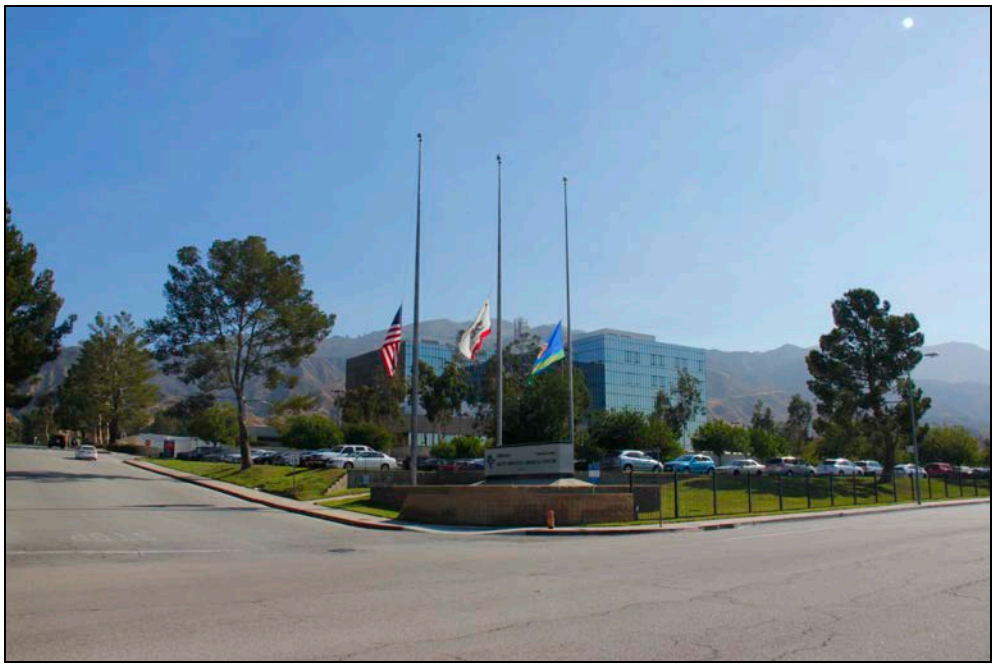
The assessments of visual quality used in the following section is based on guidelines outlined in the Federal Highway Administration publication, *Visual Impact Assessment for Highway Projects* (1981). Although these guidelines were initially crafted to provide an analytical framework for transportation projects by identifying and assessing the qualitative changes to the visual environment a project could introduce, the methodology is now widely used to evaluate visual impacts associated with a range of projects including development projects. The assessments used in this EIR are composed of three elements:

- *Vividness* of a view is based on the presence or absence of dramatic views of interesting natural landscape (i.e., far-off mountain ridgelines, a key visual resource in this setting) or man-made features (i.e., buildings) and the degree to which views can be readily acquired.
- *Intactness* is based on the presence or absence of intrusive manmade structures in an otherwise largely natural setting.
- *Unity* is based on the overall compositional harmony of the landscape and manmade structures present within it.

Views of high quality may have topographic relief, a variety of vegetation, rich colors, impressive scenery, and unique natural and/or built features. Views of medium quality may have interesting, but minor, landforms, some variety in vegetation and color, and/or moderate scenery. Views of low quality have uninteresting features, little variety in vegetation and color, uninteresting scenery, and/or common elements.

Figure 3.1-1. Photo Vantages

Photo 1. View From Olive View Drive and Kennedy Road, Facing Northeast toward the Existing Hospital Building



Source: ICF 2016.

The viewshed in Photo 1 is dominated by the campus entrance, where the existing main hospital building, surface parking lot, and several mature trees comprise the middleground of the view. These trees, along with the San Gabriel ridgelines in the background, provide scenic relief and add color. Due to the juxtaposition of the architectural form and massing of the existing main hospital building and the ridgeline of the San Gabriel Mountains, the view possesses a moderate degree of vividness and unity. The foreground and middleground also contain various mature trees, providing variety in vegetation and color. The presence of the three flagpoles at the hospital entrance, in addition to other manmade elements present in the viewshed, give this view a low degree of intactness. Viewer groups from this vantage point are primarily residential.

Visual quality rating: Moderately Low.

Photo 2A. From Reagan Road, Facing Northwest toward the Existing Hospital Building, Emergency Services, Central Plant, and San Gabriel Mountains

Source: ICF 2016.

The main cluster of development surrounding the exiting hospital building comprises the majority of visible elements in the middleground of the viewshed in Photo 2A, where associated landscaping and minimal tree canopy provide color. The San Gabriel Mountains form the backdrop of this view and provide visual interest. The presence of the central utility plant's cooling tower, ambulatory care center/emergency services building, delivery bay, and profile of the existing hospital building create a low degree of intactness. Visual unity and vividness are moderate due to the architectural forms, hardscape features (i.e., perimeter concrete walls, wrought-metal gates), and landscape (i.e., trees and greenways), backgrounded by the San Gabriel Mountains, which provide scenic relief.

Visual quality rating: Moderately Low.

Photo 2B. From Reagan Road, Facing West toward the Existing Hospital Building, Emergency Services, and San Gabriel Mountains

Source: ICF 2016.

The view presented in Photo 2B is similar to that of the view in Photo 2A, as they are taken from the same vantage point. Instead of facing northwest as in Photo 2A, Photo 2B faces west. This view shows the ambulatory care center/emergency services building, delivery bay, and north end of the existing main hospital building, which comprise the middleground of this views. Partial views of the foothills of the San Gabriel Mountains are also available in the background, providing some visual diversity and freedom from manmade elements. These partial sightlines provide moderately low levels of unity and vividness. Because of the nature and dominance of the manmade structures present, this view has a low degree of intactness.

Visual quality rating: Low.

Photo 3A. From Wilson Canyon Debris Basin, Facing South toward the Eastern Boundary of Proposed Project

Source: ICF 2016.

Photo 3A captures views of the ridgelines of the San Gabriel Mountains in the distant background, foothills of the same range near the hospital campus in the foreground, and the greenway/forest preserve just east of the current central utility plant. The hillside trees and shrubs provide variety in color and some scenic relief. Access roads to trailheads at the base of the San Gabriel mountain range can also be seen in the foreground. The elements in the foreground and background are bisected by the I-210 freeway, which traverses the middleground of the view in Photo 3A. The variety of vegetation, general absence of manmade elements, and unobstructed sightlines to the San Gabriel Mountains provide moderately high unity and vividness. The photo's viewshed provides a high degree of intactness, as it is largely free from manmade visual intrusions.

Visual quality rating: Moderately High.

Photo 3B. From Wilson Canyon Debris Basin, Facing Southwest toward Main Campus

Source: ICF 2016.

The view presented in Photo 3B is somewhat similar to that of the view in Photo 3A, as they are taken from the same vantage point. Instead of facing south as in Photo 3A, Photo 3B faces southwest. The view depicts the existing campus, with the main hospital building and ancillary facilities/parking lots that are not obstructed by mature trees and other vegetation comprising the middleground, which provide varied color. The background is comprised of partial sightlines to the foothills of the San Gabriel Mountains at the right edge of the frame, ridgelines of the Santa Monica Mountains, and residential neighborhoods throughout the community of Sylmar. Due to its massing, height, and articulation, the existing main hospital building is a commanding element in the view, which is moderately vivid and unified. Due to the presence of manmade features, it is also moderately intact.

Visual quality rating: Moderate.

Photo 3B Alt. From Wilson Canyon Debris Basin, Facing Southwest toward Main Campus

Source: ICF 2016.

The view depicted in Photo 3B Alt is also oriented southwest, as in Photo 3B, and shares approximately 50 percent of the viewshed. This view provides more context and views to the parking lot located along the Wilson Canyon Channel, while still maintaining the view of the existing campus. The background, like Photo 3B, is composed of views of the Santa Monica Mountains and residential neighborhoods throughout the community of Sylmar. As such, the views represented in Photo 3B Alt are as vivid, unified, and intact as the views represented in Photo 3B.

Visual quality rating: Moderate.

Photo 4A. From Bucher Avenue and Mesa Avenue, Facing Southeast toward the Existing Hospital Building and Supporting Surface Parking Lot

Source: ICF 2016.

The viewshed in Photo 4A is dominated by the existing main hospital building and supporting surface parking lot, with its limited associated landscaping. Due to the dominant presence of the parking lot on the north side of the hospital, the view possesses moderately low visual quality. The architectural elements of the existing hospital building provide some visual relief, as do mature trees and landscaped areas scattered throughout the parking lot. Visual unity, vividness, and intactness are moderately low, and lampposts detract somewhat from the intactness of the view.

Visual quality rating: Moderately Low.

Photo 4B. From Sycamore Avenue and Mesa Avenue, Facing Northeast toward Bungalows, Hospital Support Structures, and San Gabriel Mountains

Source: ICF 2016.

The view presented in Photo 4B is somewhat dissimilar to that of the view in Photo 4A, although they are taken from the same vantage point. Instead of facing southeast, as in Photo 4A, Photo 4B faces northeast. The view is composed of administrative buildings on the northeast end of the campus, adjacent vegetation, landscaping, mature trees, supplementary parking, and partially obstructed sightlines to the San Gabriel Mountains and Angeles National Forest. Together, these elements provide a variety of color and some scenic relief. Despite the presence of manmade structures, due to their low profile, views from this vantage point are moderately intact and unified. The variety of landscaped elements and views of the mountainside provide scenic relief, creating a moderately vivid view.

Visual quality rating: Moderate.

Photo 5A. From Upper Hill Crest Avenue, Facing Southwest toward Central Campus and Administrative Buildings/Trailers

Source: ICF 2016.

The viewshed in Photo 5A's foreground is dominated by the auxiliary utility plant buildings. Slightly rolling terrain and trees provide some scenic relief and add color. Although there are few significant design elements in the view, the slightly rolling terrain in the foreground and mature trees in the middleground lend the view a moderate degree of vividness and unity. The presence of the auxiliary utility plant building and paved road, as well as other administrative buildings in the middleground, detract from the view's level of intactness. The overall level of compositional unity is moderately low.

Visual quality rating: Moderately Low.

Photo 5B. From Upper Hill Crest Avenue, Facing Southeast toward Administrative Buildings/Trailers, Bungalows, and San Gabriel Mountains

Source: ICF 2016.

Photo 5B is taken from the same vantage point as Photo 5A; however, Photo 5B faces southeast instead of southwest. This views depicts fairly prominent topographic variation in the backdrop of the view, where portions of the San Gabriel Mountains can be seen from the middleground to the background. As in Photo 5A, the view depicts the auxiliary utility plant building and paved road, as well as other administrative buildings at the northeast end of the existing campus. Mature trees add color, giving the view, along with sightlines to the mountains, moderately high visual quality and unity. Only a relatively small number of obtrusive manmade features are present, however, resulting in a view with a moderate degree of intactness.

Visual quality rating: Moderately High.

Photo 5B Alt. From Upper Hill Crest Avenue, Facing Southeast toward Administrative Buildings/Trailers, Bungalows, and San Gabriel Mountains

Source: ICF 2016.

The view depicted in Photo 5B Alt is also oriented southeast, as in Photo 5B, and shares approximately 50 percent of the viewshed. This view provides more context and views to the developed infrastructure on the existing campus, including the main hospital building, and less of the prominent ridgelines of the San Gabriel Mountains and Angeles National Forest that border the northern edge of the campus. As such, the views represented in Photo 5B Alt are slightly less vivid, unified, and intact, because of the presence of manmade structures that do not provide substantial scenic relief.

Visual quality rating: Moderate.

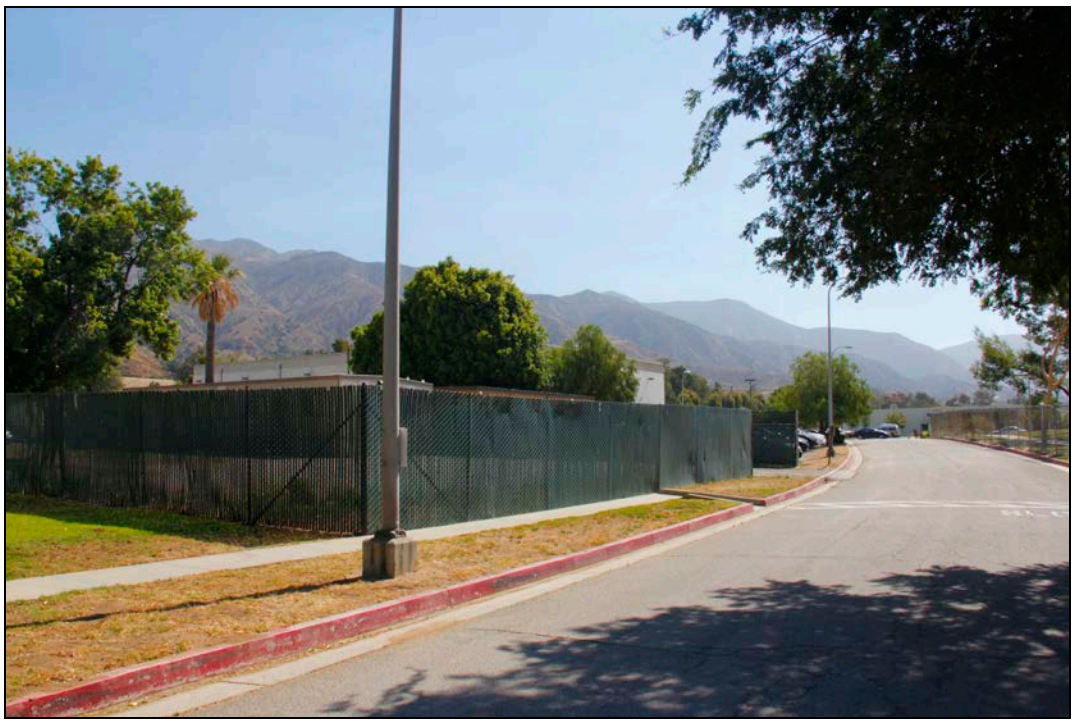
Photo 6. From Sycamore Avenue and Bucher Avenue, Facing East Toward Administrative Buildings/Trailers and San Gabriel Mountains

Source: ICF 2016.

The viewshed in Photo 6 depicts administrative buildings and associated landscaping/trees throughout the foreground and middleground, with the San Gabriel ridgeline and hillsides forming the backdrop. These natural elements provide color and scenic relief. The pleasant mature trees and landscaped areas in the foreground, which partially obstruct views of existing administrative buildings from this angle, combined with sightlines to the San Gabriel Mountains create a moderately vivid, unified, and intact character at the intersection of Sycamore Avenue and Bucher Avenue. This view was selected because, under Tier I development, the central utility plant facilities would be relocated here, replacing the current administrative buildings that can partially be seen in the middleground.

Visual quality rating: Moderate.

Photo 6 Alt. From Sycamore Avenue and Bucher Avenue, Facing East toward Administrative Buildings/Trailers and San Gabriel Mountains



Source: ICF 2016.

Photo 6 Alt captures similar compositional elements as the view depicted in Photo 6, but is taken at a slightly different east-facing angle from just south of the intersection at Sycamore Avenue and Bucher Avenue. This view depicts the south perimeter and associated fencing of the administrative buildings, which, again, under Tier I development, would be replaced by the new central utility plant facilities. This view also depicts slightly more prominent features of the San Gabriel Mountains than those in Photo 6. The mature trees and landscaped sidewalks, along with the fenced administrative building and sightlines to the mountain, provide for moderate unity and vividness. The lampposts, fencing around the edges of the parcel, and paved roadway detract from the view's level of intactness, which is moderately low.

Visual quality rating: Moderate.

Photo 7. South of Sycamore Avenue and Bucher Avenue, Facing Southwest toward Central Campus and Administrative Trailers

Source: ICF 2016.

Photo 7, also taken from approximately 50 feet south of the intersection of Sycamore Avenue and Bucher Avenue, captures several administrative trailer units and associated parking lots in the middle of the campus. The proposed new hospital facility would be built in this viewshed, where there is little scenic relief and limited variety of color. The parking lots and disparate architectural forms associated with the scattered administrative facilities are fairly commonplace and create little visual interest. Although the mature trees provide some color and visual relief, the overall unity, vividness, and intactness are fairly low.

Visual quality rating: Low

Photo 8A. From West Kennedy Road between Bucher Avenue and Olive View Drive, Facing Northeast toward Existing Hospital Building and San Gabriel Mountains

Source: ICF 2016.

The view from Photo 8A depicts the existing visitor parking lots west of the main hospital and outpatient services buildings, as well as the associated landscaped features and mature trees, which add color to the scene. Somewhat limited sightlines to the San Gabriel Mountains are also present, depending upon the position and the angle of the viewer, which form the backdrop for this and similar views. The existing hospital building can be seen in the middleground at the right edge of the frame. In general, this viewshed represents the western edge of Tier I development. Due to the varying heights of the trees, juxtaposition of the existing main hospital building, the San Gabriel ridgeline, and the foreground dominance of the parking lots, the views presented from this vantage point are somewhat discontinuous. Visual unity, vividness, and intactness are moderately low.

Visual quality rating: Moderately Low.

Photo 8B. From West Kennedy Road between Bucher Avenue and Olive View Drive, Facing West toward Central Campus and Surface Parking Outside of Existing Hospital Building

Source: ICF 2016.

The view in Photo 8B is from just west of the entrance to the outpatient services wing on the west end of the existing main hospital building. Administrative buildings and trailers west of the visitor parking lots are mostly obstructed by vegetation and mature trees, which are present in the foreground and middleground, along with the parking lots themselves. These landscaped elements provide the scene with more variety in color. Together, all of the aforementioned visual elements create a viewshed with little visual interest. Although the trees provide some scenic relief and color, visual unity and vividness are low. The view, however, is moderately intact, although the dominance of the parking lot and cars diminish the overall quality of the view.

Visual quality rating: Low.

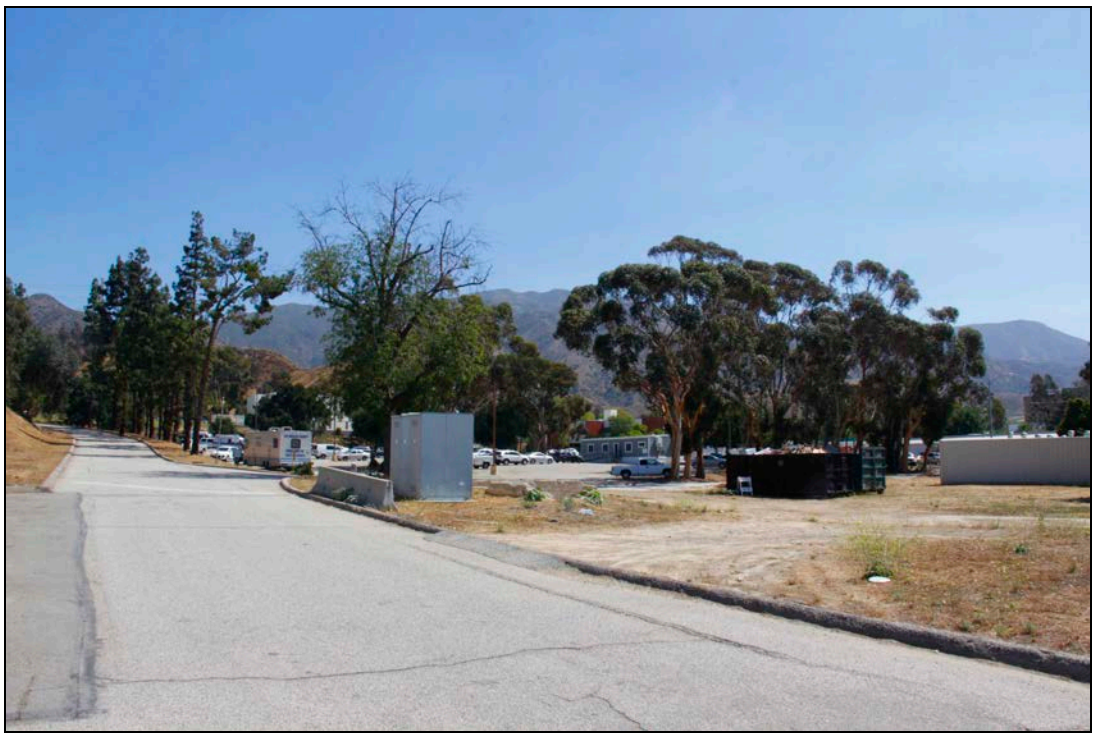
Photo 9. From Main Visitor Parking Lot South, Facing North toward Existing Hospital Building

Source: ICF 2016.

The view in Photo 9 captures the front (south-facing) façade of the existing main hospital building. Several mature trees are scattered throughout the middleground, with cars in the visitor parking lot south of the main building largely comprising the foreground. The architectural elements and hard edges of the main hospital dominate the views from this vantage point, which have some visual appeal. Trees and shrubs provide additional coloring. Views depicted in Photo 9 have a moderate degree of visual unity and vividness because of the juxtaposition of the building and trees, which provide color and contrast. Aside from the hospital, the view is somewhat free from manmade visual intrusions, such as lampposts and signage, which detract from the view's cohesion and overall quality. Views from this vantage point would go unchanged as a result of full buildout under Tiers I and II of the proposed Master Plan.

Visual quality rating: Moderate.

Photo 10. From Cobalt Street and Olive View Drive, Facing Northeast toward Modular Trailers, Mature Trees and San Gabriel Mountains



Source: ICF 2016.

The view in Photo 10, taken from just north of Olive View Drive, is representative of views throughout the west campus area, where most Tier II development has been proposed, looking north and northeast. The view captures the disparate architectural forms, scattered trailer units, surface parking lots, and other unpaved/undeveloped lands that are prevalent within the western part of the campus. A variety of vegetation is present throughout the middleground, and partial sightlines to the ridge and hills of the San Gabriel Mountains form the middle and background of this view. Mature trees in the foreground and middleground, as well as views to the San Gabriel Mountains, add a degree of vividness and unity to a viewshed whose foreground is mostly dominated by undeveloped land and modular facilities. As such, the degree of intactness is moderately low. Visual unity is moderate, since most of the existing manmade elements do not obstruct sightlines to the trees and mountains; although, again, because of their presence, the overall vividness of the view in Photo 10 is moderately low.

Visual quality rating: Moderately Low.

Photo 11. From East Way, Facing Northeast toward Child Care Center

Source: ICF 2016.

The view in Photo 11 faces east and features the existing child care center and its landscape features, which provide some color and visual interest. Mostly obstructed views of the San Gabriel mountains are available from this view, along with a few mature trees surrounding the property, which also add some color and visual interest. As such, the view possesses a moderate degree of visual unity and vividness, and the architectural design and style of the child care center serves as the most prominent visual element and creates some visual interest. Obtrusive manmade elements, such as the lamppost and bike rack, are minimally apparent and fairly integrated into the overall cohesion of the view. Photo 11 is moderately intact. Views from this location would be unchanged by the proposed Tier I and Tier II development under the Master Plan.

Visual quality rating: Moderate.

Photo 12. From Comstock Way and West Way, Facing East toward Modular Trailers and San Gabriel Mountains

Source: ICF 2016.

As in Photo 11, the view depicted in Photo 12 is representative of views throughout the western part of the existing campus. The foreground and middleground are composed of scattered administrative building and trailers. Some vegetation is visible in the foreground and middleground, providing color. The San Gabriel Mountains form the backdrop for this view and are the primary visible scenic resource. The view has a low degree of intactness because of these manmade features and others, such as lampposts, which do not provide visual interest. The middleground and background are composed of a mix of modular buildings, native shrubs, trees and vegetation, and sightlines to the San Gabriel Mountains. The visual elements in the middleground and background provide the viewshed with a moderate degree of color, contrast, scenery, and overall visual quality. Visual unity and vividness, overall, however, are moderately low.

Visual quality rating: Moderately Low.

Photo 13A. From Lantana Terrace, Facing North toward Community Mental Health Building and San Gabriel Mountains

Source: ICF 2016.

The primary visual element depicted in Photo 13A is the Olive View Community Mental Health Urgent Care Center, which, along with its entrance, parking lot, and landscaped features, dominates the foreground and middleground from this vantage point. This photo was taken from just north of Olive View Drive, and shows a variety of trees and landscaped greenways filling the middleground, providing color, depth, and visual contrast. The background contains views of the ridgeline of the San Gabriel Mountains, which add to the viewshed's overall harmony and cohesion. Visual unity and vividness are moderate. Aside from the lamppost, flagpole, and other manmade elements associated with the Olive View Community Mental Health Urgent Care Center, this view is relatively free of visual intrusions. Visual intactness is moderate.

Visual quality rating: Moderate.

Photo 13B. From Lantana Terrace, Facing Northeast toward Community Mental Health Building and San Gabriel Mountains

Source: ICF 2016.

The view in Photo 13B is similar to that of Photo 13A, albeit slightly to the east. Instead of orienting to the north, this view faces northwest, providing more sweeping views of the western parts of campus along Olive View Drive, which are substantially less developed than the eastern parts. As such, background views of the San Gabriel Mountains and Angeles National Forest are more prominent and available. As in Photo 13A, the left edge of the middleground depicts the existing Olive View Community Mental Health Urgent Care Center. The foreground of the view consists of landscaped native vegetation associated with the facility, as well as its parking lot. Other visual elements that fill in parts of the foreground and middleground of this view include mature trees, shrubs, and landscaping, as well as manmade features, such as parking and building signage, lampposts, and utility poles. Overall, this view has a moderate level of visual unity, vividness, and intactness. Views from this location would go mostly unchanged as a result of the proposed development under Tier I and Tier II of the Master Plan.

Visual quality rating: Moderate.

Photo 14A. From Olive View Road South between Cobalt Street and Kennedy Road, Facing Northeast

Source: ICF 2016.

The view in Photo 14A depicts Olive View Drive in the foreground and one-story administrative buildings and associated parking lots in the middleground. A variety of mature trees fill out the middleground of this view, with prominent, mostly unobstructed views of the San Gabriel Mountains and Angeles National Forest composing the background. These elements provide the majority of scenic relief, color, and visual interest depicted in this viewshed. Manmade features include lampposts, utility poles, and fencing, which create a moderate degree of intactness. Overall, this view has a moderate degree of visual unity and vividness. Views from this vantage point would depict the new hospital building, which would be located behind the existing one-story administrative buildings depicted in the foreground/middleground of this view. Viewer groups near Photo 14A would be primarily residential.

Visual quality rating: Moderate.

Photo 14B. From Olive View Road South between Cobalt Street and Kennedy Road, Facing Northwest

Source: ICF 2016.

Photo 14B was taken from a vantage point on south Olive View Drive, just east of the photo location depicted in Photo 14A. Whereas Photo 14A faces northeast, Photo 14B faces northwest. It also depicts Olive View Drive in the foreground and one-story administrative buildings and associated parking lots in the middleground. Similarly, a variety of mature trees fill out the middleground of this view, with mostly unobstructed views of the San Gabriel Mountains and Angeles National Forest composing the background. Manmade features include lampposts, utility poles, and fencing, which create a moderate degree of intactness. Overall, this view also has a moderate degree of visual unity and vividness. Viewer groups near Photo 14B, as in 14A, would be primarily residential. Photos 14A and 14B were selected to represent residential views in the immediate project vicinity because visual elements introduced in Photo 14A would primarily occur as a result of development under Tier I, and visual changes under Tier II would occur primarily within the viewsheds represented by Photo 14B.

Visual quality rating: Moderate.

3.1.4 Environmental Impact Analysis

3.1.4.1 Methods

Representative Views of Project and Viewer Groups

Because it is not feasible to analyze all the views in which the proposed project can be seen, 23 representative viewpoints were identified that would most clearly display the project's potential

visual effects (See Section 3.1.3.3, *Visual Character and Quality*, in this EIR). Such views represent the primary viewer groups that would be potentially affected by the proposed project. The analysis took into account views considered to be most sensitive to viewers, as well as the most common public views that can be acquired from varied locations within the project area.

Primary sensitive viewers include residents who reside in both single and multifamily residential buildings on the southern portion of Olive View Drive the closest of which are approximately 75 feet away from the campus's main entrance. This setting includes substantial traffic noise and visual intrusions from the adjacent freeway, as well activity present 24 hours a day, seven days a week, at the existing health services facilities adjoining the campus. The setting itself has undergone continuous expansion and growth, marked by project construction that has occurred over decades of time. Residential properties near the campus reflect concerted efforts to create greater privacy and visual screening from the visual intrusions posed by adjoining traffic, commercial, and institutional uses (e.g., trees, shrubbery, enclosed front porches, fencing, orientation). These features imply a measure of insulation exists currently from traffic, the campus, and new development proposed there.

Other viewer groups include:

- Employees, clients, and visitors at the Olive View–UCLA Medical Center Campus and other neighborhood businesses;
- Recreationists and hikers using the San Gabriel Mountains and trailheads within the Angeles National Forest system;
- Commuting motorists, bicyclists, and pedestrians on Olive View Drive; and
- Commuting motorists on the I-210 freeway, who can acquire fleeting views of some of the taller buildings on the Olive View–UCLA Medical Center Campus, including long-distance employee commuters and truckers traveling through the Sylmar neighborhood to and en route to other regional destinations.

Assessing Viewer Response

Viewer response is composed of two elements: *viewer sensitivity* and *viewer exposure*. These elements combine to form a method of predicting how the public might react to visual changes brought about by a project.

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of their view, speed at which the viewer moves, and position of the viewer. High viewer exposure heightens the importance of early consideration of design, art, and architecture and their roles in managing the visual resource effects of a project. Because objects in the foreground have more detail, views from nearby locations are more detailed compared to objects that are indistinguishable in the distance. Viewers would experience visibility of a proposed project to varying degrees in a particular viewshed, depending upon distance or other intervening structures or obstacles.

Viewer sensitivity is defined both as the viewer's concern for scenic quality and the viewer's response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. The sensitivity of viewers in their perception of visual quality, as well as their sensitivity to changes in visual quality, varies based on familiarity with the view, sense of

ownership of the view, and the nature of one's activity while receiving the view. In turn, these considerations determine how much attention the receptor focuses on the view.

Residential viewer groups would have moderately high sensitivity to visual changes introduced by the proposed project, as would hospital employees and other regular visitors who are intimately familiar with existing views in the project area. Recreationist and hikers would have a moderate level of sensitivity to changes in the visual setting, although they are presumed to choose hiking routes, in part, based on aesthetic considerations, prominent visual elements would be less distinguishable from distance. Commuting motorists and bicyclists would have low sensitivity because of the nature of their fleeting views and constrained sightlines to the existing campus.

3.1.4.2 Thresholds of Significance

For the purposes of this analysis, and in accordance with Appendix G of the *State CEQA Guidelines*, the proposed project would result in a significant environmental impact if it would:

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

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

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, conflict with applicable zoning and other regulations governing scenic quality.

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

3.1.4.3 Impacts and Mitigation Measures

Impact AES-1: Would the Proposed Project Have a Substantial Adverse Effect on Scenic Vistas?

Construction Impacts

Tier I

As discussed in Section 3.1.2.2, *Scenic Resources*, of this EIR, views of the San Gabriel Mountains are present from locations throughout the immediate project area and from various vantage points within the campus and, for the purposes of this analysis, are considered to be informal scenic vistas that are publicly valued. Similarly, views from trails in the Angeles National Forest and on the San Gabriel Mountains also provide scenic viewsheds in the immediate project area. However, although these informal views could be affected by construction activities, no officially designated state scenic highways have been identified in the vicinity of the project site. The closest such route is SR-2 (Angeles Crest Highway) in the city of Azusa, approximately 16 miles to the southeast of the project site. However, I-210 is located approximately 300 feet south of the existing campus and is an eligible State Scenic Highway–Not Officially Designated. Because of its eligibility, and because it is listed as a designated scenic highway in the city's General Plan, special consideration must be made whenever a project proposes to develop the surrounding area. No other formally designated scenic vistas have been identified throughout the immediate project area.

As mentioned, viewsheds from trails within the San Gabriel Mountains and Angeles National Forest trail system can be valuable and offer more sweeping views of greater Los Angeles, but from higher elevations on the campus, visual elements are very difficult to detect because of the scale that is created by views from distance. From lower elevations, visual elements are still difficult to detect because of the existing tree canopy and sloping terrain. From certain angles and distances, construction materials and staging areas may be visible. However, these changes are considered to be temporary, as construction equipment and materials would be installed at the beginning of the construction period and removed upon completion of the proposed project. Therefore, from these views, construction activities, where visible, would not result in significant impacts.

Due to intervening landforms and development, campus features are difficult to detect from I-210. The I-210 freeway has a partially below-grade (depressed) configuration, which, at its closest point, is approximately 150 feet south of the southern perimeter of the existing Olive View–UCLA Medical Center Campus. Despite the proximity of the roadway, views of the eastern campus (where most Tier I development would occur under the proposed Master Plan) are limited, and, where available, fleeting, since the primary viewer group includes motorists, commuters, and passengers. Therefore, construction activities, which would include the presence of construction vehicles, cranes, barricading, grading, excavation, hauling, etc., would not create a significant, detectable visual intrusion or represent a substantial change in visual quality from existing conditions. Because of the depressed roadway, difficulty of obtaining unobstructed sightlines to campus, intervening landforms and development, fleeting nature of available views, and temporary nature of construction equipment, no impact on a scenic vista would occur as a result of the project construction activities under Tier I. Permanent visual elements that would be introduced during the construction period and would remain after the completion of construction, such as building structures, which have the potential to affect scenic vistas due to their massing, scale, and design, are evaluated below under Operational Impacts.

Tier II

As in Tier I, from certain angles and distances both on- and off-campus, construction materials and staging areas may be visible in informal scenic vistas that depict the San Gabriel Mountains and prominent ridgelines. Again, because of the temporary nature of views, construction activities, where visible, would not result in significant impacts.

Views of the western campus (where most Tier II development would occur under the proposed Master Plan) from I-210 are limited, and, where available, fleeting. Construction activities and equipment would be similar to those under Tier I. Again, because of the depressed roadway, difficulty to obtain unobstructed sightlines to campus, intervening landforms and development, fleeting nature of available views, and temporary nature of construction equipment, no impact on a scenic vista would occur as a result of the project construction activities under Tier II.

Mitigation Measures

No significant construction-related impacts would occur under Tier I or Tier II development of the proposed Master Plan. Therefore, no mitigation measures are required.

Operational Impacts

Tier I

As discussed above, no designated state scenic highways, corridors, or parkways have been identified within the project viewshed; however, because of its eligibility, and because I-210 is listed as a designated scenic highway in the city's General Plan, special consideration must be made whenever a project proposes to develop the surrounding area. Again, despite the proximity of the roadway, views of the eastern campus (where most Tier I development would occur under the proposed Master Plan) are limited, and, where available, fleeting. Development proposed under Tier I, such as the new Ambulatory Care Center, Recuperative Care Village, parking structure, and central utility plant facilities, would be subject to policies that protect scenic resources (i.e., San Gabriel Mountains/ridgelines) under the County's General Plan and would be designed to be in keeping with or improve the existing visual character and quality on the campus through adherence to the Master Plan design guidelines, which would minimize visual intrusions and ensure compatibility with surrounding land use types. Guidelines for architectural, landscaping, lighting, and signage design are implemented in order to reclaim the natural setting and scale of the campus and the surrounding region.

Although no formally designated scenic vistas have been identified within the project area, informal views of the San Gabriel Mountains and ridgelines are publicly valued, and, therefore, are considered to be scenic vistas. As mentioned, campus development under Tier I would be subject to the County's General Plan and the design guidelines developed for the Master Plan, which would minimize visual intrusions and ensure that scenic resources are protected (i.e., San Gabriel Mountains) and project development is in keeping with the surrounding visual environment. However, Tier I development would introduce visual changes to existing viewsheds and scenic vistas in the immediate project vicinity, such as those depicted in Photos 1–9 in Section 3.1.3.4, *Visual Character and Quality*, of this EIR. While development may partially obstruct some views with sightlines to the San Gabriel Mountains, these views are widely available throughout campus and in the immediate project vicinity, and to the extent practicable, they would be preserved. Therefore, significant impacts to scenic vistas are not expected. Similar impacts are expected from more fixed vantage points, such as those from residences on south Olive View Drive. Due to the scale of existing and planned Tier I development and available sightlines to the San Gabriel ridgelines, significant impacts to these informal scenic vistas are not likely to occur.

Additionally, Tier I development includes landscaping improvements such as healing gardens, courtyards, riparian and wildflower areas, in addition to pedestrian, equestrian, and bike paths that would serve to beautify the natural setting of the campus and enhance its overall visual quality, as well as improve informal viewsheds and scenic vistas in the project area. Therefore, Tier I development would not have a substantial adverse effect on a scenic vista, including views to/from the I-210 freeway and those from elevated trails within the San Gabriel Mountains and Angeles National Forest. As mentioned, informal views from some locations on the campus, however, may be obstructed by new buildings; although, no scenic vista or valued view would be substantially obstructed or affected. New low-rise buildings would be added to the campus, consistent in scale and massing with existing buildings, and extensive new park-like landscaped spaces would also be added in areas that are now paved and occupied by infrastructure. Thus, impacts on scenic vistas would be less than significant as a result of the operation of the project under Tier I.

Tier II

As in the Tier I discussion, despite the proximity of the I-210, views of the western campus (where most Tier II development would occur under the proposed Master Plan) are limited, and, where available, fleeting, since the primary viewer group includes motorists, commuters, and passengers. Again, development proposed under Tier II, such as the future hospital parking structures, and retail fronts would be subject to the County's General Plan and the Design Guidelines developed for the Master Plan, which would minimize visual intrusions and ensure that scenic resources are protected (i.e., San Gabriel Mountains) and project development would be consistent with the surrounding visual environment. Tier II development, which would mostly occur throughout the western two-thirds of the existing campus, would introduce more substantial visual changes than would Tier I. These changes would occur in viewsheds similar to those depicted in Photos 10–14B. Development under Tier II, as in Tier I, may partially obstruct some views with sightlines to the San Gabriel Mountains. However, these views are widely available throughout campus and in the immediate project vicinity. For more fixed views, such as those from residences along south Olive View Drive, the proposed main hospital building represents the most substantial visual change, which could be seen in views similar to those depicted in 14A and 14B. To the extent practicable, these views would maintain their visual quality and, in compliance with the County's General Plan and Master Plan Design Guidelines, scenic resources would be preserved and visual intrusions would be minimized. Therefore, significant impacts to scenic vistas are not expected.

Additionally, as in Tier I, Tier II development includes landscaping improvements such as gardens and wetlands, which, along with other landscaping improvements throughout campus, would serve to beautify the natural setting of the campus and enhance its overall visual quality, while also improving informal viewsheds and scenic vistas. Therefore, under operation of Tier II, the proposed project would not have a substantial adverse effect on a scenic vista, including views from the I-210 freeway and those to/from elevated trails within the San Gabriel Mountains and Angeles National Forest. As mentioned, informal views from some locations on the campus, however, may be obstructed by new buildings; although no scenic vista or valued view would be substantially obstructed or affected. Thus, impacts on scenic vistas would be less than significant as a result of the operation of the project under Tier II.

Mitigation Measures

Operational impacts under Tier I or Tier II development of the proposed Master Plan would be less than significant. Therefore, no mitigation measures are required.

Impact AES-2: Would Proposed Project Substantially Damage Scenic Resources, Including, but not Limited, to Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway?

Construction Impacts

Tier I

As discussed above, on-campus scenic resources are limited, and no Officially Designated State Scenic Highways have been identified in the vicinity of the project site. However, I-210 is an Eligible State Scenic Highway–Not Officially Designated. Construction activities and equipment associated with Tier I development would not substantially damage primary scenic resources from the roadway, such as the San Gabriel Mountains. Similarly, no scenic rock outcroppings within the

highway or on the campus would be damaged by proposed construction under Tier I. No historic buildings on the campus have been identified, and most of the mature trees would be preserved as part of the project. While specific trees may be removed that have not yet been determined, these trees would be replanted at the appropriate ratios in accordance with the applicable policies from the County's General Plan. Impacts would be less than significant. No other off-campus improvements are proposed that could affect or damage scenic resources within I-210, the Angeles National Forest, or San Gabriel mountain range.

Tier II

As in Tier I, on-campus scenic resources are limited, and construction activities associated with Tier II development would not substantially damage primary scenic resources from I-210, such as the San Gabriel Mountains. Similarly, no rock outcroppings within the highway would be damaged by proposed construction under Tier II. No historic buildings on the campus have been identified, and most of the mature trees would be preserved as part of the project. While specific trees may be removed that have not yet been determined, these trees would be replanted at the appropriate ratios in accordance with the applicable policies from the County's General Plan. Impacts would be less than significant. No other off-campus improvements are proposed that could affect or damage scenic resources within I-210, the Angeles National Forest, or San Gabriel mountain range.

Mitigation Measures

Construction-related impacts would be less than significant under Tier I and Tier II development of the proposed Master Plan. Therefore, no mitigation measures are required.

Operational Impacts

Tier I & II

Impacts to scenic resources typically occur during construction through the complete removal or partial alteration of their visually prominent or character-defining features. As discussed above, no significant impacts to visual resources, on- or off-campus, would occur during the construction of either Tier I or Tier II development. Moreover, Tier I and Tier II development include landscaping improvements such as healing gardens, courtyards, riparian and wildflower areas, in addition to pedestrian, equestrian, and bike paths that would serve to beautify the natural setting of the campus and enhance its overall visual quality, resulting in an aesthetic benefit. As a result, impacts would be less than significant.

Mitigation Measures

Operational impacts under Tier I or Tier II development of the proposed Master Plan would be less than significant. Therefore, no mitigation measures are required.

Impact AES-3: Would the Proposed Project Substantially Degrade the Existing Visual Character or Quality of Public Views of the Site and its Surroundings in a Non-Urbanized Area? If the Proposed Project is in an Urbanized Area, Would the Proposed Project Conflict with Applicable Zoning and Other Regulations Governing Scenic Quality?

The analysis that follows takes into account the fact that the campus and it's immediate surroundings contain both suburban (low- to medium-density residential uses to the west, east, and south) and rural (the open space and undeveloped hillsides north of the campus) elements.

Construction Impacts

Tier I

Project construction under Tier I would occur in a fairly flexible, semi-urban setting that has seen extensive development occur over long period of time, and where a varied range of architectural styles and land uses are in close proximity. Also, the visual setting displays a range of visual quality from moderately high (e.g., unobstructed sightlines to the San Gabriel Mountains from within campus) to low visual quality (e.g., onsite views across west campus).

Tier I construction phasing would focus on the development of a new Recuperative Care Center, Residential Treatment Program facility, Mental Health Urgent Care Center, Mental Health Wellness Center, Ambulatory Care Center, and relocated central utility plants. Construction would also include new parking lots, various administrative buildings, and other miscellaneous facilities. The temporary presence of construction-related vehicles, equipment, barricading and cranes, etc., and construction-related excavation and grading would not result in significant changes to the visual character of the campus, nor would these result in a significant long-term overall reduction in visual quality. Thus, impacts would be less than significant during construction of Tier I development and facilities. Permanent visual elements that would be introduced during the construction period and would remain after the completion of construction, such as new buildings and structures, which have the potential to affect visual quality due to their massing, scale and design, are evaluated below under Operational Impacts.

Tier II

Tier II construction would focus on the replacement inpatient hospital and the development of the western portion of campus. Construction under Tier II would also include offices and maintenance shops, a senior/center community building, a fitness center and retail space along Olive View Drive. Although construction activities and the presence of construction equipment could be a nuisance to nearby viewer groups, these activities are temporary in nature and therefore would not result in significant changes to visual character, nor would these result in a significant overall long-term reduction in visual quality. As such, impacts would be less than significant during construction of facilities and infrastructure under Tier II. Again, permanent visual elements that would be introduced during the construction period and would remain after the completion of construction, such as structures to support the erection of new facilities, which have the potential to affect visual quality due to their massing, scale and design, are evaluated below under Operational Impacts.

Mitigation Measures

Construction-related impacts would be less than significant under Tier I and Tier II development of the proposed Master Plan. Therefore, no mitigation measures are required.

Operational Impacts

Tier I

As noted above, the visual setting is characterized by a range from low to moderately high visual quality (as shown in Photos 1 through 14B), providing an often flexible design context for new development features. Tier I development would be concentrated in the eastern third of the existing campus, as depicted in Photos 1–9. The most noticeable changes would occur in viewsheds similar to those depicted in Photos 2A, 2B, 4A, 4B, 5B, 5B Alt, and 8A, which depict the cluster of facilities, bungalows and surface parking lots around the existing main hospital building. In addition, noticeable changes would occur in viewsheds similar to that depicted in Photo 3B Alt because the Recuperative Care Center, Residential Treatment Program facility, Mental Health Urgent Care Center, and Mental Health Wellness Center would be partially located in the viewshed of Photo 3B Alt. Since it is anticipated that new buildings, in compliance with the Master Plan Design Guidelines, would be generally compatible in architectural form, finishes, and scale with existing campus buildings and surrounding areas, and because the project would preserve most of the prominent visual elements within the campus (i.e., existing main hospital building, mature trees, and available sightlines to the San Gabriel mountains), while adding extensive new landscape elements to create an inviting park-like setting for campus staff and visitors, the proposed project under Tier I would not substantially degrade the overall cohesion and would not substantially degrade the existing visual character of the site and its surroundings.

The project site is owned by Los Angeles County, and the facilities on the Olive View–UCLA Medical Center Campus are exempt from local land use regulations. Specifically, the proposed project would not be required to be consistent with city of Los Angeles' general plan land use designations and zoning. However, the proposed Master Plan provides guidelines for new development that are intended to reclaim the natural setting and scale of the campus and the surrounding region. Additionally, landscaping improvements under the Master Plan are intended to integrate the natural setting of the campus into its design.

As discussed in Section 3.1.3.1, *Overview of the Project Area*, of this EIR, the Olive View–UCLA Medical Campus lacks an overall cohesiveness and clarity, mostly because it contains a collection of unrelated structures. although visual changes are expected to occur under Tier I, these changes are not expected to reduce the visual quality ratings presented in Section 3.1.3.4, *Light and Glare*, of this EIR. Therefore, impacts would be less than significant.

Tier II

As noted above, the visual setting is characterized by a range from low to moderately high visual quality, providing an often flexible urban design context for new development features. Tier II development would be concentrated in the western two-thirds of the existing campus, as depicted in Photos 10–14B. The most noticeable changes would occur in viewsheds similar to those depicted in Photos 10 and 12, where campus development is sporadic or non-existent. Visual changes would also occur in more fixed vantage points, such as residences along south Olive View Drive. A new hospital would likely partially obstruct views of the San Gabriel Mountains from residences on south

Olive View Drive, changing the overall composition of viewsheds similar to those depicted in Photo 14B.

Because of the lack of overall development throughout the western portions of campus and because of the additional square footage proposed under Tier II development, visual changes under Tier II would be more substantial than those under Tier I. Since viewsheds within the western areas of campus have mostly lower overall visual quality ratings, and it is anticipated that new buildings would be generally compatible in architectural form and design setting by complying with the Master Plan Design Guidelines, while adding extensive new landscape elements to create an inviting park-like setting for campus staff and visitors, the proposed project under Tier II, as in Tier I, would not substantially degrade the existing visual character of the site and its surroundings. Again, although visual changes introduced under Tier II may be more substantial than those in Tier I, these changes are not expected to substantially reduce the visual quality ratings presented in Section 3.1.3.4, *Light and Glare*, of this EIR. Therefore, impacts would be less than significant.

Mitigation Measures

Since impacts would be less than significant, no mitigation measures are required.

Level of Significance after Mitigation

Operational impacts under Tiers I and II would be less than significant.

Impact AES-4: Would the Proposed Project Create a New Source of Substantial Light or Glare that Would Adversely Affect Day or Nighttime Views in the Area?

Construction Impacts

Tier I

Construction activities under Tier I are expected to occur during daylight hours, consistent with County and city regulations and are, therefore, unlikely to substantially alter ambient illumination light levels, or result in significant spill light impacts on surrounding land uses. The project is proposed in a setting in which there are numerous existing sources of light and glare, including the existing main hospital building, emergency services building, other campus facilities, headlights on Olive View Drive, freeway activity and support structures along the I-210 freeway, and nearby residential and commercial buildings on adjacent streets. In addition, there is also little potential for construction activities to produce substantial glare. The net contribution of project construction activities under Tier I, when considered in addition to existing sources of light and glare would not be major, and impacts associated with additional illumination would be temporary in nature. The proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be less than significant.

Tier II

As in Tier I, construction activities under Tier II are expected to occur during daylight hours, consistent with County and city regulations and are, therefore, unlikely to substantially alter ambient illumination light levels, or result in significant spill light impacts on surrounding land uses. The net contribution of project construction activities under Tier I, when considered in addition to existing sources of light and glare would not be major, and impacts associated with additional illumination would be temporary in nature. Construction activities would not create a new source of

substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be less than significant.

Mitigation Measures

Construction-related impacts under Tier I and Tier II development of the proposed Master Plan would be less than significant. Therefore, no mitigation measures are required.

Operational Impacts

Tier I

New buildings and parking areas and renovations to the existing hospital and outpatient services facility, in addition to other Tier I development, would not significantly alter ambient illumination light levels, or result in significant spill light impacts on surrounding land uses. As mentioned, the project is proposed in a setting in which there are numerous existing sources of light and glare, including the existing main hospital building, emergency services building, other campus facilities, headlights on Olive View Drive, freeway activity and support structures along the I-210 freeway, and nearby residential and commercial buildings on adjacent streets.

Because of the sprawled campus development, existing hospital infrastructure, density and height of mature trees and other vegetation, intervening landforms, and overall topography, many of the development projects proposed under Tier I would go largely unnoticed by nearby residents and motorists. Viewer groups primarily affected by Tier I development would be employees, patients, and hospital visitors. All project lighting features would be installed in accordance with applicable regulations and Master Plan lighting guidelines (see Chapter 2, *Project Description*, of this EIR) designed to promote energy efficiency, avoid spill light and glare, and preserve nighttime sky viewing. In addition, project elements would be designed to be compatible with the design character of the setting in which they are being proposed, and would receive non-highly reflective finishes and colors. Lighting would help to establish zones, a campus identity, and assist wayfinding, especially at night. Light would also be utilized to create areas of visual hierarchy and interest.

Therefore, it is not expected that the project would produce significant light or glare impacts. The project's net contribution under Tier I, when considered in addition to existing sources of light and glare, would not be major. The proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be less than significant.

Tier II

Buildings, parking areas and new shielded outdoor lighting features proposed under Tier II could include a new hospital, offices and maintenance shops, a senior/center community building, a fitness center, and retail space along Olive View Drive. Ambient illumination exists as a result of the existing main hospital building, emergency services building, other campus facilities, headlights on Olive View Drive, freeway activity and support structures along the I-210, and nearby residential and commercial buildings on adjacent streets.

As in Tier I, all project lighting features would be installed in accordance with applicable regulations designed to promote energy efficiency, avoid spill light and glare, and preserve nighttime sky viewing. Project elements would be designed to be compatible with the design character of the setting in which they are being proposed, and would receive non-highly reflective finishes and

colors. However, the western areas of campus are less developed (Tier II development would be concentrated in the western areas of campus), and, therefore, have lower ambient illumination levels than areas on the eastern portions of the campus. Given the proximity of nearby residential viewers on south Olive View Drive, and the potential for a 600,000-square-foot facility to be introduced into the viewsheds similar to those depicted in Photo 14B, the proposed project has the potential to create a new source of substantial light or glare. However, through incorporation of illuminance criteria and best practices, and in adherence to Master Plan Design Guidelines regarding lighting, the impacts of the new sources of light and glare associated with Tier II development would be minimized. As a result, while Tier II development would create a new source of light and/or glare, compliance with the applicable Lighting Guidelines would ensure that these potential new sources of light/glare would not substantially affect daytime or nighttime views in the area. Therefore, impacts would be less than significant.

Mitigation Measures

Operational impacts under Tier I or Tier II development of the proposed Master Plan would be less than significant. Therefore, no mitigation measures are required.

3.1.5 Cumulative Impacts

The study area for the cumulative impacts analysis is limited to locations that have clear sightlines to the built elements proposed as part of the project. Typically, the study area boundaries extend approximately 0.25 miles from the project perimeter. As outlined in Section 3.1.3, *Environmental Setting*, of this EIR, the study area for this cumulative impacts analysis are as follows: the Angeles National Forest/San Gabriel Mountains serve as the northern border of the immediate project vicinity, and I-210 creates a visual border to the south since north-facing views from the road (and south of the road) are fairly constrained because of the depressed freeway. To the west of the community mental health facility, the campus boundary at the Schoolhouse Debris Basin creates a visual border as the foothills of the San Gabriel Mountains converge with the I-210. To the east, because of topographical changes, the ridgeline between Reagan Road and Fenton Avenue serves as the eastern visual border.

A list of related projects (see Table 2-2, Related Projects, in Chapter 2, *Project Description*, of this EIR) was reviewed as part of this cumulative impacts analysis. None of the 14 related projects listed in Table 2-2 are located within the project's cumulative viewshed. The closest related project is located at 13530 Glenoaks Boulevard, approximately 0.5 miles from the campus. As a consequence, due to the intervening distances, topography, structures, and buildings, the related projects do not have clear sightlines of campus facilities. Therefore, the related projects would not cumulatively degrade or otherwise adversely affect the visual quality or character of the study area, and the proposed Master Plan would not result in a cumulatively considerable contribution to a significant cumulative aesthetic impact.

3.2 Air Quality

3.2.1 Introduction

This section describes the regulatory framework and existing conditions associated with air quality and the impacts on it that would result from the proposed project.

3.2.2 Regulatory Setting

At the federal level, the U.S. Environmental Protection Agency (EPA) is responsible for implementation of the Clean Air Act (CAA). Some portions of the CAA (e.g., certain mobile-source and other requirements) are implemented directly by EPA. Other portions of the CAA (e.g., stationary source requirements) are implemented by state and local agencies.

Responsibility for attaining and maintaining air quality in California is divided between the California Air Resources Board (CARB) and the regional air quality districts. Areas of control for the regional districts are set by CARB, which divides the state into air basins.

Plans, policies, and regulations at the federal, state, and local level relevant to the proposed project are discussed below.

3.2.2.1 Federal

The CAA was first enacted in 1963, but has been amended numerous times in subsequent years (1967, 1970, 1977, and 1990). The CAA establishes the National Ambient Air quality standards (NAAQS) and specifies future dates for achieving compliance. The CAA also mandates that the state submit and implement a State Implementation Plan (SIP) for local areas that fail to meet the standards. The plans must include pollution control measures that demonstrate how the standards will be met. The city of Los Angeles is within the South Coast Air Basin (Basin), which is designated as a nonattainment area for certain pollutants that are regulated under the CAA.

The 1990 amendments to the CAA identify specific emissions-reduction goals for areas that fail to meet the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or meet interim milestones. The sections of the CAA that would most substantially affect development of the proposed project include Title I, *Nonattainment Provisions*, and Title II, *Mobile-Source Provisions*.

Title I provisions were established with the goal of attaining the NAAQS for criteria pollutants. Table 3.2-1 shows the NAAQS that are currently in effect for each criteria pollutant. The NAAQS were amended in July 1997 to include an 8-hour standard for ozone ($O_{3)}$ and adopt a standard for inhalable particulate matter ($PM_{2.5}$). The $PM_{2.5}$ NAAQS was most recently amended in 2012 and the 8-hour O_3 NAAQS was most recently amended in October 2015. Due to site-specific stationary sources, the Los Angeles County portion of the Basin fails to meet national standards for O_3, $PM_{2.5}$, and lead (Pb), and, therefore, is considered a federal nonattainment area for those pollutants. Table 3.2-2 lists each criteria pollutant and its related attainment status.

Table 3.2-1. Federal and State Ambient Air Quality Standards

Pollutant	Symbol	Average Time	Standard (ppm)		Standard (µg/m³)		Violation Criteria	
			California	National	California	National	California	National
Ozone	O_3	1 hour	0.09	–	180	–	If exceeded	–
		8 hours	0.070	0.070	137	137	If exceeded	If fourth-highest 8-hour concentration in a year, averaged over 3 years, is exceeded at each monitor in an area
Carbon monoxide	CO	8 hours	9.0	9	10,000	10,000	If exceeded	If exceeded on more than 1 day per year
		1 hour	20	35	23,000	40,000	If exceeded	If exceeded on more than 1 day per year
(Lake Tahoe only)		8 hours	6	–	7,000	–	If equaled or exceeded	–
Nitrogen dioxide	NO_2	Annual arithmetic mean	0.030	0.053	57	100	If exceeded	If exceeded on more than 1 day per year
		1 hour	0.18	0.100	339	188	If exceeded	–
Sulfur dioxide	SO_2	24 hours	0.04	0.14	105	3651	If exceeded	–
		1 hour	0.25	0.075	655	196	If exceeded	If exceeded on more than 1 day per year
		3 hours	–	0.5[a,b]	–	1,300[a,b]	–	–
		Annual arithmetic mean	–	0.030[a]	–	801	–	If exceeded on more than 1 day per year
Hydrogen sulfide	H_2S	1 hour	0.03	–	42	–	If equaled or exceeded	–
Vinyl chloride	C_2H_3Cl	24 hours	0.01	–	26	–	If equaled or exceeded	–
Inhalable particulate matter	PM10	Annual arithmetic mean	–	–	20	–	–	–
		24 hours	–	–	50	150	If exceeded	If exceeded on more than 1 day per year
	PM2.5	Annual arithmetic mean	–	–	12	12.0[c]	If exceeded	If 3-year average from single or multiple community-oriented monitors is exceeded
		24 hours	–	–	–	35	–	If 3-year average of 98th percentile at each population-oriented monitor in an area is exceeded
Sulfate particles	SO_4	24 hours	–	–	25	–	If equaled or exceeded	–
Lead particles	Pb	Calendar quarter	–	–	–	1.5	–	If exceeded no more than 1 day per year
		30-day average	–	–	1.5	–	If equaled or exceeded	–

Pollutant	Symbol	Average Time	Standard (ppm)		Standard (µg/m³)		Violation Criteria	
			California	National	California	National	California	National
		Rolling 3-month average	–	–	–	0.15	If equaled or exceeded	Averaged over a rolling 3-month period

Notes:
[a] The final 1-hour SO^2 rule was signed June 2, 2010. The annual and 24-hour SO_2 standards were revoked in that same rulemaking. However, these standards remain in effect until 1 year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved.
[b] Secondary standard.
[c] EPA finalized the new PM2.5 annual arithmetic mean standard of 12.0 µg/m³ on December 14, 2012, which went into effect March 18, 2013. The previous 15 µg/m³ standard remained in effect until March 18, 2013, and remains in effect as the secondary standard.
ppm = parts per million; µg/m³ = micrograms per cubic meter.
Source: CARB 2016.

3.2.2.2 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 practical date. The CAAQS incorporate additional standards for most of the criteria pollutants and set standards for other pollutants recognized by the state. In general, the California standards are more health-protective than the corresponding NAAQS. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The Basin is in compliance with the California standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride. Table 3.2-2 provides the Los Angeles County portion of the Basin's attainment status with respect to NAAQS and CAAQS.

Table 3.2-2. Federal and State Attainment Status for Los Angeles County Portion of the South Coast Air Basin

Pollutants	Federal Classification	State Classification
O_3 (1-hour standard)	—	Nonattainment
O_3 (8-hour standard)	Nonattainment, Extreme	Nonattainment
PM_{10}	Attainment/Maintenance	Nonattainment
$PM_{2.5}$	Nonattainment, Moderate	Nonattainment
CO	Attainment/Maintenance	Attainment
NO_2	Attainment/Maintenance	Attainment
SO_2	Attainment	Attainment
Pb[a]	Nonattainment	Attainment

[a] Note that only the Los Angeles County portion of the basin is nonattainment for NAAQS Pb. The remainder of the basin is in attainment.
Sources: CARB 2017; EPA 2019a.

3.2.2.3 Local

The project lies within the Los Angeles County portion of the Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD has jurisdiction over an area of approximately 10,743 square miles, including all of Orange County, Los Angeles County (except for the Antelope Valley), the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The Basin is a sub-region of SCAQMD's jurisdiction. Although air quality in this area has improved, the Basin requires continued diligence to meet air quality standards.

SCAQMD has adopted a series of air quality management plans (AQMPs) to meet the CAAQS and NAAQS. These plans require, among other emissions-reducing activities, control technology for existing sources, control programs for area sources and indirect sources, an SCAQMD permitting system that allows no net increase in emissions from any new or modified (i.e., previously permitted) emissions sources, and transportation control measures. The most recent publication is the 2016 AQMP, which is intended to serve as a regional blueprint for achieving the federal air quality standards for healthful air.

The 2016 AQMP represents a thorough analysis of existing and potential regulatory control options and includes available, proven, and cost-effective strategies to pursue multiple goals in promoting reductions in greenhouse gas (GHG) emissions and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The 2016 AQMP focuses on demonstrating NAAQS attainment dates for the 2008 8-hour O_3 standard, the 2012 annual $PM_{2.5}$ standard, and the 2006 24-hour $PM_{2.5}$ standard. The 2016 AQMP includes both stationary and mobile source strategies to ensure that rapidly approaching attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the NAAQS are not met by the established date.

SCAQMD published the *CEQA Air Quality Handbook* in November 1993 to help local governments analyze and mitigate project-specific air quality impacts. This handbook provides standards, methodologies, and procedures for conducting air quality analyses as part of CEQA documents prepared within SCAQMD's jurisdiction. In addition, SCAQMD has published two guidance documents: *Localized Significance Threshold Methodology for CEQA Evaluations* (2003, revised 2008) and *Particulate Matter (PM) 2.5 Significance Thresholds and Calculation Methodology* (2006). These publications provide guidance for evaluating localized effects from mass emissions during construction. Both were used in the preparation of this analysis (SCAQMD 2006, 2008).

The proposed project is also required to comply with all applicable SCAQMD rules and regulations pertaining to construction activities, including, but not limited to the following.

SCAQMD Rule 402—Nuisance

This rule prohibits the discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, endanger the comfort, repose, health, or safety of any such persons or the public, or cause, or have a natural tendency to cause, injury or damage to business or property. Odors are regulated under this rule.

SCAQMD Rule 403—Fugitive Dust

This rule prohibits emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area that remains visible beyond the property line of the emission's source.

During construction, best available control measures identified in the rule would be required to minimize fugitive dust emissions from proposed earthmoving and grading activities. These measures would include site pre-watering and re-watering as necessary to maintain sufficient soil moisture content. Additional requirements apply to construction projects on properties with 50 or more acres of disturbed surface area or any earthmoving operation with a daily earthmoving or throughput volume of 5,000 cubic yards or more three times during the most recent 365-day period. These requirements include submittal of a dust control plan, maintenance of dust control records, and designation of an SCAQMD-certified dust control supervisor.

SCAQMD Rule 1108—Cutback Asphalt

This rule specifies VOC content limits for cutback asphalt.

SCAQMD Rule 1470—Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

This rule specifies requirements for stationary diesel engines, including emergency standby generators. It requires owners or operators of emergency standby generators to keep monthly logs of usage, limits maintenance, and testing to 20 hours per year and requires emission rates to not exceed 0.40 gram per brake-horsepower hour.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties. SCAG addresses regional issues related to transportation, the economy, community development, and the environment and is the federally designated metropolitan planning organization for a majority of the region and the largest metropolitan planning organization in the nation. As required by federal and state law, SCAG develops plans pertaining to transportation, growth management, hazardous waste management, housing, and air quality. SCAG data are used in the preparation of air quality forecasts and the conformity analysis included in the AQMP.

3.2.2.4 Description of Relevant Air Pollutants

Criteria Pollutants

Air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. These regulated air pollutants, which are known as *criteria air pollutants*, are categorized as primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOCs), nitrogen oxides (NO_X), sulfur dioxide (SO_2), and most fine particulate matter (PM_{10} and $PM_{2.5}$), including Pb and fugitive dust, are primary air pollutants. Of these, CO, SO_2, PM_{10}, and $PM_{2.5}$ are criteria pollutants. VOCs and NO_X are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. O_3 and nitrogen dioxide (NO_2) are the principal secondary pollutants. The following descriptions of each criteria air pollutant and their health effects are based on information provided by SCAQMD (2017a).

Nitrogen Dioxide (NO_2)

NO_2 is a reddish-brown gas with a bleach-like odor. NO is a colorless gas, formed from nitrogen (N_2) and oxygen (O_2) under conditions of high temperature and pressure, which are generally present

during combustion of fuels (e.g., motor vehicles); NO reacts rapidly with the oxygen in air to form NO_2, which is responsible for the brownish tinge of polluted air. The two gases, NO and NO_2, are referred to collectively as NO_X. In the presence of sunlight, atmospheric NO_2 reacts and splits to form an NO molecule and an oxygen atom. The oxygen atom can react further to form O_3, via a complex series of chemical reactions involving hydrocarbons.

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposures to NO_2 at levels found in homes with gas stoves, which are higher than the ambient NO_2 levels found in Southern California homes that generally have fewer or no stoves. In healthy people, increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 (SCAQMD 2017a). Larger decreases in lung functions are observed in individuals with asthma and/or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. More recent studies have found associations between NO_2 exposures and cardiopulmonary mortality, decreased lung function, respiratory symptoms ,and emergency room asthma visits.

Ozone (O_3)

Ozone, or smog, is photochemical oxidant that is formed when VOC and NO_X (both by-products of the internal combustion engine) react with sunlight. VOC are compounds made up primarily of hydrogen and carbon atoms (hydrocarbons). Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of VOC are emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. The two major forms of NO_X are NO and NO_2. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_2 is a reddish-brown irritating gas formed by the combination of NO and oxygen. In addition to serving as an integral participant in ozone formation, NO_X also directly acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens.

Ozone poses a higher risk to those who already suffer from respiratory diseases (e.g., asthma), children, older adults, and people who are active outdoors. Exposure to ozone at certain concentrations can make breathing more difficult, cause shortness of breath and coughing, inflame and damage the airways, aggregate lung diseases, increase the frequency of asthma attacks, and cause chronic obstructive pulmonary disease. Studies show associations between short-term ozone exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to ozone may increase the risk of respiratory-related deaths (EPA 2019c). The concentration of ozone at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 (ppb) of ozone and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggest that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum ozone concentration reaches 80 (ppb) (EPA 2019d).

In addition to its deleterious human health effects, ozone has been tied to crop damage, typically in the form of stunted growth, leaf discoloration, cell damage, and premature death. Ozone can also act as a corrosive and oxidant, resulting in property damage, such as the degradation of rubber products and other materials.

, which , , Carbon Monoxide (CO)

CO, a colorless, odorless, relatively inert gas, is a trace constituent in the unpolluted troposphere produced by natural processes and human activities. In remote areas far from human habitation, CO occurs in the atmosphere at an average background concentration of 0.04 ppm, primarily as a result of natural processes, such as forest fires and the oxidation of methane. Global atmospheric mixing of CO from urban and industrial sources creates higher background concentrations (up to 0.20 ppm) near urban areas. The major source of CO in urban areas is incomplete combustion of carbon-containing fuels, mainly gasoline.

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. 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 those with diseases involving heart and blood vessels, fetuses, and people with chronic hypoxemia (oxygen deficiency) as seen in high altitudes. Exposure to CO at high concentrations can also cause fatigue, headaches, confusion, dizziness, and chest pain. Ambient CO has no ecological or environmental effects (CARB 2019b).

Sulfur Dioxide (SO_2)

SO_2 is a colorless gas with a sharp odor. It reacts in air to form sulfuric acid, which contributes to acid precipitation, and sulfates, which are components of particulate matter. Main sources of SO_2 include coal and oil used in power plants and industries. Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics, the vast majority of whom are sensitive to the effects of SO_2. In asthmatics, increase in resistance to airflow, as well as reduction in breathing capacity leading to severe breathing difficulties, is observed after acute higher exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses, even after exposure to higher concentrations of SO_2.

Particulate Matter (PM_{10} and $PM_{2.5}$)

Particulate matter consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of particulates are now generally considered: inhalable course particles, or PM_{10}, and inhalable fine particles, or $PM_{2.5}$. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind on arid landscapes also contributes substantially to local particulate loading.

Particulate pollution can be transported over long distances and may adversely affect humans, especially for people who are naturally sensitive or susceptible to breathing problems. Numerous studies have linked PM exposure to premature death in people with preexisting heart or lung disease. Other symptoms of exposure may include nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms. In 2010, CARB estimated that annual $PM_{2.5}$ emissions caused 9,200 premature death per year in California, with an uncertainty range of 7,300–11,000; for the Basin, the estimate was 4,900 with an uncertainty range of 3,900–6,000 (SCAQMD 2017b). other areas, the Sacramento Metropolitan Area, caused 90 premature deaths, 20 hospital admissions, 1,200 asthma and lower respiratory symptom cases, 110

acute bronchitis cases, 7,900 lost work days, and 42,000 minor restricted activity days in 2010 (SCAQMD 2013). Depending on its composition, both PM_{10} and $PM_{2.5}$ can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain (U.S. Environmental Protection Agency 2019).

Lead (Pb)

Pb in the atmosphere is present as a mixture of a number of lead compounds. Leaded gasoline and lead smelters have been the main sources of lead emitted into the air, but due to the phasing out of leaded gasoline, there has been a dramatic reduction in atmospheric Pb over the past three decades. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can also cause anemia, lethargy, seizures, and death; there is no evidence to suggest that Pb has direct effects on the respiratory system.

Toxic Air Contaminants

Toxic air contaminants (TAC) are generally defined as those contaminants that are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. TACs are also defined as air pollutants that may increase a person's risk of developing cancer and/or other serious health effects not automatically create a health hazard. TACs are emitted by a variety of industrial processes, including petroleum refining, electric utility and chrome plating operations, commercial operations, such as gasoline stations and dry cleaners, and motor vehicle exhaust; TACs may exist as PM_{10} and $PM_{2.5}$ or as vapors (gases). To date, CARB has identified 21 TACs and adopted EPA's list of hazardous air pollutants as TACs. In August 1998, CARB identified diesel particulate matter (DPM) emissions as a TAC (CARB 1998). In September 2000, CARB approved a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles. The goal of the plan was to reduce DPM emissions and the associated health risk by 75 percent by 2010 and by 85 percent by 2020 (CARB 2000).

TACs include metals, other particles, gases absorbed by particles, and certain vapors from fuels and other sources. According to the 2009 *California Almanac of Emissions and Air Quality,* the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being DPM, which differs from other TACs in that it is a complex mixture of hundreds of substances, rather than a single substance (CARB 2009). DPM is composed of two phases, gas and particle, and both phases contribute to health risks. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine PM is of the greatest health concern and may be composed of elemental carbon with adsorbed compounds, such as organic compounds, SO_2, nitrates, metals, and other trace elements. DPM is emitted from a broad range of diesel engines: the on-road diesel engines of trucks, buses, and cars and the off-road diesel engines that include locomotives, marine vessels, and heavy-duty equipment. Although DPM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and presence of an emission control system.

Acute exposure to diesel exhaust may cause irritation to the eyes, nose, throat, and lungs, and has some neurological effects, such as lightheadedness. Acute exposure may also elicit a cough or

nausea, as well as exacerbate asthma. Chronic exposure to DPM in experimental animal inhalation studies has shown a range of dose-dependent lung inflammation and cellular changes in the lung and immunological effects. Based upon human and laboratory studies, there is considerable evidence that DPM is a likely carcinogen. Human epidemiological studies have demonstrated an association between DPM exposure and increased lung cancer rates in occupational settings.

3.2.3 Environmental Setting

3.2.3.1 Regional Context

The project site is located within the Basin, an area covering approximately 6,745 square miles and bounded by the Pacific Ocean to the west and south and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The terrain and geographical location determine the distinctive climate of the Basin, which is a coastal plain with connecting broad valleys and low hills.

The Southern California region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (i.e., weather and topography) as well as human-made influences (i.e., development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of pollutants throughout the Basin, making it an area of high pollution potential.

The greatest air pollution impacts in the Basin occur from June through September and are generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. These conditions frequently reduce pollutant dispersion, thereby causing elevated air pollution levels. Pollutant concentrations in the Basin vary with location, season, and time of day O_3 concentrations, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Basin and adjacent desert.

SCAQMD completed ambient air monitoring, and their evaluation studies in the Basin are compiled in the regularly updated Multiple Air Toxics Exposure Study (MATES), the most recent of which is the MATES IV study: the final draft was released to the public in May 2015. The MATES IV study estimated that the average carcinogenic risk throughout the Basin attributed to TACs is approximately 1,023 in one million. Approximately 80 percent of all risk is attributed to DPM emissions, but DPM showed a 70 percent reduction compared to MATES III (SCAQMD 2015). MATES V is currently being conducted and will include a fixed site monitoring program with 10 stations, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize cancer risk across the Basin.

Local Climate

Data from the closest climate monitoring station with recent data, the Western Regional Climate Center's (WRCC's) Burbank Valley Pump Station (COOPID 041194), was used to characterize project vicinity climate conditions. Over the period of record (1966–2016), the average study area summer (August) high and low temperatures were 89.0°F and 61.4°F, respectively. The average winter (January) high and low temperatures were 67.5°F and 41.7°F, respectively. Rainfall varies widely

from year to year, with an annual average of 16.29 inches with an average of 36 days with measureable rainfall (greater than or equal to 0.01 inches) (WRCC 2019).

The closest wind monitoring station, located approximately 10 miles southeast of the study area, is the Burbank/Glendale/Pasadena Airport wind monitoring station. Wind patterns in the project vicinity arise primarily from the south and southeast, with seasonal and diurnal variations resulting during Santa Ana events and winter storms. Over the period of record (January 1, 2012, to December 31, 2014), winds at the Burbank/Glendale/Pasadena Airport station averaged a speed of 2.10 meters per second (4.7 miles per hour), with calm wind conditions present 34 percent of the time (WRCC 2016).

Local Air Quality

SCAQMD has divided the Basin into general forecast and air monitoring areas and maintains a network of air quality monitoring stations throughout. The project site is located in the East San Fernando Valley Monitoring Area (Source Receptor Area [SRA] 7) portion of the San Fernando Valley General Forecast Area. There are currently no active monitoring stations in SRA 7. Other SRAs within the San Fernando Valley General Forecast Area include SRA 6 (West San Fernando Valley) and SRA 13 (Santa Clarita Valley). The Reseda station (CARB 70074, 18330 Gault Street) in SRA 6 monitors O_3, NO_2, CO, and $PM_{2.5}$ and is 10 miles southwest of the project site. The closest station that monitors PM_{10} is the Santa Clarita (CARB 70090, 22224 Placerita Canyon) station, which is 6 miles northwest of the project site. Monitoring data from the Reseda and Santa Clarita stations have been provided. Information regarding concentrations of pollutants over the last 3 years (2015–2017) has been compiled from the stations' data (see Table 3.2-3, below).

The monitoring data show the following trends for pollutant concentrations:

- The 1-hour O_3 state standard as well as the 8-hour O_3 state and federal standards were exceeded in each of the most recent years for which data are available;
- The 24-hour PM_{10} state standard was exceeded in 2016 and 2017; and
- No exceedances of the 1-hour NO_2, 1-hour CO, 8-hour CO, PM_{10} federal, or $PM_{2.5}$ state or federal standards during the most recent 3-year period.

As discussed above, the CAAQS and NAAQS define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Existing violations of the ozone and PM_{10} ambient air quality standards indicate that certain individuals exposed to this pollutant may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

Local Health Risk

According to SCAQMD inhalation cancer risk data (MATES IV), the study area is within cancer risk zones of approximately 445 in one million (SCAQMD 2015). For comparison, the average cancer risk in the Basin is 1,023 in one million.

Sensitive Receptors and Locations

SCAQMD defines sensitive receptor locations as residential, commercial, and industrial land use areas, as well as other locations where sensitive populations may be located, such as schools, hospitals, convalescent homes, day care centers, and other locations where children, chronically ill individuals, or other sensitive persons could be exposed (SCAQMD 2005).

The project site is surrounded by residential uses, undeveloped hillsides, flood control facilities, State Route 210 (I-210 or the Foothill Freeway), and a small number of businesses. Sensitive receptors within the project vicinity include the surrounding residences in all directions, and, because a hospital is considered a sensitive receptor, patients, as well as workers on the project site itself. Sensitive receptors are also located along the haul and material delivery routes that will be required to implement the proposed project.

Table 3.2-3. Ambient Background Concentrations from Nearby Stations

Pollutant Standards	2015	2016	2017
1-Hour Ozone (O_3)			
State Maximum Concentration (ppm)	0.119	0.122	0.140
Number of Days Standard Exceeded			
CAAQS 1-hour Standard (>0.09 ppm)	11	9	26
8-Hour Ozone (O_3)			
State Maximum Concentration (ppm)	0.095	0.099	0.115
National Maximum Concentration (ppm)	0.094	0.098	0.114
National Fourth-Highest Concentration (ppm)	0.087	0.086	0.095
National Design Value (ppm)	0.084	0.085	0.089
Number of Days Standard Exceeded			
CAAQS 8-hour Standard (>0.070 ppm)	34.0	23.0	67.0
NAAQS 8-hour Standard (>0.070 ppm)	32.0	23.0	64.0
Carbon Monoxide (CO)			
Maximum Concentration 8-hour Period (ppm)	2.5	1.9	2.5
Maximum Concentration 1-hour Period (ppm)	3.0	2.4	3.0
Number of Days Standard Exceeded			
NAAQS 8-hour Standard (≥9 ppm)	0	0	0
CAAQS 8-hour Standard (≥9.0 ppm)	0	0	0
NAAQS 1-hour Standard (≥35 ppm)	0	0	0
NAAQS 1-hour Standard (≥20 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum National 1-hour Concentration (ppm)	0.0725	0.055	0.0625
Maximum State 1-hour Concentration (ppm)	0.072	0.055	0.062
Annual Average Concentration (ppm)	0.013	0.012	0.012
Number of Days Standard Exceeded			
CAAQS 1-Hour Standard (0.18 ppm)	0	0	0
NAAQS 1-Hour Standard (100 ppb)	0	0	0
Suspended Particulates (PM_{10})			
Maximum State 24-hour Concentration (μg/m^3)	39.0	96.1	66.5
Maximum National 24-hour Concentration (μg/m^3)	41.0	96.0	66.5
State Annual Average Concentration (μg/m^3)	N/A	23.6	N/A
Number of Days Standard Exceeded			
CAAQS 24-hour Standard (>50 μg/m^3)	0.0	1.0	2
NAAQS 24-hour Standard (>150 μg/m^3) *(estimated days)*	0.0	0.0	N/A

Pollutant Standards	2015	2016	2017
Suspended Particulates ($PM_{2.5}$)			
Maximum National 24-hour Concentration (µg/m³)	36.8	30.0	35.2
24-hour Standard 98th Percentile (µg/m³)	28.4	24.5	20.7
National Annual Average Concentration (µg/m³)	8.8	9.1	9.7
State Annual Average Concentration (µg/m³)	N/A	16.9	16.8
Number of Days Standard Exceeded			
NAAQS 24-hour Standard (>35 µg/m³)	N/A	0	0

ppm = parts per million; ppb = parts per million; µg/m³ = micrograms per cubic meter; N/A = data not available.
Sources: CARB 2019a; EPA 2019b.

3.2.4 Environmental Impact Analysis

3.2.4.1 Methods

The methodology for assessing construction- and operations-related air quality impacts is presented below.

Construction Mass Emissions

As discussed in Chapter 2, *Project Description*, of this EIR, Tier I involves the construction of near-term projects. Construction of the proposed project would result in the generation of criteria pollutant and TAC emissions. Mass daily and total combustion exhaust, fugitive dust (PM_{10} and $PM_{2.5}$), and fugitive off-gassing paving emissions associated with Tier I construction activities have been estimated using the California Emissions Estimator Model (CalEEMod, version 2016.3.2) developed by the California Air Pollution Control Officers Association. Given that the specific construction schedule for each element of Tier I is unknown at this point, modeling defaults regarding construction phase types, phase lengths, equipment assumptions, and vehicle trip length assumptions within CalEEMod were used to provide a conservative analysis based on projected Master Plan square footages. The Restorative Care Village was assumed to begin construction in 2020 and begin operation in 2021, and all construction activities associated with the Restorative Care Village were assumed to be undertaken concurrently. Construction of the Ambulatory Care Center, parking structure, administration, Community Center, Materials Management/Supply Services Building, and Central Plant East were assumed to begin construction following the completion of the Restorative Care Village, with construction beginning in 2021 and operation beginning in 2023. Although it is likely that construction would occur later and over a longer timeframe, this accelerated schedule is conservative in that it overstates the level of construction activity that would occur on any given day. Also, because this analysis assumes that construction would occur earlier than the 2035 buildout date for Tier 1 suggests, emissions estimates are likely overstated in that they reflect current vehicle and equipment technologies rather than cleaner technologies that are likely to be in use closer to the Tier 1 2035 buildout date.

Regarding localized effects, SCAQMD's localized significance threshold (LST) methodology was developed to aid in the analysis of construction associated with land use development projects. SCAQMD's LST methodology focuses on emissions from mobile construction equipment (i.e., loaders, backhoes, forklifts, generators, etc.) and stationary sources (i.e., natural gas furnaces,

emergency generators, etc.) and mobile equipment (i.e., forklifts) operating onsite and within the project boundary. The LST methodology and lookup tables are not designed to evaluate localized impacts from mobile sources traveling over roadways outside of the project boundary. Therefore, the LST analysis only includes those emissions that would occur onsite and does not include emissions from motor vehicles traveling on roadways.

For purposes of analysis, fugitive dust emissions assume compliance with SCAQMD Rule 403, which would reduce fugitive dust emissions by 61 percent by watering three times per day. The exact dust-control methods used for construction will be specified in a dust-control plan that would be submitted to the SCAQMD per Rule 403 prior to construction. Tier I emissions are presented at the daily time scale and compared with the thresholds discussed in Section 3.2.4.2, *Thresholds of Significance*, in this EIR. All emissions calculation worksheets and air quality modeling output files are provided in Appendix C of this Draft EIR.

Tier 2 is discussed qualitatively, as details of the project elements and construction schedules are not known at this point. Additional environmental documentation will be prepared, if determined necessary under the requirements of CEQA, to assess the impacts of Tier 2 when more information is known and if determined necessary under the requirements of CEQA.

Emissions are presented at the daily time scale and compared with SCAQMD's thresholds discussed in Section 3.2.4.2, *Thresholds of Significance*, in this EIR. All emissions calculation worksheets and air quality modeling output files are provided in Appendix C of this Draft EIR .

Construction Health Risk

Diesel-powered construction equipment and long-term truck activity would emit DPM that could potentially expose nearby sensitive receptors to pollutant concentrations. As discussed above, sensitive receptors within the project vicinity include the surrounding residences in all directions, as well as patients and workers on the project site itself. Given the project would introduce DPM emissions to an area near existing sensitive receptors, a construction-period health risk assessment (HRA) was conducted to evaluate potential human health risk impacts that could result from the exposure of nearby sensitive receptors to DPM. The HRA consists of three parts: a TAC inventory, air dispersion modeling, and risk calculations.

The methodologies and assumptions used in the HRA are consistent with the guidance recommended by OEHHA's *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments* (OEHHA 2015). The OEHHA methodology used in this assessment relies on a dose-response assessment to characterize risk from cancer due to inhaled TACs, specifically DPM. Based on these total emissions, onsite combustion PM_{10} emissions were extracted from the CalEEMod outputs and converted to an emission rate (in grams per second) for use in the air quality modeling to determine DPM concentrations at the nearest sensitive receptors. PM_{10} exhaust was assumed to be equal to DPM. Dispersion modeling was performed using the American Meteorological Society/Environmental Protection Agency Regulator Model (AERMOD), a steady-state, multiple-source Gaussian dispersion model that was designed for use with emission sources situated in terrain where ground elevations can exceed the release heights of the emission sources (i.e., complex terrain). AERMOD is the EPA regulatory dispersion model specified in the *Guideline for Air Quality Methods* (Code of Federal Regulations, Title 40, Part 51, Appendix W) (EPA 2017) and is recommended for use by the SCAQMD, which has established its own modeling guidance for the model (SCAQMD n.d.).

The health risk calculations were based on the most recent OEHHA guidance manual, which includes age-specific factors that take into account increased sensitivity to carcinogens during early-in-life exposure. The approach to estimating cancer risk from the project's construction activities required calculating a range of potential doses and multiplying by cancer potency factors in units corresponding to the inverse dose to obtain a range of cancer risks. For cancer risk, the risk for each age group was calculated using the appropriate daily breathing rates, age sensitivity factors, and exposure duration. The cancer risks calculated for the most sensitive age groups (third trimester of pregnancy through 2 years of age) was used to estimate the project's incremental cancer risk.

Operational Mass Emissions

Existing (2016) uses at the project site generate criteria pollutant and TAC emissions, including emissions associated with motor vehicle travel to and from the site, natural gas combustion for space and heating, and area sources associated with consumer products (e.g., cleaning supplies, kitchen aerosols, cosmetics, toiletries), architectural coatings, and landscaping. Buildout of the proposed project would result in a change in land uses onsite, as well as increased intensity of existing uses, and would thus result in emissions in different quantities than existing uses. Assuming a 2020 construction start date and a default and concurrent construction schedule, Tier 1 elements could be operational as early as 2023. Therefore, the operational analysis assumes a 2023 Tier 1 full buildout. While the buildout date for Tier I of the proposed project is 2035, assuming a 2023 buildout date likely overstates impacts.

Criteria pollutant and TAC emissions associated with both existing and proposed uses were estimated using CalEEMod, motor vehicle trip generation data from the traffic impact analysis (Fehr & Peers 2019), and CalEEMod defaults for electricity, natural gas consumption, and area sources for both existing and proposed land uses. Emissions are presented at the daily time scale and the net effects of the proposed project (Master Plan buildout relative to existing uses) is compared with the thresholds discussed in Section 3.2.4.2, *Thresholds of Significance*, in this EIR. In addition, the Olive View–UCLA Medical Center Campus currently generates emissions from various permitted sources located onsite, including emergency generators, boilers, storage tanks, and other sources that emit both criteria pollutant and TAC emissions. Annual emissions from existing permitted sources was obtained from SCAQMD's FIND database for calendar year 2016 reporting, converted to average daily emissions, and scaled linearly based on the change between existing campus square footage and buildout of Tier I square footage (SCAQMD 2019). Emissions associated with permitting for new or modified stationary sources are not included in this analysis, as the specific details regarding such equipment, or if equipment will be needed in the future, are unknown at this time.

Regarding localized effects, the LST analysis focuses on criteria pollutant emissions from stationary sources (i.e., natural gas furnaces, emergency generators, etc.) and mobile equipment (i.e., forklifts) operating onsite.

Operational Carbon Monoxide Hot Spots

A CO *hot spot* is a localized concentration of CO that is above the state or national 1-hour or 8-hour ambient air standards for the pollutant. The potential for the proposed project to result in localized CO impacts occurring from the addition of project-associated traffic volumes at intersections is assessed based on SCAQMD's suggested criteria, which recommends performing a localized CO impact analysis for intersections that change from level of service (LOS) C to D as a result of a project and for all intersections rated D or worse where the project increases the volume-to-capacity (V/C) ratio by 2 percent or more. Additionally, as part of SCAQMD's 2003 AQMP, which is the most

recent AQMP that addresses CO concentrations, a detailed CO hot spots analysis was conducted at four heavily congested intersections in the Basin that were likely to experience the highest CO concentrations. The results of the CO hot spots analysis did not predict a violation of CO standards at any of these four intersections. As such, the highest daily traffic volumes that would occur among the study intersections analyzed in the project's traffic analysis are also compared against the highest traffic volumes at the busiest intersection evaluated in the 2003 AQMP in this analysis to evaluate the potential for the proposed project to result in any localized CO impacts.

3.2.4.2 Thresholds of Significance

For the purposes of the analysis in this EIR, and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant environmental impact if it would:

AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.

AQ-2 Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is a nonattainment area with respect to the applicable federal or state ambient air quality standard.

AQ-3 Expose sensitive receptors to substantial pollutant concentrations.

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

Appendix G, Section III, of the State CEQA Guidelines states that, where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make determinations regarding air quality impacts. Given SCAQMD's regulatory role in the Basin, the significance thresholds and analysis methodologies established by SCAQMD are relied upon to make determinations regarding air quality impacts.

Criteria Pollutants

The significance thresholds and analysis methodologies outlined in SCAQMD's *CEQA Air Quality Handbook*, *Localized Significance Threshold Methodology for CEQA Evaluations*, and *Particulate Matter (PM) 2.5 Significance Thresholds and Calculation Methodology* guidance documents were used in evaluating project impacts. Specifically, the SCAQMD construction and operational regional mass emissions thresholds identified in Table 3.2-4, below, were used for the regional assessment of criteria pollutants herein.

With respect to localized emissions, SCAQMD has developed LSTs and mass rate look-up tables to help public agencies analyze the project-related effects of pollutants on nearby receptors. The LSTs are based on the size or total area of the emissions source, the ambient air quality in each SRA where the emissions sources are located, and the distance to nearby sensitive receptor locations. The project site encompasses 230 acres within the East San Fernando Valley Source Receptor Area 7 (SRA 7). The proposed project addresses issues concerning the entire Olive View–UCLA Medical Center Campus; therefore, the entire campus is considered the project site.

Given the size of the project site and the distance of specific buildings from the nearest offsite receptors, different LSTs were used for the components of Tier I. As discussed above, the Restorative Care Village would be constructed first; a 1-acre site size and 200-meter distance to offsite receptors was used to determine the appropriate LST. Following the completion of the Restorative Care Village, the Ambulatory Care Center, parking structure, administration, Community

Center, Materials Management/Supply Services Building, and Central Plant East would be constructed; a 5-acre site and 50-meter receptor distance were used, based on the distance of the Community Center to the nearest offsite receptor, the multifamily residential development to the south of the campus. To account for construction-period effects of haul truck emissions on sensitive receptors near the project site, for the purposes of the LST analysis, it was assumed that 10 percent of total offsite emissions would occur at the project site. The inclusion of such emissions likely overstates impacts, as all but a small amount of on-road haul truck use would occur away from the site.

Table 3.2-4. SCAQMD Significance Thresholds (pounds per day)

Construction	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$	Pb[a]
Restorative Care Village							
Localized Significance Thresholds[b]	N/A	122	2,227	N/A	54	18	N/A
Ambulatory Care Center, Parking Structure, Administration, Community Center, Materials Management/ Supply Services Building, and Central Plant East							
Localized Significance Thresholds[c]	N/A	165	1,872	N/A	42	10	N/A
Regional Significance Thresholds	75	100	550	150	150	55	3
Operations							
Localized Significance Thresholds[d]	N/A	194	4,119	N/A	21	7	N/A
Regional Significance Thresholds	55	55	550	150	150	55	3

[a] The proposed project would result in no lead emissions during construction or operations due to the prohibition of lead in fuels. As such, lead emissions are not evaluated herein.
[b] Localized thresholds for construction based on a 1-acre construction site and 200-meter distance to receptors within SRA 7 (East San Fernando Valley). SCAQMD has not developed LSTs for VOC, SO_2, or Pb emissions.
[c] Localized thresholds for construction based on a 5-acre construction site and 50-meter distance to receptors within SRA 7. SCAQMD has not developed LSTs for VOC, SO_2, or Pb emissions.
[d] Localized thresholds for operation based on a 5-acre construction site and 200-meter distance to receptors within SRA 7. SCAQMD has not developed LSTs for VOC, SO_2, or Pb emissions.
Source: SCAQMD 2008, 2019.

For operations, emissions from onsite sources would occur throughout the entire site. Therefore, the maximum allowed acreage within the LST methodology of 5 acres is utilized for the operational analysis. A 200-meter receptor distance is used based on the proposed onsite stationary source (at proposed ambulatory care center) to the nearest offsite receptor (multifamily residences south of Olive View Drive).

Health-Based Thresholds for Project-Generated Pollutants of Human Health Concern

In December 2018, the California Supreme Court issued its decision in *Sierra Club v. County of Fresno* (6 Cal. 5th 502), hereafter referred to as the Friant Ranch Decision. The case reviewed the long-term regional air quality analysis contained in the EIR for the proposed Friant Ranch development project, is a 942-acre Master Plan development in unincorporated Fresno County, within the San Joaquin Valley Air Basin, which is currently in nonattainment for the ozone and $PM_{2.5}$ NAAQS and CAAQS. The court found that the air quality analysis was inadequate because it failed to provide enough detail "for the public to translate the bare [criteria pollutant emissions] numbers provided into adverse health impacts or to understand why such a translation is not possible at this time." The

court's decision clarifies that environmental documents must connect a project's air quality impacts to specific health effects or explain why it is not technically feasible to perform such an analysis.

As discussed in Section 3.2.2, *Regulatory Setting*, of this EIR, all criteria pollutants that would be generated by the proposed project are associated with some form of health risk (e.g., asthma). Criteria pollutants can be classified as either regional or localized pollutants: regional pollutants can be transported over long distances and affect ambient air quality far from the emissions source, and localized pollutants affect ambient air quality near the emissions source. Ozone is considered a regional criteria pollutant, whereas CO, NO_2, SO_2, and Pb are localized pollutants. PM can be both a local and a regional pollutant, depending on its composition. As discussed above, the primary criteria pollutants of concern generated by the project are ozone precursors (ROG and NO_X), CO, and PM (including DPM).

Regional Project-Generated Criteria Pollutants (Ozone Precursors and Regional PM)

Adverse health effects induced by regional criteria pollutant emissions generated by the proposed project (ozone precursors and PM) are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individuals [e.g., age, gender]). For these reasons, ozone precursors (ROG and NO_X) contribute to the formation of ground-borne ozone on a regional scale, where emissions of ROG and NO_X generated in one area may not equate to a specific ozone concentration in that same area. Similarly, some types of particulate pollutant may be transported over long distances or formed through atmospheric reactions. As such, the magnitude and locations of specific health effects from exposure to increased ozone or regional PM concentrations are the product of emissions generated by numerous sources throughout a region, as opposed to an individual project.

Models and tools have been developed to correlate regional criteria pollutant emissions to potential community health impacts. While there are models capable of quantifying ozone and secondary PM formation and associated health effects, these tools were developed to support regional planning and policy analysis and have limited sensitivity to small changes in criteria pollutant concentrations induced by individual projects. Therefore, translating project-generated criteria pollutants to the locations where specific health effects could occur or the resultant number of additional days of nonattainment cannot be estimated with a high degree of accuracy for relatively small projects (relative to the regional air basin).

Technical limitations of existing models to correlate project-level regional emissions to specific health consequences are recognized by air quality management districts throughout the state, including the San Joaquin Valley Air Pollution Control District (SJVAPCD) and SCAQMD, both of which provided amici curiae briefs for the Friant Ranch legal proceedings. In its brief, SJVAPCD (2015) acknowledges that while health risk assessments for localized TACs, such as DPM, are commonly prepared, "it is not feasible to conduct a similar analysis for criteria air pollutants because currently available computer modeling tools are not equipped for this task." The air district further notes that emissions solely from the Friant Ranch project (which equate to less than 0.1 percent of the total NO_X and VOC in the Valley) is not likely to yield valid information," and that any such information should not be "accurate when applied at the local level." SCAQMD (2015b) presents similar information in their brief, stating that "it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels."[1]

[1] For example, SCAQMD's analysis of their 2012 Air Quality Attainment Plan showed that modeled NO_X and ROG reductions of 432 and 187 tons per day, respectively, only reduced ozone levels by 9 parts per billion. Analysis of

As discussed above, air districts develop region-specific CEQA thresholds of significance in consideration of existing air quality concentrations and attainment or nonattainment designations under the NAAQS and CAAQS, both of which are informed by a wide range of scientific evidence that demonstrates there are known safe concentrations of criteria pollutants. While recognizing that air quality is cumulative problem, air districts typically consider projects that generate criteria pollutant and ozone precursor emissions below these thresholds to be minor in nature and would not adversely affect air quality such that the NAAQS or CAAQS would be exceeded. Emissions generated by the project could increase photochemical reactions and the formation of tropospheric ozone and secondary PM, which at certain concentrations, could lead to increased incidence of specific health consequences. Although these health effects are associated with ozone and particulate pollution, the effects are a result of cumulative and regional emissions. As such, a project's incremental contribution cannot be traced to specific health outcomes on a regional scale, and a quantitative correlation of project-generated regional criteria pollutant emissions to specific human health impacts is not included in this analysis.

Localized Project-Generated Criteria Pollutants (PM and CO) and Air Toxics (DPM)

Localized pollutants generated by a project are deposited and potentially affect population near the emissions source. Because these pollutants dissipate with distance, emissions from individual projects can result in direct and material health impacts to adjacent sensitive receptors. Models and thresholds are readily available to quantify these potential health effects and evaluate their significance. Locally adopted thresholds and analysis procedures for the localized pollutants of concern associated with the proposed project (DPM and CO)[2] are identified below.

Toxic Air Contaminants

Regarding sensitive receptors' exposure to substantial pollutant concentrations, SCAQMD states that the project would have a significant impact from TACs if:

- TACs increase the non-cancer health risk due to short-term (i.e., acute) or long-term (i.e., chronic) exposures. The screening risk assessment for those TACs must estimate the acute and/or chronic Hazard Index, as applicable. Onsite stationary sources emit carcinogenic or TACs that individually or cumulatively exceed the maximum incremental cancer risk of 10 in 1 million (1.0×10^{-5}) or an acute or chronic Hazard Index of 1.0 (SCAQMD 2005, 2011c).
- Hazardous materials associated with onsite stationary sources result in an accidental release of air toxic emissions or acutely hazardous materials, posing a threat to public health and safety (SCAQMD 1993).

Carbon Monoxide Hot Spots

Regarding carbon monoxide hot spots, SCAQMD states that a project impact is significant if it causes or contributes to an exceedance of the following attainment standards:

- 1-hour standards of 20 ppm (state) and 35 ppm (federal), and

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SCAQMD's Rule 1315 showed that emissions of NO_X and ROG of 6,620 and 89,180 pounds per day, respectively, contributed to 20 premature deaths per year and 89,947 school absence (SCAQMD 2015).

[2] Although SO_2, NO_2, and Pb may also concentration locally, the project does not represent a significant source of these pollutants at the local level. Accordingly, they are not discussed or evaluated further.

- 8-hour standards of 9.0 ppm (state) and 9 ppm (federal).

Cumulative Impacts

Potential cumulative air quality impacts would result when other projects' pollutant emissions combine to degrade air quality conditions below acceptable levels. This could occur on a local level (e.g., increased vehicle emissions at congested intersections or concurrent construction activities at sensitive receptor locations) or a regional level (e.g., potential O_3 impacts from multiple past, present, and reasonably foreseeable projects within the Basin). Given that both localized and regional pollution is regulated at the air basin level, the Basin is the resource study area for the purposes of air quality.

The Basin experiences chronic exceedances of the NAAQS and CAAQS and is currently in nonattainment status for various pollutants. These nonattainment conditions within the region are considered cumulatively significant. SCAQMD thresholds have been established to ensure attainment of the NAAQS and CAAQS; therefore, an exceedance of SCAQMD threshold levels must be considered a significant cumulative impact and an adverse cumulative consequence.

3.2.4.3 Impacts and Mitigation Measures

Impact AQ-1: Would the Proposed Project Conflict or Obstruct Implementation of the Applicable Air Quality Plan?

Construction and Operational Impacts

Tiers I and II

SCAQMD is required, pursuant to the CAA, to reduce emissions of criteria pollutants for which the Basin is in nonattainment status. SCAQMD's most recent plan to achieve air quality standards is the 2016 AQMP, adopted by the SCAQMD Governing Board on March 3, 2017. The AQMP outlines a comprehensive control strategy to meet the requirement for expeditious progress toward attainment of the 2006 24-hour $PM_{2.5}$ NAAQS through all feasible control measures and includes specific measures for implementing the O_3 strategy from previous AQMPs and attaining the 8-hour ozone standard by 2031 for the 2008 standard (SCAQMD 2017). These strategies are based, in part, on regional population, housing, and employment projections prepared by the region's cities and counties and incorporated by SCAG. As such, projects that propose development that is consistent with the growth anticipated in the relevant land use plans utilized in the formulation of the AQMP are considered to be consistent with the AQMP. As discussed in Section 3.10, *Land Use/Planning*, of this EIR, the proposed project falls under the jurisdiction of Los Angeles County because the project site is owned and maintained by the County. However, the project is located within the Sylmar Community Plan (Sylmar Plan), a part of the General Plan of the city of Los Angeles. Although these documents are not binding on a County project, the consistency of the proposed project with the city's General Plan (as well as the Los Angeles County 2035 General Plan) have been analyzed. Projects that propose development consistent with the growth anticipated in these land use documents are considered consistent with the AQMP.

As discussed in Section 3.10, *Land Use/Planning*, of this EIR, the project would be consistent with both the County and city general plans and the goals of SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The proposed project would guide development in the short- and long-term at the Olive View–UCLA Medical Center Campus, with new medical,

mental health, and support facilities. Buildout of the proposed project would increase development within the campus, which would increase motor vehicle travel to the site. The Master Plan would include utilization of sustainable design practices, including energy and water efficiency measures, implementation of Leadership in Energy and Environmental Design (LEED) and California Green Building Standards Code (CALGreen) program goals, creation of pedestrian and bicycle paths to promote alternative forms of transportation, and siting near existing transit services. However, while growth is anticipated, the proposed project would be consistent with the current land use designations. The proposed project would be generally supportive of the relevant environmental policies and objectives of the *County of Los Angeles General Plan Land Use Element, Mobility Element*, and the city of Los Angeles Sylmar Plan. Therefore, pursuant to SCAQMD guidelines, because the project would be consistent with the land use designations in the relevant plans and regional planning documents (SCAG RTP/SCS), the proposed project is considered consistent with the region's AQMP. As such, project-related emissions are accounted for in the AQMP, which has been developed to bring the Basin into attainment for all criteria and precursor pollutant standards. The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. This impact is considered less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

No mitigation is required, and impacts would be less than significant.

Impact AQ-2: Would the Proposed Project Result in a Cumulatively Considerable Net Increase in a Criteria Pollutant for which the Project Region Is a Nonattainment Area for an Applicable Federal or State Ambient Air Quality Standard?

Construction Impacts

Tier I

Regional Mass Emissions

Construction of the proposed project would generate air pollutant emissions from the use of heavy-duty construction equipment, construction worker vehicle trips, material deliveries, and trips by heavy-duty haul trucks. In addition, earthwork activities would result in fugitive dust emissions, and paving operations would release VOCs from off-gassing. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources. Fugitive PM_{10} and $PM_{2.5}$ emissions estimates take into account compliance with SCAQMD Rule 403.

Construction-related emissions are shown in Table 3.2-5, below. To provide a conservative analysis scenario that likely overstates impacts, the analysis herein assumes that all Restorative Care Village structures would be under construction concurrently and soon afterward, the Ambulatory Care Center, parking structure, administration, Community Center, Materials Management/Supply Services Building, and Central Plant East would be constructed concurrently. As shown in Table 3.2-5, maximum daily project-related criteria and precursor pollutant emissions would not exceed any SCAQMD regional construction-period thresholds with the exception for an exceedance of the VOC

standard during the architectural coatings phase. Therefore, mitigation is proposed to reduce emissions.

Table 3.2-5. Tier I Daily Construction-Period Regional Mass Emissions–Unmitigated (pounds per day)

Project Element	ROG[a]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Restorative Care Village						
Demolition	2	21	15	<1	1	1
Site Preparation	2	22	9	<1	3	2
Grading	1	17	7	<1	3	2
Building Construction	2	16	15	<1	1	1
Paving	1	8	9	<1	1	<1
Architectural Coatings	39	2	2	<1	<1	<1
Maximum Daily Regional Emissions	**39**	**22**	**15**	**<1**	**3**	**2**
SCAQMD Regional Construction Threshold	75	100	550	150	150	55
Exceed Significance Threshold?	No	No	No	No	No	No
Ambulatory Care Center, Parking Structure, Administration, Community Center, Materials Management/ Supply Services Building, and Central Plant East						
Demolition	3	40	24	<1	5	2
Site Preparation	6	98	35	<1	12	7
Grading	4	83	30	<1	6	3
Building Construction (2021)	4	31	32	<1	4	2
Building Construction (2022)	3	29	31	<1	3	2
Paving	1	11	15	<1	1	1
Architectural Coatings	131	2	4	<1	<1	<1
Maximum Daily Regional Emissions	**131**	**98**	**35**	**<1**	**12**	**7**
SCAQMD Regional Construction Threshold	75	100	550	150	150	55
Exceed Significance Threshold?	Yes	No	No	No	No	No

[a] The terms VOC and reactive organic gases (ROG) are used interchangeably. ROG is used in this table based on CalEEMod.

Source: Emissions estimates using CalEEMod version 2016.3.2 (see Appendix C of this Draft EIR).

Mitigation measure **MM-AQ-1**, which would require low-VOC coatings beyond SCAQMD requirements for non-residential uses, would reduce VOC emissions. As shown in Table 3.2-6, implementation of **MM-AQ-1** would reduce emissions to below SCAQMD thresholds. Additionally, implementation of **MM-GHG-C1** (refer to Section 3.7, *Greenhouse Gas Emissions*, of this EIR), which would implement idling time restrictions, compliance with manufacturer's equipment specifications, potential use of alternative fuels, and use of local and recycled materials, would further reduce air pollutant emissions during construction. Impacts would be less than significant with mitigation incorporated.

Table 3.2-6. Tier I Daily Construction-Period Regional Mass Emissions–Mitigated (pounds per day

Project Element	ROG[a]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Ambulatory Care Center, Parking Structure, Administration, Community Center, Materials Management/ Supply Services Building, and Central Plant East						
Demolition	3	40	24	<1	5	2
Site Preparation	6	98	35	<1	12	7
Grading	4	83	30	<1	6	3
Building Construction (2021)	4	31	32	<1	4	2
Building Construction (2022)	3	29	31	<1	3	2
Paving	1	11	15	<1	1	1
Architectural Coatings	66	2	4	<1	<1	<1
Maximum Daily Regional Emissions	**66**	**98**	**35**	**<1**	**12**	**7**
SCAQMD Regional Construction Threshold	75	100	550	150	150	55
Exceed Significance Threshold?	No	No	No	No	No	No

[a] The terms VOC and ROG are used interchangeably. ROG is used in this table based on CalEEMod.
Source: Emissions estimates using CalEEMod version 2016.3.2 (see Appendix C of this Draft EIR).

Localized Emissions

Localized emissions would result from construction activities that would occur at the site and in the immediate vicinity of project area sensitive receptors. Onsite construction equipment emissions are considered, as well as 10 percent of offsite emissions to account for haul truck emissions on and around the project site. Table 3.2-7 shows the onsite emissions estimates for each of the modeled elements of the proposed project. As shown therein, no exceedances of the LSTs would occur, and impacts would be less than significant for Tier I.

Table 3.2-7. Tier I Daily Construction-Period Localized Onsite Emissions (pounds per day)

Project Element	NO_X	CO	PM_{10}	$PM_{2.5}$
Restorative Care Village				
Demolition	21	15	1	1
Site Preparation	18	8	3	2
Grading	15	6	3	2
Building Construction	15	13	1	1
Paving	8	9	<1	<1
Architectural Coatings	2	2	<1	<1
Maximum Daily Onsite Emissions[a]	**21**	**15**	**3**	**2**
SCAQMD Localized Significance Threshold[b]	122	2,227	54	18
Exceed Significance Threshold?	No	No	No	No
Ambulatory Care Center, Parking Structure, Administration, Community Center, Materials Management/ Supply Services Building, and Central Plant East				
Demolition	31	22	4	2
Site Preparation	40	21	9	6
Grading	25	16	4	2

Project Element	NO_X	CO	PM_{10}	$PM_{2.5}$
Building Construction (2021)	17	17	1	1
Building Construction (2022)	16	16	1	1
Paving	11	15	1	1
Architectural Coatings	1	2	<1	<1
Maximum Daily Onsite Emissions[a]	**46**	**22**	**10**	**6**
SCAQMD Localized Significance Threshold[c]	165	1,872	42	10
Exceed Significance Threshold?	No	No	No	No

[a] Accounts for onsite emissions identified in the CalEEMod run as well as 10 percent of offsite emissions to ensure that onsite haul truck emissions are captured.
[b] Localized thresholds for construction based on a 1-acre construction site and 200-meter distance to receptors within SRA 7 (East San Fernando Valley). SCAQMD has not developed LSTs for VOC, SO_2, or Pb emissions.
[c] Localized thresholds for construction based on a 5-acre construction site and 50-meter distance to receptors within SRA 7 (East San Fernando Valley). SCAQMD has not developed LSTs for VOC, SO_2, or Pb emissions.
Source: Emissions estimates using CalEEMod version 2016.3.2 (see Appendix C of this Draft EIR).

Tier II

Tier II would involve the development of new hospital, research and development, retail, and utility plant land uses predominantly on the western portion of the campus, as well as the demolition of some existing uses at the site. Because details about Tier II are unknown, emissions associated with construction activities have not been quantified. As discussed above for Tier I, the implementation of Tier II would result in the generation of air pollutant emissions from heavy-duty construction equipment, construction worker vehicle trips, material deliveries, trips by heavy-duty haul trucks, earthwork activities, and other construction activities. Such emissions could exceed construction thresholds for regional and localized pollutant emissions depending on the schedules, equipment used, and material movement required. In the event that Tier II construction activities result in emissions that exceed regional or localized standards at the time plans for Tier II are developed further, mitigation measure **MM-AQ-2** will be implemented to ensure that impacts are minimized to the extent feasible. Additionally, implementation of **MM-GHG-C1** (refer to Section 3.7, *Greenhouse Gas Emissions*, of this EIR), which would implement idling time restrictions, compliance with manufacturer's equipment specifications, potential use of alternative fuels, and use of local and recycled materials, would further reduce air pollutant emissions during construction. Although **MM-AQ-2**, along with **MM-GHG-C1**, would control construction-period emissions under Tier II, it cannot be stated with certainty that emissions would be below applicable regional or localized emissions thresholds. Thus, construction impacts could be significant and unavoidable for Tier II.

Mitigation Measures

The following measures are proposed to mitigate Impact **AQ-2**, above.

Tiers I and II

MM-AQ-1: To reduce VOC emissions during construction, the County (or its contractors) will use low-VOC coatings that go beyond the requirements of SCAQMD Rule 1113, and have a VOC content of 25 grams per liter (g/L) or less during construction of Tier I projects.

Tier II

MM-AQ-2: In the event that construction-period emissions under Tier II exceed regional or localized emissions standards in effect at the time that Tier II project details are known, the County (or its contractors) will implement the following or more effective measures to achieve emissions reductions:

1. For exceedances of particulate matter or NO_X regional or localized significance thresholds, the County (or its contractors) will:

    a. Use off-road equipment that meets or exceeds U.S. Environmental Protection Agency Tier 4 off-road emissions standards for equipment rated at 50 horsepower or greater during all phases of construction;

    b. Outfit all off-road equipment with Best Available Control Technology (BACT) devices including, but not be limited to, CARB certified Level 3 Diesel Particulate Filters (DPFs); and

    c. Require that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year or newer trucks (e.g., material delivery trucks and soil and aggregate import/export) that meet CARB's 2010 engine emission standards of 0.01 gram per brake horsepower-hour (g/bhp-hr) of PM and 0.20 g/bhp-hr of NO_X emissions or newer, cleaner trucks.

Level of Significance after Mitigation

Tier I impacts would be less than significant with the implementation of **MM-AQ-1**. However, impacts under Tier II are considered potentially significant and unavoidable after mitigation.

Operational Impacts

Tier I

Existing and proposed uses would result in emissions from similar sources, but in different quantities. Emissions associated with motor vehicle trips; onsite consumption of natural gas for space and water heating; onsite use of solvents and consumer products; and emissions associated with landscaping were estimated using trip generation data from the traffic analysis as well as CalEEMod defaults regarding area and energy sources for the various land uses.

As shown in Table 3.2-8, below, maximum daily project-related criteria pollutant emissions over existing conditions are not expected to exceed SCAQMD operations-period thresholds for any pollutant. Similarly, maximum daily project-related criteria pollutant emissions over future no-project conditions are not expected to exceed SCAQMD operations-period thresholds for any pollutant. Implementation of **MM-GHG-O1** (refer to Section 3.7, *Greenhouse Gas Emissions*, of this EIR), which would implement sustainability measures related to water and energy conservation and solid waste and vehicle trip reductions, would further reduce the project's operational emissions. Consequently, the impact of operations-related emissions from the project is considered less than significant.

With respect to onsite emissions, SCAQMD FINDS data from 2016 was scaled up by 24 percent to capture the increase in development in the Tier I boundary (823,900 square feet to 1,170,491 square feet with completion of Tier 1) as well as the reduction in energy use intensity associated with new construction. Based on Figure 6.49 of the Master Plan, energy use intensity of new

buildings planned would fall from the current 450 thousand British Thermal Units per square foot per year (kBtu/sf-yr) to approximately 250 kBtu/sf-yr. Tier I emissions would not exceed applicable LSTs, and impacts would be less than significant.

Table 3.2-8. Tier I Daily Operational Regional Mass Emissions (pounds per day)

Project Element	ROG[a]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Existing Uses (2016)[b]						
Area	6	<1	<1	<1	<1	<1
Energy	<1	1	1	<1	<1	<1
Mobile	22	90	295	1	50	14
Permitted Sources[c]	3	82	30	3	18	18
Total	31	173	325	4	68	32
Tier I Master Plan Uses–Restorative Care Village (2023)						
Area	2	<1	<1	<1	<1	<1
Energy	<1	1	1	<1	<1	<1
Mobile	2	9	27	<1	7	2
Total	*4*	*10*	*28*	*<1*	*7*	*2*
Tier I Master Plan Uses–Ambulatory Care Center, Parking Structure, Administration, Community Center, Materials Management/Supply Services Building, and Central Plant East (2023)						
Area	12	<1	<1	<1	<1	<1
Energy	1	6	5	<1	<1	<1
Mobile	16	64	227	1	76	21
Permitted Sources[d]	3	71	26	2	16	16
Total	*33*	*150*	*284*	*3*	*99*	*39*
Regional Daily Emissions– Tier I Master Plan over Existing Uses	**4**	**9**	**-29**	**1**	**38**	**14**
SCAQMD Regional Operational Threshold	55	55	550	150	150	55
Exceed Significance Threshold?	*No*	*No*	*No*	*No*	*No*	*No*
Localized Daily Emissions– Tier I Master Plan over Existing Uses	**8**	**20**	**7**	**1**	**4**	**4**
SCAQMD Localized Significance Threshold for Operation[e]	N/A	194	4,119	N/A	21	7
Exceed Significance Threshold?	N/A	*No*	*No*	N/A	*No*	*No*

[a] The terms VOCs and ROG are used interchangeably. ROG is used in this table based on CalEEMod.

[b] Only net changes in square footage within the Tier 1 boundary were modeled under existing conditions. Because the existing hospital would remain in use before and after the implementation of Tier 1, it would not represent a change in operations.

[c] Based on SCAQMD FIND data for 2016. Particulate matter emissions were used for both PM_{10} and $PM_{2.5}$.

[d] Based on SCAQMD FIND data from 2016, scaled up by 24 percent to capture the increase in development in the Tier I boundary (823,900 square feet to 1,170,491 square feet with completion of Tier 1) and the reduction in energy use intensity from new construction. Based on Figure 6.49 of the Master Plan, energy use intensity of new buildings planned would fall from the current 450 kBtu/sf-yr to approximately 250 kBtu/sf-yr.

[e] 5-acre site with a 200-meter receptor distance in SRA 7. Distance measured from proposed onsite stationary source (at proposed ambulatory care center) to the nearest offsite receptor (multifamily residences south of Olive View Drive).

N/A = Not applicable, as no LST has been developed.

Source: Emissions estimates using CalEEMod version 2016.3.2 (see Appendix C of this Draft EIR).

Tier II

Operation of Tier II would involve emissions of air pollutants from building natural gas use, stationary sources, worker and visitor vehicle trips, and other sources. Because details about Tier II are unknown, emissions associated with operational activities under Tier II have not been quantified. Emissions under Tier II could exceed operational thresholds for regional and localized pollutant emissions depending on project details. In the event that Tier II operational activities result in emissions that exceed regional or localized standards at the time plans for Tier II are developed further, mitigation measure **MM-AQ-3** will be implemented to ensure that impacts are minimized to the extent feasible. Additionally, implementation of **MM-GHG-O1** (refer to Section 3.7, *Greenhouse Gas Emissions*, of this EIR), which would implement sustainability measures related to water and energy conservation and solid waste and vehicle trip reductions, would reduce the project's operational emissions. Although **MM-AQ-3** and **MM-GHG-O1** would control operational emissions under Tier II, it cannot be stated with certainty that emissions would be below applicable regional or localized emissions thresholds. Thus, impacts would be significant and unavoidable for Tier II.

Mitigation Measures

MM-AQ-3: In the event that operational emissions under Tier II exceed regional or localized emissions standards in effect at the time that Tier II project details are known, the County (or its contractors) will implement the following to achieve emissions reductions upon construction:

1. Increase energy efficiency by at least 10 percent beyond the Title 24 standard in place at the time of construction, unless demonstrated to be infeasible.
2. Utilize low VOC coatings (VOC content less than or equal to 25 grams per liter) for periodic painting and facility upkeep.
3. Install solar water heaters.
4. Maximize interior day light and utilize high efficiency lighting.
5. Increase roof/ceiling insulation beyond the American Society of Heating, Refrigeration and Air Conditioning Engineers Standard 90.1-2010.
6. Install weather-based irrigation controllers to reduce outdoor water consumption.
7. Implement travel demand reduction measures (TDM) for employees, including, but not necessarily limited to measures such as:

- Providing bicycle parking for at least five percent of full-time-equivalent campus employees.
- Providing preferential carpool spaces within proposed parking structures on the campus.
- Provide shuttles for visitors and employees from Metrolink and/or Metro Rail stations to reduce vehicle trips.

1. Incorporate onsite renewable energy production, including installation of photovoltaic cells or other options.

Level of Significance after Mitigation

Tier I operational impacts would be less than significant. However, operational impacts under Tier II are considered significant and unavoidable after mitigation. Feasible mitigation has been identified under **MM-AQ-3.**

Impact AQ-3: Would the Proposed Project Expose Sensitive Receptors to Substantial Pollutant Concentrations?

Construction Impacts

Tier I

As discussed above, construction activities under Tier I would occur near sensitive receptors, including residences near the project site. Thus, construction activities, including the use of diesel-fueled equipment, haul trucks, and fugitive dust emissions would occur near sensitive receptors. However, as shown in Tables 3.2-5, 3.2-6, and 3.2-7, above, none of the project elements would exceed LSTs established to identify potential impacts on receptors near sources of pollutant emissions, and impacts would be less than significant.

Cancer Risks

Based on the HRA performed using AERMOD and estimated PM_{10} exhaust emissions generated by onsite construction activities, the incremental cancer risks to the maximally exposed individual resident in the project site resulting from exposure to DPM emissions were determined. As shown in Table 3.2-9, none of the maximum construction-related health risks would exceed SCAQMD's maximum incremental cancer risk threshold for TACs of 10 in 1 million. As such, the effect of project construction would not result in a significant increase in cancer risk at nearby residences. Details of the HRA are provided in Appendix C of this Draft EIR.

Table 3.2-9. Tier I Construction-Period Health Risks

Project Element	Maximum DPM Concentration (ug/m3)	Exposure Duration	Incremental Cancer Risk to Maximally Exposed Individual Resident	Exceeds SCAQMD Threshold?
Restorative Care Village	0.0022	3rd trimester to age 1	0.39 in a million	No
Ambulatory Care Center, Parking Structure, Administration, Community Center, Materials Management/Supply Services Building, and Central Plant East	0.00495	3rd trimester to age 2	1.69 in a million	No
Source: Calculations in Appendix C of this Draft EIR)				

Health Implications of Criteria Pollutants

As shown in Tables 3.2-5 and 3.2-6, above, the proposed project's estimated regional construction emissions during Tier I would not exceed any of SCAQMD's regional significance thresholds for

criteria pollutants. Additionally, given that the proposed project's peak daily construction regional emissions of 66 pounds per day for VOC and 98 pounds per day for NO_X would not exceed 10 tons per year for either pollutant, the proposed project would represent a project of a size where it would not be feasible to directly correlate its emissions of VOC or NO_X with specific health impacts from ozone. Moreover, as shown in Tables 3.2-7, above, estimated localized construction emissions associated with Tier I would not exceed any of SCAQMD's LSTs for criteria pollutants. The LSTs represent emission levels that would cause or contribute to a violation of any short-term NAAQS or CAAQS for a particular area, and since the project would not exceed these LSTs, the project would not cause or contribute to a violation of any health-protective standard. Accordingly, an analysis correlating the relatively minor emissions generated by the Tier I projects with specific levels of health impacts would not yield reliable or accurate results and has therefore not been conducted. Furthermore, it should be noted that the NAAQS and CAAQS are health-protective standards and define the maximum amount of ambient pollution that can be present without harming public health. SCAQMD's LSTs represent the level of pollutant emissions from onsite sources from a project that would not exceed the most stringent applicable federal or state ambient air quality standards. As such, projects with emissions below the applicable LSTs will not be in violation of the NAAQS or CAAQS, and, thus, EPA and CARB health protective standards. As shown in Tables 3.2-7, the maximum daily emissions would not exceed the applicable LSTs. Thus, there would be no violations of the health-protective CAAQS and NAAQS. Construction-period impacts related to exposing sensitive receptors to substantial pollutant concentrations under Tier I would be less than significant.

Tier II

Because details about Tier II are unknown, emissions associated with construction activities have not been quantified. As discussed above for Tier I, the implementation of Tier II would result in the generation of air pollutant emissions during construction activities. Such emissions could exceed construction thresholds and expose sensitive receptors to substantial pollutant concentrations, depending on the schedules, equipment used, and material movement required. These emissions, if left unmitigated, could contribute to ozone ground-level formation in the Basin, which at certain concentrations, can contribute to short- and long-term human health effects. Certain individuals residing in areas that do not meet the CAAQS or NAAQS, including Los Angeles County, could be exposed to pollutant concentrations that cause or aggregative acute and/or chronic health conditions (e.g., asthma, lost work days, premature mortality). While implementation of the project would contribute to existing and future air pollution, project-generated construction emissions represent a fraction of Basin-wide ROG, NO_X, and $PM_{2.5}$ emissions. As previously discussed, the magnitude and locations of any potential changes in ambient air quality, and thus health consequences, from these additional emissions, cannot be quantified with a high level of certainty due to the dynamic and complex nature of pollutant formation and distribution (e.g., meteorology, emissions sources, sunlight exposure). Similar limitations exist for precisely modeling project-level health consequences of directly-emitted PM. However, it is known that public health will continue to be affected in Los Angeles County so long as the region does not attain the CAAQS or NAAQS.

In the event that Tier II construction activities result in emissions that exceed localized standards at the time plans for Tier II are developed further, **MM-AQ-2** will be implemented to ensure that impacts are minimized to the extent feasible. Additionally, implementation of **MM-GHG-C1** (refer to Section 3.7, *Greenhouse Gas Emissions*), which would implement idling time restrictions, compliance with manufacturer's equipment specifications, potential use of alternative fuels, and use of local and recycled materials, would further reduce air pollutant emissions during construction. Although **MM-**

AQ-2, along with **MM-GHG-C1**, would control construction-period emissions under Tier II, it cannot be stated with certainty that emissions would be below applicable regional or localized emissions thresholds. Thus, impacts would be significant and unavoidable for Tier II.

Mitigation Measures

MM-AQ-1 and **MM-AQ-2**, above, would be implemented.

Level of Significance after Mitigation

Tier I impacts would be less than significant with the implementation of **MM-AQ-1**. However, impacts under Tier II are considered significant and unavoidable after mitigation. Feasible mitigation for Tier II has been identified under **MM-AQ-2**.

Operational Impacts

Tier I

As shown in Table 3.2-8, above, operational activities under Tier I would not exceed the applicable LST for operation, which were established to identify potential impacts on receptors near sources of pollutant emissions.

Health Implications of Criteria Pollutants

Also shown in Table 3.2-8, the proposed project's estimated regional and localized operational emissions would not exceed any of SCAQMD's significance thresholds for criteria pollutants. Given that the proposed project's daily operational regional emissions of 5 pounds per day for VOC and a net reduction of 17 pounds per day for NO_X would not exceed 10 tons per year for either pollutant, the proposed project would represent a project of a size where it would not be feasible to directly correlate its emissions of VOC or NO_X with specific health impacts from ozone. Accordingly, the project would not cause or contribute to a violation any health-protective standard and define the maximum amount of ambient pollution that can be present without harming public health, and an analysis correlating the relatively minor emissions generated by the project with specific levels of health impacts would not yield reliable or accurate results and has therefore not been conducted.

CO Hot Spots

Elevated levels of CO concentrations are typically found in areas with significant traffic congestion. CO is a public health concern because at high enough concentrations, it can cause health problems such as fatigue, headache, confusion, dizziness, and even death. However, it should be noted that ambient concentrations of CO have declined dramatically in California because of existing controls and programs. Most areas of the state, including the region in which the project is located, meet the state and federal CO standards (CARB 2004). As part of SCAQMD's 2003 AQMP, which is the most recent AQMP that addresses CO concentrations, a revision to the Federal Attainment Plan for Carbon Monoxide (CO Plan) that was originally approved in 1992 was provided that included a CO hot spots analysis at four specified heavily traveled intersections in Los Angeles at the peak morning and afternoon time periods. These four intersection locations selected for CO modeling are considered to be worst-case intersections that would likely experience the highest CO concentrations. The CO hot spots analysis in the 2003 AQMP did not predict a violation of CO standards at the four intersections. Of these four intersections, the busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which was described as the most heavily congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. Based on

the CO modeling, the 2003 AQMP estimated that the 1-hour concentration at this intersection was 4.6 ppm, which would not exceed the most stringent 1-hour CO standard of 20.0 ppm. In reviewing the project's Traffic Impact Analysis (see Section 3.15, *Transportation/Traffic*, of this EIR), it was determined that at buildout of Tier 1 (2035) the highest daily traffic volumes generated at the roadways within the vicinity of the proposed project would be a cumulative total of 13,735 vehicles per day at the intersection of Polk Street and the I-210 Eastbound Ramps intersection, which is approximately 14 percent of the vehicles per day at the busiest intersection in the 2003 AQMP's CO hot spots analysis, and is well under the applicable regulatory threshold. As such, it can be concluded that the proposed project would not exceed the most stringent 1-hour CO standard and no detailed CO hot spots analysis for the project would be required.

Furthermore, with respect to potential localized CO impacts at intersections resulting from increased vehicular traffic introduced by a project, the SCAQMD recommends performing a localized CO impact analysis for intersections that change from LOS C to D as a result of the project and for all intersections rated D or worse where the project increases the V/C ratio by 2 percent or more. In reviewing the Traffic Impact Analysis prepared for the proposed project (see Section 3.15, *Transportation/Traffic*, of this EIR), it was determined that development of the proposed project would not change the LOS values at any of the study intersections during or Tier I buildout (2035) conditions. Additionally, where the existing LOS at the study intersections were rated D or worse, the proposed project did not increase the V/C ratio by 2 percent or more. Thus, based on SCAQMD's recommended criteria, no localized CO impact analysis would need to be conducted, and impacts would be less than significant.

Tier II

Operation of Tier II would involve emissions of air pollutants from building natural gas use, stationary sources, worker and visitor vehicle trips, and other sources. Because details about Tier II are unknown, emissions associated with operational activities under Tier II have not been quantified. Emissions under Tier II could exceed operational thresholds for regional and localized pollutant emissions depending on project details. These emissions, if left unmitigated, could contribute to ozone ground-level formation in the Basin, which at certain concentrations, can contribute to short- and long-term human health effects. Certain individuals residing in areas that do not meet the CAAQS or NAAQS, including Los Angeles County, could be exposed to pollutant concentrations that cause or aggregative acute and/or chronic health conditions (e.g., asthma, lost work days, premature mortality). While implementation of the project would contribute to existing and future air pollution, project-generated operational emissions represent a fraction of Basin-wide ROG, NO_X, and $PM_{2.5}$ emissions. As previously discussed, the magnitude and locations of any potential changes in ambient air quality, and thus health consequences, from these additional emissions cannot be quantified with a high level of certainty due to the dynamic and complex nature of pollutant formation and distribution (e.g., meteorology, emissions sources, sunlight exposure). Similar limitations exist for precisely modeling project-level health consequences of directly-emitted PM. However, it is known that public health will continue to be affected in Los Angeles County so long as the region does not attain the CAAQS or NAAQS.

In the event that Tier II operational activities result in emissions that exceed regional or localized standards at the time plans for Tier II are developed further, mitigation measure **MM-AQ-3** will be implemented to ensure that impacts are minimized to the extent feasible. Additionally, implementation of **MM-GHG-O1** (refer to Section 3.7, *Greenhouse Gas Emissions*, of this EIR), which would implement sustainability measures related to water and energy conservation and solid waste

and vehicle trip reductions, would reduce the project's operational emissions. Although **MM-AQ-3** and **MM-GHG-O1**, would control operational emissions under Tier II, it cannot be stated with certainty that emissions would be below applicable regional or localized emissions thresholds. Thus, impacts would be significant and unavoidable for Tier II.

Mitigation Measures

MM-AQ-3, above, would be implemented.

Level of Significance after Mitigation

Tier I impacts would be less than significant. However, impacts under Tier II are considered significant and unavoidable after mitigation. Feasible mitigation for Tier II has been identified under **MM-AQ-3**.

Impact AQ-4: Would the Proposed Project Result in Other Emissions (Such as Those Leading to Odors Adversely Affecting a Substantial Number of People)?

Construction and Operational Impacts

Tier I and II

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment facilities, food processing plants, chemical plants, composting areas, refineries, landfills, dairies, and fiberglass molding facilities. The proposed project includes none of these land uses. During the construction period, some limited odors may result from asphalt paving activities, which may be detectable by people immediately adjacent to work sites. However, asphalt paving would occur for a limited time period at each excavation site (less than 1 week), and the locations of paving activities would be distributed over several excavation sites at any one time. Furthermore, SCAQMD Rule 402 prohibits the discharge of air contaminants that cause nuisance or annoyance to the public, including odors. Also, SCAQMD maintains both a toll-free phone line (1-800-CUT-SMOG) and a web-based platform (https://www.aqmd.gov/nav/online-services/complaints) for reporting complaints related to air quality, including odors. Given the limited duration and location of asphalt paving, mandatory compliance with SCAQMD Rule 402, and ability for the public to report complaints to SCAQMD, construction and operation would not create a significant level of objectionable odors. Impacts would be less than significant

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

No mitigation is required and impacts would be less than significant.

3.2.5 Cumulative

Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time. The study area for analysis of cumulative effects on air quality is the Basin, which experiences chronic exceedances of state and federal ambient air quality standards as a consequence of past and present projects and is subject to continued nonattainment status by

reasonably foreseeable future projects. These nonattainment conditions within the region are considered cumulatively significant. Therefore, SCAQMD thresholds have been established to ensure attainment of the NAAQS and CAAQS.

As discussed above, the project is consistent with the AQMP and SIP. Furthermore, emissions would be below SCAQMD regional construction and operational thresholds for Tier I and would not result in substantial pollutant concentrations at nearby sensitive receptors during operations. However, emissions associated with construction and operation of Tier II of the proposed project have not been quantified as details have not been fully developed, and are therefore considered significant and unavoidable.

The proposed project would comply with SCAQMD rules and regulations, including Rule 403 (Fugitive Dust Control) and Rule 1108 (Cutback Asphalt), during construction as well as all other adopted AQMP emissions control measures while fully implementing buildout of the Master Plan. Per SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on all projects Basin-wide, which would include all nearby projects.

Cumulative impacts on Basin air quality with respect to criteria pollutant emissions would be less than significant for Tier I, but could exceed applicable thresholds under Tier II. Therefore, the project's long-term contribution to regional cumulative air quality impacts would be cumulatively considerable. **MM-AQ-2** and **MM-AQ-3,** along with **MM-GHG-C1** and **MM-GHG-O1** (refer to Section 3.7, *Greenhouse Gas Emissions*, of this EIR)**,** would be implemented to reduce cumulative impacts, but impacts would remain cumulatively considerable.

3.3 Biological Resources

3.3.1 Introduction

This section identifies biological resources that are present within the limits of the Olive View–UCLA Medical Center Campus Master Plan area and an appropriate buffer area (study area), evaluates potential impacts on those resources as result of the proposed project, and identifies measures to mitigate any significant or potentially significant impacts.

3.3.1.1 Methods Used to Identify Biological Resources

The methods used to identify biological resources in the study area consisted of a pre-field literature review and field surveys.

Pre-field Literature Review

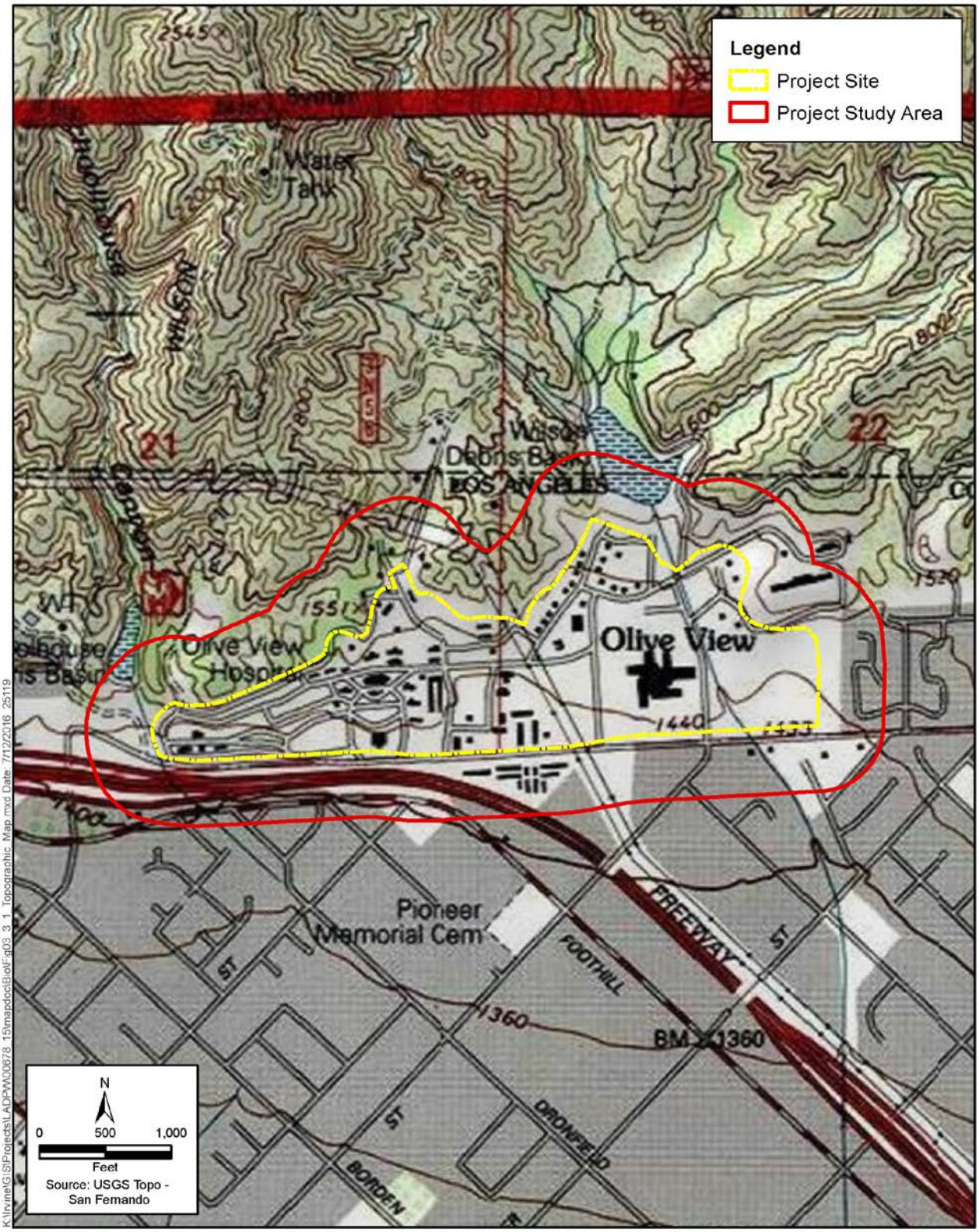
Prior to field surveys, ICF biologists conducted a comprehensive literature review to identify potential special-status species and jurisdictional waters that may be found in the vicinity of the study area. Pertinent sources reviewed were:

- California Natural Diversity Database (CNDDB) (California Department of Fish and Wildlife [CDFW] 2016a) for the 7.5-minute U.S. Geological Survey quadrangle maps in the project vicinity: San Fernando, Newhall, Mint Canyon, Agua Dulce, Oat Mountain, Sunland, Canoga Park, Van Nuys, and Burbank (see Appendix D of this EIR).
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2016) for the 7.5-minute U.S. Geological Survey quadrangle maps in the project vicinity: San Fernando, Newhall, Mint Canyon, Agua Dulce, Oat Mountain, Sunland, Canoga Park, Van Nuys, and Burbank (see Appendix D of this Draft EIR).
- Most recent United States Fish and Wildlife Service (USFWS) critical habitat maps (USFWS 2016a).

In addition, resources databases, aerial photos, United States Geological Survey (USGS) topographical maps (Figure 3.3-1), and other available and relevant data were reviewed to determine watershed characteristics and the location/types of aquatic resources that may be present within the study area, including:

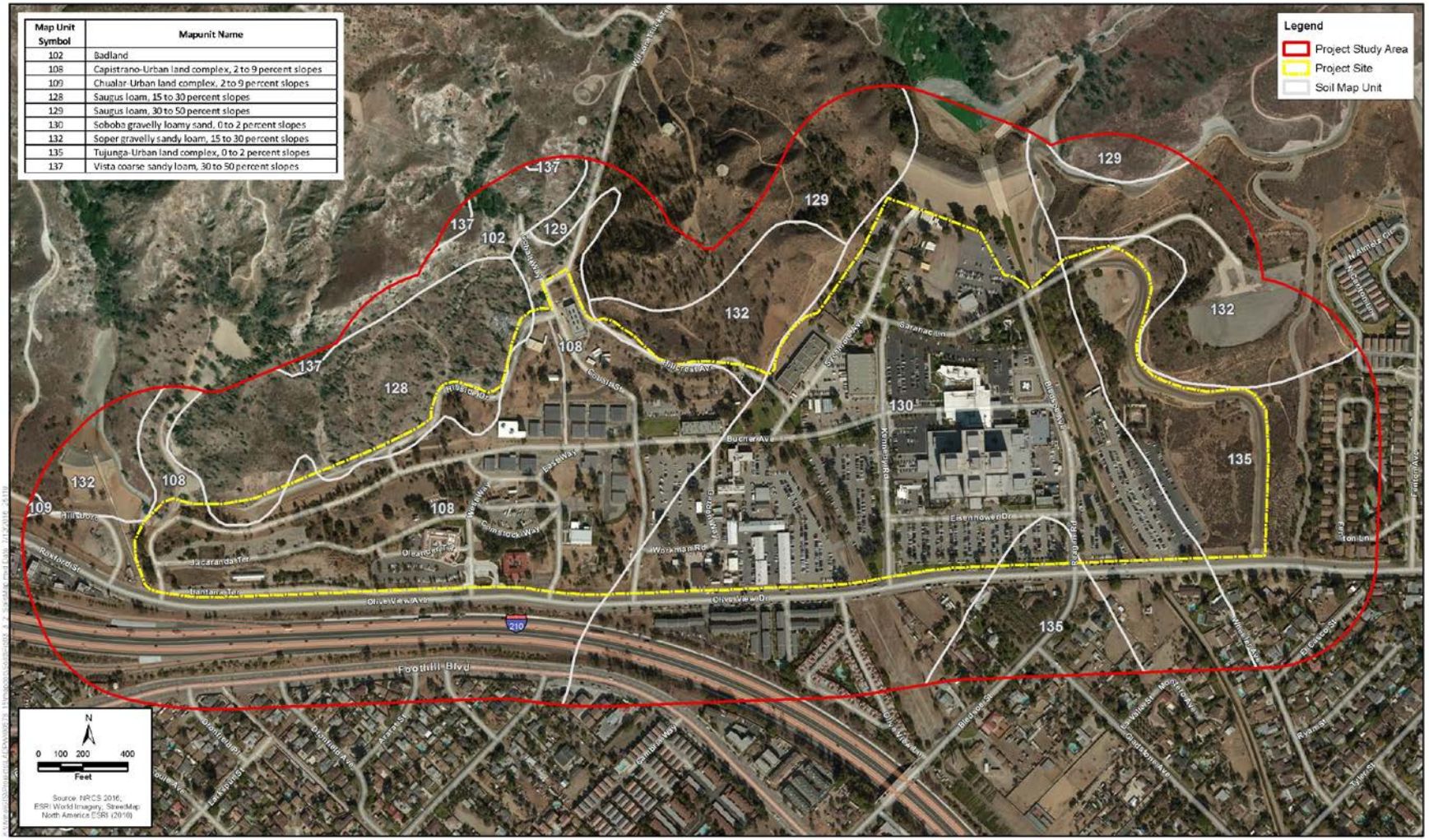
- San Fernando USGS topographic quadrangle map (USGS 1997)
- Current and historical aerial photographs (Google Earth 2016)
- Natural Resource Conservation Service Soil Survey Geographic (SSURGO) Database (USDA/NRCS 2016) (Figure 3.3-2)
- National Wetlands Inventory (USFWS 2016b)

Figure 3.3-1. Topographic Map



Source: ICF 2016.

Figure 3.3-2. Soils



Source: ICF 2016.

Field Surveys

ICF biologists Dennis Miller and Keoni Calantas conducted a reconnaissance-level field survey on June 2, 2016, to identify and evaluate vegetation communities and perform habitat assessments for special-status plants, wildlife, and aquatic resources present or potentially present within the study area. Although the development of the Olive View–UCLA Medical Center Campus Master Plan (Master Plan) has been defined for the purposes of this EIR as occurring in two phases (Tier I and Tier II), the Master Plan area (project site) was surveyed collectively.

The reconnaissance-level field survey included an evaluation for the presence, absence, or likelihood of occurrence of special-status species and vegetation types and for general biological resources within the study area. Parameters evaluated for special-status plants included topography, soil conditions, elevation, hydrology, the project site's current and proposed operational activities, and life history needs for specific species. Parameters evaluated for special-status wildlife included connectivity to documented and potentially occurring habitat, hydrology, access to the site, foraging and nesting habitat, the site's operational activities, and life history needs for each species.

All plant and wildlife species observed during the site visit were recorded in field notes. Plant species observed were identified by visual characteristics and morphology in the field D . Taxonomic nomenclature for plants followed *The Jepson Manual: Higher Plants of California,* 2nd Edition (Baldwin et al. 2012). Special-status rankings for plant species were identified through a review of the CDFW Special Plants, Bryophytes, and Lichens List (CDFW 2015). Wildlife species were detected by sight, calls, tracks, scat, or other sign (Appendix D of this Draft EIR). Special-status rankings for wildlife were identified through a review of the CDFW Special Animals List (CDFW 2015b).

A formal jurisdictional delineation was not conducted for the project; however, potential jurisdictional features within the study area, which includes the project footprint and a 100-foot buffer for the purposes of evaluating aquatic resources, were observed and locations identified on maps during the habitat assessment.

ICF biologists Phil Richards and James Hickman conducted coastal California gnatcatcher (*Polioptila californica californica*) protocol level surveys in the winter and spring of 2016/2017 (Appendix D of this Draft EIR). Protocol field surveys for the Coastal California Gnatcatcher were conducted within the project footprint and 250-foot buffer, where suitable sage scrub habitat was identified. Presence/absence of this species was determined in accordance with the USFWS 1997 Presence/Absence Survey Protocol, which includes nine focused surveys at a minimum of 14-day intervals.

ICF biologist Phil Richards conducted rare plant surveys in April and May of 2017 (Appendix D of this Draft EIR) within the project footprint and 100-foot buffer. Based on blooming periods, the optimum survey period occurred in late April through May. Field survey methods were consistent with the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2009). Botanical species data was collected within the study area using 100 percent transect coverage surveys using CDFW survey methods. Species names were recorded according to *The Jepson Manual: Higher Plants of California,* 2nd Edition (Baldwin, et. al., 2012).

Vegetation mapping was conducted in the field on June 2, 2016, using approximately 1-inch to 200-foot scale aerials (aerial dated 2010), which was later converted to Geographic Information System shapefiles. Where possible, the vegetation mapping followed the classifications defined in *A Manual of California Vegetation* (Sawyer et al. 2009). In some cases, neither classification described

vegetation on site. In those cases, the communities were defined more specifically based on observations on site.

Geographic Information System Analysis

Geographic information system analysis was completed by overlaying the project's direct impact footprint on the vegetation communities to calculate the acreage of each plant community estimated to be affected temporarily or permanently by the project.

3.3.2 Regulatory Setting

3.3.2.1 Federal

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was enacted in 1918. Its purpose is to prohibit killing or transporting native migratory birds or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. The list of migratory bird species that are protected by the MBTA is maintained by the USFWS, which regulates most aspects of the taking, possession, transportation, sale, purchase, barter, exportation, and importation of migratory birds. Under the MBTA, "take" means only to kill, directly harm, or destroy individuals, eggs, or nests or to otherwise cause failure of an ongoing nesting effort. Permits are available under the MBTA through USFWS, and authorization for potential take under MBTA is addressed as part of the federal Endangered Species Act (ESA) Section 7 consultation process.

The proposed project must be analyzed to ensure consistency with the MBTA, including avoidance of take, with respect to nesting birds, their eggs, or activities that may cause nest failure. This applies to all migratory species protected under the MBTA that may be directly or indirectly affected by the project. Any potential take must be either avoided or minimized through mitigation measures or permitted through consultation with USFWS.

Federal Endangered Species Act

The federal ESA was enacted in 1973 to protect threatened and endangered species and their associated ecosystems. "Take" of a listed species is prohibited except when specific authorization has been granted through a USFWS permit under Sections 4(d), 7, or 10(a) of the ESA. "Take" is defined as to harass, harm, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any of these activities without a permit.

Clean Water Act

In 1948, Congress first passed the Federal Water Pollution Control Act. This act was amended in 1972 and became known as the Clean Water Act (CWA), which regulates the discharge of pollutants into the waters of the United States. Under Section 404, permits need to be obtained from the U.S. Army Corps of Engineers (USACE) for the discharge of dredged or fill material into jurisdictional waters of the United States. USACE-regulated activities under Section 404 involve a discharge of dredged or fill material, including, but not limited to, grading, placing of riprap for erosion control, pouring concrete, laying sod, and stockpiling excavated material into waters of the United States. Activities that generally do not involve a regulated discharge (if performed specifically in a manner that avoids discharges) include driving pilings, some drainage channel maintenance activities,

constructing temporary mining and farm/forest roads, and excavating without stockpiling. USACE issues nationwide permits for activities that require discretionary authority and do not exceed specific impact requirements (e.g., less than 0.5 acre of permanent impacts, no impacts on special aquatic sites, etc.). USACE requires individual permits for activities that exceed the requirements of nationwide permits.

Under Section 401 of the CWA, water quality certification from the State Water Resources Control Board/Regional Water Quality Control Board needs to be obtained if an action could result in any impacts on jurisdictional waters of the United States.

3.3.2.2 State

California Endangered Species Act

The California ESA authorizes the California Fish and Game Commission (Commission) to designate endangered, threatened, and rare species and regulate the taking of these species (California Fish and Game Code Sections 2050–2098). The act defines *endangered* species as those whose continued existence in California is jeopardized. State-listed *threatened* species are those that are not presently facing extinction but that may become endangered in the foreseeable future.

Section 2080 of the California Fish and Game Code prohibits the taking of state-listed plants and animals. CDFW also designates *fully protected* or *protected* species as those that may not be taken or possessed without a permit from the Commission and/or CDFW. Species that have been designated as fully protected or protected may or may not be listed as endangered or threatened.

California Fish and Game Code

The California Fish and Game Code is regulated by the Commission, as authorized by Article IV, Section 20, of the Constitution of the State of California. Sections 3503, 3503.5, 3505, 3800, and 3801.6 of the California Fish and Game Code protect all native birds, birds of prey, and nongame birds, including their eggs and nests, that occur naturally within the state that are not already listed as fully protected. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (e.g., hawks, owls, eagles, falcons), including their nests or eggs. CDFW's Lake and Streambed Alteration Program (Sections 1600–1607) requires any person who proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake or use materials from a streambed to notify the CDFW before beginning the project.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977. It allows the Commission to designate plants as rare or endangered. Sixty-four species, subspecies, and varieties of plants are designated as *rare* under the NPPA, which prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations, emergencies, and, after properly notifying CDFW, vegetation removal from canals, roads, and other sites, changes in land use, and certain other situations.

A consortium of scientists, botanists, and enthusiasts, the CNPS has a mission to review and categorize native plants in California. The resulting list of sensitive plant species produced by CNPS can be above and beyond the federal and state lists of threatened and endangered species. CNPS rankings can therefore be used as a criterion for environmental review in the CEQA process. If a

property has suitable habitat, CEQA may require analysis of all CNPS Rank 1B, Rank 2, Rank 3, and Rank 4 plants that could occur in the vicinity. Surveys should be completed in accordance with CDFW and CNPS protocols during the plant species blooming period to stand up to rigorous environmental review.

Natural Community Conservation Planning Act

The Natural Community Conservation Planning Act (NCCPA) allows for the development of broad-based ecosystem-level plans for the protection and perpetuation of biological diversity. The primary objective of Natural Community Conservation Plans prepared under the NCCPA is to conserve natural communities at the ecosystem level while accommodating compatible land use. Although plants that are protected under an approved Natural Community Conservation Plan may be taken by activities that are covered under the plan, they typically receive a high level of conservation and protection.

California Coastal Act of 1976

The California Coastal Act (CCA), administered by the California Coastal Commission, includes policies for development proposed within the Coastal Zone and recognizes California's ports, harbors, and coastline beaches as economic and coastal resources. Decisions to implement specific development, where feasible, are to be based on consideration of alternative locations and designs to minimize any adverse environmental impacts. The California Coastal Commission regulates all jurisdictional wetlands that are under the joint jurisdiction of USACE and the Regional Water Quality Control Boards, as well as riparian habitat that is under the jurisdiction of CDFW. The CCA also defines *Environmentally Sensitive Area* as "any area in which plant or animal life, or their habitats, is either rare or especially valuable because of its special nature or role in an ecosystem, which could be easily disturbed or degraded by human activities and developments" (Section 30107.5). The CCA requires such areas to be protected and development projects within or adjacent to such areas to be planned and sited to prevent degradation of the Environmentally Sensitive Area.

3.3.2.3 Local

Los Angeles County Oak Tree Ordinance

The Los Angeles County Oak Tree Ordinance requires an Oak Tree Permit to be obtained to cut, destroy, remove, relocate, inflict damage, or encroach upon a protected oak tree or its protected zone. The ordinance protects any tree, shrub, or plant of the oak tree genus, *Quercus*, with a diameter of 8 inches or more; for oaks with multiple trunks, a combined diameter of 12 inches or more, measured 4.5 feet above the natural grade, is required for the two largest trunks. The protected zone for oaks is defined as the area beneath the dripline or canopy of the tree, plus 5 feet beyond the dripline or 15 feet from the trunk, whichever distance is greater. Impacts can include pruning or cutting the trunk to apply pesticides to a protected tree for the benefit of the tree.

There are two types of permits, administrative and discretionary. Actions that would affect one protected tree on a property with a single-family residence require an approved administrative Oak Tree Permit. Actions that would affect protected oak trees on any other type of property require a discretionary Oak Tree Permit.

Oak Tree Permit requests require the property owner to file an application with the Department of Regional Planning and provide a filing fee, an Oak Tree Permit, site plans for the property, and maps of the surrounding area.

Los Angeles County Interim Tree Removal and Replacement Policy

The Los Angeles County Interim Tree Removal and Replacement Policy requires any tree removal within the Department of Public Works right-of-way be replaced at a 1:1 ratio or higher. Replacement of the removed trees should be near the location of removal; however, if replacement in the original location is not feasible, replacement can occur elsewhere. A tree removal permit is required prior to the removal of any tree within, but not limited to, parkways, public right-of-ways, flood control facilities, and public buildings.

3.3.3 Environmental Setting

The study area is located within the community of Sylmar at the north end of the San Fernando Valley, in the City of Los Angeles, California. The study area is surrounded by Wilson Canyon Debris Basin and the Angeles National Forest to the north and a mix of residential neighborhoods and commercial buildings to the south, east, and west. The terrain of the project site is developed and relatively even; the northern portion of the study area includes the lower elevations of the adjacent foothills. Elevations for the study area range from approximately 1,400 to 1,600 feet above mean sea level (amsl). The study area is vegetated with a mosaic of plant communities, including those associated with developed residential and commercial areas, roadways, and other infrastructure.

3.3.3.1 Vegetation Communities/Land Cover Types

Five distinct vegetation communities/land cover types were mapped within the study area (Figure 3.3-3 and Table 3.3-1). A detailed description of each vegetation community is provided below.

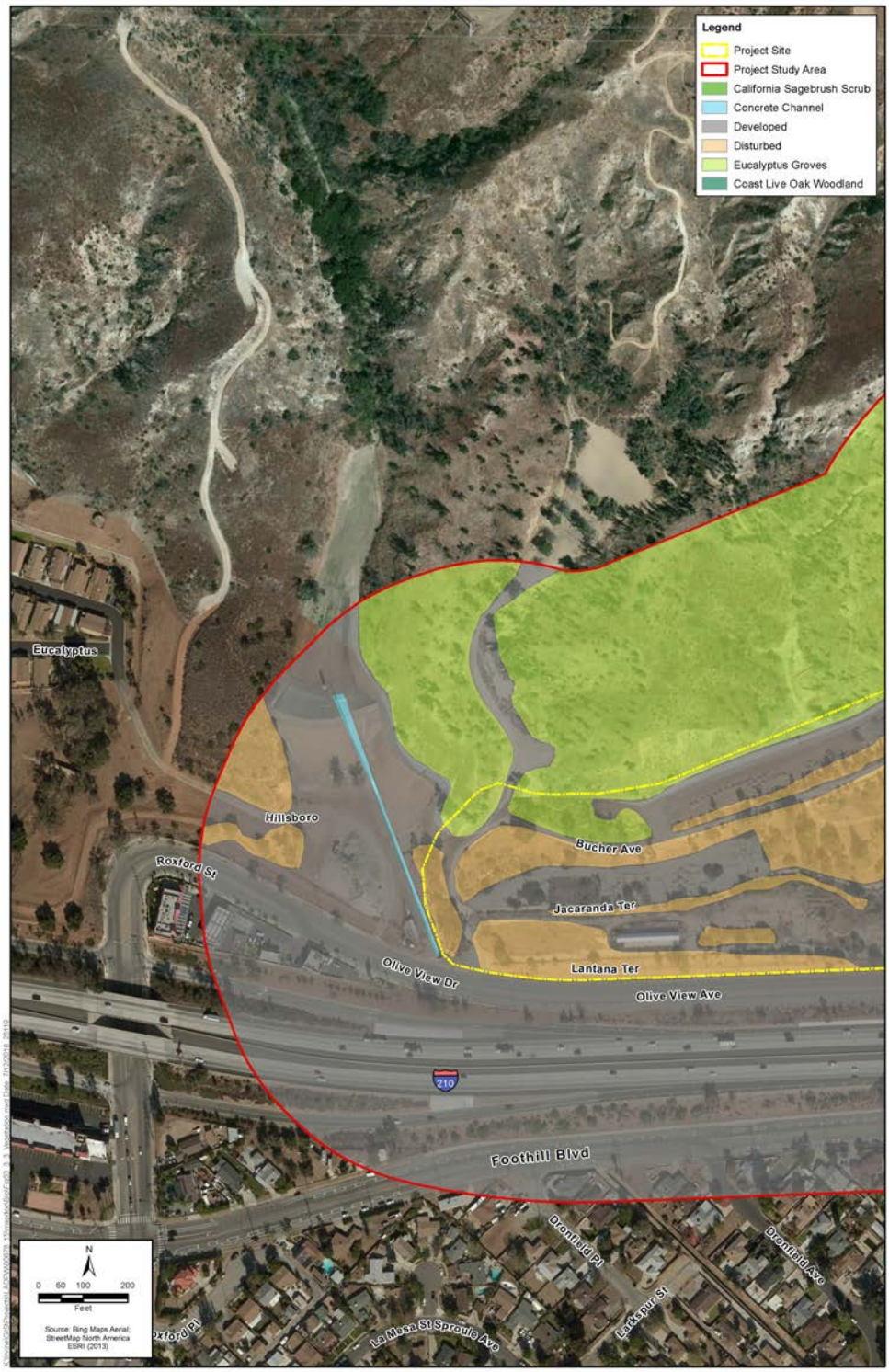
Developed

Developed areas make up a majority of the study area. These areas have been physically altered and include existing campus infrastructure, medium-density residential communities, roads and hardscape structures, and other manmade features. A chain-link fence runs along the northern border of the project site, preventing unauthorized entry of vehicles and other equipment into the northern extent of the study area. Mature ornamental trees are spread throughout the developed areas of the study area, and coast live oak (*Quercus agrifolia*) and Engelmann's oak (*Q. engelmannii*) occur sporadically throughout.

Disturbed Habitat

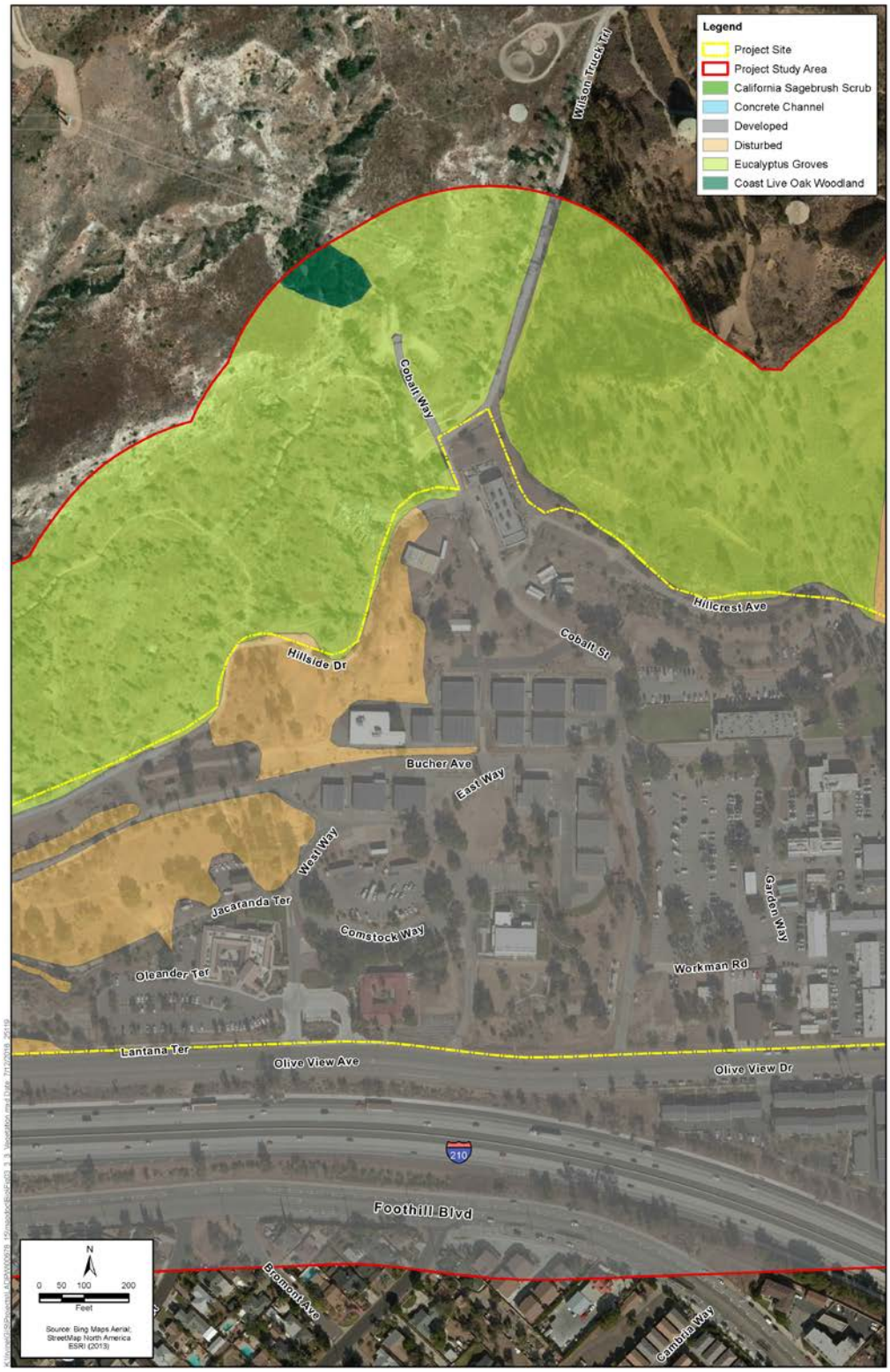
Disturbed habitat is any land that has been permanently altered by previous human activity, including grading, repeated disturbance, and dirt roads. Disturbed land is typically characterized by more than 50 percent bare ground and absence of remnant native vegetation. Disturbed habitat within the study area surrounds existing development within the project site and is dominated by nonnative grasses and other species, including ripgut grass (*Bromus diandrus*), wild oat (*Avena barbata*), tocalote (*Centaurea melitensis*), shortpod mustard (*Hirschfeldia incana*), Indian hedgemustard (*Sisymbrium orientale*), and Russian thistle (*Salsola* sp.). Patches of bare ground also are spread intermittently within the disturbed habitat.

Figure 3.3-3a. Vegetation Communities and Land Use – Sheet 1



Source: ICF 2016.

Figure 3.3-3b. Vegetation Communities and Land Use – Sheet 2



Source: ICF 2016.

Figure 3.3-3c. Vegetation Communities and Land Use – Sheet 3

Source: ICF 2016.

Figure 3.3-3d. Vegetation Communities and Land Use – Sheet 4

Source: ICF 2016.

California Sagebrush Scrub

California sagebrush scrub is comprised of low, soft-woody subshrubs to about 1 meter (3 feet) high and is one of the major shrub-dominated (i.e., scrub) communities within California. This community occurs on xeric sites with shallow soils or on dry sites, such as steep, south-facing slopes, or clay-rich soils that are slow to release stored water. California sagebrush scrub is located in the eastern portion of the study area and is dominated by California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), thickleaf yerba santa (*Eriodictyon crassifolium*), laurel sumac (*Malosma laurina*), deerweed (*Acmispon glaber*), and toyon (*Heteromeles arbutifolia*).

Eucalyptus Woodland

Eucalyptus woodland is dominated by several species of eucalyptus (*Eucalyptus* spp.). These introduced species produce large amounts of leaf and bark litter, the chemical composition of which may inhibit the establishment and growth of other species, especially natives, in the understory. Eucalyptus woodland extends along the foothills of the northern portion of the study area.

Coast Live Oak Woodland

Coast live oak woodland (Southern coast live oak riparian forest) is an open- to dense-evergreen riparian forest dominated by coast live oak. Coast live oak woodland is associated with bottomlands and outer floodplains along large streams and occurs on fine-grained, rich alluvium. Structurally, this habitat generally consists of western sycamore (*Platanus racemosa*), cottonwood (*Populus fremontii*), and willows (*Salix* sp.) at the channel margins, bordered by coast live oak at slightly higher elevations. Coast live oak woodland present within the study area is located at bottom of the foothill canyons, in the northern portion of the study area.

Table 3.3-1. Vegetation Communities/Land Cover Types within the Study Area

Vegetation/Land Cover Type	Acreage
California Sagebrush Scrub	19.80
Concrete Channel	1.31
Developed	192.75
Disturbed	17.27
Eucalyptus Groves	45.66
Coast live oak woodland	3.53
Total	**280.32**
Source: ICF 2016.	

3.3.3.2 Sensitive Vegetation Communities

Sensitive vegetation communities are those that are known to have limited distribution in the region. Two of the communities found in the study area, California sagebrush scrub and coast live oak woodland (southern coast live oak riparian forest), are considered sensitive by CDFW (Figure 3.3-3a–d).

3.3.3.3 Special-Status Biological Resources

Special-status species are plants and animals legally protected under the federal ESA, CESA, CEQA, or other regulations, as well as species considered sufficiently rare by the scientific community to qualify for such listing. Special-status species are defined as species that are:

- Listed, proposed for listing, or candidates for listing under the federal ESA as threatened or endangered;
- Listed or candidates for listing under the CESA as threatened or endangered;
- Listed as rare under the Native Plant Protection Act; and
- A state species of special concern or fully protected species. A state species of special concern is a species, subspecies, or distinct population of a fish, amphibian, reptile, bird, or mammal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:
    - Is experiencing, or formerly experienced, serious (non-cyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
    - Has naturally small populations exhibiting high susceptibility to risk from any factor(s) that, if realized, could lead to declines that would qualify it for State threatened or endangered status.

The CNPS maintains lists of plants as rare or endangered. Unless separately listed by the state or federal government, the plants on the CNPS lists are not formally protected in law. The CNPS lists are as follows:

- California Rare Plant Rank List 1A: Plants presumed extinct
- California Rare Plant Rank List 1B: Plants rare, threatened, or endangered in California and elsewhere
- California Rare Plant Rank List 2: Plants rare, threatened, or endangered in California, but more numerous elsewhere
- California Rare Plant Rank List 3: Plants about which more information is needed—a review list
- California Rare Plant Rank List 4: Plants of limited distribution—a watch list

Plants listed on CNPS List 1A, 1B, or 2 meet the definition of Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (CESA) of the California Fish and Game Code. Thus, for the purposes of this EIR, only plants on CNPS List 1A, 1B, or 2 are considered rare plants for the purposes of the analysis. CNPS List 3 plants must be considered in the CEQA document.

A list of special-status wildlife and plant species known to occur within the vicinity was evaluated for potentiality to occur within the study area (Table 3.3-2).

State and Federally Listed Plants

Dprovides the CNDDB and CNPS lists of plants for the San Fernando quadrangle and adjacent quadrangles. The literature review resulted in six federally and/or state listed plant species that have been recorded within the region: Braunton's milk-vetch (*Astragalus brauntonii*), Nevin's barberry (*Berberis nevinii*), San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*),

slender-horned spineflower (*Dodecahema leptoceras*), spreading navarretia (*Navarretia fossalis*), and California Orcutt grass (*Orcuttia californica*). Four species, Braunton's milk vetch, Nevin's barberry, San Fernando Valley spineflower, and slender horned spineflower, were determined to have low potential to occur within the study area and were not detected during the field survey.

Table 3.3-2. Potentially Occurring Special-Status Species

Species	Status	Habitat Requirements	Potential to Occur
Plants			
Braunton's milk-vetch (*Astragalus brauntonii*)	FE, CRPR 1B.1	Perennial herb. Found in recently burned and disturbed areas, sandstone and carbonite soils, chaparral, coastal scrub, valley and foothill grasslands; ranges from 4–640 m (13–2,099 ft.) in elevation. Blooming period: January–August.	Low
Parish's brittlescale (*Atriplex parishii*)	CRPR 1B.1	Annual herb. Chenopod scrub, alkaline vernal pools, playas; 25–1,900 m (82–6,232 ft.). Blooming period: June–October.	Absent–Suitable habitat does not occur on site.
Nevin's barberry (*Berberis nevinii*)	CRPR 1B.1, FE, SE	Evergreen shrub. Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, riparian scrub; 274–825 m (898–2,707 ft.). Blooming period: March–June.	Low
Round-leaved filaree (*California macrophylla*)	CRPR 1B.2	Annual herb. Clay soils in cismontane woodland, valley and foothill grassland; 15–1,200 m (50–3,936 ft.). Blooming period: March–May.	Absent–Suitable habitat does not occur on site.
Catalina mariposa lily (*Calochortus catalinae*)	CRPR 4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; 15–700 m (49–2,296 ft.). Blooming period: February–June.	Low
Club-haired mariposa lily (*Calochortus clavatus* var. *clavatus*)	CRPR 4.3	Perennial bulbiferous herb. Clay, rocky, or serpentine soils in chaparral, coastal scrub, cismontane woodland, valley and foothill grassland; 75–1,300 m (246–4,264 ft.). Blooming period: May–June.	Absent–Suitable habitat does not occur on site.
Slender mariposa-lily (*Calochortus clavatus* var. *gracilis*)	CRPR 1B.2	Perennial herb. Occurs in the Western Transverse Ranges and San Gabriel Mountains in shaded foothill canyons within chaparral, coastal scrub, valley and foothill grasslands; 0–1,000 m (3,281 ft.). Blooming period: March–June.	Low
Plummer's mariposa-lily (*Calochortus plummerae*)	CRPR 4.2	Perennial bulbiferous herb. Granitic and rocky areas in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland; 100–1,700 m (328–5,576 ft.).	Medium

Species	Status	Habitat Requirements	Potential to Occur
		Blooming period: May–July.	
Peirson's morning-glory (*Calystegia peirsonii*)	CRPR 4.2	Perennial herb. Chaparral, chenopod scrub, cismontane woodlands, coastal scrubs, valley and foothill grassland, and even lower elevation conifer forests; 30–1,500 m (98–4,920 ft.). Typically restricted to rocky slopes and known only from Los Angeles County. Blooming period: April–June.	Absent–Suitable habitat does not occur on site.
Lewis' evening-primrose (*Camissoniopsis lewisii*)	CRPR 3	Annual herb. Sandy or clay soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland; 0–300 m (0–984 ft.). Blooming period: March–June.	Absent–Study area occurs outside elevation range for the species.
White pygmy-poppy (*Canby candida*)	CRPR 4.2	Annual herb. Gravelly, sandy, or granitic soils in Joshua Tree woodland, Mojavean desert scrub, pinyon and juniper woodland; 600–1,460 m (1,968–4,789 ft.). Blooming period: March–June.	Absent–Study area occurs outside elevation range for the species.
Southern tarplant (*Centromadia parryi* ssp. *australis*)	CRPR 1B.1	Annual herb. In margins of marshes and swamps, vernally mesic soils in valley and foothill grassland, vernal pools; 0–480 m (0–1,574 ft.). Blooming period: May–November.	Absent–Suitable habitat does not occur on site.
Island mountain-mahogany (*Cercocarpus betuloides* var. *blancheae*)	CRPR 4.3	Evergreen shrub. Closed-cone coniferous forests, chaparral; 30-600 m (98–1,968 ft.). Blooming period: February–May.	Absent–Suitable habitat does not occur on site.
San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*)	CRPR 1B.1, FC, SE	Annual herb. In sandy areas on foothills, mixed grassland, chaparral; 90–500 m (295–1,640 ft.). Severely limited distribution; only known in Los Angeles, Orange, and Ventura Counties. Blooming period: April–July.	Low
Small-flowered morning-glory (*Convolvulus simulans*)	CRPR 4.2	Annual herb. Friable clay soils or serpentine seeps in chaparral openings, coastal scrub, valley and foothill grassland; 30–700 m (98–2,297 ft.). Blooming period: March–July.	Absent–Suitable habitat does not occur on site.
Santa Susana tarplant (*Deinandra minthornii*)	CRPR 1B.2	Deciduous shrub. Rocky chaparral, coastal scrub, sandstone outcrops and crevices; 280–760 m (919–2,493 ft.). Blooming period: July–November.	Absent–Suitable habitat does not occur on site.
Paniculate tarplant (*Deinandra paniculata*)	CRPR 4.2	Annual herb. Usually found in vernally mesic soils in coastal scrub, valley and foothill grassland, vernal pools; 25–940 m (82–3,084 ft.). Blooming period: April–November.	Absent–Suitable habitat does not occur on site.

Species	Status	Habitat Requirements	Potential to Occur
Mt. Pinos larkspur (*Delphinium parryi* ssp. *purpureum*)	CRPR 4.3	Perennial herb. Grows sporadically in Kern, Santa Barbara, and Ventura counties in the understory of chaparral, scrub, and pinyon-juniper woodlands; 360–820 m (1,181–2,690 ft.). Blooming period: May–June.	Absent–Suitable habitat does not occur on site.
Slender-horned spineflower (*Dodecahema leptoceras*)	CRPR 1B.1, FE, SE	Annual herb. Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; sandy soils; 200–760 m (656–2,493 ft.). Blooming period: April–June.	Low
Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*)	CRPR 1B.1	Perennial herb. Coastal scrub, coastal bluff scrub, chaparral, valley and foothill grassland; often found in open, rocky slopes, in shallow clays over serpentine, or in rocky areas with little soil; 0–450 m (1,476 ft.). Blooming period: April–June.	Absent–Suitable habitat does not occur on site.
Many-stemmed dudleya (*Dudleya multicaulis*)	CRPR 1B.2	Perennial herb. Often in clay soils in chaparral, coastal scrub, valley and foothill grassland; 15–790 m (49–2,591 ft.). Blooming period: April–July.	Absent–Suitable habitat does not occur on site.
Palmer's grapplinghook (*Harpagonella palmeri*)	CRPR 4.2	Chaparral, coastal scrub, valley and foothill grassland. Clay soils; open grassy areas within shrubland; 20–955 m (65–3,133 ft.). Blooming period: March–May.	Absent–Suitable habitat does not occur on site.
Newhall sunflower (*Helianthus inexpectatus*)	CRPR 1B.1	Perennial herb. Marshes and swamps, riparian woodland; 0–305 m (1,000 ft). Blooming period: August–October.	Absent–Study area occurs outside elevation range for the species.
Urn-flowered alumroot (*Heuchera caespitosa*)	CRPR 4.3	Perennial rhizomatous herb. Rocky soil in montane riparian forest, cismontane woodland, lower and upper montane coniferous forest; 1,155–2,650 m (3,788–8,692 ft.). Blooming period: May–August.	Absent–Study area occurs outside elevation range for the species.
Vernal barley (*Hordeum intercedens*)	CRPR 3.2	Annual herb. Coastal dunes, coastal scrub, saline flats, depressions in valley and foothill grassland, vernal pools; 5–1,000 m (16–3,280 ft.). Blooming period: March–June.	Absent–Suitable habitat does not occur on site.
Mesa horkelia (*Horkelia cuneata* var. *puberula*)	CRPR 1B.1	Perennial herb. Sandy and gravelly soils within maritime chaparral, cismontane woodland, coastal scrub; 70–810 m (229–2,657 ft.). Blooming period: February–September.	Low
San Gabriel Mountains sunflower (*Hulsea vestita*	CRPR 4.3	Perennial herb. Rocky soil in lower and upper montane coniferous forest; 1,500–2,500 m (4,920–8,200 ft.).	Absent–Study area occurs outside elevation range for

Species	Status	Habitat Requirements	Potential to Occur
ssp. *gabrielensis*)		Blooming period: May–July.	the species.
Parry's sunflower (*Hulsea vestita* ssp. *parryi*)	CRPR 4.3	Perennial herb. Granitic, carbonite, or rocky openings in lower and upper coniferous forest and pinyon-juniper woodland; 1,370–2,895 m (4,494–9,496 ft.). Blooming period: April–August.	Absent–Study area occurs outside elevation range for the species.
Southern California black walnut (*Juglans californica*)	CRPR 4.2	Deciduous tree. Alluvial areas in chaparral, cismontane woodland, coastal scrub; 50–900 m (164–2,952 ft.). Blooming period: March–August.	Low
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	CRPR 1B.1	Annual herb. Coastal salt marsh, coastal salt swamps, playas, vernal pools; 1–1,220 m (3–4,001 ft.). Blooming period: February–June.	Absent–Suitable habitat does not occur on site.
Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)	CRPR 4.3	Annual herb. Openings in chaparral and sage scrub; 0–885 m (2,900 ft.). Blooming period: January–July.	Low
Ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*)	CRPR 4.2	Perennial bulbiferous herb. Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland; 30–1,800 m (98–5,904 ft.). Blooming period: March–August.	Absent–Suitable habitat does not occur on site.
San Gabriel linanthus (*Linanthus concinnus*)	CRPR 1B.2	Annual herb. Rocky openings in chaparral, lower and upper montane coniferous forest; 1,520-2,800 m (4,986–9,184 ft.). Blooming period: April–July.	Absent–Study area occurs outside elevation range for the species.
Davidson's bush-mallow (*Malacothamnus davidsonii*)	CRPR 1B.2	Perennial shrub. Coastal scrub, riparian woodland, chaparral, cismontane woodland, sandy washes; 185–855 m (607–2,805 ft.). Blooming period: June–January.	Medium
White-veined monardella (*Monardella hypoleuca* ssp. hypoleuca)	CRPR 1B.3	Perennial herb. Chaparral, cismontane woodland, dry slopes; 50–1,525 m (165–5,000 ft.). Blooming period: June–August.	Absent–Suitable habitat does not occur on site.
Spreading navarretia (*Navarretia fossalis*)	CRPR 1B.1, FT	Annual herb. San Diego hardpan and claypan, chenopod scrub, marshes and swamps, playas, swales, depressions, vernal pools; 30–655 m (98–2,150 ft.). Blooming period: April–June.	Absent–Suitable habitat does not occur on site.
Piute Mountains navarretia (*Navarretia setiloba*)	CRPR 1B.1	Annual herb. Cismontane woodland, pinyon-juniper woodland, valley and foothill grassland, in clay soils or on gravelly loam; 285–2,100 m (935–6,890 ft.). Blooming period: April–July.	Absent–Suitable habitat does not occur on site.
Short-joint beavertail (*Opuntia basilaris* var.	CRPR 1B.2	Shrub. Chaparral, Joshua Tree woodland, Mojavean desert scrub,	Absent–Suitable habitat does not

Species	Status	Habitat Requirements	Potential to Occur
brachyclada)		pinyon-juniper woodland, in sandy soil or coarse, granitic loam; 425–1,800 m (1,395–5,905 ft.). Blooming period: April–June.	occur on site.
California Orcutt grass (*Orcuttia californica*)	CRPR 1B.1, FE, SE	Annual grass. Restricted to deeper portions of undisturbed vernal pools; 60–660 m (197–2,165 ft.). Blooming period: April–August.	Absent–Suitable habitat does not occur on site.
Hubby's phacelia (*Phacelia hubbyi*)	CRPR 4.2	Annual herb. Gravelly to rocky soil or talus in chaparral, coastal scrub, valley and foothill grassland; 0–1,000 m (0–3,280 ft.). Blooming period: April–July.	Absent–Suitable habitat does not occur on site.
Mojave phacelia (*Phacelia mohavensis*)	CRPR 4.3	Annual herb. Sandy to gravelly soil in meadows, seeps, cismontane, pinyon-juniper woodland, lower montane coniferous forest; 1,400–2,500 m (4,592–8,200 ft.). Blooming period: April–August.	Absent–Study area occurs outside elevation range for the species.
White rabbit-tobacco (*Pseudognaphalium leucocephalum*)	CRPR 2B.2	Perennial herb. Occurs in dry, sandy creek bottoms within chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats; often on sandy or gravelly soils; 14–1400 m (46–4,593 ft.). Blooming period: August–November.	Low
San Gabriel oak (*Quercus durata* var. *gabrielensis*)	CRPR 4.2	Evergreen shrub. Chaparral and cismontane woodland; 450–1,000 m (1,476–3,280 ft.). Blooming period: April–May.	Medium
Chaparral ragwort (*Senecio aphanactis*)	CRPR 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub, drying alkaline flats; 20–855 m (49–2,625 ft.). Blooming period: January–April.	Absent–Suitable habitat does not occur on site.
Western bristly scaleseed (*Spermolepis lateriflora*)	CRPR 2A	Annual herb. Sonoran Desert scrub, rocky or sandy substrate; 365–670 m (1,198–2,198 ft.). Blooming period: March–April.	Absent–Suitable habitat does not occur on site.
Greata's aster (*Symphyotrichum greatae*)	CRPR 1B.3	Perennial herb. Mesic areas in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland; 300–2,010 m (984–6,593 ft.). Blooming period: June–October.	Absent–Suitable habitat does not occur on site.
Invertebrates			
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains; restricted to seasonal vernal pools. Prefers cool-water pools with low to moderate dissolved solids; are unpredictable and	Absent–Suitable habitat does not occur on site.

Species	Status	Habitat Requirements	Potential to Occur
		often short-lived.	
Fish			
Santa Ana sucker (*Catostomus santaanae*)	FT	Previously found in the Los Angeles, San Gabriel and Santa Ana river systems. Most streams are fairly small and shallow, with currents ranging from swift to sluggish. Species is abundant where waters are cool and unpolluted, though they can occur where waters are fairly turbid. Often occurs where boulders, rubble and sand are the main bottom materials; associated with growths of filamentous algae and *Chara*. Spawning period: early April to early July.	Absent–Suitable habitat does not occur on site.
Unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*)	FE, SE, CFP	Inhabits slow-moving reaches or quiet-water microhabitats in streams and rivers. Favorable habitats are usually shaded by dense and abundant vegetation. In more open reaches, algal mats or barriers may provide refuge. Reproduction occurs in areas with adequate aquatic vegetation and slow-moving water where males can establish and vigorously defend territories.	Absent–Suitable habitat does not occur on site.
Arroyo chub (*Gila orcuttii*)	CSC	Occur within warm, fluctuating streams and within slow moving sections of streams containing sandy or muddy bottoms.	Absent–Suitable habitat does not occur on site.
Santa Ana speckled dace (*Rhinichthys osculus* ssp.)	CSC	This subspecies of speckled dace is assumed extirpated from most of the Santa Ana River. Formerly widespread in mountain portions of the Santa Ana, San Gabriel, and Los Angeles watersheds. Populations were scattered in foothill areas and rare in lowlands. They were last seen in the Santa Ana River near Rialto in 2001.	Absent–Suitable habitat does not occur on site.
Amphibians			
Arroyo toad (*Anaxyrus californicus*)	FE, CSC	Found in rivers with willows, cottonwoods, and sycamores. This species prefers sandy/gravelly areas in drier parts of its range near washes or intermittent streams with clear standing water that is required for egg deposition.	Absent–Suitable habitat does not occur on site.
Southern mountain yellow-legged frog (*Rana muscosa*)	FE, SE, CSC	Inhabits lakes, ponds, meadow streams, isolated pools, and sunny riverbanks. Populations are known in the San Gabriel, San Jacinto and San Bernardino	Absent–Suitable habitat does not occur on site.

Species	Status	Habitat Requirements	Potential to Occur
		Mountains, always encountered within a few feet of water, in rocky streams in narrow canyons and in the chaparral belt.	
Western spadefoot (*Spea hammondii*)	CSC	Found primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools and seasonal ponds are essential for breeding and egg laying. Found at 0–1,370 m (4,500 ft.).	Absent–Suitable habitat does not occur on site.
Reptiles			
Silvery legless lizard (*Anniella pulchra pulchra*)	CSC	Habitat is primarily areas with sandy or loose loamy soils under the sparse vegetation of beaches, chaparral, or pine-oak woodland, and open, well-shaded terraces in mature riparian natural communities. Leaf litter is commonly present.	Medium
Western pond turtle (*Actinemys* [=*Emys]* *marmorata*)	CSC	Requires slack- or slow-water aquatic habitat, aerial and aquatic basking sites, and an upland oviposition site on an unshaded slope with clay soils in the vicinity of the aquatic site.	Absent–Suitable habitat does not occur on site.
Coast horned lizard (*Phrynosoma blainvillii*)	CSC	Inhabits grasslands, brushlands, woodlands, and open coniferous forests with sandy or loose soil; requires abundant ant colonies for foraging.	Medium
Two-striped garter snake (*Thamnophis hammondii*)	CSC	Often in water and rarely found far from it, though also known to inhabit intermittent streams with rocky beds bordered by willow thickets or other dense vegetation; will also inhabit large riverbeds if riparian vegetation is available and occur in artificial impoundments if both aquatic vegetation and suitable prey items (small amphibians and fish) are present.	Absent–Suitable habitat does not occur on site.
Birds			
Cooper's Hawk	CSC	Breeds across southern Canada southward to southern United States and into central Mexico. Breeds in deciduous, mixed, and coniferous forests. Winters throughout the United States and Mexico. Builds stick nests within tall trees typically in wooded areas. Feeds on birds and small mammals.	Foraging: Present Nesting: Present
Tricolored blackbird (*Agelaius tricolor*)	CSC	Range is restricted to the Central Valley and surrounding foothills, throughout coastal and some inland localities in southern California, and scattered sites	Foraging: Absent Nesting: Absent

Species	Status	Habitat Requirements	Potential to Occur
		in Oregon, western Nevada, central Washington, and western coastal Baja California. Breed in dense colonies and may travel several kilometers to secure food for their nestlings; males defend small territories within colonies and mate with 1 to 4 females. They are itinerant breeders, nesting more than once at different locations during the breeding season.	
Grasshopper sparrow (*Ammodramus savannarum*)	CSC	Species appears to prefer areas with significant grass cover and scattered shrubs for perching; doesn't use habitats with dense shrub cover or sites that have been over-grazed. During migration and winter, will use many types of open fields.	Foraging: Absent Nesting: Absent
Burrowing owl (*Athene cunicularia*)	CSC	Inhabits prairies, grasslands, lowland scrub, agricultural lands, coastal dunes, desert floors, and some artificial, open areas. Requires large, open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small-mammal burrows. Uses rodent or other burrows for roosting and nesting cover; uses pipes, culverts, and nest boxes when burrows are scarce.	Foraging: Absent Nesting: Absent
Swainson's hawk (*Buteo swainsoni*)	ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas, such as grasslands or alfalfa or grain fields, that support rodent populations.	Foraging: Absent Nesting: Low
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, SE	Riparian forest nester along the broad, lower flood-bottoms of larger river system. Nests are in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Foraging: Absent Nesting: Absent
White-tailed kite (*Elanus leucurus*)	CFP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Will forage in open grasslands, meadows, or marshes and isolated, dense-topped trees for nesting and perching.	Foraging: Absent Nesting: Absent

Species	Status	Habitat Requirements	Potential to Occur
Southwestern willow flycatcher (*Empidonax traillii extimus*)	FE, SE	Breeds in riparian woodlands along rivers, streams, or other wetlands. Usually nests in proximity to water or very saturated soil.	Foraging: Absent Nesting: Absent
Loggerhead shrike (*Lanius ludovicianus*)	CSC	Forages in open country of many types (including non-intensive agricultural areas) and nests in small trees and large shrubs, often at the edges of such open areas. Like most birds of prey, this species generally occurs in low densities. The species is widely distributed in southern California, with some seasonal movements evident.	Foraging: Absent Nesting: Absent
Coastal California gnatcatcher (*Polioptila californica californica*)	FT, CSC	Prefers open, scrubby habitats such as coastal sage scrub and some forms of chaparral.	Absent–Based on 2016/2017 focused surveys.
Least Bell's vireo (*Vireo bellii pusillus*)	FE, SE	Inhabits riparian thickets either near water or in dry portions of river bottoms. Nests along margins of bushes, and forages low to the ground; may also be found using mesquite and arrow weed in desert canyons.	Foraging: Absent Nesting: Absent
Mammals			
Pallid bat (*Antrozous pallidus*)	CSC	Found throughout Southern California, from the coast to mixed conifer forests, grasslands, shrublands, and woodlands. Most common in open, dry habitats with rocky areas for roosting; yearlong resident in most of its range. Roosts under bridges and in rock crevices, caves, mine shafts, buildings, and tree hollows.	Foraging: Low Roosting: Low
Townsend's big-eared bat (*Corynorhinus townsendii*)	SC, CSC	Occurs throughout the drier portions of California; non-migratory; hibernates from approximately October through April. Take a variety of prey, but primarily larger insects, especially moths. Known roost sites have been in caves, lava tubes, mines, tunnels, buildings and other manmade structures. Foraging habitats include coniferous forests and pinyon-juniper woodlands, deciduous riparian woodlands, and desert lands.	Foraging: Low Roosting: Low
Spotted bat (*Euderma maculatum*)	CSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes, almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	Foraging: Absent Roosting: Absent

Species	Status	Habitat Requirements	Potential to Occur
Western mastiff bat (*Eumops perotis californicus*)	CSC	Forages in a variety of habitats, such as dry desert washes, floodplains, chaparral, oak woodland, open ponderosa pine forest, grassland, montane meadows, and agricultural areas. Primarily a cliff-dwelling species for breeding.	Foraging: Absent Roosting: Absent
Western yellow bat (*Lasiurus xanthinus*)	CSC	Inhabits extremely arid areas to dry areas, including savannas, secluded woodlands, regions dominated by pastures or croplands; even tolerates residential areas. Roosts in trees; commonly found in the skirt of dead fronds of native and nonnative palm trees.	Foraging: Absent Roosting: Absent
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)	CSC	Distributed along the coastal slope from around Point Conception south into Baja California. Requires extensive open spaces, such as grasslands or open sage scrub, usually in fairly level situations. Generally not found in chaparral or woodland habitats. The presence of substantial available cover, either dense grasses or shrubs, appears to be important for day roosts and is often adjacent to more open foraging areas.	Absent–Suitable habitat does not occur on site.
California leaf-nosed bat (*Macrotus californicus*)	CSC	Low-flying forager that gleans and feeds on the ground and in the air. Roosts are in deep tunnels or caves, occasionally in buildings or bridges. Formerly found throughout southern California, but apparently is now confined to lowland Sonoran Desert habitat below 900 m (2,952 ft.). Forages in desert wash vegetation within 1 to 3 miles of roosting sites. Historical habitats utilized in coastal areas appear to be poorly known.	Foraging: Absent Roosting: Absent
San Diego desert woodrat (*Neotoma lepida intermedia*)	CSC	Distributed from central California southward well into Baja California, Mexico; locally common in a variety of sunny shrub habitats, frequently in rocky and/or steep terrain and upper drainages; often builds its dens low in cactus or rock crevices, but will use other sites as needed.	Low
Big free-tailed bat (*Nyctinomops* [=*Tadarida*] *macrotis*)	CSC	Inhabits arid, rocky areas; roosts in crevices in cliffs.	Foraging: Absent Roosting: Absent
Southern grasshopper mouse (*Onychomys*	CSC	Inhabits desert areas, especially scrub habitats with friable soils for digging.	Absent–Suitable habitat does not

Species	Status	Habitat Requirements	Potential to Occur
torridus ramona)		Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	occur on site.
Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)	CSC	Inhabits areas of open ground, prefers fine sandy soils (for burrowing), but is also found commonly on gravel washes and on stony soils, within brush and woodland habitats. Rarely found on sites with a high cover of rocks.	Absent–Suitable habitat does not occur on site.
American badger (*Taxidea taxus*)	CSC	Inhabits a diversity of habitats that meet the principal requirements of sufficient food, friable soils, and relatively open, uncultivated ground; prefers grasslands, savannas, and mountain meadows near timberline.	Absent–Suitable habitat does not occur on site.

Notes:
CRPR = California Rare Plant Rank, CSC = California Species of Concern; FT = Federal Threatened; FE = Federal Endangered; SE = State Endangered Species; CFP = California Fully Protected; FC = Federal Candidate Species; SC = State Candidate Species
Source: ICF 1016; California Department of Fish and Wildlife 2016; California Native Plant Society 2016.

Non-Listed Special-Status Plants

Non-listed special-status species are species that are not listed under either the California or the federal ESA, but are sufficiently rare to require special consideration. Table 3.3-2 identifies 40 non-listed special-status plants known to occur in the region. Based on observed conditions during the field survey, nine species were determined to have low to medium potential to occur within the study area: Catalina mariposa lily (*Calochortus catalinae*), slender mariposa lily (*Calochortus clavatus* var. *gracilis*), Plummer's mariposa-lily (*Calochortus plummerae*), mesa horkelia (*Horkelia cuneata* var. *puberula*), Southern California black walnut (*Juglans californica*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), Davidson's bush-mallow (*Malacothamnus davidsonii*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), and San Gabriel oak (*Quercus durata* var. *gabrielensis*). A full list of plant species detected during the field survey can be found in Appendix D of this Draft EIR. Rare plant surveys were completed in April and May 2017, at which time no special-status plants were observed during the focused survey effort and thus were presumed to be absent from the study area (Appendix D of this Draft EIR).

State- and Federally-Listed Wildlife

Table 3.3-2 identifies 10 federally and/or state-listed threatened and endangered wildlife species that are known from the region. Of these species, two were determined to have low or greater potential to occur within the study area.

Swainson's hawk (*Buteo swainsoni*) was determined to have low potential for nesting within the study area; however, this species was not detected during the field survey, and no suitable foraging habitat occurs within a 5-mile radius. Therefore, the likelihood for occurrence is less than reasonable within the study area.

Coastal California gnatcatcher (*Polioptila californica californica*) was determined to have a medium to high potential to occur in the eastern portion of the study area (Figure 3.3-4) based on the initial habitat assessment. Between November 2016 and March 2017, protocol level (USFW 1997) Coastal California gnatcatcher surveys were conducted (see Appendix D for full report). No coastal California gnatcatchers were observed within the study area.

Non-listed Special-Status Wildlife

Table 3.3-2 identifies 24 non-listed special-status wildlife species that are known from the region (CDFW 2016a). Six of these were determined to have a low or medium potential to occur in the study area based on current habitat conditions: Cooper's hawk (*Accipiter cooperii*), silvery legless lizard (*Anniella pulchra pulchra*), coast horned lizard (*Phrynosoma blainvillii*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and San Diego desert woodrat (*Neotoma lepida intermedia*). A full list of wildlife species detected during the field survey is found in Appendix D of this Draft EIR.

Critical Habitat

No USFWS designated critical habitat for any species overlaps the study area.

3.3.3.4 Wildlife Corridors

Wildlife movement within the study area is expected to be higher along the undeveloped northern portion. This area of the study area is connected to a landscape of undeveloped open space through Wilson Canyon to the north, which is further connected to the Angeles National Forest. Otherwise, development of the Master Plan is mostly contained within existing chain-link fencing, which inhibits movement of wildlife onto the campus. The developed southern portion of the study area also inhibits the movement of wildlife southward. The species expected to move across the study area include small-to-large sized mammals, birds, and reptiles. One juvenile coyote (*Canis latrans*) was observed in the northwestern portion of the study area within a disturbed lot adjacent to campus buildings.

Figure 3.3-4. Suitable Coastal California Gnatcatcher Habitat

Source: ICF 2016.

3.3.3.5 Jurisdictional Waters and Wetlands

Potential waters in the study area include several unnamed blue line features (USGS 1997) that drain from north to south through the study area. One of these features flows north to south within a concrete box culvert from Wilson Debris Basin; a second borders the western side of project site and flows through a concrete box culvert from Schoolhouse Debris Basin. Both features continue south into the Sylmar community of the City of Los Angeles before transitioning underground, likely into the storm drain system. Seven other riverine features occur in the hills to the north of the study area (USFWS 2016b). Two other potential features were noted during the habitat assessment that were not depicted on the USGS topographic map or the National Wetlands Inventory. All nine of these potential water features transition underground as they approach the study area, likely into the storm drain system. Each of these features may be considered jurisdictional waters under CWA, Section 404 for USACE, Section 401 of the CWA, and Section 13050(e) (et seq.) of the California Water Code via the Porter Cologne Water Quality Act for Regional Water Quality Control Board (RWQCB), and CDFW jurisdiction, pursuant to Section 1602 of the California Fish and Wildlife Code.

3.3.4 Environmental Impact Analysis

This section describes the impacts that could occur to biological resources due to implementation of the Master Plan and identifies measures to mitigate any significant impacts. The impacts are organized by topic, which correspond with the significance criteria.

3.3.4.1 Methods

The following sections evaluate the biological resource impacts that would result should the proposed project be implemented. The existing conditions described in Section 3.3.3, which presents the literature review, the results of a field survey conducted on June 2, 2016, the 2016 protocol California Gnatcatcher surveys, and the 2016 rare plant surveys, along with the significance thresholds identified below, provide the basis for assessing the direct and indirect impacts on plants and wildlife of anticipated development of the Master Plan.

3.3.4.2 Thresholds of Significance

For the purposes of this EIR, in accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant environmental impact if it would:

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 CDFW or USFWS.

BIO-2 Have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

BIO-3 Result in substantial interference 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.

BIO-4 Conflict with any local policies or ordinances to protect biological resources, such as a tree preservation policy or ordinance.

BIO-5 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS.

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.

3.3.4.3 Impacts and Mitigation Measures

Impact BIO-1: Would Implementation of the Proposed 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 CDFW or USFWS?

Construction Impacts

Tier I

Special-Status Plant Species

Special-status plant surveys conducted in April and May of 2017 concluded that no special-status plants were present within the study area at the time of the survey. Because the project footprint consists of a large percentage of disturbed/developed land uses and fragmented native vegetation communities, there are little intact and undisturbed native vegetation communities that provide habitat for sensitive plant species. Therefore, no impacts on special-status plants are anticipated as a result of Tier I implementation. One small section of coastal California sagebrush occurs on the eastern side of the project area; however, no sensitive plants occurred within the habitat at the time of the rare plant survey.

Special-Status Wildlife Species

Tier I development includes the construction of the Restorative Care Village, which includes a proposed Recuperative Care Center, Residential Treatment Program facility, Mental Health Urgent Care Center, and Mental Health Wellness Center in the northeastern portion of the campus. The Residential Treatment Program facility and Recuperative Care Center and its associated parking lot would be located just west of suitable coastal California gnatcatcher habitat as identified during the initial habitat assessment. No permanent loss of gnatcatcher habitat is anticipated as a result of the development of these facilities. However, given that the extent of other Tier I improvements in this area of the campus are less clearly defined (e.g., recreational trails and facilities), it is possible that some permanent loss of suitable California sagebrush habitat that may be used by coastal California gnatcatcher (Figure 3.3-4) could occur. To determine the presence or absence of coastal California gnatcatcher in this area, protocol level surveys were conducted in 2016 and 2017, but no coastal California gnatcatchers were found. Additionally, the literature review indicated that populations of coastal California gnatcatcher are generally not present in the area, despite the expanse of open California sagebrush habitat to the north of the project. The lack of a population in that undisturbed area indicates that it is highly unlikely that any Coastal California gnatcatcher would occupy this area in the eastern portion of the campus. As protocol surveys were negative for coastal California gnatcatcher, no impacts to the species are anticipated. For a discussion of the significance of impacts due to the removal of sagebrush scrub habitat, please see discussion under Impact **BIO-5**, below.

The removal or modification of abandoned buildings that provide suitable roosting habitat within the project area may result in impacts on two bat species: pallid bat and Townsend's big-eared bat. Therefore, impacts on these two species are considered to be potentially significant. However, implementation of mitigation measures **MM-BIO-1** and **MM-BIO-2** would reduce impacts to a less-than-significant level.

Impacts from construction to three additional special-status species, including coast horned lizard, silvery legless lizard, and San Diego desert woodrat, would be less than significant because these species occur throughout Southern California and are not limited geographically to the vicinity of the study area, and the project is not anticipated to have a significant impact on any regional populations.

Tier II

Under Tier II, no additional impacts would occur to the area beyond restoration; no impacts to California gnatcatcher would occur as they are not occupying the California Sagebrush Scrub habitat on the eastern end of the project site. Impacts from construction to three additional special-status species, including coast horned lizard, silvery legless lizard, and San Diego desert woodrat, would be less than significant because these species occur throughout southern California and are not limited geographically to the vicinity of the study area.

Mitigation Measures

The following measures will provide the necessary steps to determine the presence or absence of bat species, and if present, avoidance measures needed to reduce impacts to less than significant.

MM-BIO-1: Prior to the commencement of construction activities, a habitat assessment will be done by a qualified bat biologist to identify buildings within the project area that are suitable roosting habitat for bats. The following measures would apply to structures with bat roost potential, as determined by a qualified biologist:

- To avoid impacts to roosting bats, preconstruction surveys will be conducted prior to work occurring within the vicinity of, or removal of, vacant buildings. A qualified bat biologist will be retained to conduct bat and bat roosting site surveys between May 1 and July 30, prior to commencement of construction activities. This pre-construction survey will be conducted at the non-vacant and vacant buildings determined to be potentially suitable for roosting bats. The survey must occur during maternity season to confirm whether Townsend's big-eared bat is present in the vacant buildings, the only locations with potential for this species. The survey at the buildings will involve exit counts and acoustic surveys to determine whether a structure supports a nursery or roost and by which species. For the non-vacant buildings, a structure inspection will be performed by a bat biologist to look for bat sign (e.g., guano, wall streaking).
- Preconstruction bat surveys will include evening emergence surveys performed at dusk using active full-spectrum acoustic monitoring. Work will be performed by qualified biologists, who have knowledge of the natural history of the bat species that could occur in the project area and experience conducting surveys, using full spectrum acoustic equipment. During surveys, biologists will avoid unnecessary disturbance of occupied roosts. Evening (i.e., dusk) emergence surveys will consist of at least one biologist stationed on at different vantage points from the structure, watching for emerging bats from a half hour before sunset to 1–2 hours after sunset or until visibility is no longer optimal. Full-spectrum

acoustic detectors will be used during emergence surveys to assist in species identification. All emergence surveys will be conducted during favorable weather conditions (i.e., calm nights with temperatures conducive to bat activity [55°F and above] and no precipitation predicted).

- If roosting sites or bats are not found, a report confirming their absence will be sent to the CDFW, and no further action will be required.
- If it is determined that structures in the project area are being used by bats as roost sites, the following protective measures will be implemented:
    - Disturbance of maternity roosting structures or trees (e.g., structure removal, construction equipment operation near roosts, tree trimming or removal) will not occur between April 15 and the following September 15 (i.e., the maternity period) to avoid impacts on reproductively active females and active maternity roosts, whether colonial or solitary. The maternity roost will remain undisturbed from the time it is located until the following September 15 or until a qualified biologist has determined the roost is no longer active. No construction work will occur at the roost or within a 100-foot-wide buffer zone (or an alternative width, as determined in consultation with CDFW) until September 15.
    - Exclusion devices may be installed outside of the maternity period (i.e., between September 16 and April 14) to preclude bats from occupying buildings during construction. Exclusionary devices will only be installed by or under the supervision of an experienced bat biologist.
    - A Bat Management Plan (see **MM-BIO-2**) will be developed if a bat maternity roost, including Townsend's big-eared bat, is found in the vacant building(s), and no construction work within a 250-foot-wide buffer zone (or an alternative width, as determined in consultation with CDFW) will occur between April 1 and September 30.

MM-BIO-2: A Bat Management Plan will be developed to ensure mortality to bats does not occur. The following items will be included in the plan, at a minimum:

- For each location confirmed to be occupied by bats, the plan will detail, both in text and graphics, where exclusion devices will be placed, type(s) of exclusion material to be used, the timing for exclusion work, and the timeline and methodology needed to exclude the bats.
- Monitoring activities and schedules will be included, including frequency of monitoring, identification of structures that need to be monitored, and reporting requirements.
- The plan will be reviewed and approved by CDFW.

Level of Significance after Mitigation

Less-than-significant impact.

Operational Impacts

Tier I

Special-Status Plant Species

Operational activities within the project area would not differ significantly from current activities. Therefore, operation of the proposed facilities and buildings would not have an adverse impact on any candidate, sensitive, or special-status plant species. Accordingly, operational impacts associated with the development of Tier I would be less than significant.

Special-Status Wildlife Species

Suitable habitat for coastal California gnatcatcher occurs along the eastern side of the project site. Tier I development in proximity to the suitable habitat, where this species was absent during 2016/2017 focused protocol surveys, will include the construction of the Restorative Care Village. Additionally, new pedestrian recreation trails (see Figure 2-6 in Chapter 2) are proposed within the California sagebrush habitat. However, given the presence and proximity of existing parking lots and roads, these new facilities are not expected to result in a substantial increase in operational impacts on coastal California gnatcatcher from lighting, noise, traffic, or other operational components. Therefore, operational impacts on this wildlife species would be less than significant.

Operational activities within the project area, which would not differ significantly from current activities, are also not expected to result in significant impacts on other special-status species, including pallid bat, Townsend's big-eared bat, and Swainson's hawk, that may roost and nest on the project site. Operational impacts on additional special-status species with low potential to occur, such as coast horned lizard, silvery legless lizard, and San Diego desert woodrat, would also be less than significant. Therefore, operation of the proposed facilities and buildings would not have a significant adverse impact on any candidate, sensitive, or special-status animal species. Accordingly, operational impacts associated with the development of Tier I would be less than significant.

Tier II

Operational impacts under Tier II would be similar to that described under Tier I.

Mitigation Measures

No operational impacts to candidate, sensitive, or special-status species would occur; therefore, no mitigation is required.

Level of Significance

No impact or less-than-significant impact.

Impact BIO-2: Would Implementation of the Proposed Project Have a Substantial Adverse Effect on Federally Protected Wetlands, as Defined by Section 404 of the CWA, through Direct Removal, Filling, Hydrological Interruption, or Other Means?

Construction and Operational Impacts

Tier I

Two blue line concrete box culverts and nine blue line and non-blue line potential jurisdictional features occur within the study area. A jurisdictional delineation is required to determine the extent of each feature and whether any features are jurisdictional and could be affected by Tier I construction.

Levels of temporary and permanent impacts on potentially jurisdictional aquatic resources will be assessed when subsequent project-specific plans are completed following a jurisdictional delineation of the site. Given the small amount of potential jurisdictional waters potentially affected, the limited functions and values of these features, including their ephemeral nature (i.e., limited to transport of water during and shortly after rainfall), significant impacts are not anticipated. Additionally, if impacts occur, any compensatory mitigation (i.e., on site restoration at a 1:1 ratio for temporary impacts and off-site mitigation through land purchase, in-lieu fee program, or other agency-approved mitigation program) developed during the permitting phase, would ensure impacts on potential waters and/or wetlands would be less than significant.

Tier II

Construction and operational impacts under Tier II would be similar to those described under Tier I.

Mitigation Measures

The following measure is proposed to mitigate the impact on jurisdictional aquatic resources described above under Impact **BIO-2**:

> **MM-BIO-3:** Prior to construction of individual Master Plan projects, a jurisdictional delineation will be conducted within the project site for jurisdictional features, including wetlands. If jurisdictional features are not present, there is no potential for impacts to occur, and no further action will be needed. If a jurisdictional feature is found within the project disturbance limits, then the following measures would be triggered:
>
> - **Full avoidance**: This may be possible if the jurisdictional feature is found in portions of the project site that can be avoided. In this instance, environmentally sensitive area fencing will be placed between the work area and the location of the feature. A biologist will be present during the placement of the fencing.
> - **Impact**: If avoidance of jurisdictional features is not feasible, permits/agreements will be obtained from appropriate agencies (i.e., RWQCB, USACE, CDFW) prior to work within the features.

Level of Significance after Mitigation

Less-than-significant impact.

Impact BIO-3: Would Implementation of the Proposed Project Result in Substantial Interference 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?

Construction Impacts

Tier I and Tier II

Wildlife Movement

Although small-to-large-sized mammals and reptiles have the potential to wander onto the project site, an existing chain-link fence currently prohibits movement of most wildlife onto the project site. Since development will be contained within the existing chain-link fence, impacts to terrestrial wildlife species would be considered less than significant.

Bats

The removal or modification of the buildings that provide suitable roosting habitat within the project site may result in impacts to maternity bat roosts. Disturbance to a maternity roost can result in abandonment by the adult females, resulting in the mortality of the young or direct mortality to the entire roost, which would be a significant impact. However, with the implementation of Mitigation Measure **MM-BIO-2** and **MM-BIO-4**, impacts to maternity roosts would be less than significant.

Nesting Birds

Impacts resulting from construction have the potential to directly and indirectly affect nesting birds and temporarily cause portions of the site to be inaccessible to bird species in the area. Bird species protected under the MBTA have potential to nest in existing ornamental and natural vegetation on the project site. Some bird species protected by the MBTA may also nest on existing buildings or other appurtenances. Removal of vegetation and the demolition of buildings during construction could result in direct impacts on nests that are protected under the MBTA. Also, high noise levels and dust from construction activity could cause indirect impacts on nests and cause failure. The MBTA prohibits take of nearly all native birds. Under the MBTA, *take* means to kill, directly harm, or destroy individuals, eggs, or nests or otherwise cause failure of an ongoing nesting effort. Similar provisions within the California Fish and Game Code protect all native birds of prey (Section 3503.5) and all non-game birds that occur naturally in the state (Section 3800). The destruction of an occupied nest would be a significant impact and a violation of the MBTA and the California Fish and Game Code. However, Mitigation Measure **MM-BIO-4** would reduce the significant impact associated with MBTA-protected bird species to less than significant. Additionally, the Master Plan includes future landscaping plans that would utilize native plant palettes in an effort to connect the campus to the surrounding natural vegetation communities, thereby replacing nesting habitat. Therefore, impacts from construction would be less than significant with the implementation of Mitigation Measure **MM-BIO-4**.

Mitigation Measures

Measures **MM-BIO-1** and **MM-BIO-2** are proposed to mitigate construction impacts to bat maternity roosts under Impact **BIO-3**.

The following measure is proposed to mitigate construction impacts on nesting birds described above under Impact **BIO-3**:

MM-BIO-4: The nesting season for birds will be avoided, or preconstruction nesting bird surveys will be conducted if construction activities are carried out during the nesting season. To ensure compliance with the MBTA and similar provisions under Sections 3503, 3503.5, 3505, 3800, and 3801.6 et seq.of the California Fish and Game Code, the County of Los Angeles, through the general contractor, will conduct all vegetation removal during the non-breeding season, between September 1 and February 14, or implement the following:

- If the removal of vegetation, demolition of buildings, or noise-generating construction activities are scheduled between February 15 and August 31, the proponent or construction contractor will retain a qualified biologist experienced with conducting nesting bird surveys who will conduct a nesting bird survey prior to the start of vegetation removal, building demolition, or noise-generating construction activities within any potential nesting habitat (i.e., all vegetation, buildings, etc.). The size of the nesting bird survey area will be determined by a qualified biologist at the time of the survey and include the entire limits of disturbance. It will also include a buffer area, if deemed necessary by the biologist. The preconstruction nesting bird survey will be conducted no more than seven days prior to initiation of vegetation removal, building demolition activities, or noise-generating construction activities. If no active nests are detected during these surveys, no restrictions on project activities will be necessary.
- If active nests are not found, then no potential for impact to nesting birds (or raptors) will occur and no further action will be needed.
- If an active nest(s) is observed, then an appropriate buffer (no-construction activity buffer) will be established by the biologist to ensure that nest abandonment does not occur due to the construction activities. All no-construction activity buffer areas will be clearly demarcated in the field with stakes and flagging that are visible to construction personnel.

Level of Significance after Mitigation

Implementation of **MM-BIO-2** and **MM-BIO-3** would ensure that the potential impacts of construction activities on maternity roosts would be reduced to less than significant.

Implementation of **MM-BIO-5** would ensure that the potential impacts of construction activities on nesting birds that are protected under the MBTA and California Fish and Game Codes would be reduced to less than significant.

Operational Impacts

Tier I and Tier II

Impacts from long-term operation of the Master Plan would be similar to existing conditions. Operation of the proposed facilities and buildings would not have an adverse impact on the movement of wildlife species through natural corridors or impede the use of nursery sites. Accordingly, operational impacts associated with the development of Tier I and Tier II would be considered less than significant.

Mitigation Measures

No mitigation is proposed for operational impacts that are less than significant to wildlife movement.

Level of Significance

Less-than-significant impact.

Impact BIO-4: Would Implementation of the Proposed Project Conflict with any Local Policies or Ordinances to Protect Biological Resources, such as a Tree Preservation Policy or Ordinance?

Construction Impacts

Tier I and Tier II

Native oak trees are currently located on the project site as ornamental landscaping. Coast live oak and Engelmann's oak trees are interspersed with nonnative ornamental trees throughout the campus.

Construction of proposed Master Plan facilities and structures could result in damage to, or removal of, vegetation on the project site, including native oak trees that have been planted in ornamental areas or that occur naturally. Although coast live oak trees are not considered special-status plant species, these trees are protected under the Los Angeles County Oak Tree Ordinance. Protected trees include native oaks that measure 8 inches or more in diameter or oaks with multiple trunks, with a combined diameter of 12 inches or more for the largest two trunks measured 4.5 feet above the natural grade. Potential damage to or removal of oak trees that are protected by the Los Angeles County Oak Tree Ordinance would be a significant impact.

Mitigation Measures

The following measure is proposed to mitigate the impact to oak trees described above under Impact **BIO-4**:

> **MM-BIO-5:** Prior to construction of Master Plan projects that could result in tree removal or pruning, a qualified arborist will inventory native oak trees on the project site in support of an Oak Tree Permit, if required. Oak Tree Permit requests require a property owner to file an application with the Department of Regional Planning and provide a filing fee, an Oak Tree Report, site plans for the property, and maps of the surrounding area. The Oak Tree Report will include information about the protection of oak trees that may be adjacent to construction activities that are to remain. The Oak Tree Report will also include the proposed replanting plan, in accordance with the required replacement ratio, for any oak trees that are to be removed.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I and Tier II

Operation of facilities and buildings proposed under the Master Plan, including routine maintenance and pruning of ornamental vegetation and trees, is not expected to result in significant impacts on protected biological resources such as oak trees, which are protected by the Los Angeles County Oak Tree Ordinance.

Mitigation Measures

No significant operational impacts to native oak trees would occur; therefore, no mitigation is required.

Level of Significance

Less than significant.

Impact BIO-5: Would Implementation of the Proposed Project Have a Substantial Adverse Effect on any Riparian Habitat or other Sensitive Natural Community Identified in Local or Regional Plans, Policies, or Regulations or by CDFW or USFWS?

Construction Impacts

Tier I and Tier II

The study area includes two sensitive vegetation communities: California sagebrush scrub and coast live oak woodland. Impacts on these sensitive communities are described below.

California Sagebrush Scrub

Tier I development in the northeastern portion of the project site would include the Recuperative Care Center and Residential Treatment Program facility. These facilities would be located just west of California sagebrush scrub habitat. Although temporary minor impacts could occur due to dust or construction debris, construction of these facilities is not expected to result in any permanent impacts to or loss of sagebrush scrub habitat. Other project components that are less well defined include pedestrian recreational trails and related small recreational facilities within the sagebrush scrub habitat area. Development of these trails may result in the loss of small areas of sagebrush scrub habitat. The Master Plan includes strategies for utilizing native plant palettes for future planting and protecting existing native trees and shrubs in the areas that currently exist as California sagebrush scrub habitat; other restoration and preservation activities may include removal of invasive species. Landscaping plans to encourage the survival of native wildlife species would also be implemented. Nonetheless, the impact due to the possible removal of sagebrush scrub habitat is considered to be a potentially significant impact.

Coast Live Oak Woodland

Coast live oak woodland within the study area is located outside the project site, with the exception of a few coast live oak trees that extend onto the project site boundary. Master Plan landscaping plans include strategies to protect existing native coast live oak trees along the boundary of the project site. However, if project construction requires the removal of these or other protected oak

trees on the project site, implementation of mitigation measure **MM-BIO-5** would reduce these significant impacts to less than significant.

Mitigation Measures

The following measure is proposed for mitigating impacts to California sagebrush scrub associated with Impact **BIO-5**, above:

MM-BIO-6: Prior to construction within the eastern portion of the project site that could temporarily affect California sagebrush scrub as identified in Figure 3.3-3 of the Master Plan EIR, a Habitat Mitigation Monitoring Plan (HHMP) will be created. The Plan will include, at a minimum, the following requirements:

- Vegetation monitoring will be performed in the spring-summer, or as specified in the HMMP, within California sagebrush scrub habitat proposed for temporary impact. A list of native species present will be compiled, and the absolute percent cover of each species will be estimated. This information will set the performance standards and success criteria for the HMMP.
- The HMMP will provide a map showing the location of each area proposed for impact and the absolute percent cover of each native species within the impact area.
- Restoration monitoring will be performed for 5 years or until success criteria are met with monitoring every quarter for the first 2 years and annually thereafter.
- The monitoring will include annual vegetation sampling beginning after the first year. The sampling will occur in the window of March to June, or as specified within the HMMP. The sampling will provide absolute percent cover of native shrubs and forbs/grasses.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I and Tier II

Impacts from long-term operation of the Master Plan would be similar to existing conditions. Operation of the proposed facilities and buildings would not have an adverse impact on the sensitive vegetation communities within the study area as all California sagebrush impacts, if they occur, would be limited to the construction phases. No additional California sagebrush is anticipated to be directly or indirectly affected during operation. Accordingly, no impacts or less-than-significant operational impacts would occur under Tiers I and II.

Mitigation Measures

Success criteria and monitoring from **MM-BIO-6** addresses operational impacts to sensitive vegetation communities; see above.

Level of Significance after Mitigation

Less than significant.

Impact BIO-6: Would Implementation of the Proposed Project Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan?

Construction and Operational Impacts

Tier I and Tier II

The project site is not encompassed within any adopted habitat conservation plans. Therefore, implementation of the proposed project would not affect any adopted habitat conservation plans.

3.3.5 Cumulative Impacts

The study area for cumulative biological impacts consists of the general project area, the community of Sylmar, and the open space that surrounds the project site to the north. As discussed in the impacts section above, construction of the Master Plan could result in impacts on coastal California gnatcatcher habitat and that of other nesting birds and roosting bats, as well as the destruction of sensitive habitat. It is possible that other related projects could also result in similar impacts and that the cumulative impacts on special-status species could be significant. However, with implementation of the mitigation measures identified above and avoidance of potential impacts to the affected species and habitat, implementation of the Master Plan would not contribute to significant cumulative impacts. Additionally, because the majority of the project site and surrounding area to the south is currently developed or disturbed, the proposed Master Plan is not anticipated to result in cumulative impacts on biological resources beyond those identified above. Therefore, the proposed project would not contribute to any significant cumulative impacts to biological resources.

3.4 Cultural Resources

3.4.1 Introduction

This section discusses potential impacts on cultural resources (i.e., archaeological, historical, and paleontological resources) resulting from the proposed project.

3.4.2 Regulatory Setting

The proposed project is subject to several laws regarding historical resources as well as regulations and building codes regarding built-environment historical resources. The term *historical resources* in this context encompasses all cultural resource types, including built-environment resources, prehistoric archaeological sites, and historical archaeological sites. In addition, paleontological resources are considered cultural resources for the purposes of the California Environmental Quality Act (CEQA). The appropriate treatment of historic properties is guided by federal guidelines promulgated by the Secretary of the Interior.

3.4.2.1 State

The National Historic Preservation Act of 1966 mandated the selection and appointment of a State Historic Preservation Officer (SHPO) in each state. Each SHPO is tasked, among other duties, with maintaining an inventory of historic properties. In California, the state legislature established additional responsibilities for the SHPO. These include maintenance of the California Register of Historical Resources (CRHR). Established by California Public Resources Code (PRC) Section 5024.12(a) in 1992, the CRHR serves as "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent feasible, from substantial adverse change." According to PRC Section 5024.1(c), the CRHR criteria broadly mirror those of the National Register of Historic Places (NRHP). The CRHR criteria found at PRC Section 5024.1(c) are as follows:

A historical resource must be significant at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States; or
2. It is associated with the lives of person important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The general rule is that a resource must be 50 years old to qualify for the CRHR. In addition to meeting one or more of the significance criteria, the resource must possess integrity. Integrity is defined as the authenticity of a historical resource's physical identity evidence by the survival of characteristics that existed during the resource's period of significance.

There are several ways for resources to be included in the CRHR. A resource can be listed in the CRHR, based on a nomination and public consideration process. In addition, a resource that is subject to a discretionary action by a government entity will be evaluated with respect to *eligibility* for the CRHR. Properties that are listed in or formally determined eligible for listing in the NRHP are automatically listed in the CRHR.

California Environmental Quality Act

Established in 1970, CEQA directs state and local government entities to analyze and publically disclose the environmental impacts of proposed projects. Moreover, it requires development and adoption of mitigation measures to lessen impacts. At PRC Section 21060.5, the CEQA Guidelines define the environment to include "objects of historic…significance." For the purposes of CEQA, *historical resources* are defined at PRC Section 15064.5(a) of the CEQA Guidelines and include the items below (Paleontological resources are provided protection as historical resources, as discussed in PRC Section 15064.5(a)(3) of the CEQA Guidelines.). The text below is abbreviated and excerpted.

1. A resource listed in or determined eligible by the State Historical Resources Commission for listing in the CRHR.
2. A resource included in a local register of historical resources…or identified as significant in a historical resource survey…will be presumed historically significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the CRHR.

State Health and Safety Code Section 7050.5/California Public Resources Code Section 5097.9

Under State Health and Safety Code (HSC) Section 7050.5, if human remains are discovered during any project activity, the County coroner must be notified immediately. If human remains are exposed, HSC Section 7050.5 states that no further disturbance will occur until the County coroner has made the necessary findings as to origin and disposition, pursuant to PRC Section 5097.98. Construction will halt in the area of the discovery of human remains, the area of the discovery will be protected, and consultation and treatment will occur as prescribed by law. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the Native American Heritage Commission (NAHC) within 24 hours. The NAHC, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased person so they can inspect the burial site and make recommendations for treatment or disposal.

Public Resources Code Section 5097.5

PRC Section 5097.5 states that no person will knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any vertebrate paleontological site, including fossilized footprints or any other archaeological, paleontological, or historical feature situated on public lands, except with the

express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

3.4.2.2 Local

Los Angeles County

On September 1, 2015, the Los Angeles County Board of Supervisors adopted the Historic Preservation Ordinance, which applies only to those properties in the unincorporated areas of Los Angeles County. The Olive View–UCLA Medical Center Campus is in the Sylmar Community Plan area of the city of Los Angeles. Therefore, the Historic Preservation Ordinance does not apply.

City of Los Angeles Cultural Heritage Ordinance

The city of Los Angeles maintains a list of all sites, buildings, and structures that have been designated through the Cultural Heritage Ordinance as Historic-Cultural Monuments (HCMs).

Historic-Cultural Monument

Section 22.1717.7 of the Cultural Heritage Ordinance states that an HCM is any site, including significant trees or other plant life located on the site; building; or structure of particular historic or cultural significance to the city of Los Angeles. This includes historic structures or sites in which the broad cultural, economic, or social history of the nation, state, or community is reflected or exemplified; or which is identified with historic personages or with important events in the main currents of national, state, or local history; or which embodies the distinguishing characteristics of an architectural type specimen, inherently valuable for a study of a period, style, or method of construction or a notable work of a master builder, designer, or architect whose individual genius influenced his or her age.

After an application for HCM designation is submitted, the Cultural Heritage Commission determines whether or not the application merits consideration. If the commission recommends approval of the application and includes the site, building, and structure in the list of HCMs, no permit for demolition, substantial alteration, or relocation of the HCM may be issued (Section 22.171.14) unless:

1. The Superintendent of Building determines that demolition, relocation, or substantial alteration is necessary in the interest of the public health, safety, or general welfare;
2. The substantial alteration complies with the Secretary of the Interior's Standards for Rehabilitation;
3. The substantial alteration protects and preserves the historic and architectural qualities and the physical characteristics that made the site, building, or structure a designated HCM; and
4. The proposed action is in compliance with CEQA PRC Section 21000 et seq.

3.4.3 Environmental Setting

This section provides information on the archaeological, historical, and paleontological resources at the Olive View–UCLA Medical Center Campus.

The project area is in the San Fernando Valley, within the Transverse Ranges physiographic province. The Transverse Ranges are composed of parallel, east/west-trending mountain ranges and

sediment-filled valleys (U.S. Geological Survey 1996). The San Fernando Valley is a structurally complex, sedimentologically diverse, and tectonically evolving late Tertiary-Quaternary[1] basin that contains the headwaters of the Los Angeles River and its tributaries. Prior to the advent of flood control, the valley floor was composed of active alluvial fans and floodplains. Seasonal streams emanating from Pacoima and Big Tujunga Canyons drain the complex western San Gabriel Mountains and deposit coarse, highly permeable alluvium that contains generally high-quality water.

The San Fernando Valley is a structural trough that has been filled from the sides, with the major source of sediment being large drainages in the San Gabriel Mountains. Deposition on the major alluvial fan of Tujunga Wash and Pacoima Wash, which issues from the San Gabriel Mountains, as well as smaller fans, has been influenced by ongoing compressional tectonics in the valley. Late Pleistocene[2] deposits have been cut by active faults and warped over growing folds. Holocene[3] alluvial fans are locally ponded behind active uplifts (Yerkes 1997).

Today's Mediterranean-like climate is characterized by warm, dry summers and cool, moist winters, with rainfall falling predominantly between November and May. Climatic conditions in this region varied substantially during prehistoric times. Paleoclimatic research indicates that pine forests were present in the Santa Barbara coastal regions between 12,000 and 8,000 years ago. As the climate became warmer and drier, the pine forests were replaced approximately 5,700 years ago by Holocene-type grassland and oak woodland communities. Today's coastal sage scrub and chaparral communities became more pronounced approximately 2,000 years ago.

Current land uses in the project vicinity are mainly urban in character, with medical buildings, parking lots, and landscaping. Native vegetation is present just outside the boundaries of the project area to the north. Low-lying areas and gentle slopes are dominated by nonnative grasses with scattered coast live oak and valley oak. Higher elevations transition to chaparral. Areas between the nonnative grasses and chaparral are dominated by coastal sage scrub species, such as yucca and buckwheat. This setting hosts a variety of animal resources, including mule deer, brush rabbits, and black-tailed jackrabbits. Along the nearby intermittent streams is riparian vegetation where willows, cottonwoods, a variety of shrubs, and some grasses are present.

3.4.3.1 Geologic Setting

The project area is at the base of the San Gabriel Mountains, at elevations ranging from 1433 to 1551 feet above sea level. The project area is covered by fluvial and fan deposits that originated in the mountains to the north. The majority of the project area is underlain by recent Holocene alluvium, consisting of silt, sand, and gravel (Dibblee and Ehrenspeck 1991). The slopes in the northern portion of the project area are composed of the Pleistocene Pacoima Formation, a weakly consolidated alluvial gravel with sand deposits derived from the adjacent mountains (Dibblee 1991).

[1] *Tertiary* is defined as noting or pertaining to the early part of the Cenozoic era, from 65 to 2 million years ago. *Quaternary* is defined as noting or pertaining to the present period of Earth's history, forming the latter part of the Cenozoic era; it originated 2 million years ago and included the Recent and Pleistocene epochs.

[2] Noting or pertaining to the epoch forming the earlier half of the Quaternary period, beginning about 2 million years ago and ending 10,000 years ago.

[3] Denoting or formed in the second and most recent epoch of the Quaternary period, which began 10,000 years ago, at the end of the Pleistocene.

3.4.3.2 Prehistoric Setting

Approaches to prehistoric frameworks have changed over the past half century, from being based on material attributes to radiocarbon chronologies to associations with cultural traditions. Archaeologists defined a material complex consisting of an abundance of milling stones with few projectile points or vertebrate faunal remains dating from about 7,000 to 3,000 years before the present as the Millingstone Horizon (Wallace 1955), which was later redefined as a cultural tradition named the Encinitas Tradition (Warren 1968), with various regional expressions, including Topanga and La Jolla. The characteristics of the Encinitas Tradition are abundant metates and manos, crudely made core and flake tools, bone tools, shell ornaments, very few projectile points, and subsistence that focused on collecting (e.g., plants, shellfish, etc.) (Sutton and Gardner 2010:7). Faunal remains vary by location, but include shellfish, land animals, marine mammals, and fish. The Encinitas Tradition is currently defined under four geographical patterns: (1) Topanga in coastal Los Angeles and Orange Counties; (2) La Jolla in coastal San Diego County; (3) Greven Knoll in inland San Bernardino, Riverside, Orange, and Los Angeles counties; and (4) Pauma in inland San Diego County (Sutton and Gardner 2010:8–25).

About 3,500 years before present, the Encinitas Tradition was replaced in the greater Los Angeles Basin by the Del Rey Tradition (Sutton 2010). This tradition has been generally assigned to the Intermediate and Late Prehistoric periods. The changes that initiated the beginning of the Intermediate period include new settlement patterns, economic foci, and artifact types that coincided with the arrival of a biologically distinctive population.

As defined by Sutton (2010), the Del Rey Tradition replaces usage of the Intermediate and Late Prehistoric designations for both the southern California mainland and the southern Channel Islands. The Del Rey Tradition represents the arrival, divergence, and development of the Gabrielino in Southern California. Within the Del Rey Tradition are two regional patterns: Angeles and Island.

The Angeles pattern generally is restricted to the mainland and appears to have been less technologically conservative and more ecologically diverse, with a largely terrestrial focus and greater emphases on hunting and nearshore fishing. In Angeles Phase I, Elko points for atlatls or darts appear; small steatite objects such as pipes and effigies from Catalina are found; shell beads and ornaments increase; fishing technologies increase, including use of bone harpoons/fishhooks and shell fishhooks; donut stones appear; and hafted microblades for cutting/graving wood or stone appear. In addition, several Encinitas (Topanga) traits, such as discoidals, cogged stones, plummet-like charmstones, and cairn burials, virtually disappear from the record. Mortuary practices changed to consist of flexed primary inhumations, with extended inhumations becoming less common. Settlement patterns made a shift from general use sites being common to habitation areas that were separate from the functional work areas. Subsistence shifted from mostly collecting to increased hunting and fishing (Sutton 2010).

Angeles Phase II is identified primarily by the appearance of a new funerary complex, with other characteristics similar to Angeles I. The complex features killed (i.e., broken) artifacts, including manos, metates, bowls, mortars, pestles, and points, plus highly fragmented cremated human bones and a variety of faunal remains (Sutton 2010).

Angeles Phase III is the beginning of what has been known as the Late period and marked by several changes from Angeles I and II. These include the appearance of small projectile points, steatite shaft straighteners, and increased use of asphaltum, all reflecting adoption of the bow and arrow. In addition, obsidian sources changed from mostly Coso to Obsidian Butte, and shell beads derived

from Gulf of California species began to appear. Subsistence practices continued as before, and the geographic extent of the Angeles Pattern increased (Sutton 2010).

Angeles Phase IV is marked by new material items, including Cottonwood points for arrows, olivella cupped beads and *Mytilus* shell disks, birdstones (zoomorphic effigies with magico-religious properties), and trade items (e.g., pottery from the Southwest). It appears that populations increased, and there was a change in the settlement pattern to fewer but larger permanent villages. The presence and utility of steatite vessels may have impeded the diffusion of pottery into the Los Angeles Basin. Smaller special-purpose sites continued to be used (Sutton 2010), practices continued as before, and the geographic extent of the Angeles Pattern increased (Sutton 2010).

Angeles Phase V components contain more and larger steatite artifacts, including larger vessels, more elaborate effigies, and comals. Settlement locations shifted from woodland to open grasslands. The exploitation of marine resources seems to have declined, and the use of small seeds increased. Many Gabrielino inhumations contained grave goods, while cremations did not (Sutton 2010).

Angeles Phase VI reflects the ethnographic mainland Gabrielino of the post-contact (i.e., post-A.D. 1542) period. One of the first changes in Gabrielino culture after contact was population loss due to disease, coupled with resulting social and political disruption. Angeles Phase VI material culture is essentially Angeles Phase V, augmented by a number of Euro-American tools and materials, including glass beads and metal tools such as knives and needles (used in bead manufacture). The frequency of Euro-American material culture increased through time until it constituted the vast majority of materials used. Locally produced brownware pottery appears along with metal needle-drilled olivella disk beads (Sutton 2010).

3.4.3.3 Native American Ethnographic Setting

The project area is within the traditional tribal territory of the Fernandeño, a subgroup of the Gabrielino/Tongva. The Tongva occupied Los Angeles County south of the Sierra Madre Mountains, portions of Orange County, San Clemente Island, and Santa Catalina Island (McCawley 1996). Historically, populations of the Tongva associated with Mission San Fernando were known as Fernandeño Indians. However, both were populations of the Tongva nation. The distinction is primarily geographical (McCawley 1996).

Two groups of Native Americans were present prehistorically in the San Fernando Valley, the Tataviam (Fernandeño) and the Tongva (Gabrielino). Tataviam territory stretched from the Antelope Valley to the Tejon Ranch area and the San Fernando Valley. The Tongva territory encompassed a vast area extending from Topanga Canyon to the northwest, to the base of Mount Wilson to the north, to San Bernardino to the east, to Aliso Creek to the southeast, and to the southern Channel Islands, an area of more than 2,500 square miles (McCawley 1996:3).

Gabrielino subsistence was based on a varied hunting and gathering strategy that included large and small land and sea mammals, river and ocean fish, and a variety of plant resources. Deep-sea fishing was accomplished from boats of wooden planks tied together and sealed with asphalt and other materials. Sea mammals were hunted with harpoons, spears, and clubs. River fishing was accomplished by the use of line and hook, nets, basket traps, spears, and poisons. Land mammals were hunted with bow and arrow, clubs, and traps.

The Gabrielino first encountered Europeans in 1542, when Spanish conquistador Juan Rodríguez Cabrillo and his crew entered Gabrielino territory. Spanish colonization of the region began in 1769 and resulted in the establishment of Missions San Fernando and San Gabriel. Disease and violence resulting from Spanish colonization, as well as the harsh effects of mission life, diminished Gabrielino populations. Following the secularization of the missions, most surviving Gabrielino became wage laborers on the ranchos of Mexican California. In the early 1860s, a smallpox epidemic nearly wiped out Gabrielino culture.

3.4.3.4 Historical Setting

Once known as the Olive View Sanatorium, the original 468-acre hospital campus was purchased by the County of Los Angeles (County) in 1915 expressly for tuberculosis treatment. At that time, County General Hospital was where most of the local tubercular patients were taken and treated. An additional 122 acres was added at the eastern end of the campus in 1922, for a total of 590 acres. Located at the time in unincorporated Los Angeles County, in the northeast corner of the San Fernando Valley, Olive View Sanatorium was isolated, connected to metropolitan Los Angeles only by the rail transit lines of the Pacific Electric Red Cars and Southern Pacific Railroad, which served the adjacent city of San Fernando. The site was named for its panoramic views of the extensive nearby olive groves.

Pulmonary tuberculosis, also known as consumption, is a communicable disease that is spread by the tubercular bacillus bacteria. Poor ventilation and overcrowding in the home and the workplace, specifically, the tenements and sweatshops of the poor, were blamed for the spread of tuberculosis to epidemic proportions in the later decades of the nineteenth century and the first half of the twentieth century. In the 1870s, the disease killed approximately 15 percent of the world's population. By the 1940s, it had claimed more lives than any other contagious disease. The most common treatment for tuberculosis was the "sanatorium rest routine, sequestering…patients in sprawling rural hospitals, isolated from great centers of population" (Caldwell 1988:11). Therapy for early, or *incipient*, cases included an abundance of fresh air. Patients were encouraged to sleep with a window open or outside, even in the coldest of climates. Southern California thus became a mecca for tuberculosis sanatoria as the warm, dry air was thought to be medicinal. This favorable climate encouraged a great migration, not just of the patients, but also their families. Severe overcrowding of patients with tuberculosis became a significant issue for local hospitals.

The sanatoria, which were built soon after the turn of the century, included Barlow Sanatorium (established in 1902, now known as Barlow Respiratory Hospital), Kaspare Cohn Hospital (established in 1902, now known as Cedars-Sinai Medical Center), the Jewish Consumptive Relief Association (established in 1912, now known as City of Hope), and Olive View Sanatorium, the only public institution in the group. As a result, patients recuperating at County General Hospital would generally be relocated to Olive View Sanatorium.

In addition to rest therapy, the treatment of tuberculosis also included collapse therapy, wherein where one lung would be collapsed with an injection of nitrogen and thereby allowed to rest and heal. As this and other more radical treatments and operations were performed from the 1920s through the 1940s, the sanatoria expanded their facilities to include operating rooms, acute units, and additional medical staff. In the winter of 1944–1945, the antibiotic streptomycin was first used as a treatment for tuberculosis at the Mayo Clinic in Minnesota. Recovery time was cut from months or years at the sanatoria to just a few weeks. The Barlow Sanatorium became a respiratory hospital. The other early tubercular sanatoria either closed their doors or became general hospital facilities.

In its first year of operation (1921), Olive View Sanatorium had a total of 95 patients and 32 staff members. The patients were housed in four wards, and the staff was housed in two dormitories. From 1921 to 1931, numerous buildings were constructed on the hospital campus, including convalescent camps, occupational therapy buildings, a chapel, two schools, a post office, and a fire station. The pastoral setting of the Craftsman and Spanish Colonial Revival buildings, all residential in character, was enhanced by a well-maintained and lush landscape. The buildings were generally one or two stories in height, with most designed with south-facing verandas to take advantage of the sunlight and views.

In 1928, a total of 156 buildings housed 1,000 patients and 550 employees. Seven of the 33 wards were for children. Between 1928 and 1930, a surgical unit (Building 401/402) and nurse's dormitory (Building 403) were constructed at the extreme eastern end of the campus. Olive View Sanatorium reached its peak patient population of 1,230 in 1953, when it was accepting tubercular patients from smaller sanatoria that had closed because of the successful use of antibiotics to fight the disease. In 1962, a forest fire destroyed the original administration building. From 1964 to 1971, a new general hospital was constructed. Days after its opening in January of 1971, this replacement hospital collapsed in the Sylmar earthquake on February 9, 1971.

Current Campus

The current Olive View–UCLA Medical Center Campus contains buildings that date from the early 1920s to the present. The original campus was laid out according to direction from published treatises of the early twentieth century, including the choice of site, the grouping and siting of buildings, the particular styles of architecture used for specific types of structures, and the overall landscape design, with its paths and interior roadways. Little of that original design remains today. Only a few buildings date to the era before the introduction of antibiotic treatment, including the former administration building (now used by the personnel/payroll department), a warehouse (now used for material management/storage), and the bungalows along Sycamore and Saranac avenues.

The administration building (1925), located west of Cobalt Avenue, is isolated in the western portion of the campus. To the west is the newer psychiatric urgent care building. To the northwest are open paved areas where some wards and a chapel were once located. North and northeast of the administration building are other wards; employees' dorms; support buildings, such as the kitchen, pharmacy, and service building; and pre-fabricated storage buildings. Previous administration building alterations were determined to be incompatible, including a sliding metal sash.

The warehouse (1926), located at the end of Cobalt Avenue, north of Bucher Avenue, bisects the campus on the east–west axis. It appears to be generally intact.

The Craftsman and Spanish Colonial Revival bungalows and cottages that line both sides of Sycamore and Saranac Avenues north of the main hospital building are used as support and ancillary departments at the hospital. All display alterations, primarily replacement window sashes, although roof and porch alterations are evident as well. Bungalows G, H, I, and J were constructed in 1927; Bungalows M, N, and O were constructed in 1929; and Bungalows P and R were constructed in 1930. Bungalows C, D, E, and F were demolished after 1994, and Bungalows K, L, and Q were replaced by trailers in 1994 and 2014.

Immediately west of the main hospital building are the offices and shops of the maintenance facility. These one-story concrete and brick buildings with raised elevations generally form a U shape, opening toward Olive View Drive, and are cohesive in style and use. North of the shops are the old

lab and vivarium, along with a structure for the Sheriff's Department. In combination with the shops, these represent a collection of mid-century buildings constructed between 1958 and 1969.

The replacement hospital building was constructed in 1983 and is currently the primary focus of the campus. Set back from Olive View Drive, with a surface parking lot between it and the street, the hospital visually dominates the landscape, both in mass and in height. A transmission line easement divides from the building from the original western end of the campus. In addition, the hospital building blocks views of the series of small-scale Craftsman and Spanish Colonial Revival buildings off Sycamore and Saranac Avenues from the public right-of-way. In many ways, this physically represents the completed transition of the campus from a sanatorium to a general hospital, specifically, from a landscape with a focused purpose (i.e., the care, treatment, and cure of patients with tuberculosis) to a facility that treats patients with various ailments, but primarily those who require short-term care or mental health services.

3.4.3.5 Historical and Archaeological Resources

The identification of historical and archaeological resources in the project area is based on a study prepared by Cogstone Resource Management, Inc., entitled *Archaeological Resources Assessment for the Olive View–UCLA Medical Center Master Plan EIR, Los Angeles County, California* (Lev-Tov and Valasik 2016) (see Appendix E of this Draft EIR]).

Information Review Results

The sources of information that were reviewed included:

- National Register of Historic Places
- California Historical Landmarks
- California Points of Historical Interest
- California Register of Historical Resources
- City of Los Angeles Historic-Cultural Monument List
- SurveyLA–Historic Resources Survey Report, Sylmar Community Plan Area, August 2015
- Olive View–UCLA Medical Center, Department of Parks and Recreation (DPR) Primary Record, District Record and Continuation Sheets, September 30, 1994
- 1926 Map of Olive View
- Undated Map of Olive View Hospital (1950s/1960s)
- 1970 Map of Olive View Hospital (with accompanying list of structures, improvements, and equipment as of May 31, 1970)
- 1995 Map of Olive View–UCLA Medical Center Campus, 14445 Olive View Drive, Sylmar, CA, September 22, 1995

A search for archaeological and historical records was completed at the South Central Coastal Information Center at California State University, Fullerton, on January 28, 2016.

The records search determined that two historic built-environment resources and one historic district were recorded within the project area. The historic district for the Olive View–UCLA Medical Center Campus, P-19-175294, is within both the Tier I and Tier II project areas. Also located within

Tier I is P-19-187900, consisting of foundations for the laundry and linen buildings within the Olive View Tuberculosis Sanitarium Complex. Within Tier II is P-19-003794, which consists of a concrete foundation and sidewalk associated with men's solarium wards 121 and 124, as well as a concrete subterranean transformer vault.

The review of existing sources of information, combined with information collected during the field visits, was used to determine the significance of buildings, structures, objects, sites, and districts and evaluate potential effects on such resources.

Field Investigation Results

An intensive pedestrian survey of the 138.6-acre project site was conducted on February 15, 2016 (Lev-Tov and Valasik 2016). Portions of the three previously recorded cultural resources were observed during the survey. No archaeological resources were previously recorded or observed during the survey.

The Olive View–UCLA Medical Center Campus has been surveyed for historical resources several times, by both local and federal agencies, beginning in 1994. Following the Northridge Earthquake in 1994, the Olive View–UCLA Medical Center Campus was surveyed by the Federal Emergency Management Agency (FEMA) and its consultants in compliance with Section 106 guidance. At that time, the consultants for FEMA found that an NRHP-eligible historic district was evident. The boundary of the historic district was delineated by outlining the concentration of 50-year-old buildings (constructed in 1944 or earlier), which, at that time, formed the historic core of the hospital campus. When the boundary was drawn around the historic core, 67 buildings were located within the historic district; 46 were considered *contributing* and 19 were considered *non-contributing*. Between the survey and completion of the evaluation, one contributing building was demolished.

This eligibility determination included a DPR Primary Record, District Record, and 40 pages of continuation sheets dated September 30, 1994. The consultant determined the period of significance to be 1920 to 1944 and found the historic district eligible under Criterion A. On November 16, 1994, this documentation was forwarded to FEMA, stating that the district eligibility was reviewed in consultation with the staff at the Office of Historic Preservation (OHP), but that the documentation had not been formally submitted to OHP and should be considered draft. Less than a year later, representatives from OHP, FEMA, the California Office of Emergency Services, and the County (as the owner and operator of the Olive View–UCLA Medical Center Campus) met to discuss various FEMA-related undertakings at this location. The meeting took place at the Olive View–UCLA Medical Center Campus, and a field reconnaissance survey was conducted. As a result of field reconnaissance, in concert with a review of new information and additional details related to historical development of the campus, OHP concluded that, although the 1994 determination of NRHP eligibility was valid at that time, a re-examination of the campus showed that the Olive View–UCLA Medical Center Campus had lost integrity of design, setting, materials, and workmanship. Therefore, OHP concluded that, because of the combination of demolition, relocation, reconfiguration, additions, and intrusions that occurred between 1944 and the 1970s, the character and appearance of the district's components, cumulatively, were substantially changed; therefore, the Olive View–UCLA Medical Center Campus could no longer be seen as a coherent and cohesive NRHP-eligible district. OHP submitted its finding in a letter to FEMA on September 28, 1995.

In 2015, as part of the Los Angeles Historic Resources Survey (SurveyLA)[4] program conducted by the city of Los Angeles Office of Historic Resources, the Olive View–UCLA Medical Center was identified as potentially significant and a "rare remaining example of a 1920s sanatorium in Los Angeles; the property has been in continuous use as a medical facility since its establishment in 1920." However, the identification of contributing and non-contributing features was considered to be out of scope for the survey, and a formal evaluation was not completed. No period of significance was identified because this was primarily a windshield survey, and no NRHP, CRHR, or local criteria were applied. No DPR forms were prepared in concert with this survey.

The survey team provided a discussion of notable features in its description of the campus, including the Craftsman bungalows on Sycamore Avenue, Spanish Colonial Revival buildings at the intersection of Sycamore and Mesa Avenues, the original administration building on Olive View Drive, the warehouse building at the north end of Cobalt Street, three of the maintenance shops along Olive View Drive, the Quonset hut on Jacaranda Terrace, the old lab on Bucher Avenue, as well as numerous other buildings and structures, representing various periods of development. In addition, the SurveyLA team also pointed out remnants of extensive development on the property, such as paved roads, walkways, concrete steps, retaining walls, and light standards, as well as various mature trees, which are extant.

Table 3.4-1 lists the buildings at the Olive View–UCLA Medical Center Campus that were previously evaluated and the associated finding.

Table 3.4-1. Historical Status of Campus Buildings

Address	Building Name	Previous Finding	Finding Date	Notes	Current Status
Building 2249	Men's Solarium Wards 121 and 123	7R	2/29/08	Two features: concrete foundation and sidewalk associated with the wards and a concrete subterranean transformer vault. DPR form.	Actual buildings demolished
Building	Ward 403	6Z	9/26/07	Building evaluated for CRHR only. DPR form.	Demolished
Building 2521 and 2519	Laundry and Linen Buildings	7R	9/25/06	Two features: cement pad and stairway (Laundry Building) and a smaller cement pad (Linen Building). DPR form.	Actual buildings demolished
N/A	Maclay Highline Aqueduct	7R	9/18/06	Underground aqueduct (abandoned). May have been demolished by Los Angeles Department of Water and Power. DPR form.	Not observed in 2016

[4] Note: SurveyLA provides baseline information on historic resources to inform planning decisions and support City policy goals and processes. Survey findings are subject to change over time as properties age, more information is uncovered, and more detailed analyses are completed. Resources identified through SurveyLA are not designated resources; designation is a separate process that requires public hearings and property owner notification.

Address	Building Name	Previous Finding	Finding Date	Notes	Current Status
Building 2169	Building 106	2S2	11/16/94; 9/28/95	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2167	Building 110	2S2	11/16/94; 9/28/95	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2139	Warehouse (currently used for materials management and storage)	2S2	11/16/94; 9/28/95	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ
Building 2142	Cottage #4	2S2	11/16/94; 9/28/95	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2145	Cottage U	2S2	11/16/94; 9/28/95	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2144	Garage	2S2	11/16/94; 9/28/95	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2248	Ward 103/ Stationary	2S2	11/16/94; 9/28/95	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished

Address	Building Name	Previous Finding	Finding Date	Notes	Current Status
Building 2168	Building 108	2S2	11/16/94; 9/28/95	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2148	Cottage #3	2S2	11/16/94; 9/28/95	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2190	Barber Shop	2S2	11/16/94; 9/28/95	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2147	Cottage #1	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2189	Garbage and Can House	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2171	Medical Transcription	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2164	Personnel Payroll (former administration building)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ

Address	Building Name	Previous Finding	Finding Date	Notes	Current Status
Building 2154	Building 307	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2259	Bungalow D	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2258	Bungalow E	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2257	Bungalow F	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2176	Building 114	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2260	Bungalow C	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2237	Bungalow G (currently houses Employee Health Services)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ

Address	Building Name	Previous Finding	Finding Date	Notes	Current Status
Building 2236	Building H (currently houses the Department of Surgery and Patient Financial Services Workers)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ
Building 2222	Building I (currently houses Environmental Health and Safety)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ
Building 2220	Bungalow J (currently houses Internal Services Department)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ
Building 2180	Convalescent Cottage	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2223	Building 401/402	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2138	Garage/Lumber Storage	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished

Address	Building Name	Previous Finding	Finding Date	Notes	Current Status
Building 2155	Building 301	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2157	Building 303	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2156	Building 305	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2200	Bungalow L	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2202	Bungalow M (currently houses Quality Assurance Coordinator)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ
Building 2203	Bungalow N (currently houses Doctor's Office)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ
Building 2204	Bungalow O (currently houses Patient Financial Services Workers)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ

Address	Building Name	Previous Finding	Finding Date	Notes	Current Status
Building 2205	Double Garage (currently houses Occupational Therapy)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ
Building 2241	Film Storage Vault	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2261	Women's Doctor's Cottage	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2211	Building 403	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2206	Bungalow P (currently houses Credit Union)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building..	In situ
Building 2207	Bungalow Q	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2208	Bungalow R (currently houses Information Systems)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ

Address	Building Name	Previous Finding	Finding Date	Notes	Current Status
Building 2295	Bungalow S (currently houses Utilization Review)	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ
Building 2266	Guest Cottage	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2265	Bungalow T	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 2175	Morgue	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	Demolished
Building 5018	Coroner's Office	2S2	11/16/94	HRG/FEMA determination; see 9/29/1995 SHPO correspondence, which refutes 1994 finding of no NRHP-eligible historic district or individually eligible building.	In situ

Notes:
2S2: Individual property determined eligible for NRHP by consensus through Section 106 process. Listed in the CRHR.
6Z: Found ineligible for NRHP, CRHR, or local designation through survey evaluation.
7R: Identified in reconnaissance-level survey: not evaluated.
Source: City of Los Angeles 2015; ICF 2016.

Field Investigation Results

Of the 46 buildings and structures that were identified as contributing features to the proposed historic district in 1994, only 13 remain at the Olive View–UCLA Medical Center Campus. This was confirmed following a field survey conducted by qualified architectural historians with ICF on May 26, 2016. Only 27 percent of the resources identified as contributing features to the proposed historic district in 1994 remain.

For the purposes of the NRHP, a *district* is defined as an area that possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects that are united historically or aesthetically by plan or physical development (National Park Service 1990). The May 2016 survey of the campus revealed that there is little visual sense of the physical environment from the period of significance (1920–1944), as defined in the 1994 evaluation, remaining on the site. The aforementioned pattern of demolition, relocation, and modern (post-1944) additions has degraded the important interrelationship of buildings, structures, and landscape from the period of significance. This, in turn, has affected the integrity of the proposed historic district (*integrity* is the ability of a property to convey its significance.). When evaluating properties for NRHP eligibility, a property's integrity is as important as the property's association with an important historic context.

Seven aspects define integrity as it relates to evaluating properties for NRHP eligibility. The following aspects were considered most important when evaluating the integrity of the proposed Olive View–UCLA Medical Center historic district (1994):

- **Design:** A combination of elements that creates the form, plan, space, structure, and style of a property.
- **Setting:** The physical environment of a historic property.
- **Materials:** The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- **Feeling:** The property's expression of the aesthetic or historic sense of a particular period of time.
- **Association:** The direct link between an important historic event or person and a historic property.

During the field survey in March 2016, the architectural historian was granted access to historical maps, photographs, and property inventory lists, which provided a basis for understanding the physical changes to the campus over time. Based on this on-site research, the results of the records search, and a walking survey of the campus, it appears that, although there are still remnants of occupation over a long period of time, as the SurveyLA team remarked, the determination made by OHP in 1995 (i.e., that the Olive View–UCLA Medical Center Campus had lost integrity of design, setting, materials, and workmanship and the combination of demolition, relocation, reconfiguration, additions, and intrusions between 1944 and the 1970s had substantially changed the character and appearance of district components) is still valid. In addition, since 1995, other physical improvements, such as demolition and new construction, have degraded the site's historic integrity even more. Therefore, although the historic core of the Olive View–UCLA Medical Center is associated with an important local context (i.e., the goal of humanely and efficiently treating and caring for tubercular patients in Los Angeles County in the early part of the twentieth century), the buildings, individually and collectively, no longer retain integrity of design, setting, materials, workmanship, feeling, or association and convey significance as an NRHP-eligible property under any criterion. As a result, the property is also not eligible for the CRHR under Criterion 1, 2, 3, or 4.

The proposed 1994 historic district boundary excluded the buildings in Table 3.4-2, constructed between 1944 and 1967, from evaluation. In accordance with the accepted practice of using the 50-year mark, 1967 was used as the cut-off date for evaluating properties at the Olive View–UCLA Medical Center Campus.

Table 3.4-2. Properties Constructed between 1944 and 1967

County Building Number	Original/Former Building Name	Current Name/Use	Year Built
3217	Old Pharmacy Building	Weed Abatement	1955
3584	Lab Building	Pathology/Housekeeping/CRM	1958
4224	Paint/Warehouse/Electric Shop Building	Maintenance of Plant	1961
4225	Storage Building	Maintenance of Plant	1960–1961
4227	Mechanical Shops	Maintenance of Plant	1960–1961
4228	Office of Building	Maintenance of Plant	1961
4407	Metal Storage Building	Maintenance of Plant	1964
4985	Vivarium	Testing Annex	1963–1964
5000	Garage	OV–Storage	1962
5018	Corrugated Iron Building	Storage	1962
Source: ICF 2016. Note: None of the properties identified above appear to be eligible for the CRHR.			

As a result of exclusion from the 1994 evaluation, the buildings were evaluated for individual NRHP eligibility for the purposes of this report.

3.4.4 Environmental Impact Analysis

3.4.4.1 Thresholds of Significance

For the purposes of this EIR, in accordance with Section 21084.1 of CEQA and Appendix G of the CEQA Guidelines, the proposed project would have a significant adverse environmental impact if it would:

CR-1: Cause a substantial adverse change in the significance of a historical resource, pursuant to Section 15064.5 of the CEQA Guidelines.

CR-2: Cause a substantial adverse change in the significance of an archaeological resource, as defined in Section 15064.5 of the CEQA Guidelines.

CR-3: Disturb any human remains, including those interred outside of formal cemeteries.

3.4.4.2 Impacts and Mitigation Measures

Impact CR-1: Would the Proposed Project Cause a Substantial Adverse Change in the Significance of a Historical Resource, as Defined in Section 15064.5 of the CEQA Guidelines?

Construction Impacts

Tiers I and II

Because there are no known historical resources on the Olive View–UCLA Medical Center Campus, no substantial adverse changes are anticipated.

Operational Impacts

Tiers I and II

Operation of the Olive View–UCLA Medical Center Campus under the proposed Master Plan would not affect historical resources.

Impact CR-2: Would the Proposed Project Cause a Substantial Adverse Change in the Significance of an Archaeological Resource, as Defined in Section 15064.5 of the CEQA Guidelines?

Construction Impacts

Tiers I and II

Surface disturbances over the past 130 years have probably destroyed intact archaeological resources on the campus. Therefore, the likelihood of encountering prehistoric and historical archaeological resources is low. However, based on consultation with a tribal representative of the Fernandeño Tataviam Band of Mission Indians in 2017 (see Section 3.16, *Tribal Cultural Resources*, of this EIR), it has been determined that the campus is within the known use radius of two tribal cultural resources, as well the vicinity of natural springs and mature oak trees. As a consequence, and given the campus' location along the foothills, there is increased potential for subsurface tribal cultural resources in the vicinity of the campus. Therefore, the possibility exists that structural demolition, grading, and excavation for new building foundations, new internal roadways, and utility infrastructure, as well as parking structures, could affect unknown buried archaeological resources. Disturbance or destruction of archaeological resources, resulting in a substantial adverse change in the significance of the resource, would be a significant impact. Construction impacts would vary, depending on final plans, and need to be analyzed in detail to determine what level of monitoring, if any, would be required. To ensure that impacts on archaeological resources would be minimized or avoided, mitigation measures **MM-CR-1** through **MM-CR-6**, below, would be implemented.

Operational Impacts

Tiers I and II

Operation of the Olive View–UCLA Medical Center Campus under the proposed Master Plan would not affect archaeological resources.

Mitigation Measures

The following measures are proposed to mitigate Impact **CR-2**, as described above:

MM-CR-1: Train Construction Personnel. Prior to any ground disturbance, all construction personnel will be trained to recognize possible buried cultural and tribal cultural resources during construction. Training will inform construction personnel of the procedures to be followed upon discovery of cultural and tribal cultural resources, including Native American burials. Training will make construction personnel aware that unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order and violators will be subject to prosecution under appropriate state and federal laws. Violations will be grounds for removal from the project.

MM CR-2: Cultural Resources Monitoring. Cultural resources monitoring of ground-disturbing activities within undisturbed native soils will be conducted by a qualified archaeologist who is familiar with the types of cultural and tribal cultural resources that could be encountered in the project area. The monitor will be under the direct supervision of an archaeologist who meets the national standards for archaeology, as set by the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation. Ground-disturbing activities include, but are not limited to, auguring, excavation, geotechnical investigations, vegetation clearing, ground-surface leveling, trenching, and conventional mass grading. A single monitor will be assigned to observe two or more simultaneous ground-disturbing activities that occur less than 50 feet away from each other. Additional monitors will be assigned if two or more simultaneous ground-disturbing activities occur more than 50 feet away from each other. Monitors will complete a daily activity log.

MM-CR-3: Native American Tribal Monitoring. If intact prehistoric cultural resource deposits, as determined by the project archaeologist, and/or tribal cultural resources, as determined in consultation between the Fernandeño Tataviam Band of Mission Indians and the County, are identified during ground-disturbing activities within native soils, Native American tribal monitoring will be conducted by a Native American monitor from the Fernandeño Tataviam Band of Mission Indians. A single tribal monitor will be assigned to observe two or more simultaneous ground-disturbing activities that occur less than 50 feet away from each other. Additional tribal monitors will be assigned if two or more simultaneous ground-disturbing activities occur more than 50 feet away from each other. The tribal monitors will represent the tribe's interests and follow the NAHC's Guidelines for Tribal Monitors. Monitors will complete a daily activity log.

MM-CR-4: Discovery of Cultural and Tribal Cultural Resources. If cultural resources or tribal cultural resources are encountered during ground-disturbing activities, cultural and tribal monitors will be empowered to divert ground-disturbing activities within 50 feet of the discovery until a qualified archaeologist can determine whether the resource is a unique archaeological resource or historical resource, as defined in PRC Section 21083.2 and/or 14 California Code of Regulations Section 15064.5, or tribal cultural resource, as defined in PRC Section 21074 and determined in consultation with the tribe. Work may continue in other areas. Tribal monitors will cooperate with the qualified archaeologist to locate all cultural materials exposed during ground-disturbing activities. All cultural resources recovered will be documented on DPR Series 523 forms.

MM-CR-5: Treatment of Cultural and Tribal Cultural Resources. If the qualified archaeologist determines that a discovery is a historical resource (as defined in **MM-CR-4**) of an archaeological nature or, as determined in consultation between the tribe and the County, a tribal cultural resource, then the mitigation standards of 14 California Code of Regulations Section 15126.4(b), which specifies that preservation in place will be the preferred manner of mitigation, will be implemented.

If preservation in place is not feasible, a cultural and/or tribal cultural resources treatment plan will be prepared, pursuant to 14 California Code of Regulations Section 15126.4(b) and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. The treatment plan will include provisions for (i) assessing and treating the identified resources, (ii) reporting results in a timely manner, (iii) providing an opportunity for the tribe to recover the material, and (iv) providing comments on the draft report. The tribe will be afforded an opportunity to review the plan prior to implementation. The plan will be submitted to the Los Angeles County Department of Public Works prior to treatment of the historical resource, unique archaeological resource, or tribal cultural resource.

A preliminary draft monitoring compliance report will be submitted within 3 months of the end of project construction activity. The report, which will be prepared by a qualified archaeologist, will include documentation and interpretation regarding the identified or recovered resources. Interpretation will include full evaluation of the eligibility of the resources identified for listing in the CRHR. All surface and subsurface artifacts and features will be mapped and described in the report. The tribe will be afforded an opportunity to provide comments for inclusion in the final report. The final report will be filed at the South Central Coastal Information Center at California State University, Fullerton. One copy of the final report will be provided to the tribe.

MM-CR-6: Human Remains. In accordance with California Health and Safety Code Section 7050.5, if human remains are encountered, no further disturbance will occur within 50 feet of the find(s) until the Los Angeles County Coroner has made the necessary findings as to origin. Furthermore, pursuant to PRC Section 5097.98(b), remains will be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Los Angeles County Coroner determines that the remains are Native American, the NAHC will be contacted within 24 hours. The NAHC will identify the Most Likely Descendant, who will make recommendations concerning treatment of the remains within 48 hours, as provided in PRC Section 5097.98. If the County cannot come to an agreement with the Most Likely Descendant, PRC Section 5097.98(e) requires the County to "reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance."

Level of Significance after Mitigation

Impacts on archaeological resources, if any are found, are expected to be reduced to a level of less than significant with implementation of mitigation measures **MM-CR-1** through **MM-CR-6**.

Impact CR-3: Would the Proposed Project Disturb any Human Remains, Including those Interred Outside of Formal Cemeteries?

Construction Impacts

Tiers I and II

Ground-disturbing activities have the potential to unearth human remains. Should human remains be uncovered during construction, mitigation plans would require construction to halt in the area of discovery, the area to be protected, and no further disturbance to occur, as specified by State Health and Safety Code Section 7050.5. **MM-CR-6** explains how potential impacts on human remains would be mitigated.

Operational Impacts

Tiers I and II

Operation of the Olive View–UCLA Medical Center Campus under the proposed Master Plan would not affect human remains.

Mitigation Measures

Mitigation measure **MM-CR-6** is proposed to mitigate Impact **CR-2**, as described above.

Level of Significance after Mitigation

Impacts on human remains, if any, would be reduced to a level of less than significant with implementation of mitigation measure **MM-CR-6**.

3.4.5 Cumulative Impacts

3.4.5.1 Historical Resources

Because there are no historical resources on the campus and the proposed project would not result in any adverse effects on historical resources in the vicinity of the campus, the proposed project would not contribute to any cumulative impacts on historical resources. No further discussion is required.

3.4.5.2 Archaeological Resources

The study area for the cumulative impacts analysis of prehistoric archaeological resources consists of the traditional tribal territory of the Tongva nation. The Tongva occupied Los Angeles County south of the Sierra Madre Mountains, portions of Orange County, San Clemente Island, and Santa Catalina Island. The study area for the cumulative impacts analysis of historic archaeological resources consists of the Los Angeles metropolitan region. Growth and development in the cumulative impacts study areas could result in significant impacts if prehistoric or historic archaeological resources are encountered and disturbed or damaged during construction activities. It should be noted that a great deal of historic-period debris (e.g., bricks, bottles, broken cups, plates) can be found during construction; however, this material is seldom considered a significant resource that would be eligible for the CRHR. In addition, although the potential for an individual cumulative project to affect significant cultural resources is unknown, given the geographic extent of the cumulative impacts study areas, it is probable for cumulative growth and development to affect

significant prehistoric or historical archaeological resources. Although the likelihood of encountering prehistoric or historic archaeological resources on the Olive View–UCLA Medical Center Campus is low, the possibility remains for project excavation to affect unknown archaeological resources, a potentially significant project impact. However, **MM-CR-1** through **MM-CR-6** would reduce potential project-related impacts to a less-than-significant level. Therefore, with mitigation, the proposed project's contribution to significant cumulative impacts would be rendered less than cumulatively considerable.

3.5 Energy

3.5.1 Introduction

This section describes the existing energy systems that serve the project site, including natural gas, electricity, and transportation fuels, and the impacts on those systems that could occur due to implementation of the proposed Master Plan. Measures that would mitigate significant impacts are also identified.

3.5.2 Regulatory Setting

3.5.2.1 Federal

The Energy Policy and Conservation Act of 1975

The Energy Policy and Conservation Act of 1975 (EPCA) is a United States Act of Congress that responded to the 1973 oil crisis by creating a comprehensive approach to federal energy policy. The primary goals of EPCA are to increase energy production and supply, reduce energy demand, provide energy efficiency, and give the executive branch additional powers to respond to disruptions in energy supply.

Leadership in Energy and Environmental Design Leadership in Energy and Environmental Design (LEED) is a rating system devised by the United States Green Building Council to evaluate the environmental performance of a building and encourage market transformation towards sustainable design. The system is credit-based, allowing projects to earn points for environmentally friendly actions taken during construction and use of a building. LEED was launched in an effort to develop a "consensus-based, market-driven rating system to accelerate the development and implementation of green building practices." The program is not rigidly structured: not every project must meet identical requirements to qualify.

3.5.2.2 State

California Code of Regulations, Title 24, Part 6

Title 24, Part 6 of the California Code of Regulations (also known as the California Energy Code) establishes energy conservation standards for new construction. These standards relate to insulation requirements, glazing, lighting, shading, and water and space heating systems. Local governmental agencies may adopt and enforce energy standards for new construction, and additions, alterations, and repairs to existing buildings provided the California Energy Commission finds that the standards will require buildings to be designed to consume no more energy than permitted by Title 24, Part 6. Section 91.1300 of the City of Los Angeles Municipal Code incorporates these state requirements.

2010 California Green Building Standards Code

1. The 2010 California Green Building Standards Code (CALGreen) is a statewide mandatory green building code all cities in California were required to adopt by January 1, 2011. CALGreen

requires new standards in materials reuse, locally sourced materials, water/energy efficiency, and indoor air quality. To meet CALGreen requirements, the Los Angeles County Board of Supervisors adopted the Los Angeles County Green Building Standards Code (Title 31), which is designed to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact, or positive environmental impact, and encouraging sustainable construction practices in the following categories (Los Angeles County Board of Supervisors 2013):

a. Planning and design

b. Energy efficiency

c. Water efficiency and conservation

d. Material conservation and resource efficiency

e. Environmental air quality

Senate Bill 1078

In 2002, Senate Bill (SB) 1078 (Public Utilities Code Chapter 2.3 Section 387, 390.1, and 399.25) implemented a Renewable Portfolio Standard, which established a goal that 20 percent of the energy sold to customers be generated by renewable resources by 2017. The goal was accelerated in 2006 under SB 107 and expanded in 2011 under SB 2, which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 (LADWP 2015).

Senate Bill 100

In 2018, SB 100 (Public Utilities Code Chapter 312 Section 399.11, 399.15, 399.30 and 454.53) increased the Renewable Portfolio Standard target and established state policy that renewable energy resources and zero-carbon resources supply all electricity procured to serve California end-use customers and the State Water Project by 2045. The bill requires the California Public Utilities Commission (CPUC), California Energy Commission, Department of Water Resources, and California Air Resources Board to incorporate this policy into all relevant planning, and use existing programs to achieve this policy.

California Public Utility Commission

The CPUC regulates privately owned electric, telecommunications, natural gas, water, and transportation companies, in addition to household goods movers and rail safety. The CPUC's Energy Division sets electric rates, protects consumers, and promotes energy efficiency, electric system reliability, and utility financial integrity. The CPUC regulates local natural gas distribution facilities and services, natural gas procurement, intrastate pipelines, and intrastate production and gathering. It works to provide opportunities for competition when, in the interest of consumers, it takes the lead in environmental review of natural gas–related projects, recognizes the growing interaction of electric and gas markets, and monitors gas energy efficiency and other public purpose programs.

3.5.2.3 Local

County of Los Angeles

General Plan 2035

The Conservation and Natural Resources Element of the County's General Plan serves to augment the protection, conservation, and preservation of natural resource and open space areas in Los Angeles County. This element addresses Open Space Resources; Biological Resources; Local Water Resources; Agricultural Resources; Mineral and Energy Resources; Scenic Resources; and Historical, Cultural, and Paleontological Resources. The primary goals for Energy Resources are to encourage the production and use of renewable energy resources, encourage effective management of energy resources, and encourage the use of existing infrastructure to reduce environmental impacts. (Los Angeles County 2015)

City of Los Angeles

Power Integrated Resources Plan

The Los Angeles Department of Water and Power (LADWP) is responsible for the construction, operation, maintenance, and management of electric works and property for the benefit of the city and its habitats. The goal of the Power Integrated Resources Plan is to identify a portfolio of generation resources and power system assets that meets the city's future energy needs at the lowest cost and risk consistent with LADWP's environmental priorities and reliability standards (LADWP 2015). The plan provides a 20-year framework to ensure that current and future energy needs of the city can be met.

The Power Integrated Resources Plan provides objectives and recommendations to reliably supply LADWP customers with power and to meet the updated SB 1078's 50 percent renewable energy goal by 2030.

3.5.3 Environmental Setting

3.5.3.1 Natural Gas

The Southern California Gas Company (SoCalGas), Pacific Region, is the principal distributor of natural gas in southern California, providing retail and wholesale customers with transportation, exchange, and storage services as well as procurement services to most retail core customers. As the nation's largest natural gas distribution utility, SoCalGas is responsible for providing energy to its 21.8 million consumers over a 24,000-square-mile service area throughout central and southern California. The company maintains 5.9 million meters in more than 500 communities. SoCalGas is a gas-only utility and, in addition to serving the residential, commercial, and industrial markets, provides gas for enhanced oil recovery and electric generation customers in southern California. As a public utility, SoCalGas is under the jurisdiction of federal and state regulatory agencies (SoCalGas 2019).

Aliso Canyon, California's largest underground natural gas storage facility, has a total working capacity of 86 billion cubic feet of natural gas, or about 64 percent of SoCalGas' total storage capacity. On October 23, 2015, a natural gas leak in well SS25 was detected at the Aliso Canyon natural gas storage facility owned by SoCalGas. The leak was stopped on February 11, 2016, and

well SS25 was permanently sealed on February 18, 2016. Following the leak, the facility's maximum working gas storage level is limited to 23.6 billion cubic feet, about 28 percent of the facility's maximum capacity. Because of the limited maximum storage of Aliso Canyon, the company's natural gas supply has dropped significantly. Nevertheless, a study commissioned by Los Angeles County found that the storage facility was not necessary to maintain electricity reliability in the area, as demand response, energy storage, and energy efficiency could alleviate market supply issues (SoCalGas 2018).

The 2018 *California Gas Report* estimated the total annual gas supply taken by SoCalGas was approximately 2,534 million cubic feet per day in 2017. SoCalGas projects total gas demand to decline at an annual rate of 0.5 percent from 2018 to 2035 (SoCalGas 2018). The decline in throughput demand is due to modest economic growth, CPUC-mandated energy efficiency standards and programs, renewable electricity goals, the decline in commercial and industrial demand, and conservation savings linked to Advanced Metering Infrastructure. Table 3.5-1 summarizes the projected annual gas requirements in southern California through year 2035.

Table 3.5-1. Southern California Projected Annual Gas Requirements through Year 2035

Year			
2020	**2025**	**2030**	**2035**
2,566 MMcf/day	2,442 MMcf/day	2,310 MMcf/day	2,313 MMcf/day
Source: SoCalGas 2018. Note: Assumes average temperature and normal hydro year. MMcf = million cubic feet			

SoCalGas expects it will be able meet their forecasted demand with a combination of in- and out-of-state gas sources (SoCalGas 2018). The Olive View–UCLA Medical Center Campus currently consumes an estimated 3,492,117 cubic feet per year of natural gas (County of Los Angeles 2016).

3.5.3.2 Electricity

Existing power and electrical services to the Olive View–UCLA Medical Center Campus are provided by LADWP, which supplies more than 26 million megawatt hours (MWh) of electricity per year for its 1.5 million residential and business customers. LADWP is responsible for the maintenance of 10,000 miles of overhead distribution lines and underground distribution cables and 15,452 transmission towers; and also maintains 160 distributing stations, 21 receiving stations, and over 50,000 substructures. Of LADWP's total power resources, about 30 percent are from renewable sources, 31 percent from natural gas, 10 percent from nuclear, and 18 percent from coal. About 70 percent of the city's electricity is consumed by business and industry, with the remaining 30 percent required for residents, averaging about 5,900 kilowatt hours (5.9 MWh) of usage per year. (LADWP 2019)LADWP also prepares energy forecasts as a part of their Power Integrated Resource Plan. LADWP's Load Forecast incorporates updates to reflect the latest load forecast, fuel price, and projected renewable price forecasts, along with numerous other modeling assumptions. The most recent Power Integrated Resources Plan (2015) makes projections out to Fiscal Year 2039/2040. Table 3.5-2 summarizes the projected net energy demand for LADWP's service area through 2040.

Table 3.5-2. LADWP Projected Energy Demand through Year 2040

Year		
2020	**2030**	**2040**
26,859 GWh	31,395 GWh	35,749 GWh
Source: LADWP 2016. GWh = gigawatt hours		

The Olive View–UCLA Medical Center Campus currently consumes an estimated 5,503,577 kilowatt hours per year of electricity (County of Los Angeles 2016). (See Appendix C of this EIR for electricity consumption assumptions and calculations.)

3.5.3.3 Transportation Fuels

The State CEQA Guidelines, Appendix F, Energy Conservation, state that EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. California is the most populous state in the nation, and its total energy demand is second only to Texas' (U.S. Energy Information Administration 2012).

Driven by high demand from California's many motorists, major airports, and military bases, the transportation sector is the state's largest energy consumer (Luna & Glushon 2009). The majority of transportation energy is currently derived from a wide variety of petroleum products. Automobiles and trucks consume gasoline and diesel fuel. The transportation sector consumes relatively minor amounts of natural gas or electricity; however, propelled mainly by air quality laws and regulations, technological innovations in transportation are expected to increasingly rely on compressed natural gas and electricity as energy sources. Energy consumption by on-road motor vehicles reflects the types and numbers of vehicles, the extent of their use (often described in terms of vehicle miles traveled), and their fuel economy (typically described in terms of miles per gallon).

Data from the Department of Motor Vehicles show that gasoline demand is largely driven by Light Duty Vehicles (LDVs), which represent more than 90 percent of all gasoline consumption in California (California Energy Commission 2017). Gasoline vehicles made up 92 percent of California LDVs in 2015. Gasoline also fuels hybrid vehicles and accounts for more than 95 percent of the fuel used by flexible-fuel vehicles in California. Corporate Average Fuel Economy (CAFE) standards provide for significantly improved fuel economy, and the National Highway Traffic Safety Administration estimates that this trend will continue through 2025. Most of the demand for gasoline in California can be attributed to LDVs in the residential sector, and thus the slow growth in population, coupled with improvements in fuel economy, explains an overall decline in demand for gasoline. Demand forecasts show reductions of up to 3.7 percent per year due to improved fuel economy, driven by CAFE standards and displacement by alternative fuels, primarily driven by the Zero-Emission Vehicle regulations. Overall, in the low-demand, mid-demand, and high-demand cases, California on-road gasoline consumption would decrease from approximately 14 billion gallons to between 10 and 11 billion gallons (California Energy Commission 2017).

3.5.4 Environmental Impact Analysis

This section presents a discussion of the potential impacts on energy resources that could result from implementation of the proposed Master Plan.

3.5.4.1 Thresholds of Significance

For the purposes of this EIR, and in accordance Appendix F of the State CEQA Guidelines, the proposed project would have a significant environmental impact on energy resources and service systems if it would:

ENERGY-1 Result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

ENERGY-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.5.4.2 Impacts and Mitigation Measures

Impact ENERGY-1: Would the Proposed Project Result in the Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources during Project Construction or Operation?

Construction Impacts

Tier I

Construction of structures under Tier I would require the use of energy resources, including natural gas, electricity, and transportation fuels. Under Tier I, new buildings and facilities that could be constructed include a Restorative Care Village, which is composed of a Recuperative Care Center, a Residential Treatment Program facility, a new Mental Health Urgent Care Center, and a Mental Health Wellness Center, an Ambulatory Care Center, research and development buildings, a Community Center, improvements to the existing hospital, and new parking facilities.

Transportation Fuels

Diesel fuel for construction vehicles and equipment would be the primary source of energy used throughout the course of construction under Tier I. In total, the Tier I construction period would result in the consumption of approximately 147,427 gallons of fuel.[1] However, construction would be temporary, and would represent a negligible increase in regional demand and an insignificant amount relative to the more than 18 billion gallons of on-road fuels used in the state in 2015 (California Energy Commission 2017). Construction contractors, to reduce costs, would implement energy conservation practices, including using fuel efficient vehicles and equipment to the extent practicable and maintaining construction equipment in accordance with manufacturers' specifications so equipment performance would not be compromised. Consequently, construction of Tier I facilities would not result in the wasteful, inefficient, or unnecessary use of transportation fuels in meaningful amounts. Impacts would be less than significant.

[1] This estimate was based on air quality modeling outputs of Tier I construction activities. For worksheets, please see Appendix C of this EIR.

Electricity and Natural Gas

Construction of individual projects under Tier I would require the use of electricity and, to a limited extent, natural gas to operate construction equipment and worker vehicles. The additional consumption of electricity and natural gas from construction activities would be temporary and relatively minor. As stated above, construction contractors, to reduce costs, would implement energy conservation practices. As a consequence, construction of Tier I facilities would not result in the wasteful, inefficient, or unnecessary use of electricity and natural gas in meaningful amounts. Impacts would be less than significant.

Tier II

Under Tier II of the Master Plan, approximately 137,000 square feet of existing development on the campus would be demolished and 992,000 square feet of new buildings and facilities could be constructed. Because of the increase in both demolition and proposed new development under Tier II, more construction workers would be employed than would occur under Tier I. However, the amount of energy consumed by Tier II construction workers would still be finite and limited to the construction periods. Additionally, over time, it can be expected that construction equipment and worker vehicles will become more fuel efficient and will use, to a greater extent, alternative and renewable sources of energy. Consequently, and for the reasons stated above under Tier I, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy under Tier II.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

The additional development that may occur under Tier I could result in long-term increases in energy consumption due to electricity and natural gas consumed by the additional new development that could occur and the increase in motor vehicle trips generated by that new development. Based on air quality modeling outputs (see Appendix C of this EIR), Tier I development would consume an additional 12,728,594 kWh of electricity, 25,882,552 cubic feet of natural gas, and 2,819,286 gallons of fuel per year compared to existing conditions. However, the proposed Master Plan includes more energy efficient project elements such as solar electric power, solar thermal and hot water, and ground source heating energy for various facilities. In addition, the proposed project would comply with Title 24's energy conservation standards for new construction (see Section 3.5.2, *Regulatory Setting*). Also, in the near future vehicles used to travel to and from the site will become more fuel efficient, and alternative fuel/electric vehicles will become more common. For these reasons, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy.

Tier II

As with Tier I, new and renovated buildings and facilities that may occur under Tier II could result in long-term increases in energy consumption. However, the proposed Master Plan includes more

energy efficient project elements and would comply with Title 24's energy conservation standards for new construction. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy under Tier II.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Impact ENERGY-2: Would the Proposed Project Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency?

Construction and Operational Impacts

Tiers I and II

Construction of structures under Tiers I and II would require the use of energy resources, including natural gas, electricity, and transportation fuels. However, as discussed above under **ENERGY-1**, construction activities are not expected to result in the wasteful, inefficient, or unnecessary consumption of energy in meaningful amounts. Additionally, as detailed in Section 3.10, *Land Use*, of this EIR, the proposed project would not conflict with energy-related policies of local and state plans that pertain to energy. Furthermore, a goal of the proposed project is to identify feasible opportunities to exceed state energy requirements and pursue green building sustainable design to the maximum extent possible, exceed state energy requirements, and promote efficient energy use.

Design and construction of proposed buildings and facilities under the Master Plan would also comply with the energy conservation standards of Title 24, Part 6, of the California Code of Regulations and the 2010 California Green Building Standards Code (CALGreen). Therefore, construction and operation of the proposed project would not conflict with or obstruct a state or local plan for renewable energy and energy efficiency.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

3.5.5 Cumulative Impacts

The study area for the cumulative energy impacts analysis includes the service areas of the project site's individual energy providers. Cumulative development within those service areas would require the use and consumption of energy. For a discussion of anticipated energy demand and the ability of energy providers to accommodate that demand, see Section 3.5.3, *Environmental Setting*, of this EIR. It is anticipated that proposed Master Plan development, as well as cumulative development in the project area, would comply with applicable state and local energy efficiency and conservation regulations. Therefore, the proposed project in conjunction with cumulative

development is not expected to result in the inefficient or wasteful use of large amounts of energy or conflict with existing state and local plans related to energy efficiency. Consequently, the proposed project would not result in a cumulatively considerable contribution to significant energy impacts.

3.6 Geology/Soils

3.6.1 Introduction

This section describes the regulatory setting and affected environment related to geologic, soil, and seismic conditions in the proposed project's study area. It also identifies the potential project impacts related to geology, soils, and seismicity pursuant to CEQA.

In March 2016, Ninyo & Moore prepared its *Preliminary Geotechnical Evaluation for Olive View—UCLA Medical Center Master Plan*, and Paleo Solutions prepared its *Paleontological Technical Study,* which are included in Appendix F of this EIR. This section summarizes the analysis and findings included in that report.

3.6.2 Regulatory Setting

3.6.2.1 Federal

No federal regulations are applicable to the proposed project.

3.6.2.2 State

Alquist–Priolo Earthquake Fault Zoning Act

The 1972 Alquist–Priolo Earthquake Fault Zoning Act requires the State Geologist to delineate Earthquake Fault Zones (EFZs) along known active faults in California. The Act also requires building setbacks to be established from the trace of an active fault. EFZs must meet the requirements of being "sufficiently active" (evidence of movement within the last approximate 11,000 years) and "well-defined" (detectable by a trained geologist). It is known that faults often rupture along a complex zone that may include the movement of multiple splays/strands rather than of a single strand. The EFZs are intended to be sufficiently wide enough on both sides of a known active fault to include these known or unknown splays/strands of the fault. The purpose of the Alquist–Priolo Earthquake Fault Zoning Act was to prohibit the location of most structures for human occupancy across the traces of active faults, thus mitigating the hazard of fault rupture.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was passed in 1990 and went into effect in 1991. The act addresses issues related to earthquake hazards from non-surface fault rupture, including hazards related to liquefaction and seismically induced landslides. The purpose of the Seismic Hazards Mapping Act is to identify and map seismic hazard zones, to be used by cities and counties when preparing the safety elements of their general plans, thereby encouraging land use management policies and regulations that will reduce seismic hazards. The act has resulted in the preparation of maps that delineate Liquefaction Zones and Earthquake-Induced Landslide Zones of Required Investigation (California Department of Conservation, California Geological Survey 2007).

California Building Standards Code

The California Building Standards Commission (Commission) is responsible for coordinating, managing, adopting, and approving building codes in the state of California. In January 2011, the 2010 California Building Standards Code (CBSC) became effective. The 2010 CBSC updated all prior codes under California Code of Regulations (CCR) Title 24. The 2013 version of the CBSC, which was reviewed and approved by the Commission at meetings in December 2012 and January 2013, went into effect on January 1, 2014.

The State of California provides minimum standards for building design through the 2010 California Building Code (CBC), a component of the 2010 CBSC (codified under CCR Title 24). Chapters 16 through 18 of the 2010 CBC regulate structural design, structural tests and inspections, and soils and foundations. The CBC applies to building design and construction in the state and is based on the federal Uniform Building Code (UBC), which is used widely throughout the country (generally adopted on a state-by-state or district-by-district basis).

The CBC, which has been modified for California conditions, contains numerous provisions that are more stringent than those in the UBC because of California's seismic and environmental conditions. According to Section 1613 of the CBC, "[e]very structure, and portion thereof, including nonstructural components that are permanently attached to structures and their supports and attachments, will be designed and constructed to resist the effects of earthquake motions in accordance with ASCE 7."[1]

State of California Geological Survey

The State of California Geological Survey (CGS; formerly CDMG, California Division of Mines and Geology) identifies earth resource issues that should be taken into consideration when evaluating a proposed project for geologic hazards, particularly related to earthquake damage. Consideration includes the potential for existing geologic conditions to affect the proposed project, as well as the potential for the proposed project to affect the existing geologic and soil conditions by creating or exacerbating a geologic hazard.

The CGS establishes regulations related to geologic hazards, including faulting, liquefaction, seismically induced landslides, and ground shaking, as they affect people and structures. These regulations include the Alquist–Priolo Earthquake Fault Zone Act and the Seismic Hazards Mapping Program. The CGS also issues guidelines for the evaluation of geologic and seismic factors that may affect a project or that may be affected by a project. Each guideline provides checklists and outlines to ensure a comprehensive report of geologic and seismic conditions. Although not mandatory in all their detail, the guidelines provide assistance in assuring completeness of geologic and seismic studies conducted for a project.

Alquist Hospital Seismic Safety Act of 1983

The Alquist Hospital Seismic Safety Act of 1983 establishes a seismic safety building standards program under the jurisdiction of the Office of Statewide Health Planning and Development (OSHPD) for hospitals built on or after March 7, 1973. The Act was initiated following the loss of life incurred due to the collapse of hospitals during the Sylmar earthquake of 1971. The Act emphasizes that essential facilities, such as hospitals, must remain operational following an earthquake, and

[1] ASCE 7 is a document published by the American Society of Civil Engineers (ASCE) that specifies minimum design loads for buildings and other structures.

thus the provisions and subsequent regulatory language of the act were developed to address the issues of survivability of both nonstructural and structural components of hospital buildings after a seismic event.

OSHPD sets requirements for building design and rates buildings on a number of categories according to the anticipated ability of a building to withstand seismic activity. The categories include structural performance category (SPC) ranks, numbering SPC-1 through SPC-5, with a lower rating indicating a higher potential risk of collapse and thus a higher risk to the public, and a higher rating indicating compliance with provisions of the Act. Nonstructural performance category (NPC) ranks are also provided for buildings and range from levels 1 through 5.

3.6.2.3 Local

Los Angeles County General Plan

The Los Angeles County General Plan Safety Element (Chapter 12 of the General Plan) includes regulations regarding geotechnical issues for new development. Specifically, the Safety Element includes the following goals and policies for seismic and geotechnical hazards:

- **Goal S 1**: An effective regulatory system that prevents or minimizes personal injury, loss of life and property damage due to seismic and geotechnical hazards.
    - **Policy S 1.1**: Discourage development in Seismic Hazard and Alquist–Priolo Earthquake Fault Zones.
    - **Policy S 1.2**: Prohibit the construction of most structures for human occupancy adjacent to active faults until a comprehensive fault study that addresses the potential for fault rupture has been completed.
    - **Policy S 1.3**: Require developments to mitigate geotechnical hazards, such as soil instability and landsliding, in hillside management areas through siting and development standards.
    - **Policy S 1.4**: Support the retrofitting of unreinforced masonry structures to help reduce the risk of structural and human loss due to seismic hazards.

Los Angeles County Building Code

Los Angeles County has adopted the California Building Code, described above, to evaluate the adequacy of geotechnical and engineering studies needed for design and construction of buildings in the County. Some jurisdictions have adopted more stringent local building codes to reflect geotechnical conditions in the area, typically as zoning or grading ordinances.

3.6.3 Environmental Setting

3.6.3.1 Regional Geology

The project site is located on the northern edge of the San Fernando Valley, a Tertiary-Quaternary period sediment-filled basin within the Transverse Ranges geomorphic province of southern California. Rock units in the province include older Precambrian-era[2] and Jurassic-period[3]

[2] The earliest era of earth history, ending 570 million years ago, during which the earth's crust formed and life first appeared in the seas.

metavolcanic, metasedimentary and igneous rocks. Cretaceous-age[4] marine and non-marine sedimentary and metasedimentary rocks and younger Tertiary-age[5] rocks composed of volcanic, marine, and non-marine sediments overlie the older rocks. More recent Quaternary[6] sediments, primarily of alluvial origin, comprise the low-lying valley and drainage areas within the region, including the area where the Olive View–UCLA Medical Center Campus project site is located.

The rock formations in the province have been folded and uplifted due to compression and rotation associated with a restraining bend on the San Andreas Fault. The folding and uplifting of the region led to characteristic east-to-west trending structural troughs and mountain ranges. The San Fernando Valley formed as sediment infilled a subsiding basin between the San Gabriel Mountains to the north and the Santa Monica Mountains to the south.

3.6.3.2 Site Geology

The medical center is situated on a gently sloping alluvial fan and rock formations at the margin between the northern San Fernando Valley and western end of the San Gabriel Mountains. Regional geologic maps indicate that the upper, elevated northwestern portion of the project site is underlain by Tertiary-age Towsley Formation generally composed of cobble conglomerate and coarse-grained sandstone, and Cretaceous-age metamorphic rocks. Other elevated hillside areas in the western, northern, and eastern portions of the site are mapped as being underlain by Pacoima Formation and older alluvium composed of weakly consolidated sand and gravel. The lower southern portion of the project site, where the existing improvements are located, and the eastern portions of the project site at the base of Wilson Canyon are mapped as being underlain by young (Holocene[7]) alluvial deposits generally composed of gravel, sand, and clay sediments. A regional geologic map of the site vicinity is shown on Figure 3.6-1.

[3] Noting or pertaining to a period of the Mesozoic epoch, occurring from 190 to 140 million years ago.

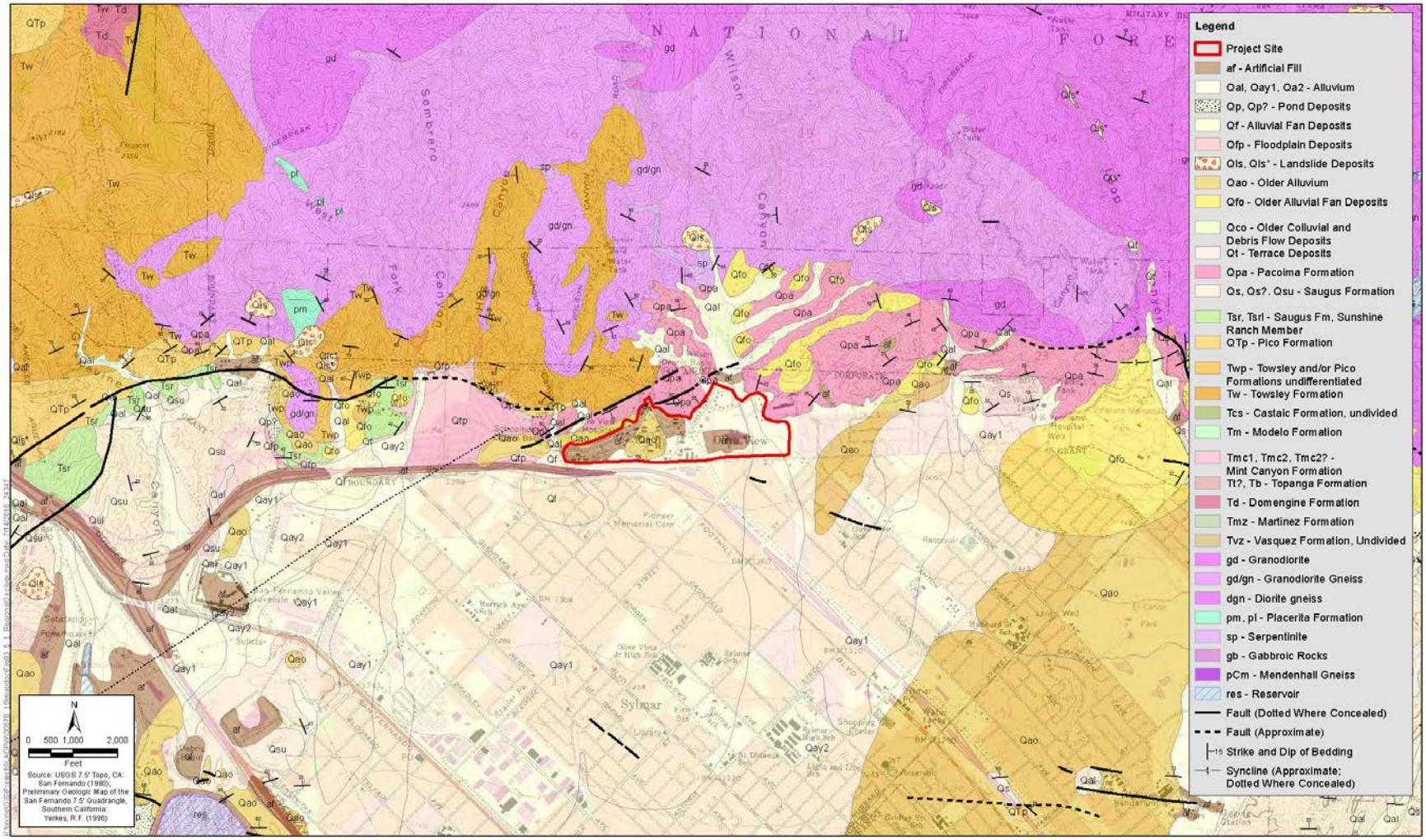
[4] Noting or pertaining to a period of the Mesozoic era, from 140 to 65 million years ago.

[5] Noting or pertaining to the early part of the Cenozoic era, from 65 to 2 million years ago.

[6] Noting or pertaining to the present period of earth history, forming the latter part of the Cenozoic era. Originated 2 million years ago and included the Recent and Pleistocene epochs.

[7] Denoting or formed in the second and most recent epoch of the Quaternary period, which began 10,000 years ago at the end of the Pleistocene.

Figure 3.6-1. Regional Geology



Source: ICF 2017.

Groundwater

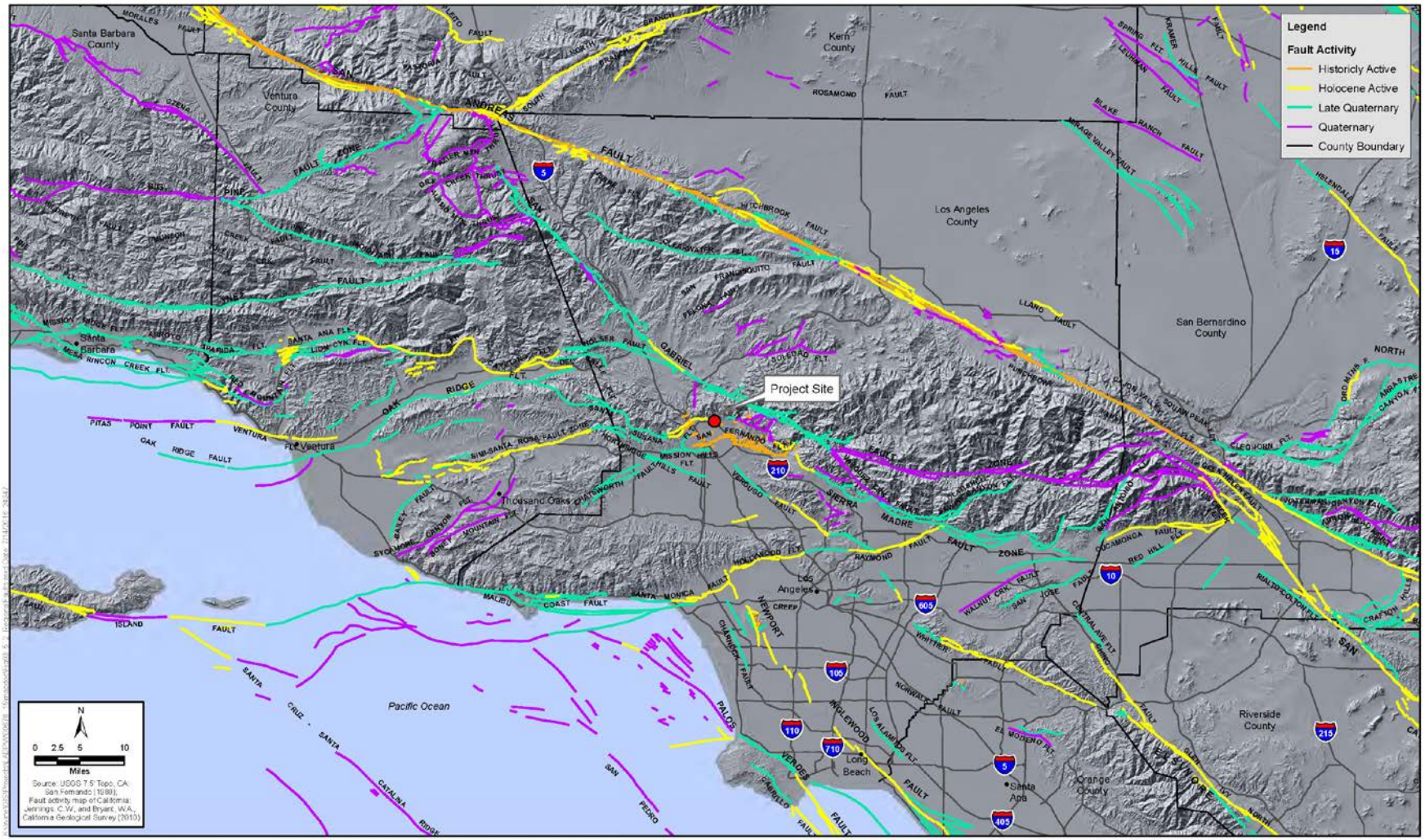
The site is located within the San Fernando Valley Groundwater Basin. Monitoring well data were not available for the project site, but were reviewed for commercial properties located in the Sylmar community south of the project site. These properties were involved in environmental clean-up activities when monitoring wells were installed and groundwater data from LACDPW wells were utilized. Based on the groundwater information reviewed from the GeoTracker website, groundwater levels from 1993 to 2013 in the Sylmar community, approximately 1.5 miles south of the project site, have ranged from approximately 125 to 200 feet below the ground surface. The historic high groundwater mapped by the CGS near the southern portion of the medical center site is approximately 120 feet deep.

Groundwater levels may be influenced by seasonal variations, precipitation, subsurface stratification, groundwater pumping, irrigation practices, and other factors and are subject to fluctuations. Shallow perched conditions may be present.

Faulting and Seismicity

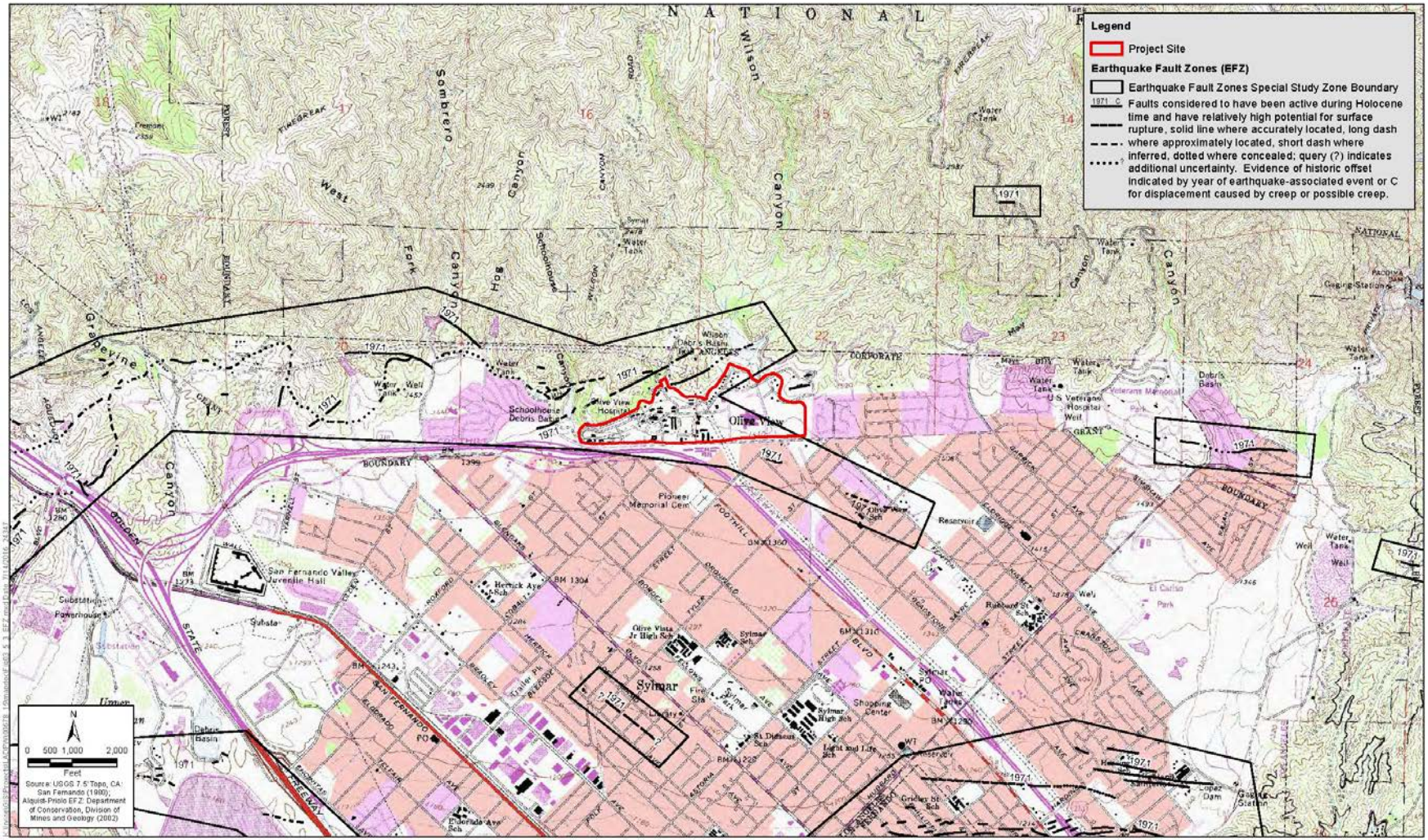
The Olive View–UCLA Medical Center Campus site is located in a seismically active area, as is the majority of the Southern California region, thus the potential for strong ground motion is considered potentially significant. The numerous faults in southern California include active, potentially active, and inactive faults. As defined by the CGS, active faults are faults that have ruptured within Holocene time, or within approximately the last 11,000 years. Potentially active faults are those that show evidence of movement during Quaternary time (approximately the last 1.6 million years), but for which evidence of Holocene movement has not been established. Inactive faults have not ruptured in the last approximately 1.6 million years. Figure 3.6-2 shows the approximate site location relative to the principal faults in the region.

Figure 3.6-2. Regional Faults



Source: ICF 2017.

Figure 3.6-3. Earthquake Fault Zones



Source: United States Geological Survey (USGS), ICF 2017.

The project site is also located in the State of California (1979) EFZ (formerly Alquist–Priolo Special Studies Zone) related to surface ruptures caused by the 1971 San Fernando Earthquake (also known as the 1971 Sylmar Earthquake). Figure 3.6-3, above, shows the site location relative to the mapped EFZ. Faults in proximity of the project site include the Santa Susana Fault which is less than 0.1 miles from the site, the Northbridge Blind Thrust which is 0.5 miles from the site, and the Sierra Madre (San Fernando) fault which is 1.7 miles from the site. Significant damage occurred to the buildings at the site in 1971 due to ground shaking from the San Fernando Earthquake. The potential for surface rupture to occur at the site is a potentially significant hazard to existing and planned structures. Table 3.6-1 lists the principal known active faults within approximately 30 miles of the project site and the predicted maximum moment magnitude (M_{max}).

Table 3.6-1. Principal Regional Active Faults

Fault	Approximate Fault-to-Site Distance[1] miles (kilometer)	Maximum Moment Magnitude[1] (M_{max})
Santa Susana[2]	<0.1 (<0.1)	6.9
Northridge Blind Thrust	0.5 (0.8)	6.9
Sierra Madre (San Fernando)	1.7 (2.8)	7.3
San Gabriel	3.2 (5.2)	7.3
Verdugo	4.7 (7.5)	6.9
Holser	8.6 (13.9)	6.8
Simi-Santa Rosa	14.4 (23.2)	6.9
Hollywood	16.2 (26.0)	6.7
Oak Ridge	16.6 (26.8)	7.4
Upper Elysian Park Blind Thrust	17.0 (27.3)	6.7
Santa Monica	17.3 (27.9)	7.4
Raymond	19.0 (30.5)	6.8
San Cayetano	19.6 (31.6)	7.2
Newport-Inglewood (Los Angeles Basin)	19.7 (31.8)	7.5
Malibu Coast	21.0 (33.8)	7.0
Puente Hills Blind Thrust (LA)	21.2 (34.1)	7.0
Anacapa-Dume	21.9 (35.3)	7.2
San Andreas	22.0 (35.3)	8.2
Palos Verdes	25.3 (40.8)	7.7
Clamshell-Sawpit Canyon	27.5 (44.3)	6.7

Notes:
[1] USGS 2008.
[2] USGS 2014.
Source: Ninyo & Moore 2016.

Santa Susana (Olive View) Fault

The Santa Susana fault was not mapped as crossing the project site as part of the USGS 2008 National Seismic Hazard Map database, but rather it was shown to be located approximately 2.9

miles west of the site. However, according to the preliminary geotechnical evaluation (Appendix F of this EIR), the 2014 National Seismic Hazard Map shows the Santa Susana fault crossing through the northern portion of the site. Accordingly, the Santa Susana fault is considered to be in the immediate vicinity of the campus and the fault-to-site distance in Table 3.6-1 is shown as less than 0.1 mile.

1971 Sylmar Earthquake

The Olive View–UCLA Medical Center Campus site was previously subjected to substantial ground shaking, surface rupture, and earthquake-related damages resulting from the 1971 Sylmar Earthquake. The magnitude 6.5 earthquake included roughly 12 miles of surface rupture in the site vicinity and produced a maximum slip of 6 feet. The approximate locations of faults associated with major surface ruptures that were mapped at the project site are shown on Figure 3.6-3. Other surface ruptures and landslides that occurred at the site as a result of the earthquake are shown on references reviewed for the preliminary geotechnical evaluation (Appendix F of this EIR). Damage to the medical center site included the collapse of stair towers adjacent to buildings, the partial collapse of medical buildings, and the collapse of parking structures. Some structures damaged in the earthquake were later demolished. The extensive urban damages and loss of life that resulted from the 1971 Sylmar Earthquake led to the enactment of the Alquist–Priolo Act, signed into California law on December 22, 1972.Additionally, previous geologic mapping and references indicate the presence of a roughly east-west trending fault (the Olive View Fault) across the northwestern portion of the site (see Figure 3.6-2 and Figure 3.6-3). Although not labeled on the referenced map used for Figure 3.6-3, the fault has been named as the Olive View Fault by others. The USGS has designated the fault as the eastern extension of the active Santa Susana Fault Zone. This active fault was associated with surface ruptures at the project site caused by the 1971 Sylmar Earthquake.

Liquefaction

Liquefaction is the phenomenon in which loosely deposited granular soils located below the water table undergo rapid loss of shear strength due to excess pore pressure generation when subjected to strong earthquake-induced ground shaking. Ground shaking of sufficient duration results in the loss of grain-to-grain contact due to the rapid rise in pore water pressure causing the soil to behave as a fluid for a short period of time. Liquefaction is known generally to occur in saturated or near-saturated cohesionless soils at depths shallower than 50 feet. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking. The potential damaging effects of liquefaction include differential settlement, loss of ground support for foundations, ground cracking, heaving and cracking of slabs due to sand boiling, buckling of deep foundations due to liquefaction-induced ground settlement.

According to Seismic Hazard Zones Maps published by the State of California, a portion of the project area in the northeastern part of the site near the mouth of Wilson Canyon is located within an area considered susceptible to liquefaction (Figure 3.6-4). This portion of the site within the lower-lying canyon bottom area was mapped as potentially liquefiable due to the tendency for shallower groundwater and loose, younger alluvial sediments to accumulate in canyon bottoms. However, the overall historic high groundwater levels at the site are deep, approximately 120 feet or more below the ground surface, thus much of the project site is not considered susceptible to liquefaction. Areas of the project site mapped as being underlain by rock formations are not susceptible to liquefaction.

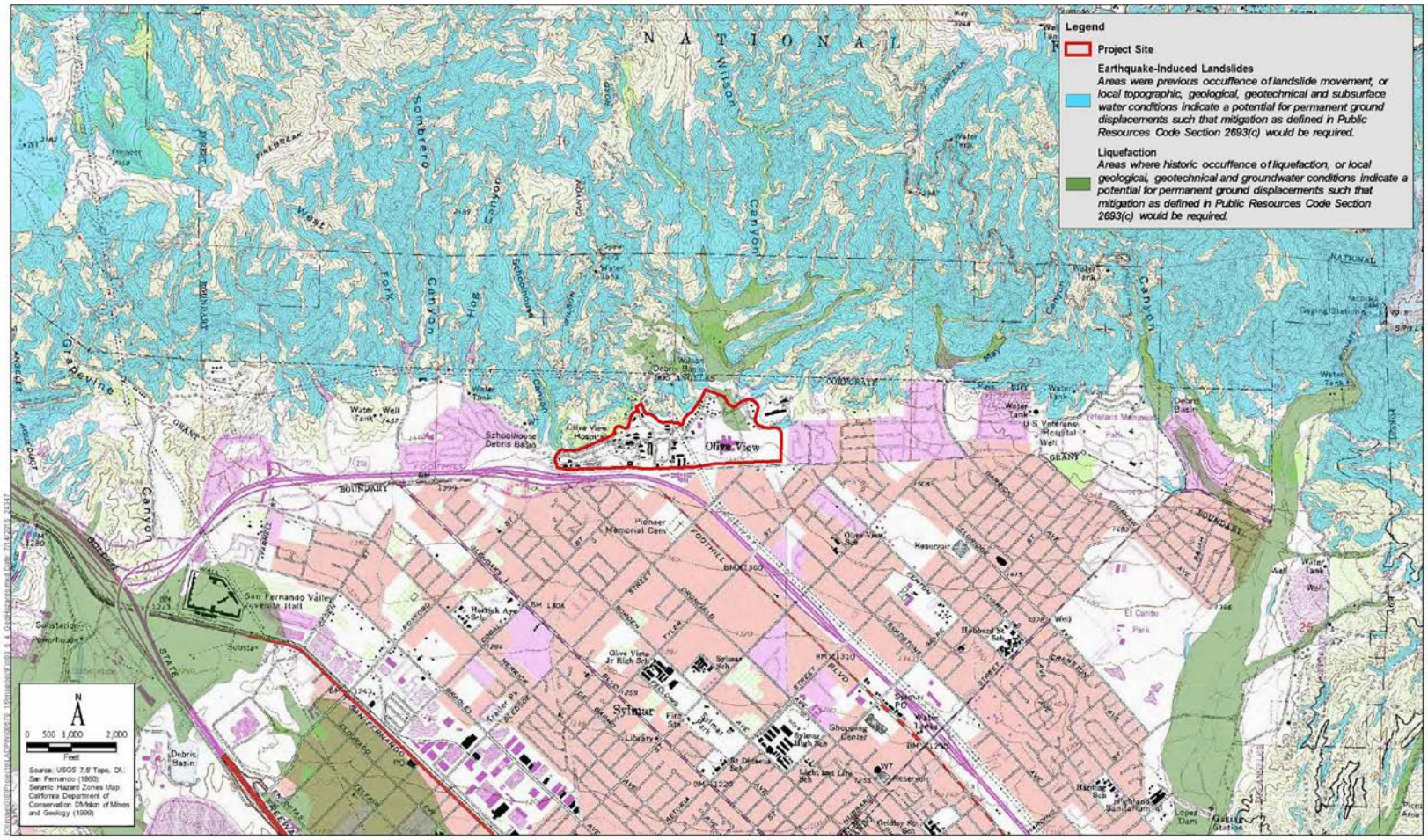
Landslides

Landslides, slope failures, and mudflows of earth materials generally occur where slopes are steep and/or he earth materials are too weak to support themselves. Earthquake-induced landslides may also occur due to seismic ground shaking. Landslides can consist of rockfalls, shallow slumps, mudflows, and erosional failures, or deeper-seated rotational and block failures. Shallow failures are typically caused by high incident rainfall or concentrated surface runoff conditions that weaken surficial materials. Rotational slides and block-type slides form deeper within the ground and are generally related to discontinuities in the rock that manifest into a sliding surface. Rainfall and other water infiltration into the ground can exacerbate and initiate these deeper sliding conditions. Landslides can also be caused by construction activities, such as grading that undercuts the toe of a slope or induces loading at the top of a slope.

Landslides are not known to occur on the northern hillside areas of the site; however, the northern portion of the project site contains steep, natural slopes that have been subjected to fires. In addition, portions of the slopes on the northern part of the site have been designated on the State Seismic Hazard Zones Map (Figure 3.6-4) as having the potential for earthquake–induced landslides. Furthermore, landslides that were caused by earthquake ground shaking were mapped at the site following the 1971 Sylmar Earthquake.

The southern portion of the project site has shallower slope gradients and has been extensively developed and is primarily covered with pavements, hardscape, and structures. The developed southern portion of the site includes some graded slopes at shallow gradients associated with landscaping and open space areas.

Figure 3.6-4. Seismic Hazard Zones Map



Source: State of California 1999, Ninyo & Moore 2016.

Site Soils

Erosion refers to the process by which soil or earth material is loosened or dissolved and removed from its original location. Erosion can occur by varying processes and may occur at the project site where soil or rock is exposed to wind or moving water (i.e., rainfall and surface runoff). The processes of erosion are generally a function of material type, terrain steepness, rainfall or irrigation levels, surface drainage conditions, and general land uses. According to the preliminary geotechnical evaluation (Appendix F of this EIR), surface exposures at the site are composed of various types of soil and rock materials. In addition, the site comprises varied topographic terrain, ranging from gentle to steep gradients. In a general sense, steeper slope gradients, such as in the northern portion of the site, provide a higher erosion potential for similar soil types.

Sandy soils typically have low cohesion, and have a relatively higher potential for erosion from surface runoff when exposed in slopes or utilized near the face of fill embankments. Surface soils with higher amounts of clay tend to be less erodible as the clay acts as a binder to hold the soil particles together. Additionally, large portions of the site, including the eastern and northern portions, are currently undeveloped and subject to potential water- and wind-related soil erosion. Soil erosion and soil runoff from natural drainages and non-vegetated areas on the adjacent slopes have the potential to affect the site.

Subsidence

Subsidence is characterized as a sinking of the ground surface relative to surrounding areas and can generally occur where deep soil deposits are present. Subsidence in areas of deep soil deposits is typically associated with regional groundwater withdrawal or other fluid withdrawal from the ground such as oil and natural gas. Subsidence can result in the development of ground cracks and damage to site improvements.

There are no known areas of subsidence mapped in the City or County of Los Angeles. Historic subsidence is not known to have occurred or been reported in the site region. The Safety Element of the Los Angeles City General Plan (1996) includes information regarding the city's program to preclude potential subsidence within the city. Subsurface extraction activities within the City of Los Angeles are regulated by oil drilling district procedures, which contain provisions for monitoring and imposing measures to preclude subsidence related to oil and gas extraction. Therefore, the potential for subsidence at the project site is relatively low.

Compressible/Collapsible Soils

Compressible soils undergo consolidation when exposed to new loading, such as fill or foundation loads. Soil collapse is a phenomenon in which the soils undergo a significant decrease in volume when exposed to an increase in moisture content, with or without an increase in external loads. Buildings, structures, and other improvements may be subject to excessive settlement-related distress when compressible soils or collapsible soils are present.

According to the preliminary geotechnical evaluation (see Appendix F of this EIR), the project area is underlain by fill soils, alluvial sediments, and sedimentary rock formations. The alluvial deposits underlying the site are generally unconsolidated to weakly consolidated, based on the young nature of the deposits, reflecting a depositional history without substantial loading, and may be subject to collapse. Older, undocumented fill soils related to previous site development are considered potentially compressible/collapsible.

Expansive Soils

Expansive soils include clay minerals, which are characterized by their ability to undergo significant volume change (i.e., shrink or swell) in response to variations in moisture content. Sandy soils are generally not expansive. Changes in soil moisture content can result from rainfall, irrigation, pipeline leakage, surface drainage, perched groundwater, drought, or other factors.

A volumetric change in expansive soils may cause excessive cracking and heaving of structures with shallow foundations, concrete slabs on grade, or pavement that was supported on such material. According to the preliminary geotechnical evaluation (see Appendix F of this EIR), the near-surface soils in the project site are predominantly composed of sandy, coarse-grained materials. These soils typically have a low expansion potential. However, clayey soils may be present in areas of the project site.

3.6.3.3 Paleontological Resources

The identification of paleontological resources within the project area is based on a study prepared by Paleo Solutions, Inc., entitled *Paleontological Technical Study: Olive View–UCLA Medical Center Master Plan Project, Los Angeles County, California* (Grillo and Raum 2016) (see Appendix F of this EIR).

Information Review Results

A locality search was completed at the Vertebrate Paleontology section of the Los Angeles County Museum of Natural History (LACM). Searches were also conducted in the University of California Museum of Paleontology (UCMP) online database, the PaleoBiology Database (PBDB), and in literature. The records and literature reviews indicate that there are four recorded localities (LACM 5745, LACM 3387, LACM 7152, LACM 1733) in older Quaternary alluvial deposits, similar to the Pacoima Formation, southwest of the proposed project site (McLeod 2016). No other paleontological resources have been recorded in the immediate area in Quaternary alluvium or Pacoima Formation (UCMP 2016; Jefferson 1991; PBDB 2016).

LACM 5745, southwest of the proposed project, east of the Golden State Freeway (I-5) and south of the Foothill Freeway (I-210), produced fossil specimens of mastodon (*Mammut*) and horse (*Equus*) in fill dirt. Southwest of the proposed project site, LACM 3397 produced fossil bison (*Bison*) at a 75 foot depth, LACM 7152 produced fossil mammoth (*Mammuthus*) and bison (*Biso*n) in terrace deposits;,and LACM 1733 produced fossil horse (*Equus*) at unknown depth (McLeod 2016).

3.6.4 Environmental Impact Analysis

3.6.4.1 Methods

The impact analysis presented in this section incorporates information from the *Preliminary Geotechnical Evaluation for Olive View–UCLA Medical Center Master Plan*, prepared by Ninyo & More in March 2016 (Appendix F of this EIR). The following discussion identifies impacts and the measures required to mitigate impacts that are found to be significant.

3.6.4.2 Thresholds of Significance

For the purposes of this EIR and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant environmental impact if it would:

GEO-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving:

1) Rupture of a known earthquake fault, as delineated on the most recent Alquist–Priolo Earthquake Fault Zone 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*),
2) Strong seismic ground shaking,
3) Seismically related ground failure, including liquefaction, or
4) Landslides.

GEO-2 Result in substantial soil erosion or the loss of topsoil.

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 an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

GEO-4 Be located on expansive soils, as defined in Table 18-1-B of the UBC (1994), or corrosive soils, creating substantial direct or indirect risk to life or property.

GEO-5 Have soils that would be incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater.

GEO-6 Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

The lead agency determined in the Notice of Preparation/Initial Study (see Appendix A of this EIR) that the proposed project would result in no impacts in the following area and was therefore screened from further review in this EIR.

3.6.4.3 Impacts and Mitigation Measures

Impact GEO-1: Would the Proposed Project Expose People or Structures to Potential Substantial Adverse Effects, including the Risk of Loss, Injury, or Death, Involving Earthquake Fault Rupture, Seismic Shaking, Ground Failure, or Landslides?

Construction Impacts

Tier I

Fault Rupture

As previously mentioned, the project site is located within a State of California EFZ (formerly Alquist–Priolo Special Studies Zone), and there is a possibility for seismic surface rupture to occur at the site, a potentially significant impact. As shown in Table 3.6-1, above, a number of active faults lay within the project vicinity, including the Santa Susana Fault (less than 0.1 miles from the site), the Northbridge Blind Thrust (0.5 miles from the site), and the Sierra Madre (San Fernando) fault (1.7 miles from the site), although the faults do not run through the project site. Moreover, the project

site was previously subjected to substantial surface rupture damage resulting from the 1971 Sylmar Earthquake.

Fault trenching studies to evaluate the presence and relative activity of faulting at portions of the site have been conducted in the past by other geotechnical consultants on behalf of the County of Los Angeles. Studies conducted in 2008 and 2010 for the proposed Mental Health Urgent Care Facility and Day Care Facility in the southern portion of the project site involved performance of subsurface trenches and test pits adjacent to the facilities to explore for the presence of active faulting. These studies generally concluded that the trenches exposed older (Pleistocene) alluvium that was not cut by active (Holocene epoch [last 11,000 years]) faulting. Following these findings, a trench shadow corridor area was established for the investigated sites that is free of active faulting and feasible for permitting structures intended for human occupancy in accordance with the provisions of the Alquist–Priolo Act.

Additionally, as part of the master planning study for the proposed project, a preliminary planning map for subsurface fault rupture hazards was prepared, showing a summary of fault trench locations performed by other geotechnical consultants at the site. The map also identified areas of the project site where fault trenching has cleared areas of active faulting for potential buildings sites, areas where additional subsurface geologic investigations are required, and areas located within the EFZ where subsurface geologic investigations may not be feasible (see fault rupture hazards figure on page 203 of the Appendix to the Campus Master Plan, SmithGroup 2015). Therefore, although previous trenching studies have cleared some areas of the project site for habitable structures, additional subsurface geologic investigations are required. Mitigation measure **MM-GEO-C1** (see below) would require the applicant to perform additional subsurface geologic investigations to evaluate all potential buildable zones proposed under the Master Plan. With implementation of **MM-GEO-C1**, impacts would be reduced to a less-than-significant level.

Seismic Ground Shaking

As mentioned above, active faults lay in the project vicinity. Earthquake events from one of the regional active or potentially active faults near the project area could result in strong ground shaking that could affect the project site. The level of ground shaking at a given location depends on many factors, including the size and type of earthquake, distance from the earthquake, and subsurface geologic conditions. The type of construction also affects how particular structures and improvements perform during ground shaking. The potential levels of ground shaking at the project site could result in significant impacts on future improvements. However, the proposed project would adhere to all applicable seismic design requirements and guidelines. Additionally, the implementation of structural design mitigation measures (see **MM-GEO-C1**, below) would reduce potential seismic ground shaking impacts to a less-than-significant level.

Ground Failure

According to the preliminary geotechnical evaluation prepared for the proposed project (see Appendix F of this EIR), the northeastern portion of the project site near the mouth of Wilson Canyon is located within in an area that is considered susceptible to liquefaction. If not mitigated during detailed project design, liquefaction and its associated manifestations could cause damage to future project improvements, a potentially significant impact. Potentially damaging effects of liquefaction include differential settlement, loss of ground support for foundations, ground cracking, heaving and cracking of slabs due to sand boiling, and buckling of deep foundations due to liquefaction-induced ground settlement. Mitigation measures identified in **MM-GEO-C1** would

reduce the potentially significant liquefaction hazard impacts to Master Plan development to a less-than-significant level.

Landslides

According to the preliminary geotechnical evaluation prepared for the proposed project (see Appendix F of this EIR), , the presence of steep hillside areas and previously mapped earthquake-induced landslides in the northern portion of the project site has the potential to produce landslides, mudflows, or seismic slope instability, which has the potential to affect the proposed project. Earthquake-induced landslides may occur due to seismic ground shaking, but can also be caused by construction activities, such as grading that undercuts the toe of a slope or induces loading at the top of a slope. **MM-GEO-C1** would require a detailed assessment of the landslide and mudflow potential in areas of project improvements and incorporated into the Master Plan design, as appropriate. Therefore, with the implementation of **MM-GEO-C1**, impacts would be reduced to a less-than-significant level.

Tier II

Tier II construction impacts related to exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving earthquake fault rupture, seismic shaking, ground failure, or landslides are expected to be similar to those described for Tier I. Impacts would be less than significant after incorporation of **MM-GEO-C1**.

Mitigation Measures

Mitigation measures below are proposed for both Tier I and Tier II development.

MM-GEO-C1: All recommendations included in the preliminary geotechnical evaluation prepared for the proposed project (see Appendix F of this EIR) are incorporated into mitigation measures and will be followed. A detailed subsurface geotechnical evaluation will be performed to address site-specific conditions at the locations of the planned improvements and provide detailed recommendations for design and construction.

The geotechnical evaluation will include the following measures to mitigate potential fault rupture, seismic ground shaking, ground failure, and liquefaction hazards identified under Impacts **GEO-1** and **GEO-2**.

- **Fault rupture**: Future geologic investigations to evaluate the location and relative activity of potentially active fault splays at the project site and the feasibility of locating future site improvements will be conducted by geologic consultants prior to design of structure locations. Fault investigations will be conducted by a California State Certified Engineering Geologist and reviewed by the CGS. Appropriate building setback zones will be established in locations deemed not feasible for construction of occupied structures.
- **Seismic ground shaking**: Structural elements of future improvements will be designed to resist or accommodate appropriate site-specific ground motions and conform to current seismic design standards, including those set forth by the 2013 CBC and the County of Los Angeles building regulations.
- **Ground failure**: Assessment of liquefaction potential at the project site will be evaluated by subsurface geotechnical exploration prior to detailed design and construction of project improvements and be incorporated into the design, as appropriate. Structural design will be developed to reduce the potential impacts of liquefaction, including the incorporation of

techniques such as structural design, in-situ ground modification, or supporting foundations with piles at depths designed specifically for seismically induced settlement.

- **Landslides**: A detailed assessment of the landslide and mudflow potential in areas of project improvements will be performed prior to design and construction of improvements and incorporated into the design, as appropriate. Methods for construction in areas with a potential liquefaction hazard may include excavation of potentially unstable material for a more stable slope configuration; reduction of landslide driving forces by removal of earth materials at the top of the landslide; construction of a buttress and/or stabilization fills; construction of retailing walls, installation of rock bolts on the face of the slope, or installation of protective wire mesh on the slope face; the construction of debris impact walls at the toe of the slope to contain rock fall debris; and/or supporting foundations with piles at depths designed specifically for seismically induced settlement. Graded slopes created for future developments within the project site will also be designed to reduce the potential for landslides or mudflows.

The geotechnical evaluation will include the following measures to mitigate unstable soil impacts identified under Impact **GEO-3**.

- **Groundwater**: Excavations for foundations in areas with shallow perched groundwater may need to be cased, shored and/or dewatered to maintain stability of the excavations and adjacent improvements and provide access for construction. All recommendations included in the preliminary geotechnical evaluation pertaining to groundwater will be followed.

  On-site infiltration of storm water related to Low Impact Development (LID) guidelines will be evaluated during the detailed design phase of the project. Further study, including subsurface exploration, will also be performed during the detailed design phase of planned improvements to evaluate the presence of seepage and/or perched groundwater, the potential for stormwater infiltration at the site, and the potential impacts on design and construction of project improvements. Techniques such as casing, shoring, and/or construction dewatering will be incorporated.

- **Collapsible soils/settlement**: Assessment of soil settlement will be performed prior to detailed design and construction or project improvements, and techniques will be developed, as appropriate, to reduce impacts related to settlement. Surface reconnaissance and subsurface evaluation will be performed. Site-specific geotechnical evaluations will also be performed to assess the settlement potential of on-site natural soils and undocumented fill, which will include drilling of exploratory borings or test pits, laboratory testing of soils, or other appropriate measures to evaluate site conditions.

  Examples of possible mitigation measures for soils with the potential for settlement could include removal of the compressible/collapsible soil layers and replacement with compacted fill, surcharging to induce settlement prior to construction of improvements, allowing for a settlement period after or during construction of new fills, and utilization of specialized foundation design, including the use of deep foundation systems, to support structures. Various in-situ soil improvement techniques are also available, such as dynamic compaction (i.e., heaving tamping) or compaction grouting.

The geotechnical evaluation will include the following measures to mitigate the expansive and corrosive soils hazards identified under Impact **GEO-4**.

- **Expansive soils**: Assessment of the potential for expansive soils will be performed during the design phase of the project through subsurface exploration, and mitigation techniques, such as over-excavation and replacement with non-expansive soils, soil treatment, moisture management, and/or specific structural design for expansive soil conditions, will be developed, as appropriate, to reduce the impacts related to expansive soils.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

Fault Rupture

As discussed under Tier I construction impacts, the project site is located within a State of California EFZ and the possibility exists for potentially significant impacts to occur, including seismic surface rupture at the site. The project site was also previously subjected to substantial surface rupture damage resulting from the 1971 Sylmar Earthquake. However, incorporation of mitigation measure **MM-GEO-C1** would reduce impacts to a less-than-significant level.

Seismic Ground Shaking

As discussed under Tier I construction impacts, earthquake events from one of the regional active or potentially active faults near the project area could result in strong ground shaking, which could affect the project site. The level of ground shaking at a given location depends on many factors, including the size and type of earthquake, distance from the earthquake, and subsurface geologic conditions. The type of construction also affects how particular structures and improvements perform during ground shaking. As shown in Table 3.6-1, above, a number of known active faults in the project vicinity create a significant potential for strong ground motion at the project site. The potential level of ground shaking could have significant impacts on project improvements without appropriate design mitigation, and should be considered during the detailed design phase of the project. Appropriate structural design and mitigation techniques as proposed under **MM-GEO-C1** would reduce the impacts related to seismic ground shaking. The proposed project would also adhere to all applicable seismic requirements and guidelines. Therefore, implementation of **MM-GEO-C1**, impacts would be reduced to a less-than-significant level.

Ground Failure

As mentioned under Tier I construction impacts, although a portion of the project area in the northeastern part of the site, near the mouth of Wilson Canyon, is located within an area considered susceptible to liquefaction, structural design and mitigation techniques would reduce potential impacts of liquefaction. Incorporation of **MM-GEO-C1** would reduce impacts to a less-than-significant level.

Landslides

As mentioned under Tier I construction impacts, according to the preliminary geotechnical evaluation for the proposed project, there is the potential for future landslides or mudflows in the project area. Earthquake-induced landslides may occur due to seismic ground shaking. However,

potential impacts due to landslides are considered low with mitigation incorporated. **MM-GEO-C1** would reduce impacts to a less-than-significant level.

Tier II

Tier II operational impacts related to exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving earthquake fault rupture, seismic shaking, ground failure, or landslides, are expected to be similar to those described for Tier I. Impacts would be less than significant after incorporation of **MM-GEO-C1**.

Mitigation Measures

See **MM-GEO-C1**.

Level of Significance after Mitigation

Less than significant.

Impact GEO-2: Would the Proposed Project Result in Substantial Soil Erosion or the Loss of Topsoil?

Construction Impacts

Tier I

According to the preliminary geotechnical evaluation, near-surface soils at the project site are predominantly composed of sandy, coarse-grained materials. Clayey soils might also be present in areas of the project site. Sandy soils typically have low cohesion and a relatively higher potential for erosion from surface runoff when exposed in cut slopes or utilized near the face of fill embankments. Surface soils with higher amounts of clay tend to be less erodible because the clays are able to hold soil particles together.

Tier I construction activities would result in ground surface disruption, including disruptions from grading, trenching, and excavation activities. Such activities could result in erosion at the project site during construction, a potentially significant impact. Additionally, portions of the campus are currently undeveloped and subject to potential water and wind soil erosion. However, as described in Section 3.8 of this EIR, *Hydrology and Water Quality*, any project involving grading of an area greater than 1 acre is required to apply for a National Pollutant Discharge Elimination System permit from the Los Angeles Regional Water Quality Control Board. This permit requires preparation and implementation of a Stormwater Pollution Prevention Plan that incorporates best management practices (BMPs) for erosion control. Specifically, construction activity resulting in a land disturbance of 1 acre or more, or less than one acre, but part of a larger common plan of development or sale, must obtain the Construction Activities Storm Water General Permit. Compliance with permit requirements and implementation of mitigation measure **MM-GEO-C2** (see below) would minimize the erosion potential during construction and reduce impacts to a less-than-significant level.

Tier II

Construction activity under Tier II would be similar to that described under Tier I. Impacts would be less than significant after incorporation of **MM-GEO-C2**.

Mitigation Measures

The following measure would ensure that soil erosion impacts (Impact **GEO-2**) would be minimized:

> **MM-GEO-C2:** A Storm Water Pollution Prevention Program incorporating BMPs for erosion control will be prepared prior to the start of construction in accordance with governing agencies. Long-term erosion management practices and drainage provisions will also be incorporated into the design and maintenance of the project following the development of site improvements. BMPs may include surface drainage measures for erosion due to water, such as the use of erosion prevention mats or geofabrics, silt fencing, sandbags and plastic sheeting, and temporary drainage devices. Positive surface drainage will be accommodated at project construction sites to allow surface runoff to flow away from site improvements or areas susceptible to erosion. Wetting of soil surfaces and/or covering exposed ground areas and soil stockpiles will also be considered during construction operations, as appropriate, to reduce wind-related erosion (see Section 3.9 of this EIR, *Hydrology and Water Quality*). Project design will address reducing concentrated runoff conditions that could cause erosion and affect the stability of the project.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

As described in Section 3.9, *Hydrology and Water Quality*, of this EIR, soil erosion during long-term operation of future development on the project site would be minimized through site drainage design and maintenance practices. The Master Plan would increase and improve storm drainage pipes and incorporate the use of bioretention and permeable pavement LID features, which would also minimize runoff and the potential for soil erosion. These features would meet the requirements of the city of Los Angeles Department of Sanitation's *Development Best Management Practices Handbook*. Discharge rates would also decrease after implementation of the Master Plan also reducing the potential for soil erosion. Thus, Tier I operational impacts on erosion would be less than significant.

Tier II

Similar to Tier I, soil erosion during operation of the site would be minimized through site drainage design and maintenance practices, thus impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Impact GEO-3: Would the Proposed Project be Located on a Geological Unit or Soil that is Unstable or that Would Become Unstable, Potentially Resulting in an On-site or Off-Site Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse?

Construction and Operational Impacts

Tier I

For a discussion of landslide and liquefaction hazards during construction, see Impact **GEO-1**, above.

As previously stated, mapped areas of subsidence were not found in the city or County of Los Angeles reference materials. The County of Los Angeles General Plan Safety Element includes goals and policies addressing the introduction or expansion of developments in areas known to have geologic hazards. Therefore, the potential for subsidence on the project site is relatively low and would be considered a less-than-significant impact. No mitigation measures are required.

Tier I construction activities could result in ground surface disruption, including disruptions from grading, trenching, and excavation activities. Based on the deep groundwater levels reported in the project vicinity and the anticipated depth of construction activities, groundwater may not have a significant impact on Tier I construction activities. However, areas of shallower perched groundwater may be encountered during excavations, and, if encountered, could cause instability of excavations and present a constraint to construction activities, a potentially significant impact. Implementation of **MM-GEO-C1** would ensure impacts related to perched groundwater and wet or saturated soil conditions would be reduced to less-than-significant levels.

Due to the presence of potentially compressible/collapsible soils at the project site, there is a potential for a differential settlement to cause damage to project improvements. Without appropriate mitigation implemented during detailed project design and construction, the potential impacts of settlement would be considered significant. Mitigation measures, including soil assessment, removal of the compressible/collapsible soil layers and replacement with compacted fill, surcharging to induce settlement prior to construction of improvements, allowing for a settlement period after or during construction of new fills, and utilization of specialized foundation design, including the use of deep foundation systems, to support structures, would reduce potential impacts to less-than-significant levels. With the implementation of **MM-GEO-C1**, the proposed project's compressible/collapsible soils impacts would be less than significant.

Tier II

Tier II impacts related to unstable soils conditions are expected to be similar to those described for Tier I. Impacts would be less than significant after incorporation of **MM-GEO-C1**.

Mitigation Measures

See **MM-GEO-C1**, above.

Level of Significance after Mitigation

Less than significant.

Impact GEO-4: Would the Proposed Project Be Located on Expansive Soil, as Defined in Table 18-1-B of the UBC (1994), or Corrosive Soils, Creating Substantial Risk to Life or Property?

Construction and Operational Impacts

Tier I

According to the preliminary geotechnical evaluation prepared for the proposed project, the near-surface soils at the project site are predominantly composed of sandy, coarse-grained materials that typically have a low expansion potential. However, clayey soils might be present in areas of the project site. If construction activities occur on soils that are known to be potentially expansive, the impact on proposed future improvements could be significant. Implementation of **MM-GEO-C1** would reduce potential impacts from expansive soils to less than significant.

Tier II

Tier II impacts related to expansive soils are expected to be similar to those described for Tier I. Impacts would be less than significant after incorporation of **MM-GEO-C1**.

Mitigation Measures

See **MM-GEO-C1**, above.

Level of Significance after Mitigation

Less than significant.

Impact GEO-5: Would the Proposed Project Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature?

Based on the results of the geologic map review, literature, museum record searches, and reconnaissance survey, the paleontological potential of the geologic units within the project site were ranked using the Potential Fossil Yield Classification (PFYC) System, which was developed by the Bureau of Land Management (BLM) (BLM 2007) as a predictive tool for classifying geologic units on their likelihood of containing paleontological resources on a scale of 1 (very low potential) to 5 (very high potential).

Pacoima Formation sediments are evaluated as having a moderate potential (PFYC 3a) for paleontological resources in the vicinity of the project site. This conclusion is based on the generally fine- to medium-grained nature of the sediments observed during survey and the report of significant Pleistocene fossils from similar alluvial deposits in the vicinity (McLeod 2016).

Quaternary alluvium sediments are evaluated as having a low potential (PFYC 2) for paleontological resources at the surface. This conclusion is based on the Holocene age of these sediments, which may shallowly overlie older paleontologically sensitive deposits of older Quaternary alluvium.

Construction Impacts

Tiers I and II

Construction during implementation of the project could involve clearing, grading, excavation, utility relocation, and other earthmoving activity. Depending on the previous level of disturbance,

construction activities have the potential to affect sensitive geologic units and geographic areas known to contain scientifically significant fossils; as a result, adverse impacts to nonrenewable paleontological resources could occur (State CEQA Guidelines, 14 CCR Sections 15064.5[3] and 15023; State CEQA Guidelines Appendix G, Section V, Part C).

Surface grading or shallow excavations in the uppermost few feet of the younger Quaternary alluvium in the proposed project area are unlikely to uncover significant fossil vertebrate remains. However, deeper excavations that extend down into older sedimentary deposits, as well as any excavations in the Pacoima Formation in the northern portion of the campus may well encounter significant vertebrate fossils (McLeod 2016). Therefore, grading and other earthmoving activities may potentially result in significant direct impacts to paleontological resources throughout the entirety of the project site. Implementation of **MM GEO-C3** below would reduce these impacts to a less-than-significant level.

Operational Impacts

Tiers I and II

Normal operation of the Olive View–UCLA Medical Center Campus under the proposed Master Plan would not affect paleontological resources.

Mitigation Measures

Prior to any excavation related to the construction of facilities or improvements proposed under the Master Plan, a qualified vertebrate paleontologist will be retained by the County or construction contractor to prepare a paleontological resource monitoring plan. This plan should include specific locations and construction activities requiring monitoring, procedures to follow for monitoring and fossil discovery, and a curation agreement with LACM.

MM-GEO-C3: Due to the moderate paleontological potential of the Pacoima Formation, monitoring will be conducted during all earthmoving activities that affect native sediments to reduce potential impacts to a less-than-significant level. Excavations will be monitored on a full-time basis by a qualified paleontological monitor under the supervision of a qualified paleontologist.

Additionally, when initial excavation exceeds depths of 5 feet into areas mapped as Quaternary alluvium, periodic paleontological spot checks should be conducted to determine if older, paleontologically sensitive sediments are present. If present, full-time monitoring will be implemented.

Monitoring may be reduced if some of the potentially fossiliferous units described herein are, upon exposure and examination by qualified paleontologic personnel, determined to have a low potential for containing fossil resources.

The paleontologic monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays and remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor will have the authority to temporarily divert grading away from exposed fossils to recover the fossil specimens professionally and efficiently and collect associated data. All efforts to avoid delays in project schedules will be made. To prevent construction delays, paleontological monitors will be equipped with the necessary tools for the rapid removal of fossils and retrieval of associated data, including handheld global positioning system receivers, digital cameras, and cell phones, as well as a tool

kit with specimen containers, matrix sampling bags, field labels, field tools (e.g., awls, hammers, chisels, shovels, etc.), and plaster kits. At each fossil locality, field data forms will be used to record pertinent geologic data, stratigraphic sections will be measured, and appropriate sediment samples will be collected and submitted for analysis.

Fossils collected, if any, will be transported to a paleontological laboratory for processing where they will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility such as LACM.

Following analysis, a Report of Findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the appropriate lead agency, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.

Level of Significance after Mitigation

Impacts on paleontological resources, if any are found, are expected to be reduced to a level of less than significant with implementation of **MM-GEO-C3**, as identified above.

3.6.5 Cumulative Impacts

3.6.5.1 Tiers I and II

In general, geologic/soils hazards (i.e., fault rupture, seismic shaking, liquefaction, expansive and corrosive soils) are site specific and the combined effects of individual projects would not result in cumulative increases in these geologic hazards on individual projects. However, cumulative impacts could occur in three areas: soil erosion, subsidence, and unstable soils. Cumulative soil erosion impacts could occur when multiple projects disturb and expose soils during construction, resulting in erosion and the cumulative loss of topsoil. Wind or water transport of eroded soils could also result in cumulative adverse impacts on the water quality of local water bodies (see Section 3.9, *Hydrology/Water Quality*, of this EIR for a discussion of water quality impacts). Cumulative subsidence impacts could occur when multiple projects result in the withdrawal of groundwater from the same water source or result in withdrawals, such as oil and natural gas, from local sources, thereby increasing the potential for subsidence to occur. Cumulative soil stability impacts could occur if two or more projects are in very close proximity; excavation or earthmoving activities could cumulatively increase the instability of the local geologic unit or project area slopes.

With regards to cumulative soil erosion impacts, cumulative development within the San Fernando Valley and greater Los Angeles region could result in the cumulative loss of topsoil. However, as noted in the discussion above, projects requiring grading of more than 1 acre would be required to apply for a National Pollutant Discharge Elimination System permit and implement an SWPPP that incorporates BMPs for erosion control. Development on the medical center campus under the Master Plan would be subject to permit requirements and the specific measures identified in **MM-GEO-2**, which would minimize soil erosion on the campus during construction. Therefore, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative soil erosion impact during construction (during operation, implementation of LID features on the campus would reduce runoff and soil erosion, and thus would not contribute to any adverse cumulative impacts).

The proposed project would not require groundwater, oil, or gas withdrawals from local sources, and therefore would not contribute to any potential subsidence impacts.

With regards to unstable soil impacts, none of the 14 related projects shown in Table 2-2 of Chapter 2, *Project Description,* are located adjacent or in very close proximity to the campus. The nearest related project is located 0.5 miles from the campus at 13530 Glenoaks Boulevard; therefore, none of the related projects would contribute to cumulative slope stability impacts in the immediate vicinity of the campus. However, multiple projects could be developed within the campus under the Master Plan over time, and some of those projects may be constructed simultaneously and in close proximity to each other. The measures identified in **MM-GEO-C1** would minimize landslide hazards; therefore, development on the campus is not expected to result in cumulatively considerable contribution to significant cumulative landslide hazard impacts on or in the immediate vicinity of the campus.

Paleontological Resources

The study area for cumulative impacts to paleontological resources generally consists of the San Fernando Valley and greater Los Angeles region. Cumulative impacts to paleontological resources concern the incremental loss of these nonrenewable resources to society as a whole.

Cumulative growth and development in the Los Angeles region could have impacts if significant paleontological resources are found during construction activities. Significant fossil resources do exist in the San Fernando Valley. The potential for an individual project to affect significant paleontological resources is unknown, but it is probable that cumulative growth and development could have impacts on significant fossil resources given the geographic extent of the cumulative impacts study area. Construction activities associated with the project have the potential to affect sensitive geologic units and geographic areas known to contain scientifically significant fossils. Project grading and earthmoving could disturb or destroy paleontological resources, a potentially significant project impact that could cumulatively contribute to the progressive loss of paleontological resources in the region. However, **GEO-C2** would reduce potential project-related impacts. This mitigation measure includes monitoring, treatment of any discovered paleontological resources to mitigate impacts, preparation of a final report, and curation of discovered specimens in an approved facility. Therefore, with mitigation, the proposed project's contribution to significant cumulative impacts to paleontological resources would be rendered less than cumulatively considerable.

3.7 Greenhouse Gas Emissions

3.7.1 Introduction

This section provides an overview of the regulatory framework applicable to greenhouse gas (GHG) emissions at the statewide, regional, and local scales and evaluates the potential environmental impacts associated with implementation of the Olive View–UCLA Medical Center Campus Master Plan (Master Plan or proposed project). GHG emissions refer to airborne pollutants that are generally understood to affect global climate conditions. These gaseous pollutants have the effect of trapping heat in the atmosphere and consequently altering weather patterns and climactic conditions over long timescales. The GHG emissions impact assessment addresses both construction and operational activities associated with the proposed project. Supporting data and calculations are included in Appendix C of this EIR.

3.7.2 Regulatory Setting

3.7.2.1 Federal

There is currently no overarching federal law specifically related to climate change or the reduction of GHG emissions. Under the Obama Administration, the United States Environmental Protection Agency (EPA) was developing regulations under the Clean Air Act (CAA) pursuant to EPA's authority under the act. There have also been settlement agreements between EPA, several states, and nongovernmental organizations to address GHG emissions from electric generating units and refineries, as well as EPA's issuance of two noteworthy findings on December 7, 2009, regarding greenhouse gases, under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—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 greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

EPA also adopted a Mandatory Reporting Rule (2015) and Clean Power Plan (2014), the latter of which contains EPA-issued regulations for controlling carbon dioxide (CO_2) emissions from new and existing coal-fired power plants. However, on February 9, 2016, the Supreme Court issued a stay of these regulations pending litigation. Former EPA Administrator Scott Pruitt also signed a measure to repeal the Clean Power Plan. The fate of the proposed regulations is uncertain pending the potential change in federal administrations and the outcome of federal court deliberations.

3.7.2.2 State

California has taken proactive steps, briefly described in this section, to address the issues associated with GHG emissions and climate change, much of which establishes a broad framework for the state's long-term GHG and energy reduction goals and climate change adaptation program. The former and current governors of California have also issued several Executive Orders (EOs) related to the state's evolving climate change policy. Summaries of key policies, EOs, regulations, and

legislation at the state level that are relevant to the project are provided below in chronological order.

Assembly Bill 1493

With the passage of Assembly Bill (AB) 1493 (referred to as Pavley I) in 2002, California launched an innovative and proactive approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the California Air Resources Board (CARB) to develop and implement regulations to reduce automobile and light-truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the model year 2009. Although litigation challenged these regulations and the EPA initially denied California's related request for a waiver, the waiver request was granted.

Executive Order S-3-05

On June 1, 2005, Governor Arnold Schwarzenegger signed California EO S-3-05. The goal of this EO was to reduce California's GHG emissions to (1) 2000 levels by 2010; (2) 1990 levels by 2020; and (3) 80 percent below the 1990 levels by 2050. EO S-3-05 also calls for the California Environmental Protection Agency to prepare biennial science reports on the potential impact of continued global warming on certain sectors of the California economy. As a result of the scientific analysis presented in these biennial reports, a comprehensive Climate Adaptation Strategy was released in December 2009 following extensive interagency coordination and stakeholder input. The latest of these reports, Climate Action Team Biennial Report, was published in December 2010.

Green Building Code and Title 24 Updates

The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code (24 California Code of Regulations [CCR]). Part 11 established voluntary standards that became mandatory under the 2010 edition of the code. These involved sustainable site development, energy efficiency (in excess of California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The current energy efficiency standards were adopted in 2016 and took effect on January 1, 2017. The standards are to be updated periodically, with the next update planned for 2019.

Assembly Bill 32

One goal of EO S-03-05 was further reinforced by Assembly Bill (AB) 32 (Chapter 488, Statutes of 2006), the Global Warming Solutions Act of 2006, which requires the state to reduce GHG emissions to 1990 levels by 2020. Since AB 32 was adopted, CARB, the California Energy Commission (CEC), the California Public Utilities commission (CPUC), and the Building Standards Commission have been developing regulations that will help meet the goals of AB 32. Under AB 32, CARB is required to prepare a scoping plan and update it every five years. The Scoping Plan was approved in 2008, the first update approved in 2014, and an additional update was approved in 2017 (see discussion of Senate Bill [SB] 32 below). The Scoping Plan identifies specific measures to reduce GHG emissions to 1990 levels by 2020, and requires CARB and other state agencies to develop and enforce regulations and other initiatives for reducing GHGs. Specifically, the AB 32 Scoping Plan articulates a key role for local governments, recommending they establish GHG reduction goals for both their municipal operations and the community that are consistent with those of the state.

Low Carbon Fuel Standard

With EO S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard (LCFS) for California in 2007. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020. In September 2018, the LCFS regulation was amended to increase the statewide goal to a 20 percent reduction in carbon intensity of California's transportation fuels by at least by 2030.

Senate Bill 375

SB 375, signed into law by Governor Schwarzenegger on September 30, 2008, became effective January 1, 2009. This law requires that the state's 18 Metropolitan Planning Organizations develop the sustainable communities strategies (SCS) as part of their RTPs, focusing on integrated land use and transportation planning, and that the SCS demonstrates the state's ability to attain the GHG emissions reduction targets that the CARB established for the region by 2020 and 2035. This goal would be accomplished through either the financially constrained SCS as part of the RTP or an unconstrained alternative planning strategy. If regions develop integrated land use, housing, and transportation plans that meet the SB 375 targets, new projects in these regions can be relieved of certain California Environmental Quality Act (CEQA) review requirements.

Senate Bills 1078, 107, and 2

California's Renewables Portfolio Standard (RPS), outlined and updated in SBs 1078 (2002), 107 (2006), and 2 (2011), obligates investor-owned utilities, energy service providers, and Community Choice Aggregators to procure additional retail sales per year from eligible renewable sources with the long-range target of procuring 33 percent of retail sales from renewable resources by 2020. The CPUC and CEC are jointly responsible for implementing the program.

Executive Order B-30-15

Governor Jerry Brown signed EO B-30-15 on April 29, 2015. EO B-30-15 established a medium-term goal for 2030 of reducing GHG emissions by 40 percent below 1990 levels and requires CARB to update its current AB 32 Scoping Plan to identify measures to meet the 2030 target. EO B-30-15 supports EO S-3-05, but is only binding for state agencies.

Senate Bill 32 and Assembly Bill 197

SB 32 (2016) requires CARB to ensure that statewide GHG emissions are reduced to at least 40 percent below the 1990 level by 2030, as is consistent with the target set forth in EO B-30-15. The companion bill to SB 32, AB 197 creates requirements to form a Joint Legislative Committee on Climate Change Policies, requires CARB to prioritize direct emission reductions and consider social costs when adopting regulations to reduce GHG emissions beyond the 2020 statewide limit, requires CARB to prepare reports on sources of GHGs and other pollutants, establishes 6-year terms for voting members of CARB, and adds two legislators as non-voting members. CARB adopted the *2017 Climate Change Scoping Plan* in November 2017 to meet the GHG reduction requirement set forth in SB 32. The 2017 Scoping Plan proposes continuing the major programs of the previous Scoping Plan, including cap-and-trade regulations, low carbon fuel standards, more efficient cars, trucks, and freight movement, RPS, and reducing methane emissions from agricultural and other wastes.

Senate Bill 32 Scoping Plan

CARB approved the 2017 Climate Change Scoping Plan Update in December 2017, which builds on the programs set in place as part of the previous Scoping Plan that was drafted to meet the 2020 reduction targets per AB 32. The 2017 Scoping Plan Update proposes meeting the 2030 goal by accelerating the focus on zero and near-zero technologies for freight movement, continued investment in renewables, greater use of low-carbon fuels, including electricity and hydrogen, stronger efforts to reduce emissions of short-lived climate pollutants (i.e., methane [CH_4], black carbon [BC], and fluorinated gases), further efforts to create walkable communities with expanded mass transit, and other alternatives to traveling by car, continuing the cap-and-trade program, and ensuring that natural lands become carbon sinks to provide additional emissions reductions and flexibility in meeting the target. The Scoping Plan Update also recommends that local governments aim to achieve community-wide efficiency of 6 metric tons of carbon dioxide-equivalent ($MTCO_2e$) per capita by 2030 and 2 $MTCO_2e$ per capita by 2050 to be used in local climate action planning. These efficiency targets would replace the 15 percent from 2008 levels by 2020 approach recommended in the initial Scoping Plan, which would allow for local governments to grow in a sustainable manner (CARB 2016).

Senate Bill 350 and Senate Bill 100

SB 350 (The Clean Energy and Pollution Reduction Act) was signed into law on October 2015. SB 350 requires CARB (in coordination with the California Public Utilities Commission [CPUC] and the California Energy Commission [CEC]) to coordinate and implement the following overarching goals:

1. Increase the RPS to 50 percent of retail sales by 2030, and ensure grid reliability.
2. Establish annual targets for statewide energy efficiency savings, and demand reductions that will achieve a cumulative doubling of statewide energy efficiency savings for electricity and natural gas end uses by 2030.
3. Reduce GHG emissions in the electricity sector through the implementation of the above-referenced measures and other actions as modeled in their integrated resource plans (IRPs) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs. The IRPs will detail how each large utility will meet their customers resource needs, minimize price increases, reduce emissions, and ramp up the deployment of clean energy resources.

In September 2018, SB 100 was signed into law, which implements the following goals:

1. Increase the RPS to 50 percent of retail sales by 2026 (moved up by four years from SB 350).
2. Increase the RPS to 60 percent of retail sales by 2030 (new 2030 target).
3. Increase the RPS to 100 percent of retail sales by 2045 (carbon-free goal for 2045).

SB 100 is a legislative action that was signed into law after the 2017 Scoping Plan was adopted. The Scoping Plan modeling is based on the SB 350 target of 50 percent renewables by 2030. However, the new SB 100 target of 60 percent renewables by 2030 and 100 percent renewables by 2045 supersedes the goals of SB 350 and will be included in future Scoping Plan updates.

Mobile Source Strategy

CARB developed the Mobile Source Strategy to provide an action plan that establishes an integrated planning perspective and common vision for transforming the mobile sector. The Mobile Source Strategy supports multiple planning efforts, including the State Implementation Plans, the Scoping Plan, the Short-Lived Climate Pollutant Reduction Strategy, and the California Sustainable Freight Action Plan. The Mobile Source Strategy outlines CARB's approach to reducing emissions from mobile sources, including actions to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth.

Short-Lived Climate Pollutant Strategy

SB 1383, adopted in 2013, requires CARB to develop and implement a Short-Lived Climate Pollutant (SLCP) Strategy with the following 2030 goals: 40 percent reduction in methane, 40 percent reduction in hydrofluorocarbon (HFC) gases, and 50 percent reduction in anthropogenic BC. Per its directive, CARB adopted the SLCP Strategy, establishing a path to decrease SLCPs from various sectors of the economy. Strategies span from wastewater and landfill practices and methane recovery to reducing natural gas leaks and consumption. The SLCP strategy also identifies measures that can reduce HFC emissions through incentive programs and limitations on the use of high-GWP () refrigerants in new refrigeration and air-conditioning equipment.

Cap-and-Trade

In October 2011, CARB adopted a cap-and-trade program, a market-based system with an overall emissions limit for affected emission sources, including in-state electricity generators, hydrogen production, and petroleum refining for large-scale manufacturers, fuel suppliers, and distributors. The original cap-and-trade program set a compliance schedule through 2020. AB 398 extends the program through 2030 and requires CARB to make refinements, including establishing a price ceiling. Revenue generated from the cap-and-trade program are used to fund various programs. AB 398 established post-2020 funding priorities to include (1) air toxics and criteria pollutants, (2) low and zero carbon transportation, (3) sustainable agricultural practices, (4) healthy forests and urban greening, (5) short-lived climate pollutants, (6) climate adaptation and resiliency, and (7) climate and clean energy research.

Executive Order B-55-18

EO B-55-18 acknowledges the environmental, community, and public health risks posed by future climate change. It further recognizes the climate stabilization goal adopted by 194 states and the European Union under the Paris Agreement. Although the United States is no longer party to the agreement, California is committed to meeting Paris Agreement goals and exceeding them wherever possible. Based on the worldwide scientific agreement that carbon neutrality must be achieved by the mid-twenty-first century, EO B-55-18 establishes a new state goal of achieving carbon neutrality as soon as possible, and no later than 2045, and maintaining net negative emissions thereafter. The EO charges CARB with developing a framework for implementing and tracking progress toward these goals. This EO extends EO S-3-05, but is only binding on state agencies. However, given this directive, it is likely that the carbon neutral goal by 2045 will make its way into future updates to the Scoping Plan, which must be updated every 5 years.

3.7.2.3 Regional

South Coast Air Quality Management District

As discussed in Section 3.2, *Air Quality*, of this EIR, the South Coast Air Quality Management District (SCAQMD) has primary responsibility for the development and implementation of rules and regulations for meeting national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS), as well as permitting new or modified sources, developing air quality management plans, and adopting and enforcing air pollution regulations within the South Coast Air Basin, in which the proposed project is located. CARB's scoping plans do not delineate an explicit role for local air districts with respect to implementing the reduction goals of SB 32 and AB 32, but CARB does state that they will work actively with air districts in coordinating emissions reporting, encouraging and coordinating GHG reductions and providing technical assistance in quantifying reductions. The ability of air districts to control emissions (i.e., criteria pollutants and GHGs) is provided primarily through permitting, but also through their role as a CEQA lead or commenting agency, the establishment of CEQA thresholds, and the development of analytical requirements for CEQA documents.

On December 5, 2008, the California Air Resources Board considered draft GHG guidance and adopted a staff proposal for an interim GHG significance threshold of 10,000 $MTCO_2e$ per year for industrial permitting projects where SCAQMD is the lead agency. The board letter, resolution, interim GHG significance threshold, draft guidance document, and attachments can be found under Item 31, California Air Resources Board Monthly Report of the December 5, 2008, Governing Board Meeting Agenda[1] and are attached as Exhibit B in Appendix C of this EIR. In its draft guidance document, SCAQMD included the evidence and rationale for developing thresholds, specifically citing CEQA Guidelines Section 15064.7(a): Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects") and Subsection (b): Thresholds of significance to be adopted for general use as part of the lead agency's environmental review process must be adopted by ordinance, resolution, rule or regulation, and developed through a public review process and be supported by substantial evidence. SCAQMD developed thresholds for both stationary sources as well as for land use development projects. SCAQMD's recommended GHG significance threshold underwent a public review process as part of stakeholder working group meetings that were open to the public. The draft guidance document provides the supporting analysis and methodology for developing the GHG significance thresholds for stationary sources and land use development projects. After completion of the public process, the proposed interim thresholds for land use development projects were brought to SCAQMD's Governing Board, but were not formally adopted, while the threshold involving industrial permitting projects where SCAQMD is lead agency was adopted.

For industrial process, the SCAQMD has formally adopted a 10,000 $MTCO_2e$ threshold for industrial (i.e., permitted) facilities where SCAQMD is the lead agency. This industrial source threshold is not appropriate for use on commercial or civic projects, such as the proposed project, since it is not associated with industrial processes.

SCAQMD noted that the proposed interim GHG significance thresholds for evaluation of land use development projects was only a recommendation for lead agencies and not a mandatory requirement. The GHG significance threshold may be used at the discretion of the local lead agency. The draft GHG guidance identified a tiered approach for determining the significance of GHG

[1] Board Agenda Item 31 data available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf

emissions, one of which included the use of numerical screening thresholds. With respect to numerical GHG significance thresholds, the SCAQMD proposed two different approaches to be taken by lead agencies when analyzing GHG emissions:

- **Option #1** includes using separate numerical thresholds for residential projects (3,500 $MTCO_2e$/year), commercial projects (1,400 MTCO2e/year), and mixed-use projects (3,000 MTCO2e/year).
- **Option #2** includes use of a single numerical threshold for all nonindustrial projects of 3,000 $MTCO_2e$/year. SCAQMD's most recent recommendation per its September 2010 meeting minutes is to use option #2.

SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

SCAG is the metropolitan planning organization (MPO) for the six-county region that includes Los Angeles, Orange, Riverside, Ventura, San Bernardino, and Imperial counties. The 2016–2040 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) includes commitments to reduce emissions from transportation sources to comply with SB 375. GHG emissions-reduction goals and policies included in the 2016–2040 RTP/SCS consist of adding density in proximity to transit stations, utilizing mixed-use development, and encouraging active transportation (i.e., non-motorized transportation, such as bicycling).

SCAG promotes the following policies and actions related to active transportation to help the region confront congestion and mobility issues and consequently reduce emissions:

- Implement transportation demand management (TDM) strategies, such as promoting bicycling and public transportation through the installation and use of folding bikes on bus programs, triple racks on buses, and dedicated racks on light and heavy rail vehicles;
- Encourage and support local jurisdictions in developing active transportation plans for their jurisdiction if they do not already have one;
- Expand the Compass Blueprint Project program to support member cities in the development of bicycle plans;
- Expand the Toolbox Tuesdays program to encourage local jurisdictions to direct enforcement agencies to focus on bicycling and walking safety to reduce multimodal conflicts;
- Support local advocacy groups and bicycle-related businesses to provide bicycle-safety curricula to the general public;
- Encourage children, including those with disabilities, to walk and bicycle to school;
- Encourage local jurisdictions to adopt and implement the proposed Regional Bikeways Network Active Transportation Policy; and
- Support local jurisdictions in connecting all cities within the SCAG region via bicycle facilities.

SB 375 requires CARB to develop regional CO_2 emission reduction targets, compared to 2005 emissions, for use on cars and light trucks only for 2020 and 2035 for each MPO. SB 375 also requires that each MPO prepare an SCS as part of the RTP to reduce CO_2 by better aligning transportation, land use, and housing. For SCAG, the SCS targets through September 30, 2018, require SCAG to reduce per capita emissions 8 percent below 2005 levels by 2020 and 13 percent below 2005 levels by 2035 (SCAG 2016). The 2016–2040 RTP/SCS states that the region will meet

or exceed the SB 375 per capita targets, lowering regional per capita GHG emissions below 2005 levels by 8 percent by 2020 and 18 percent by 2035. The 2016–2040 RTP/SCS also states that regional 2040 per capita emissions would be reduced by 22 percent, although CARB has not established a 2040 per capita emissions target. After September 30, 2018, SCAG's SCS targets were increased, requiring SCAG to reduce per capita GHG emissions from passenger vehicles by approximately 8 percent by 2020 and 19 percent by 2035 over base year 2005 (CARB 2019).

3.7.2.4 Local

Los Angeles County Community Climate Action Plan and Municipal Climate Action Plan

In October 2015, the County of Los Angeles adopted the Los Angeles County Community Climate Action Plan (CCAP), which describes the County's plan for achieving the goal of reducing GHG emissions from community activities in the unincorporated areas of Los Angeles County by at least 11 percent below 2010 levels by 2020. The CCAP includes specific strategy areas for each of the major emissions sectors and provides details on the 2010 and projected 2020 emissions in the unincorporated areas. The CCAP is a component of Los Angeles County's General Plan.

Additionally, the County is currently developing a Municipal Climate Action Plan (MCAP), which will include various programs and policies for reducing municipal GHG emissions to 15 percent below current levels. The MCAP focuses on GHG emissions that result from the County's municipal operations and does not include GHG emissions generated by the community; these emissions are included in the CCAP. The MCAP includes municipal emissions from the following sectors: building energy, cogeneration facilities, vehicle fleets, owned landfills, refrigerants, wastewater treatment plants, street and outdoor lighting, water pumps, water conveyance, waste generation, employee commutes, and miscellaneous direct emissions.

The MCAP and CCAP are distinct plans with separate approval processes and timelines. However, there may be some minor overlap in the emissions that are accounted for in both plans, particularly in the wastewater, water, lighting, and employee commute emissions sectors where County facilities and actions occur in the unincorporated areas. The emissions in these sectors may be counted as both municipal and community emissions. For example, employee commute emissions are counted as municipal emissions and included in the MCAP, but may also occur in the unincorporated areas and would therefore be included in vehicle miles traveled data for the unincorporated areas. As such, there may also be some overlap in the associated actions to reduce these emissions. Because many of the County's operations take place within the jurisdiction of cities and pertain only to municipal operations, the County's municipal emissions have little overlap with community emissions in the unincorporated areas. To the extent that any overlap of programs or policies may occur, the County anticipates working with all appropriate departments and stakeholders to ensure that these programs and policies are developed as efficiently as possible, while still meeting the goals of both plans.

3.7.3 Environmental Setting

This section provides a discussion of the existing conditions related to GHG and climate change.

3.7.3.1 Global Climate Change

The process known as the *greenhouse effect* keeps the atmosphere near Earth's surface viable for the successful habitation of humans and other life forms. The greenhouse effect is created by sunlight that passes through the atmosphere. Some of the sunlight striking Earth is absorbed and converted to heat, which warms the surface. The surface emits a portion of this heat as infrared radiation, some of which is re-emitted toward the surface by GHGs. Human activities that generate GHGs increase the amount of infrared radiation absorbed by the atmosphere, thus enhancing the greenhouse effect and amplifying the warming of Earth to temperatures that may have a lasting, deleterious effect.

Since the Industrial Revolution in the early nineteenth century, increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere (Intergovernmental Panel on Climate Change [IPCC] 2007). Atmospheric concentrations of GHGs in excess of natural levels result in increasing global surface temperatures, a phenomenon commonly referred to as *global warming.* Higher global surface temperatures, in turn, result in changes to Earth's climate system, including increased ocean temperature and acidity, reduced sea ice, variable precipitation, and increased frequency and intensity of extreme weather events (IPCC 2018). Large-scale changes to Earth's system are collectively referred to as *climate change*.

The IPCC was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change, its potential impacts, and options for adaptation and mitigation. The IPCC estimates that human-induced warming reached approximately 1 degree Celsius (°C) above pre-industrial levels in 2017, increasing at 0.2°C per decade. Under the current nationally determined contributions of mitigation from each country until 2030, global warming is expected to rise to 3°C by 2100, with warming to continue afterwards (IPCC 2018). Large increases in global temperatures could have substantial adverse effects on the natural and human environments worldwide and in California.

3.7.3.2 Potential Climate Change Effects

Climate change is a complex process that has the potential to alter local climatic patterns and meteorology. Although modeling indicates that climate change will result in sea level rise globally and regionally, as well as changes in climate and rainfall, among other effects, there remains uncertainty about characterizing precise local climate characteristics and predicting precisely how various ecological and social systems will react to any changes in the existing climate at the local level. Regardless of this uncertainty, it is widely understood that substantial climate change is expected to occur in the future, although the precise extent will take further research to define. Specifically, significant impacts from global climate change worldwide and in California include:

- Declining sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in atmospheric water vapor, due to the atmosphere's ability to hold more water vapor at higher temperatures (California Natural Resources Agency 2018);
- Rising average global sea levels, primarily due to thermal expansion and the melting of glaciers, ice caps, and the Greenland and Antarctic ice sheets (IPCC 2018);
- Changing weather patterns, including fluctuations to precipitation, ocean salinity, and wind patterns, as well as more energetic aspects of extreme weather, including droughts, heavy

precipitation, heat waves, extreme cold, and the intensity of tropical cyclones (Intergovernmental Panel on Climate Change 2013);

- Declining snowpack levels in the Sierra Nevada range, which account for approximately half of the surface water storage in California, could be reduced by 70 percent to as much as 90 percent over the next 100 years (California Natural Resources Agency 2018);
- Increasing the number of days conducive to ozone formation (e.g., clear days with intense sun light) by 25 percent to 85 percent (depending on the future temperature scenario) by the end of the twenty-first century in high ozone areas, including Southern California (California Natural Resources Agency 2018);
- Increasing potential for the erosion of California's coastlines and intrusion of seawater into the Sacramento Delta and associated levee systems due to the rise in sea level (California Natural Resources Agency 2018); and
- Exacerbating the severity of drought conditions in California such that durations and intensities are amplified, ultimately increasing the risk of wildfires and consequential damage incurred (California Natural Resources Agency 2018).
- Lowering agricultural crop yields due to extreme heat waves and heat stress, increasing water needs of crops and livestock (particularly during dry and warm years), and new and changing pest and disease threats (California Natural Resources Agency 2018).

The impacts of climate change, such as increased heat-related events, droughts, and wildfires, pose direct and indirect risks to public health, as people will experience earlier death and worsening illnesses. Indirect impacts on public health include increased vector-borne diseases, stress and mental trauma due to extreme events and disasters, economic disruptions, and residential displacement (California Natural Resources Agency 2018).

3.7.3.3 Greenhouse Gases

The principle anthropogenic (human-made) GHGs listed by the IPCC that contribute to global warming are CO_2, CH_4, nitrous oxide (N_2O), and fluorinated compounds, including sulfur hexafluoride (SF_6), HFCs, and perfluorocarbons (PFCs). Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic sources. California law and the State CEQA Guidelines contain a similar definition of GHGs (Health and Safety Code Section 38505(g); 14 CCR Section 15364.5).

The primary GHGs of concern associated with the proposed project are CO_2, CH_4, and N_2O. Principal characteristics of these pollutants are discussed below.

- **Carbon dioxide** enters the atmosphere through fossil fuels (i.e., oil, natural gas, and coal) combustion, solid waste decomposition, plant and animal respiration, and chemical reactions (e.g., manufacture of cement). CO_2 is also removed from the atmosphere (or sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal solid waste landfills.
- **Nitrous oxide** is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

Methods have been set forth to describe emissions of GHGs in terms of a single gas to simplify reporting and analysis. The most commonly accepted method of comparing GHG emissions is the GWP methodology defined in IPCC reference documents. IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide equivalent (CO_2e), which compares the gas in question to that of the same mass of CO_2 (by definition CO_2 has a global warming potential of 1). The GWP values used in this report are based on the IPCC Fourth Assessment Report (AR4) and United Nations Framework Convention on Climate Change reporting guidelines (IPCC 2007). The AR4 GWP values are consistent with those used in CARB's most recent GHG inventory and the 2017 Scoping Plan Update.

Table 3.7-1 lists the global warming potential of CO_2, CH_4, and N_2O and their lifetimes in the atmosphere.

Table 3.7-1. Lifetimes and Global Warming Potentials of Key Greenhouse Gases

Greenhouse Gas	Global Warming Potential (100 years)	Lifetime (years)[1]
CO_2	1	50–200
CH_4	25	9–15
N_2O	298	121
Notes: [1] Defined as the half-life of the gas. Source: California Air Resources Board 2018a.		

3.7.3.4 Statewide Greenhouse Gas Emissions Trends

A GHG inventory is a quantification of all GHG emissions and sinks[2] within a selected physical and/or economic boundary. GHG inventories can be performed on a large scale (e.g., for global and national entities) or on a small scale (e.g., for a building or person). Although many processes are difficult to evaluate, several agencies have developed tools to quantify emissions from certain sources.

CARB has prepared a statewide emissions inventory covering 2000 to 2016, which demonstrates that GHG emissions have decreased by approximately 11 percent over that period (CARB 2018b). The largest reductions in GHG emissions have come from the electricity sector, which continues to decrease as a result of the state's climate policies that has led to a growth in wind generation and solar power. Emissions in 2016 from the transportation sector, which represents California's largest source of GHG emissions and contributed 39 percent of total annual emissions, increased by two percent from 2015. Table 3.7-2 shows statewide GHG emission estimates from 2006 to 2016 in California. Note that the 2020 target (1990 levels) is 426.6 million metric tons of CO_2e ($MMTCO_2e$) while the 2030 target (40 percent below 1990 levels) is currently set at 260 $MMTCO_2e$.

[2] A GHG sink is a process, activity, or mechanism that removes a GHG from the atmosphere.

Table 3.7-2. California Greenhouse Gas Emissions Inventory 2006–2016

Sector	Annual CO_2e Emissions (million metric tons)										
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Transportation	189	189	178	170	165	162	161	161	162	166	169
Industrial	93	90	91	88	92	91	91	94	94	92	90
Electric Power	105	114	120	101	90	88	95	90	88	84	69
Commercial/Residential	43	43	44	44	45	46	43	44	37	38	39
Agriculture	35	36	36	34	34	35	36	35	36	34	34
High Global Warming Potential	10	11	12	12	14	15	16	17	18	19	20
Recycling and Waste	8	8	8	8	8	8	8	9	9	9	9
Emissions Total[1]	**483**	**490**	**487**	**457**	**448**	**444**	**450**	**448**	**444**	**441**	**429**

Notes:

[1] Totals may not add exactly due to rounding.

Source: CARB 2018b.

3.7.4 Environmental Impact Analysis

This section describes the impact analysis related to GHG emissions for the two tiers of development that could occur under the proposed project. It describes the methods used to determine the impacts of Tier I (i.e., near-term projects) and Tier II (i.e., projects occurring beyond 2035) developments and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate significant impacts accompany each impact discussion, when necessary.

3.7.4.1 Methods

As discussed in Chapter 2, *Project Description*, of this EIR, the environmental impacts of Tier I development are analyzed at a project level, while the impacts of Tier II development, which are more speculative due to the fact that they would occur much further in the future and the likelihood that the County's program needs will evolve and change over time, are analyzed qualitatively at a programmatic level. As a consequence, it is anticipated that subsequent environmental documents will need to be prepared, in compliance with CEQA regulations, for individual Tier II projects when they are proposed and better defined.

Implementation of the proposed project would generate GHG emissions during construction activities and associated operations. Tier I developments would be implemented over a 17-year period (or through the year 2035), resulting in over 600,000 square feet of new development and improvements to the existing hospital. Tier II developments would occur beyond 2035 and would include up to 992,000 square feet of new development, along with renovation and reuse of the existing inpatient hospital. Overall, if build-out of the campus occurs as envisioned under the Master Plan, the net increase in building square footage would be approximately 1.3 million square feet, which would occur throughout the campus.

Construction of the proposed project would generate emissions of CO_2, CH_4, and N_2O associated with mobile and stationary construction equipment exhaust and employee and haul truck vehicle exhaust. GHG emissions associated with the project's Tier I developments were estimated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2, and the methods applied to the analysis of criteria pollutant emissions for the proposed project that are summarized in Section 3.2, *Air Quality*, of this EIR. In accordance with SCAQMD guidance, the project's construction-related GHG emissions were amortized over a 30-year period and added to operational emissions.

Operation of the proposed project would generate long-term emissions of CO_2, CH_4, and N_2O associated with area sources, energy consumption, motor vehicles, waste generation, and water consumption. Area sources include landscaping activities and consumer products (e.g., personal care products). Energy sources include electricity consumption and natural gas combustion for lighting and heating requirements. Mobile sources include vehicle trips generated by patients and visitors to the medical center and campus employees driving to and from work. The waste category refers to decomposition of waste generated from the new campus developments. The water category includes electricity consumption associated with the supply, treatment, and distribution of water for the new campus developments. In addition, the existing hospital facilities are regulated under the cap-and-trade program. For stationary sources, GHG emissions from calendar year 2016 cap-and-trade reporting was first scaled up by 24 percent to capture the increase in development in the Tier I boundary (823,900 square feet to 1,170,491 square feet with completion of Tier 1), as well as the reduction in energy-use intensity associated with new construction. According to the Master Plan, energy use intensity of new buildings planned would fall from the current 450 kilo British thermal unit [kBtu]/square feet per year (sf/yr) to approximately 250 kBtu/sf-yr. Electricity emissions are based on the Los Angeles Department Water and Power (LADWP)'s 2016 carbon intensity as identified in its 2017 Power Strategic Long-Term Resource Plan. Emissions from all operational sources are calculated annually and added to amortized construction emissions.

3.7.4.2 Thresholds of Significance

For the purposes of the analysis in this EIR, and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant environmental impact if it would:

GHG-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

GHG-2 Conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the purpose of reducing emissions of GHGs.

With respect to GHG emissions, CEQA Guidelines Section 15064.4 provides guidance to lead agencies for determining the significance of impacts from GHG emissions. Section 15064.4(a) provides that a lead agency will make a good-faith effort based, to the extent possible, on scientific and factual data to describe, calculate, or estimate the amount of GHG emissions resulting from a project. Section 15064.4(a) further provides that a lead agency will have the discretion to determine, within the context of a particular project, whether to: (1) quantify GHG emissions resulting from a project, and/or (2) rely on qualitative analysis or performance-based standards. Pursuant to the CEQA Guidelines in Section 15064.4(a), the analysis presented herein quantifies GHG emissions resulting from the project, provides a good-faith effort to describe, calculate, and estimate those emissions, and compares them with the chosen threshold level.

CEQA Guidelines Section 15064.4(b) provides that when assessing the significance of impacts from GHG emissions, a lead agency should focus the analysis on the reasonably foreseeable incremental

contribution of the project's emissions to the effects of climate change and consider a timeframe that is appropriate for the project. The lead agency's analysis should reasonably reflect evolving scientific knowledge and state regulatory schemes and consider (1) the extent to which the project may increase or reduce GHG emissions compared with existing conditions, (2) whether the project's GHG emissions exceed a threshold of significance that the lead agency determines applies to the project, and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The analysis of the potential impacts from the project's GHG emissions follows this approach.

CEQA Guidelines do not provide numeric or qualitative thresholds of significance for evaluating GHG emissions. Instead, they leave the determination of threshold significance up to the lead agency and authorize it to consider thresholds of significance previously adopted or recommended by other public agencies or experts, provided that the lead agency's decision is supported by substantial evidence (CEQA Guidelines Sections 15064.7[b] and 15064.7[c]). Additionally, any public agency may also use an environmental standard as a threshold of significance, as it would promote consistency in significance determination and integrate environmental review with other environmental program planning and regulations (CEQA Guidelines Section 15064.7[d]).

As discussed under Section 3.7.2, *Regulatory Setting*, of this EIR, AB 32 establishes the requirement for reducing statewide GHGs to 1990 emissions levels by 2020. A number of air quality management agencies throughout the state have drafted or adopted various threshold approaches and guidelines for analyzing 2020 operational GHG emissions in CEQA documents. The different thresholds include (1) compliance with a qualified GHG reduction strategy, (2) performance-based reductions, (3) numeric "bright-line" thresholds, (4) compliance with regulatory Golden Door programs[3], and (5) efficiency-based thresholds. The California Supreme Court's 2010 Newhall Ranch decision (*Center for Biological Diversity v. California Department of Fish and Wildlife*) confirmed that, when an agency chooses to rely completely on a single quantitative method to justify a no-significance finding, "CEQA demands the agency research and document the quantitative parameters essential to that method" (Justia 2016). The California Supreme Court's 2018 Golden Door case (*Golden Door Properties v. Co. of San Diego*) reinforced the message from the Newhall Ranch decision that analyses need to provide substantial evidence to support significance thresholds selected for use in the CEQA analysis (Justia 2018). Furthermore, the Appeal Court ruling in *City of Long Beach v. City of Los Angeles* (Justia 2018) held that a qualitative analysis of consistency with state GHG reductions plans is adequate and projects that generate a significant amount of GHG emissions may still be consistent with state and local GHG reduction plans.

Tier I developments would be implemented over a 17-year period through 2035; Tier II developments would occur beyond 2035. There are currently no adopted quantitative thresholds relevant to the project. The County of Los Angeles has neither drafted nor adopted threshold approaches and guidelines for analyzing GHG emissions and climate change in CEQA documents. Although the County adopted its CCAP in 2015, the plan was prepared to comply with the 2020 GHG reduction goal established by AB 32, and thus would not be applicable to use in evaluating GHG emissions of the proposed project beyond the 2020 timeframe. Therefore, the GHG emissions analysis for the proposed project herein cannot rely on a qualitative tiering analysis with the County's CCAP. Additionally, although SCAQMD has adopted a 10,000-metric-ton (MT) per year significance threshold level for industrial projects, this threshold would not be applicable to the proposed project because the project is a mixture of hospital and medical office uses that do not fit into the industrial project

[333] See https://ceqaportal.org/ceqacase.cfm?cq_id=1899 for more information.

category; SCAQMD has not adopted a threshold level for hospital and medical office uses. SCAQMD has drafted separate numerical thresholds for residential projects (3,500 $MTCO_2e$/year), commercial projects (1,400 $MTCO_2e$/year), and mixed-use and all non-industrial projects (3,000 $MTCO_2e$/year). The proposed project is not a residential, commercial, or mixed-use project. Consequently, these draft numerical thresholds from SCAQMD are inapplicable to the proposed project.

The Courts have ruled that although there are various potential thresholds and methodologies for evaluating project-level GHG emissions consistent with CEQA, use of statewide emission reduction goals is a permissible criterion of significance, so long as substantial evidence and reasoned explanation is provided to close the analytical gap between the level of effort required at one scale (state level) to the level of effort required at another scale (e.g., proposed plan level). The plan to achieve these statewide emission reduction goals is provided by the Scoping Plan (and future updates); exhibiting consistency with the Scoping Plan will demonstrate that the County is doing its fair share toward achieving statewide reduction targets.

As noted, recent case law has identified the need to analyze both near-term and post-2020 emissions, as applicable, with the court stating that an "EIR taking a goal-consistency approach to CEQA significance may in the near future need to consider the project's effects on meeting longer-term emissions reduction targets." Moreover, analyses must use the best scientific information available and to determine whether planning decisions are consistent with state goals. All current CEQA GHG numerical threshold concepts recommended by expert agencies are based on AB 32's requirement to reduce statewide GHG emissions to 1990 levels by 2020. However, SB 32 establishes a statewide GHG reduction goal of 40 percent below 1990 levels by 2030. State and local air district guidance on addressing project-level GHG impacts in relation to the 2030 target outlined under SB 32 is forthcoming. Although not legally binding on local land use agencies, EO S-03-05 has set forth a longer-term reduction target to reduce GHG emissions to 80 percent below 1990 levels by 2050 (see Section 3.7.2, *Regulatory Setting*, of this EIR). Of the threshold options discussed above, the approach used in this analysis is compliance with regulatory programs, which is appropriate in addressing the proposed project's post-2020 developments on the campus. Under this threshold approach, the proposed project's GHG emissions are evaluated for each major emission sector (e.g., energy, water, waste, mobile, and stationary) to determine whether the project's emissions would conflict with applicable sector-specific reduction targets and strategies.

Note that GHGs and climate change are exclusively cumulative impacts: there are no non-cumulative GHG emissions impacts from a climate change perspective (CAPCOA 2008). Therefore, in accordance with the scientific consensus regarding the cumulative nature of GHGs, the analysis herein analyzes the cumulative contribution of project-related GHG emissions.

3.7.4.3 Impacts and Mitigation Measures

Impact GHG-1: Would the Proposed Project Generate GHG Emissions, Either Directly or Indirectly, that May Have a Significant Impact on the Environment?

Construction Impacts

Tier I

Construction of the proposed project would generate GHG emissions from the use of heavy-duty construction equipment, construction worker vehicle trips, material deliveries, and trips by heavy-duty haul trucks. As mentioned above in Section 3.7.4.2, *Thresholds of Significance*, of this EIR, GHG

emissions are measured exclusively as cumulative impacts; therefore, the proposed project's construction emissions are considered part of total GHG emissions for the project lifecycle, which also includes GHG emissions during operations. In accordance with SCAQMD guidance, the project's construction emissions are amortized over a 30-year period, and the resulting annual emissions are combined with the project's annual operational GHG emissions.

As presented in Table 3.7-3, below, construction of the Tier I development projects under the proposed Master Plan is estimated to generate a total of 1,664 $MTCO_2e$ over the construction period. When amortized over a 30-year period, the construction GHG emissions from the Tier I developments would be approximately 55 $MTCO_2e$ per year. Because construction emission sources would cease once construction is complete, they are considered short term. It should be noted that total and annual construction GHG emissions represent a conservative assessment because GHG emissions would decrease in future years as the construction industry shifts toward implementation of cleaner fuels (i.e., electrified equipment) and more efficient technologies. As such, the annual construction GHG emissions associated with the proposed project would decrease with time and are likely to be lower than assumed herein.

Nonetheless, in an effort to reduce the proposed project's construction GHG emissions to the maximum extent feasible, mitigation measure **MM-GHG-C1**, discussed under Tier II, below, will be implemented during all project construction activities at the campus.

Table 3.7-3. Tier I Construction GHG Emissions

Construction Source	GHG Emissions ($MTCO_2e$)
Restorative Care Village	282
Ambulatory Care Center, Parking Structure, Administration, Community Center, Materials Management/Supplies Services Building, and Central Plant East	1,382
Total Emissions	**1,664**
Annual Emissions (Amortized over 30 years)	**55**
Notes: Emissions estimates using CalEEMod version 2016.3.2 (see Appendix C of this EIR).	

Tier II

Tier II would involve the development of a new hospital, research and development facilities, retail, and utility plant uses predominantly on the western portion of the campus, as well as the demolition of some existing uses. Because Tier II construction schedules and activities are unknown and because Tier II development would likely occur far in the future (i.e., after 2035), GHG emissions associated with construction activities have not been quantified. Nonetheless, as discussed above for Tier I, the implementation of the Tier II would result in the generation of GHG emissions from heavy-duty construction equipment, construction worker vehicle trips, material deliveries, trips by heavy-duty haul trucks, earthwork activities, and other construction activities. Although the proposed new development projects under Tier II would result in more building square footage than those under Tier I and may result in greater overall construction emissions, it should be noted that construction-related GHG emissions would also decrease in future years as cleaner fuels and more efficient technology is implemented by the construction industry. Additionally, implementation of **MM-GHG-**

C1 will further reduce the proposed project's GHG emissions resulting from construction activities to the maximum extent feasible.

Mitigation Measures

The following measure is proposed to mitigate Impact **GHG-1**, above.

MM-GHG-C1: The County (or its contractors) will implement the following diesel emission-reduction measures during project construction:

- All equipment and delivery truck idling times will be limited by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. Clear signage will be installed at all delivery driveways and loading areas regarding the limitation on idling time.
- All construction equipment will be maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities using diesel-powered vehicles or equipment, the County's construction contractors will verify that all vehicles and equipment have been checked by a certified mechanic and determined to be running in proper condition prior to admittance into the project site. A report by the certified mechanic of the condition of the construction and operations vehicles and equipment will be submitted to the County prior to their use.
- Alternative-fuel (e.g., biodiesel, electric, compressed natural gas) construction vehicles/equipment (comprising at least 15 percent of the fleet) will be used, to the extent feasible.
- Renewable diesel fuel will be used for all diesel-powered heavy construction equipment and on-road vehicles to the extent that it is readily available from a local supplier in the Southern California region.
- Local building materials (at least 10 percent) and recycled products, including cement and concrete made with recycled products, will be used, to the extent feasible.
- A construction waste management plan will be implemented to divert landfilled waste by requiring the recycling of a minimum of 65 percent of all non-hazardous construction waste.

Level of Significance after Mitigation

The significance determination is based on the combined GHG emissions generated by both project construction activities and operational activities.

Operational Impacts

Tier I

Project operations would result in GHG emissions from multiple sources of emissions, including energy, mobile, area, water, wastewater, waste, and permitted (stationary) sources. Table 3.7-4 presents the net increase in GHG emissions over existing conditions from implementation of the Tier I developments under the proposed project.

Table 3.7-4. Annual GHG Emissions Associated with Tier I Development

Source	Annual GHG Emissions ($MTCO_2e$)
Existing	
Operations	
Area	<1
Energy	1,178
Mobile	11,190
Waste	200
Water/Wastewater	424
Stationary	17,832
Total	30,825
Restorative Care Village	
Operations	
Area	<1
Energy	945
Mobile	1,499
Waste	453
Water/Wastewater	74
Total	2,972
Ambulatory Care Center, Parking Structure, Administration, Community Center, Materials Management/ Supply Services Building, and Central Plant East	
Operations	
Area	<1
Energy	5,325
Mobile	14,282
Waste	1,742
Water/Wastewater	635
Stationary	22,112
Total	44,096
Tier I Total	47,068
Net Project Operational Emissions	16,243
Project Construction Emissions	55
Total Net Emissions Increase	**16,298**
Source: Emissions estimates using CalEEMod version 2016.3.2 (see Appendix C of this EIR) 2019.	

As shown, implementation of the Tier I development projects at the project site would result in a net increase in GHG emissions of 16,298 $MTCO_2e$ annually over exiting conditions.

An evaluation of each project emissions source is presented below.

Energy

The Governor's Office of Planning and Research (OPR)'s 2018 CEQA and Climate Change Advisory recommends that a land use development project that "achieves applicable building energy efficiency standards, uses no natural gas or other fossil fuels, and includes Energy Star appliances where available, may be able to demonstrate a less-than-significant greenhouse gas impact associated with project operation" (Governor's Office of Planning and Research 2018). Although the proposed project would likely require natural gas use for the medical buildings/facilities, development under the proposed project would comply with all applicable County and state building measures at the time of their development, including Title 24, Part 6, California Energy Code baseline standard requirements for energy efficiency, commonly referred to as CALGreen (California Code of Regulations, Part 11). As part of the proposed project's sustainability goals, an energy usage intensity (EUI) analysis for each new building would be conducted and the solar potential of each building site would be estimated to guide the design of the campus. Additionally, all of the new buildings and major renovations on the campus would be mandated by the County to be certified under the Leadership in Energy and Environmental Design (LEED) Rating System, with a minimum certification of LEED Silver, which can potentially include features associated with building energy efficiency. As the LEED rating system would continue to evolve over time, in an effort to promote green building to the highest standard possible, future developments under the proposed project would be certified under the LEED version that is current at that time. Mitigation measure **MM-GHG-O1** requires implementation of these measures. Therefore, the project's operational characteristics with respect to electricity would meet most of OPR's recommendations. Furthermore, the estimate of energy emissions in Table 3.7-4, above, which includes emissions from electricity and natural gas use, does not factor in all efficiency measures that would be pursued as part of the project, nor does it reflect implementation of state and local measures to reduce GHG emissions associated with electricity (e.g., SB 100). Relative to the energy emissions estimated in Table 3.7-4, the portion of GHG emissions associated with electricity use would decrease annually in future years from statewide implementation of SB 100, which sets an RPS target of 60 percent by 2030 and 100 percent by 2045. Based on the requirements of SB 100, it is reasonable to conclude that there would be zero emissions associated with the project's electricity consumption by 2045. However, as shown in Table 3.7-4, above, the annual increase in electricity-related GHG emissions are estimated to be 5,092 $MTCO_2e$ over existing conditions, which is an approximately 46 percent increase. Note that this emissions estimate is based on LADWP's 2016 emissions intensity. **MM-GHG-O1** will ensure energy-efficiency measures will be implemented, including the use of Energy Star rated appliances, the preference for electric-only appliances and HVAC, high-efficiency lighting, high-performance glazing on new buildings containing more than 10,000 gross square feet (gsf), and installation of a cool roof on new buildings to the extent feasible. Although the proposed Master Plan has established an objective of achieving energy efficiency in the new and renovated facilities at the campus, the actual energy efficiency that will be achieved from project implementation cannot be determined at this time without quantifiable reduction targets being established by the proposed Master Plan.

Mobile

With respect to mobile emissions, there is a nexus between SB 743 and the state's goals to reduce GHG emissions; one of the criteria under SB 743 for determining the significance of the transportation impacts of a project is a reduction in GHG emissions. In response to SB 743, OPR released the Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory in April 2018 (Governor's Office of Planning and Research 2018). The advisory presents screening

thresholds for land use projects so that agencies can quickly determine whether a project would result in a less-than-significant transportation impact. The advisory states:

> Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a SCS or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

Because the activities that could occur under Tier I development are expected to generate a net increase of 3,841 daily trips to, from, and within the campus, the mobile emissions associated with the proposed project would exceed OPR's screening threshold of 110 trips per day. Additionally, as shown in Table 3.7-4, emissions associated with mobile sources would total 15,881 MT of CO_2e per year, which is an approximate 41 percent increase over the 11,190 MT of CO_2e per year the occurs under existing conditions. It should be noted that the estimate of mobile emissions in Table 3.7-4 does not reflect implementation of state and local measures to reduce GHG emissions associated with transportation (e.g., SB 375). **MM-GHG-O1** will ensure various measures to reduce vehicle miles traveled (VMT) and mobile source emissions will be implemented, including requiring VMT measures for employees, bicycle parking, preferential carpool spaces, and parking spaces be designated for clean-air vehicles and equipped with electric vehicle charging equipment. Nonetheless, given the substantial increase in daily vehicle trips resulting from the proposed project, the Master Plan potentially could be inconsistent with the long-term GHG reduction goals of reducing VMTs in the region.

Area

As shown in Table 3.7-4, emissions associated with area sources, which include gasoline-powered landscaping equipment (e.g., trimmers, mowers), would total less than 1 MT of CO_2e per year. Area-source emissions are based on CalEEMod's default assumptions and represent a conservative estimate of equipment usage, according to the square footage of the proposed building space. In addition, the landscaping designs under the proposed project would take into account sustainability and water conservation, resiliency to fire and flood, and viability. As opposed to the existing landscape character of the campus, which currently features nonnative vegetation unsuited to Southern California's Mediterranean climate, the planting guidelines for the proposed project would use landscaped palettes of California native plant species that help reduce water consumption, maintenance, and hardscape repair costs. Plantings would be appropriate to the region's microclimate and the function of the space in which they are installed. Given that the landscape improvements would feature low-maintenance plants that require minimal care, the use of trimmers and mowers is also anticipated to be minimal. Moreover, **MM-GHG-O1** will require, to the extent feasible, that non-fossil-fuel powered landscaping equipment be used at the campus. Although there are no relevant measures in the Scoping Plan related to area sources, the Master Plan's focus on producing minimal area emissions and using California native plants that require little maintenance would be in line with the Scoping Plan's overall goal of reducing emissions.

Water Use and Wastewater Generation

Based on the data shown in Table 3.7-4, the GHG emissions associated with water use and wastewater generation would increase by approximately 285 MT of CO_2e per year over existing conditions. However, the proposed project has identified water efficiency as a priority for the campus, and the Master Plan states that new construction and major renovations would demonstrate a reduction in indoor water usage by a minimum of 35 percent from baseline. To achieve this reduction, the new developments under the proposed project would install water-conserving plumbing fixtures, such as low-flow and/or dual flush water closets for all buildings,

sensory-type lavatory faucets, ultra-low-flow urinals for acute care, and waterless urinals in other uses. The proposed project also prioritizes the selection of medical equipment that could be air-cooled rather than being cooled by water and considers either replacing the current cogeneration system, which requires a tremendous amount of water for cooling the equipment, or using recycled gray water in the cooling towers. With respect to outdoor water use, the proposed Master Plan indicates that the campus as a whole should demonstrate a reduction in outdoor water usage by 50 percent from baseline and engage in strategies that eliminate the use of potable water for landscaping. Efforts to achieve this reduction in outdoor water use include planting native and drought-tolerant plants that require little to no irrigation, and use of gray-water systems that involve onsite capture, treatment, and reuse of water that would otherwise be discarded offsite for treatment. Furthermore, the project's new developments would comply with all applicable County and state water conservation (indoor and outdoor) measures, including Title 24, Part 6, California Energy Code baseline standard requirements for energy efficiency. **MM-GHG-C1** and **MM-GHG-O1** will ensure these measures are implemented to the extent feasible. Nonetheless, the GHG emissions associated with water use and wastewater generation from the Tier I developments would represent a 67 percent increase over existing conditions. Although the proposed Master Plan has established an objective of achieving water efficiency in the new and renovated facilities at the campus, the actual water efficiency that will be achieved from project implementation cannot be determined at this time without quantifiable reduction targets being established by the proposed Master Plan.

Waste Generation

As shown in Table 3.7-4, emissions associated with waste would total approximately 2,195 MT of CO_2e per year, compared to 200 $MTCO_2e$ per year under existing conditions. California law requires reducing, recycling, or composting 75 percent of solid waste generated by 2020. The state also has specific goals for diverting organic waste, which decomposes in landfills to produce the super pollutant methane. State law also directs edible food go to hungry families rather than being discarded. Although the proposed Master Plan would aim to integrate sustainable elements that includes waste recycling, the actual waste reduction that will be achieved from project implementation cannot be determined at this time without quantifiable reduction targets being established by the proposed Master Plan. **MM-GHG-C1** requires construction waste recycling and that the use of local building materials, cement, and concrete be made with recycled products to the extent feasible. **MM-GHG-O1** requires solid waste diversion during operations, implementation of a food waste diversion program, and implementation of an onsite recycling program. These mitigation measures would ensure operational emissions would decrease, the extent of which is unknown.

Stationary Sources

As shown in Table 3.7-4, emissions associated with stationary permitted sources would total approximately 22,112 of CO_2e per year, compared to 17,832 $MTCO_2e$ per year under existing conditions. The existing medical and hospital facilities adhere to CARB's cap-and-trade regulation, as are approximately 80 percent of California's emissions. The existing permitted sources will support future uses, but associated emissions will be regulated by CARB and not the County. The proposed project will implement various sustainability goals for reducing resource consumption, which will help reduce the need to expand permitted facilities. Cap-and-trade regulations set a firm limit on GHGs and minimize the compliance costs of achieving 2020 and 2030 reduction goals. The cap-and-trade program is a principal component of the Scoping Plan. The project by default will be consistent with this program, but specific emission levels are unknown.

Summary

Overall, because no quantifiable reduction targets have been established under the proposed project, it cannot be determined with certainty whether the project would conflict with applicable sector-specific reduction targets and strategies for GHG emissions. Given that implementation of the Tier I developments under the proposed project would result in an increase of 16,243 MT of CO_2e per year over existing conditions, this impact would be potentially significant. Although implementation of **GHG-O1** would reduce the project's GHG emissions, it cannot be stated with certainty that emissions would be reduced to a level that would comply with the long-term GHG reduction targets and goals of applicable regulatory programs. As such, impacts would be significant and unavoidable.

Tier II

Operation of Tier II would involve GHG emissions from building natural gas use, stationary sources, worker and visitor vehicle trips, and other sources. Because details about Tier II are unknown, GHG emissions associated with operational activities under Tier II have not been quantified. However, because development under Tier II would be greater than Tier I, the GHG emissions could also potentially conflict with applicable sector-specific reduction targets and strategies. Although **MM-GHG-O1** would be implemented to ensure that impacts are minimized to the extent feasible, it cannot be stated with certainty that emissions would be reduced to a level that would comply with the long-term GHG reduction targets and goals of applicable regulatory programs. As such, impacts would be significant and unavoidable.

Mitigation Measures

The following measure is proposed to mitigate Impact **GHG-1**, above.

MM-GHG-O1: The County will implement the following GHG reduction measures for all new development within the campus:

- The County (or its contractors) will implement the following water conservation measures, which are in addition to those required by codes and ordinances:
    - Install public bathroom faucet aerators (non-residential & residential over 6 stories) with a flow rate of 0.4 gallons per minute (gpm),
    - Install cooling tower conductivity controllers or cooling tower pH conductivity controllers,
    - Install rotating sprinkler nozzles for landscape irrigation 0.5 to 1.0 gpm,
    - Install drip/subsurface irrigation (i.e., micro-irrigation),
    - Implement proper hydro-zoning (i.e., groups plants with similar water requirements together),
    - Install zoned irrigation,
    - Contour landscaping to minimize precipitation runoff,
    - Install drought tolerant plants in 50 percent of total new landscaping,
    - Install water conserving turf in 100 percent of new turf added to landscaping, and
    - Use recycled water for stationary equipment that requires water cooling, to the extent feasible.

- Install a stormwater retention and filtration system.
- Pursue a net zero water building design for new campus buildings, to the extent feasible.
- Develop a recycled water strategy and implementation plan that increases the campus's use of alternative water sources, such as rainwater, greywater, stormwater, and recycled water.
- Achieve a minimum solid waste diversion rate of 85 percent by 2035 by implementing measures including, but not necessarily limited, to:
    - Installing a food waste diversion program at the campus.
    - Installing an onsite recycling program at the campus.
- Incentivize the use of recycled materials in new and renovated campus buildings.
- Prioritize the use of food vendors with certifications for sustainable agricultural practices related to water and energy use, to the extent feasible.
- Provide plant-based menu options at new and existing campus food facilities, to the extent feasible.
- Pursue zero waste certification requirements for the campus, to the extent feasible.
- Install Energy Star-rated appliances.
- Install electric-only appliances and HVAC (e.g., no natural gas heating or cooling) systems, to the extent feasible. Where natural gas appliances need to be installed, these appliances will meet high-efficiency standards.
- Establish an energy and water use data collection program to benchmark and report energy and water use at the campus, demonstrating an increase in energy and water efficiency over the lifetime of the project.
- Implement TDMs for employees, including, but not necessarily limited to measures such as:
    - Providing bicycle parking for at least 5 percent of full-time-equivalent campus employees.
    - Providing preferential carpool spaces within proposed parking structures on the campus.
- Dedicate 5 percent of new parking spaces for clean-air vehicles and equip those spaces with electric vehicle charging equipment.
- Purchase new zero-emission passenger vehicles for use by the campus.
- Install a high-efficiency lighting system that takes advantage of natural daylighting, augmented by daylighting controls and occupancy sensors that turn off the lights in unoccupied spaces.
- Maximize the installation of solar systems on new and renovated buildings to the extent these systems are cost-effective.
- Install, in proposed new buildings containing more than 10,000 gsf of space, high-performance glazing with a low solar heat gain coefficient value that reduces the amount of solar heat allowed into the building, without compromising natural illumination.

- Install cool roofs with an R value (i.e., the measurement of the effectiveness of thermal insulating materials) of 30 or better on proposed new buildings, to the extent feasible.
- Implement a net zero carbon building design for all new building developments and building renovations at the campus, to the extent feasible.
- Develop an urban heat island mitigation strategy and implementation plan to guide all future development of the campus.
- Increase urban tree canopy cover to provide shade to a minimum of 40 percent of the length of sidewalks on all campus streets.
- Use electric powered landscaping equipment, rather than fossil-fuel powered landscaping equipment, to the extent feasible.
- Focus selection on native plants and trees to provide new, water-wise landscaping that blends the campus with the ecology of the surrounding natural environment.
- Provide ongoing sustainability education and training for campus employees.

Level of Significance after Mitigation

Implementation of **MM-GHG-C1** would reduce construction-related GHG emissions, and **MM-GHG-O1** would reduce operational GHG emissions across the area, energy, mobile, water/wastewater, and waste sectors. However, because it cannot be determined with certainty that **MM-GHG-O1** would be sufficient to render the proposed project consistent with the County's and state's long-term GHG reduction goals, impacts are considered significant and unavoidable after mitigation.

Impact GHG-2: Would the Proposed Project Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs.

Construction and Operational Impacts

Tiers I and II

Three plans relevant to the proposed project have been adopted for the purposes of reducing GHG emissions: the County of Los Angeles CCAP, the AB 32 Scoping Plan, and the 2017 Scoping Plan. The proposed project's consistency with these plans is reviewed below.

As demonstrated in the following analysis, the proposed project would not conflict with the County of Los Angeles CCAP, AB 32 and its Scoping Plan, and SB 32 and the 2017 Scoping Plan. Implementation of **GHG-C1** and **GHG-O1** would reduce, to the extent feasible, the proposed project's GHG emissions to a level that would render these emissions to be consistent with the GHG emissions reduction trajectory for 2050. Thus, with mitigation, implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, making this impact less than significant.

Consistency with County of Los Angeles CCAP

As discussed above, the County of Los Angeles adopted a CCAP in 2015 to reduce community GHG emissions (County of Los Angeles 2015). The County's CCAP is a roadmap that outlines the County's path to achieve its 2020 GHG reduction goal of 11 percent below 2010 GHG emissions levels. The CCAP's GHG reduction measures feature 26 local actions grouped into five strategy areas: green building and energy, land use and transportation, water conservation and wastewater, waste

reduction, reuse, and recycling, and land conservation and tree planting. Because the CCAP analysis was prepared for the County's 2020 GHG reduction goal, its use in quantitatively evaluating the significance of the GHG emissions of the proposed project is not applicable. Buildout of the proposed Tier I developments is anticipated in 2035, which is a 15-year later timeline than that of the CCAP, while buildout of the proposed Tier II developments can potentially occur after 2050. Consequently, the CCAP is used qualitatively for this analysis to determine if the proposed project would be consistent with the CCAP measures.

The consistency of the proposed project with the measures in the County's CCAP is analyzed in Table 3.7-5, below.

Table 3.7-5. Consistency of Proposed Project with CCAP Measures

Local Actions	Proposed Project Conformance
Green Building and Energy	
BE-1 (Green Building Development): Promote and incentivize at least Tier 1 voluntary standards within CALGreen for all new residential and nonresidential buildings. Develop a heat island reduction plan and facilitate green building development by removing regulatory and procedural barriers.	As part of the proposed project's sustainability goals, an EUI analysis for each new building would be conducted, and the solar potential of each building site would be estimated to guide the design of the campus. Additionally, all new buildings and major renovations on the campus would be mandated by the County to be certified as LEED Silver, which can potentially include features associated with building energy efficiency. The proposed Master Plan also identifies landscape improvements associated with the provision of tree-lined streets along with the provision of parking spaces under cover to reduce the heat island effect on the campus.
BE-2 (Energy Efficiency Programs): Energy efficiency retrofits for at least 25 percent of existing commercial buildings over 50,000 square feet and at least 5 percent of existing single-family residential buildings.	As part of the proposed project, the existing 534,300-square-foot inpatient hospital building would be renovated as required to meet the energy efficiency provisions of the latest California Building Code.
BE-3 (Solar Installations): Promote and incentivize solar installations for new and existing homes, commercial buildings, carports and parking areas, water heaters, and warehouses.	Recognizing that the size and topography of the project site offers a huge opportunity for solar-generated renewable energy; thus the implementation of the proposed project would include a EUI analysis of each building, and the solar potential of each site would be estimated in order to inform the design of the campus.
BE-4 (Alternative Renewable Energy Programs): Implement pilot projects for currently feasible wind, geothermal, and other forms of alternative renewable energy.	This action is applicable to the County's renewable energy programs. The proposed project would consider the solar potential of all new development buildings on the campus.
BE-5 (Wastewater Treatment Plant Biogas): Encourage renewable biogas projects.	This action is not applicable to the proposed project.

Local Actions	Proposed Project Conformance
BE-6 (Energy Efficiency Retrofits of Wastewater Equipment): Encourage the upgrade and replacement of wastewater treatment and pumping equipment.	Development of the proposed project would require new or upgraded sewer, water, storm drains, and telecommunications infrastructure. Approximately 482,400 square feet of utility improvements would occur under Tier I.
BE-7 (Landfill Biogas): Partner with the owners and operators of landfills with at least 250,000 tons of waste-in-place to identify incentives to capture and clean landfill gas to beneficially use the biogas to generate electricity, produce biofuels, or otherwise offset natural gas or other fossil fuels.	The proposed Master Plan has identified waste recycling as a sustainable element that would be incorporated at the campus. Mitigation Measure **GHG-O1** also requires that the campus achieve a solid waste diversion goal of a minimum of 85 percent by 2035 by implementing measures such as, but not limited to, onsite recycling and food waste diversion programs.
Land Use and Transportation	
LUT-1 (Bicycle Programs and Supporting Facilities): Construct and improve bicycle infrastructure to increase biking and bicyclist access to transit and transit stations/hubs. Increase bicycle parking and end-of-trip facilities.	Tier II development would include the extension of pedestrian, bicycle, and equestrian trails throughout the campus. The proposed Master Plan has also identified the need to provide dedicated secure bicycle parking (e.g., bike cages, bike lockers, or indoor secure parking) and maintenance stations at the campus for filling up tires and making minor repairs.
LUT-2 (Pedestrian Network): Construct and improve pedestrian infrastructure to increase walking and pedestrian access to transit and transit stations/hubs. Program the construction of pedestrian projects toward the goal of completing 15,000 linear feet of new pedestrian improvements/amenities per year.	The proposed project would include improvements to walking and pedestrian access throughout the campus. Various walking, biking, and equestrian paths would be developed to make the campus more inviting and easily traversed. Under Tier I, proposed pedestrian, equestrian, and bike paths would be sited along Olive View Drive and, under Tier II, would ultimately be incorporated throughout the campus.
LUT-3 (Transit Expansion): Collaborate with the Los Angeles County Metropolitan Transportation Authority (Metro) on a transit program prioritizes transit by creating bus priority lanes, improving transit facilities, reducing transit-passenger time, and providing bicycle parking near transit stations. Construct and improve bicycle, pedestrian and transit infrastructure to increase bicyclist and pedestrian access to transit and transit stations/hubs.	This action is not directly applicable to the proposed project. However, the proposed project would include improvements to pedestrian activities throughout the campus. Various walking, biking, and equestrian paths would be developed to make the campus more inviting and easily traversed.
LUT-4 (Travel Demand Management): Encourage ride- and bike-sharing programs and employer sponsored vanpools and shuttles. Encourage market-based bike sharing programs that support bicycle use around and between transit stations/hubs. Implement marketing strategies to publicize these programs and reduce commute trips.	The proposed Master Plan indicates that the campus would be required to meet SCAQMD Rule 2202, which requires the campus to meet emission reduction targets by implementing a trip reduction program. Additionally, mitigation measure **MM-GHG-O1** would require the provision and implementation of a

Local Actions	Proposed Project Conformance
	TDM program for campus employees under the project.
LUT-5 (Car-Sharing Program): Implement a car-sharing program to allow people to have on demand access to a shared fleet of vehicles.	The proposed Master Plan indicates that the campus would be required to meet SCAQMD Rule 2202, which requires the campus to meet emission reduction targets by implementing a trip reduction program. Additionally, Mitigation Measure **MM-GHG-O1** would require the provision of a TDM program for campus employees, which may include the provision of preferential carpool spaces within the proposed parking structures in the campus.
LUT-6 (Land Use Design and Density): Promote sustainability in land use design, including diversity of urban and suburban developments.	The landscaping improvements under the proposed project would integrate the natural setting of the campus into its design. Proposed landscaping designs will take sustainability and water conservation, resiliency to fire and flood, and viability into account. Plantings and landscaping would also be provided to help easily identify building entrances and assist in wayfinding, as well as provide shade and hierarchy throughout the site. Outdoor healing gardens, courtyard gardens, and gathering spaces would be developed. Landscaping would also be used to create screens and buffers for parking areas, storage areas, trash and recycle enclosures, and to provide separation between uses or activities. Proper lighting in surrounding trails and campus would facilitate wayfinding throughout the project site.
LUT-7 (Transportation Signal Synchronization Program): Improve the network of traffic signals on the major streets throughout LA County.	This action is not directly applicable for the proposed project.
LUT-8 (Electric Vehicle Infrastructure): Install 500 electric vehicle (EV) charging facilities at County-owned public venues (e.g., hospitals, beaches, stand-alone parking facilities, cultural institutions, and other facilities) and ensure that at least one-third of these charging stations will be available for visitor use.	Under mitigation measure **MM-GHG-O1**, the proposed project would dedicate five percent of new parking spaces on the campus for clean-air vehicles and have them be equipped with electric vehicle charging equipment.
LUT-9 (Idling Reduction Goal): Encourage idling limits of 3 minutes for heavy-duty construction equipment, as feasible within manufacturer's specifications.	Under mitigation measure **MM-GHG-C1**, an idling limit of 3 minutes for heavy-duty construction equipment would be implemented during project construction at the campus.
LUT-10 (Efficient Goods Movement): Support regional efforts to maximize the efficiency of the goods movement system throughout the unincorporated areas.	This action is not directly applicable to the proposed project.

Local Actions	Proposed Project Conformance
LUT-11 (Sustainable Pavements Program): Reduce energy consumption and waste generation associated with pavement maintenance and rehabilitation.	As part of the sustainable planting guidelines that would be implemented as part of the proposed project, new plantings would be selected that help minimize excessive maintenance and reduce hardscape repair costs. This would entail the selection of non-invasive root systems at paved areas, especially trees that would not lift the hardscape (pavement), and plantings with little leaf, flower, or fruit drop adjacent to paved surfaces.
LUT-12 (Electrify Construction and Landscaping Equipment): Utilize electric equipment wherever feasible for construction projects. Reduce the use of gas-powered landscaping equipment.	Under mitigation measure **MM-GHG-O1**, the use of fossil-fuel powered landscaping equipment at the campus would be prohibited to the extent feasible.
Water Conservation and Wastewater	
WAW-1 (Per Capita Water Use Reduction Goal): Meet the State established per capita water use reduction goal, as identified by SB X7-7 (The Water Conservation Act of 2009) for 2020.	The proposed project has identified water efficiency as a priority for the campus, and new developments would install water-conserving plumbing fixtures, such as low-flow and/or dual-flush water closets for all buildings, ultra-low-flow urinals for acute care, waterless urinals for other uses, and sensory-type lavatory faucets. With respect to outdoor water use, the Master Plan states that the campus would engage in strategies that eliminate the use of potable water for landscaping. Efforts to achieve this reduction in outdoor water include planting native and drought-tolerant plants that require little to no irrigation and using gray-water systems that involve the onsite capture, treatment, and reuse of water that would otherwise be discarded offsite for treatment. Additionally, **MM-GHG-O1** would require the additional implementation of water conservation measures that exceed those required by codes and ordinances.
WAW-2 (Recycled Water Use, Water Supply Improvement Programs, and Storm Water Runoff): Promote the use of wastewater and gray water to be used for agricultural, industrial, and irrigation purposes. Manage stormwater, reduce potential treatment, and protect local groundwater supplies.	As part of the efforts to reduce water use, the proposed project would prioritize the selection of medical equipment that could be air cooled rather than being cooled by water and would consider either replacing the current cogeneration plant system, which requires a tremendous amount of water for cooling the equipment, or using recycled gray water to cool the cooling towers. Efforts to reduce outdoor water use at the campus also include the use of gray-water systems for plant irrigation that involve the onsite capture, treatment and the reuse of water that would otherwise be discarded offsite for treatment.

Local Actions	Proposed Project Conformance
	Implementation of **MM-GHG-O1** would require the use of 100 percent recycled water for any stationary equipment that requires water cooling, to the extent feasible, the installation of a stormwater retention and filtration system at the campus, and the installation of low-water plantings and drip irrigation.
Waste Reduction, Reuse, and Recycling	
SW-1 (Waste Diversion Goal): For the County's unincorporated areas, adopt a waste diversion goal to comply with all state mandates associated with diverting from landfill disposal at least 75 percent of the waste by 2020.	The proposed Master Plan would aim to integrate sustainable elements that would incorporate waste recycling at the campus. Implementation of **MM-GHG-O1** would require that the project achieve a minimum solid waste diversion rate of 85 percent by 2035.
Land Conservation and Tree Planting	
LC-1 (Develop Urban Forests): Support and expand urban forest programs within the unincorporated areas.	This action is not directly applicable to the proposed project. However, the proposed project would implement landscape improvements that integrate the natural setting of the campus into its design. The planting guidelines for the proposed project would use plant palettes of California native species and plants that help reduce water consumption, maintenance, and hardscape repair costs. Plantings would be appropriate to the micro climate and function of the space in which they are developed.
LC-2 (Create New Vegetated Open Space): Restore and re-vegetate previously disturbed land and/or unused urban and suburban areas.	This action is not directly applicable to the proposed project. However, the Master Plan outlines the implementation of landscape improvements to integrate the natural setting of the campus into its design.
LC-3 (Promote the Sale of Locally Grown Foods and/or Products): Establish local farmers markets and support locally grown food.	This action is not directly applicable to the proposed project.
LC-4 (Protect Conservation Areas): Encourage the protection of existing land conservation areas.	This action is not directly applicable to the proposed project.
Source: ICF 2019.	

As shown in Table 3.7-5, the proposed project would be consistent with all applicable and relevant actions in the County's CCAP. Eight of the actions are not applicable to the proposed project, and thus consistency with these measures does not apply. Because the proposed project is consistent with all applicable CCAP actions, it would not conflict with the County's CCAP.

Consistency with AB 32 Scoping Plan

AB 32 codifies the state's GHG emissions reduction targets for 2020. Because buildout of the proposed project is anticipated in 2035 for Tier I developments and beyond 2050 for Tier II developments, consistency with the AB 32 Scoping Plan is discussed primarily for informational purposes. For a comprehensive evaluation of GHG impacts, a discussion is needed with respect to the proposed project's consistency with guidance documents and regulations with timelines more consistent with the buildout years of 2035 and 2050 and beyond.

CARB adopted the Climate Change Scoping Plan in 2008, incorporating its First Update (2014) as a framework for achieving the AB 32 targets. The Scoping Plan and First Update outline a series of technologically feasible and cost-effective measures for reducing statewide GHG emissions. Some reductions would require changes pertaining to vehicle emissions and mileage standards, some of which would result from changes to sources of electricity and increased energy efficiency at existing facilities. The remainder would need be based upon state and local plans, policies, or regulations that would lower carbon emissions, relative to business-as-usual conditions.

The Master Plan has identified sustainability goals to minimize GHG emissions associated with future development at the campus. One of the main objectives for the proposed project is to identify feasible opportunities for exceeding state energy requirements and pursuing green building sustainable design to the maximum extent feasible. To ensure that GHG emissions reduction would be achieved by the proposed project, **MM-GHG-C1** and **MM-GHG-O1** would be implemented that, to the extent feasible, directly addresses water and energy conservation, solid waste diversion, VMT reduction, use of renewable energy, and vegetative plantings. The reduction in GHG emissions achieved by these mitigation measures are consistent with strategies identified in the 2008 Scoping Plan and First Update, as well as statewide goals to improve energy efficiency, reduce building energy consumption, and increase renewable energy generation. Accordingly, the proposed project would not conflict with the AB 32 Scoping Plan.

Consistency with 2017 Scoping Plan

In general, future developments at the campus outlined in the Master Plan would be built around the concept of sustainability. This is manifested through green building principles, including an emphasis on energy efficiency, water conservation, and waste reduction, and sustainable landscaping practices. Although the measures included in the updated scoping plan are necessarily broad, the proposed project is generally consistent with the goals and desired outcomes of the First Update (i.e., increasing energy efficiency, water conservation, waste diversion, transportation sustainability, etc.). The consistency of the Master Plan with the policies outlined in the 2017 Climate Change Scoping Plan Update for achieving 2030 GHG targets is analyzed in Table 3.7-6.

Table 3.7-6. Consistency of Proposed Project with Climate Change Scoping Plan[a] Policies

Policy	Primary Objective	Proposed Project Consistency Analysis
SB 350	Reduce GHG emissions in the electricity sector through the implementation of the 50 percent RPS, doubling of energy savings, and other actions as appropriate to achieve GHG emissions reductions planning targets in the Integrated Resource Plan process.	This policy is a state program that requires no action at the local or project level. Nonetheless, as part of the proposed project's sustainability goals, an EUI analysis for each new building would be conducted, and the solar potential of each building site would be estimated to guide the design of the campus. Additionally, the County would mandate that all new

Policy	Primary Objective	Proposed Project Consistency Analysis
		buildings and major renovations be certified as LEED Silver, which can potentially include features associated with building energy efficiency.
Low Carbon Fuel Standard	Transition to cleaner/less-polluting fuels that have a lower carbon footprint.	This policy is a state program that requires no action at the local or project level. Nonetheless, the proposed project would reduce mobile-source GHG emissions by including improvements to walking routes throughout campus. Various walking, biking, and equestrian paths would be developed to make the campus more inviting and easily traversed. Future development at the campus would also be required to meet SCAQMD Rule 2202, which requires that the campus meet emission reduction targets by implementing a trip reduction program. Additionally, mitigation measure **MM-GHG-O1** would require the provision and implementation of a TDM program for campus employees, which may include the provision of preferential carpool spaces within the proposed parking structures in the campus.
Mobile Source Strategy (Cleaner Technology and Fuels [CTF] Scenario)	Reduce GHGs and other pollutants from the transportation sector through transition to zero-emission and low-emission vehicles, cleaner transit systems and reduction of vehicle miles traveled.	This policy is a state program that requires no action at the local or project level. Nonetheless, the proposed project would reduce mobile-source GHG emissions by including improvements to walking distances throughout campus. Various walking, biking, and equestrian paths would be developed to make the campus more inviting and easily traversed. Future development at the campus would also be required to meet SCAQMD Rule 2202, which requires the campus to meet emission reduction targets by implementing a trip reduction program. Additionally, mitigation measure **MM-GHG-O1** would require the provision and implementation of a TDM program for campus employees, which may include the provision of preferential carpool and clean air vehicle spaces within the proposed parking structures on the campus.
SB 1383	Approve and Implement Short-Lived Climate Pollutant strategy to reduce highly potent GHGs.	This policy is a state program that requires no action at the local or project level and thus does not apply to the Master Plan.

Policy	Primary Objective	Proposed Project Consistency Analysis
California Sustainable Freight Action Plan	Improve freight efficiency, transition to zero-emission technologies, and increase competitiveness of California's freight system.	This policy is a state program that requires no action at the local or project level and thus does not apply to the Master Plan.
Post-2020 Cap-and-Trade Program	Reduce GHGs across largest GHG emissions sources.	This policy is a state program that requires no action at the local or project level. However, a portion of the project site is regulated under the Post-2020 Cap-and-Trade Program. All proposed uses would implement building energy efficiency to reduce the need for new or expanded permitted uses.

Notes:
[a] The Scoping Plan policies included in this table are those representing the state strategy for meeting the 2030 GHG target of SB 32.
Source: ICF 2019

As shown, the proposed Master Plan would not conflict with or hinder the implementation of the policies the 2017 Climate Change Scoping Plan Update.

Consistency with SB 32 and Executive Order EO S-3-05

As discussed above, SB 32 adopted a GHG reduction target of 40 percent below 1990 levels by 2030, and EO S-3-05 established a long-term goal of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050. Achieving these long-term GHG reduction policies will require systemic changes in how energy is produced and used, which, if legislatively adopted, will require significant policy, technical, and economic solutions. Decarbonization of the transportation fuel supply will require that electric and plug-in hybrid electric vehicles comprise the vast majority of light-duty vehicles. Some changes, such as the use of alternative fuels (e.g., biofuels) to replace petroleum for aviation, cannot be accomplished without action by the federal government. Furthermore, achieving the 2050 GHG reduction goals will require California to dramatically increase the amount of electricity that is generated by renewable generation sources and, correspondingly, advance significantly the deployment of energy storage technology and smart-grid strategies, such as price-responsive demand and the smart charging of vehicles. This would entail a significant redesign of California's electricity system, which can only be accomplished through state action.

In evaluating the proposed project's emissions for consistency with SB 32 and EO S-3-05, it is important to note that many of these broad-scale shifts in how energy is produced and used are unknown at this time and ultimately outside of the scope of the proposed project. Consequently, the extent to which the proposed project's GHG emissions and resulting impacts would be mitigated through implementation of such statewide (or nationwide) changes is not known. Furthermore, implementation of such additional policy and regulatory changes lies within the jurisdiction of state-level agencies (e.g., CARB) and federal-level agencies, not the County or the proposed project. However, some of the measures recommended as part of SB 32 and EO S-3-05 (e.g., decarbonization, energy efficiency, reduced fossil-fuel-based VMT, etc.) can be facilitated to some extent through implementation of specific GHG reduction measures in large, plan-level developments such as the proposed project. The sustainability goals of the proposed project and **MM-GHG-C1** and **MM-GHG-O1**, for instance, would require that the proposed project implement feasible GHG reduction

measures within its control to put the project on the path toward the 2050 reduction goal of EO S-3-05. Thus, the proposed project's emissions would be consistent with the goals in SB 32 and EO S-3-05 with implementation of mitigation measures, rendering the impact less than significant.

3.7.5 Cumulative

GHG emissions and climate change are exclusively cumulative impacts; non-cumulative GHG emissions impacts from a climate change perspective do not exist as climate change is, by definition, the result of cumulative global emissions. No single project, when considered in isolation, can cause climate change because a single project's emissions are not enough to change the radiative balance of the atmosphere. Because climate change is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, global climate change will have a significant cumulative impact on the natural environment, as well as human development and activity. As such, GHGs and climate change are cumulatively considerable, even though the contribution may be individually limited. CARB and SCAQMD methodology and thresholds are thus cumulative in nature.

As discussed above, the project would be inconsistent with statewide targets in the post-2030 timeframe. Although the proposed project would not conflict with the GHG emission reduction measures and objectives outlined in the County of Los Angeles CCAP or the AB 32 Scoping Plan and Update, due to the lack of a details regarding buildout long-term, the proposed project's incremental contribution to cumulative impacts related to GHG emissions and reduction targets and plans would be cumulatively considerable after the implementation of **MM-GHG-C1** and **MM-GHG-O1**. Therefore, it cannot be stated with certainty that the proposed project would result in emissions that would represent a fair share of the requisite reductions to achieve statewide reduction targets.

3.8 Hazards and Hazardous Materials

3.8.1 Introduction

This section describes the existing conditions related to hazards and hazardous materials, the regulatory framework associated with hazards and hazardous materials, the impacts related to hazards and hazardous materials that would result from the proposed project, and the mitigation measures that would reduce these impacts. The information presented is summarized from a Phase I Hazardous Materials Assessment (March 11, 2016) prepared by Ninyo & Moore (see Appendix G of this EIR).

3.8.2 Regulatory Setting

3.8.2.1 Federal

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established an Environmental Protection Agency (EPA)-administered program to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the cradle to grave system of regulating hazardous waste.

Cortese List

U.S. Code 65962.5 (commonly referred to as the Cortese List) includes Department of Toxic Substances Control (DTSC)-listed hazardous waste facilities and sites, Department of Health Services lists of contaminated drinking water wells, sites listed by the State Water Resources Control Board as having underground storage tank leaks or a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

Department of Transportation Hazardous Materials Regulations (49 CFR 100–185)

U.S. Department of Transportation (DOT) Hazardous Materials Regulations cover all aspects of hazardous materials packaging, handling, and transportation. Parts 107 (Hazard Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), and 177 (Highway Transportation), would all apply to the proposed project and/or surrounding uses.

3.8.2.2 State

California Health and Safety Code

DTSC, a department of the California Environmental Protection Agency (Cal-EPA), is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. DTSC regulates hazardous

waste primarily under the authority of the Federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Division 20, Chapter 6.5, of the California Health and Safety Code deals with hazardous waste control through regulations pertaining to transportation, treatment, recycling, disposal, enforcement, and permitting of hazardous waste. Division 20, Chapter 6.10, contains regulations applicable to the cleanup of hazardous materials releases. Title 22, Division 4.5, contains the environmental health standards for the management of hazardous waste. This includes standards for identification of hazardous waste (Division 20, Chapter 11) and standards applicable to transporters of hazardous waste (Division 20, Chapter 13).

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), as defined in California Health and Safety Code, Chapter 6.11, Sections 25404–25404.9, consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the environmental and emergency response programs and provides authority to the Certified Unified Program Agency (CUPA). The CUPA is designed to protect public health and the environment from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes. This is accomplished via inspections, emergency response, enforcement, and site mitigation oversight. The CUPA for the proposed project is the Los Angeles County Fire Department (LACFD)'s Health Hazardous Materials Division.

California Code of Regulations, Title 8—Industrial Relations

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) and the federal Occupational Safety and Health Administration (OSHA) are the agencies responsible for ensuring worker safety in the workplace. Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices; these standards would be applicable to the construction and operation of the project. The standards included in Cal/OSHA's Title 8 include regulations pertaining to hazard control (including administrative and engineering controls), hazardous chemical labeling and training requirements, hazardous exposure prevention, hazardous material management, and hazardous waste operations.

California Labor Code (Division 5, Parts 1 and 7)

The California Labor Code is a collection of regulations that include the regulation of the workplace to ensure appropriate training on the use and handling of hazardous materials and the operation of equipment and machines that use, store, transport, or dispose of hazardous materials. Division 5, Part 1, Chapter 2.5, ensures that employees in charge of the handling of hazardous materials are appropriately trained on, and informed of, the materials they are handling. Division 5, Part 7, ensures employees who work with volatile flammable liquids are outfitted in appropriate safety gear and clothing.

State Water Resources Control Board Construction Storm Water Program

Dischargers whose projects disturb 1 or more acres of soil or whose projects disturb less than 1 acre, but are part of a larger common plan of development that in total disturbs 1 or more acres, are

required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity, Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation. The Construction General Permit requires the completion and implementation of a site-specific Storm Water Pollution Prevention Plan (SWPPP).

3.8.2.3 Local

City of Los Angeles General Plan

The following City of Los Angeles General Plan goals are relevant to the proposed project:

- **Goal 1**: A city where potential injury, loss of life, property damage, and disruption of the social and economic life of the city due to fire, water-related hazard, seismic event, geologic conditions, or release of hazardous materials disasters is minimized.
    - **Policy 1.1.4**: Health/environmental protection. Protect the public and workers from the release of hazardous materials and protect city water supplies and resources from contamination resulting from accidental release or intrusion resulting from a disaster event, including protection of the environment and the public from potential health and safety hazards associated with program implementation.
- **Goal 2**: A city that responds with the maximum feasible speed and efficiency to disaster events so as to minimize injury, loss of life, property damage, and disruption of the social and economic life of the city and its immediate environs.
    - **Policy 2.1.2**: Health and environmental protection. Develop and implement procedures to protect the environment and public, including animal control and care, to the greatest extent feasible within the resources available, from potential health and safety hazards associated with hazard mitigation and disaster recovery efforts.

Los Angeles County General Plan

The following Los Angeles County General Plan goals and policies are relevant to the proposed project:

- **Goal S4**: Effective County emergency response management capabilities.
    - **Policy S 4.1**: Ensure that residents are protected from the public health consequences of natural or man-made disasters through increased readiness and response capabilities, risk communication, and the dissemination of public information.
    - **Policy S 4.3**: Coordinate with other County and public agencies, such as transportation agencies and health care providers, on emergency planning and response activities and evacuation planning.

Operational Area Emergency Response Plan

Under the County of Los Angeles Office of Emergency Management (OEM), the Operational Area Emergency Response Plan (OAERP) addresses how the County of Los Angeles carries out centralized emergency management, should an emergency go beyond day-to-day response capabilities. It ensures the successful coordination of the response and the initiation of recovery operations among County departments in response to incidents in the unincorporated areas and/or the incorporated

areas of the County Operational Area (OA). The OAERP also addresses interagency coordination of information, operations, and aid among the local governments within the OA.

3.8.3 Environmental Setting

The proposed project is located at 14445 Olive View Drive on land owned by the County of Los Angeles. The campus is located within the community of Sylmar, at the north end of the San Fernando Valley, in the city of Los Angeles, California.

The proposed project is an approximately 230-acre parcel of land, occupied by the Olive View–UCLA Medical Center community mental health center, office and administrative buildings, residential structures (office use), storage buildings, a hazardous waste storage area, a helipad, a power plant, police department, parking lots, and various roads. The proposed project abuts the foothills of the San Gabriel Mountains. Horse trails and hiking trails run along the northern edge of the campus. Predominantly single-family residential neighborhoods are located to the east of the campus. A mix of single-family (including homes with equestrian facilities) residences, multifamily residences, and some commercial uses are located to the south of the campus across Olive View Drive. Residential uses are also located just west of the campus and north of I-210.

3.8.3.1 Hazardous Materials

A site reconnaissance, review of historical land uses, environmental database search, and online records review were conducted by Ninyo & Moore in February 2016 to identify recognized environmental conditions (RECs), which are defined as the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property. The results of that effort are summarized below. Currently, the proposed project site uses and stores various hazardous materials in the hospital building, central utility plant, and associated cooling towers.

Hazardous Materials Records and Site Reconnaissance

Proposed Project Site

The proposed project site was identified in multiple environmental databases including: Los Angeles County Industrial Waste and Underground Storage Tank Sites (Los Angeles County HMS), Underground Storage Tank (UST), Facility and Manifest Data (HAZNET), California Hazardous Material Incident Report System (CHMIRS), Resource Conservation and Recovery Act Large Quantity Generator (RCRA-LQG), Aerometric Information Retrieval System Facility Subsystem (US AIRS AFS), Emissions Inventory Data (EMI), Facility Index System/Facility Registry System (FINDS), Statewide Environmental Evaluation and Planning System (SWEEPS UST), and National Pollutant Discharge Elimination System (NPDES). Also, the old Los Angeles County Fire Station #04 (located within the proposed project's Tier I project boundary, facing Olive View Drive) was listed on the Leaking Underground Storage Tanks (LUST) database with a status as of 1995 of "leak being confirmed" and affecting soil. This fire station was decommissioned shortly after 1995, but is currently used for hazmat purposes and office space. Additional data were not provided; thus, current site status is unknown.

Hazardous materials and hazardous waste were observed at the loading dock of the hospital. Jet fuel, turbine oil, diesel fuel, and other petroleum products were observed in storage areas at the loading dock (including two 20,000-gallon diesel USTs), as well as at the turbine room of the central utility plant. Biomedical waste and medical gas are also stored in storage rooms at the loading dock;

the biomedical waste is stored in an autoclave before being transported offsite. Hazardous waste manifests provided to Ninyo & Moore show that the majority of hazardous waste disposed offsite is generated from the pathology lab of the hospital, as well as sharps generated throughout the hospital. This waste is stored at the site grounds to the west of the hospital when there is an overflow of waste. Two liquid oxygen ASTs were observed at the cooling towers of the hospital. Observed at the loading dock of the site was one four-stage clarifier (of unknown capacity), which treats wastewater created from the sorption unit of the Central Utility Plant. According to the South Coast Air Quality Management District (SCAQMD), an active permit for a spray paint booth was issued for the site in 1990. Evidences of releases or spills were not observed during site reconnaissance and are therefore not considered environmental concerns. The presence of USTs at the loading dock and an active permit for a spray paint booth represent potential environmental concerns (PECs) for the site.

Based on the construction date of many of the site buildings (prior to 1980), asbestos-containing materials (ACMs) and lead-based paint (LBP) may be present on building materials at the site.

Table 3.8-1 summarizes the materials that were identified as stored on the campus with approximate quantities and their locations.

Table 3.8-1. Campus Materials Storage Facilities

Location	Material	Approximate Quantities and Type of Storage
Hospital Loading Dock	Diesel	(2) 20,000-gallon USTS
	Jet fuel	(6) 55-gallon drums
	Cleaner/degreaser	(1) 55-gallon drum
	Waste oil	(4) 55-gallon drums
	Compressed nitrogen	(24) 150-cubic-foot cylinders
	Motor oil	(8) 55-gallon drums
	Turbine oil	(12) 5-gallon buckets
	Sharps, chemotherapy waste, unidentifiable biohazard waste	Variable
	Misc. gases: carbon dioxide, oxygen, nitrogen, helium, argon, nitrous oxide	Variable
Hospital Central Utility Plant	Engine oil	(2) 100-gallon tanks
	Diesel oil	(1) 55-gallon drum
	Jet fuel	(2) 55-gallon drum
	Waste oil	(1) 55-gallon drum
	Compressed refrigerant	(13) 55-pound cylinders
Hospital Pathology Laboratory	Paraffin waste	(10) 1-gallon containers
	Xylene	(70) 1-gallon containers (2) 55-gallon drums
	Ethyl alcohol	(4) 55-gallon drum
	Formaldehyde	(2) 55-gallon drum
	Methanol	(25) 1-gallon containers
Cooling Towers	Liquid oxygen	(1) 400-gallon AST (1) 5,000-gallon AST

Location	Material	Approximate Quantities and Type of Storage
	Nitrous oxide	(30) 150-cubic-foot cylinders
	Anti-corrosion water treatment	(12) cylinders (3) drums*
Note: *Container size not disclosed in ESA. Source: Ninyo & Moore 2016.		

Surrounding Sites

During the environmental database search, various sites were identified within a 1-mile radius of the proposed project site. As concluded in the Environmental Site Assessment (ESA) these surrounding properties were not considered potential impacts to the proposed project site.

Nearby Schools

The nearest school to the proposed project site, PUC Lakeview Charter High School, is located approximately 0.60 mile to the southwest. Other schools in the vicinity include Olive Vista Middle School and The Concordia Schools–Sylmar Campus, located 0.77 mile south and 0.95 mile southeast of the proposed project site, respectively.

Emergency Planning

LACFD is responsible for emergency medical services and fire protection in the project area. In the event of an emergency, LACFD implements all appropriate emergency procedures outlined in the Los Angeles County Operational Area Emergency Response Plan, approved on February 17, 1998, by the County Chief Executive Office. The plan was implemented to provide effective life safety measures and reduce property loss, provide for the rapid resumption of affected business and community services, and provide accurate documentation and records for cost recovery.

3.8.4 Environmental Impact Analysis

This section describes the potential construction and operational impacts of the proposed project and measures required to mitigate any significant impacts.

3.8.4.1 Methods

A Phase I Hazardous Materials Assessment (HMA) (see Appendix G of this Draft EIR) was conducted by Ninyo & Moore in February and March of 2016. The purpose of the HMA was to identify and evaluate potential issues of concern that could affect or be affected by the proposed project.

3.8.4.2 Thresholds of Significance

For the purposes of the analysis in this EIR, and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant environmental impact if it would:

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

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

HAZ-3 Emit hazardous emissions or involve handling hazardous or acutely hazardous materials (i.e., hazardous material found to be fatal to humans in low doses), substances, or waste within 0.25 mile of an existing or proposed school.

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

HAZ-5 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The County, as the CEQA lead agency, determined in the Notice of Preparation/Initial Study (NOP/IS) (see Appendix A of this Draft EIR) for this EIR that the proposed project would not result in either of the following impacts:

- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area.
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires, including in areas where wildlands are adjacent to ur*b*anized areas or where residences are intermixed with wildlands. For a discussion of those impacts, please see Section 3.18, *Wildfire Hazards*, in this EIR.

Therefore, no further analysis of these issues is required. Please refer to the NOP/IS for additional information regarding these issue areas.

3.8.4.3 Impacts and Mitigation Measures

Impact HAZ-1: Would the Proposed Project Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials?

Construction Impacts

Tier I

Tier I development would include construction of Restorative Care Village facilities, an ambulatory care center, and a community center, improvements to the existing hospital, new parking facilities, and other campus improvements. As such, proposed project construction would involve routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and fuels. Such transport, use, and disposal must be compliant with applicable regulations, such as those outlined in Section 3.8.2, *Regulatory Setting*, of this EIR and with construction best management practices (BMPs) implemented in accordance with a site-specific SWPPP required as part of the NPDES Construction General Permit. Although solvents, paints, oils, grease, fuel, and other materials would be transported, used, and disposed of during the construction phase of the proposed project, these materials are typically used in construction projects and would not represent the transport, use, and disposal of acutely hazardous materials. Because compliance with existing regulations and

the Construction General Permit is mandatory, the proposed project is not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. No impacts or less-than-significant impacts would occur.

Tier II

Potential construction impacts associated with Tier II development would be similar to potential construction impacts as part of Tier I. As such, the analysis for Tier I above would apply for the implementation of Tier II. No impacts or less-than-significant impacts would occur.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

No impacts or less-than-significant impacts would occur.

Operational Impacts

Tier I

As summarized under Section 3.8.3, *Environmental Setting*, several hazardous materials are stored onsite at various locations. The hospital loading dock and pathology laboratory, as well as the central utility plant and associated cooling tower locations, were all identified in the ESA as currently storing hazardous materials. Tier I development would include improvements to the aforementioned hospital in addition to the relocation of the central plant to the north side of the existing hospital building (to be known as Central Plant East, as there will be a second utility plant added as part of Tier II development). Additionally, an ambulatory care center (ambulatory care center operations would range from primary care practice to outpatient surgery), Restorative Care Village, and materials management building would be constructed as part of Tier I development. As noted in Chapter 2 of this EIR, the materials management building would handle pharmaceutical supplies and regulated medical waste. These facilities could increase the use of hazardous materials; however, it is expected they would use, store, and handle hazardous material in a manner similar to how they are used by existing campus facilities, including the hospital, and thus their handling and storage would be subject to all hazardous materials laws and regulations already being adhered to. Continued compliance with existing laws and regulations would result in less-than-significant impacts from the routine transport, use, or disposal of hazardous materials.

Tier II

As described in Chapter 2, *Project Description*, of this Draft EIR, Tier II development could include a new hospital and a supply services building containing maintenance shops. As such, the new hospital under Tier II would be expected to handle and store hazardous materials similar to what is being stored in the existing hospital (materials summarized in Section 3.8.3, *Environmental Setting*). The supply services building is expected to house routine hazardous materials used for day-to-day maintenance. These materials would be used similarly to existing conditions, and any releases involving these materials would be localized and cleaned up as it occurs. Furthermore, continued compliance with existing laws and regulations related to the routine transport, use, or disposal of hazardous materials would result in less-than-significant operational impacts..

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Impacts would be less than significant.

Impact HAZ-2: Would the Proposed Project Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment?

Construction Impacts

Tier I

As discussed above for impact **HAZ-1**, construction activities associated with the proposed project would require transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and fuels, which could result in upset or accidents that could release hazardous materials into the environment. Such transport, use, and disposal must be compliant with applicable regulations such as the regulations discussed in Section 8.2, *Regulatory Setting*, of this EIR, and with construction BMPs implemented in accordance with a site-specific SWPPP required as part of the NPDES Construction General Permit. As discussed above, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; therefore, the risk of upset and accidents involving the release of hazardous materials into the environment would be less than significant.

The proposed project site was identified in multiple environmental databases (summarized above in Section 8.3, *Environmental Setting*, of this EIR). According to the ESA, there were no violations associated with the aforementioned listings. However, the Los Angeles County Fire Station #04, located within the proposed project footprint, was listed in the LUST database as having contaminated soil and no current site status. It is unknown whether the soil remains onsite. Although no Recognized Environmental Concerns (RECs) were identified during the completion of the ESA, the presence of the LUST case on the proposed project site was identified as a Potential Environmental Concern (PEC). In addition, the presence of the USTs in the hospital loading dock and the presence of a paint and solvent spray booth were also identified as PECs (spray booth location was not disclosed in the ESA). As such, there is a possibility that contaminated soils could exist within one of these areas, which could be exposed during project construction, a potential significant impact. Implementation of mitigation measures **MM-HAZ-1** and **MM-HAZ-2** (below) would reduce potential impacts associated with contaminated soils to less than significant.

Demolition of structures built prior to 1980 may result in the exposure of the public and/or the environment to LBP and/or ACMs in buildings, a potentially significant impact. **MM-HAZ-C2c** (below) would reduce potential impacts to less than significant.

Tier II

Similar to Tier I, construction activities associated with the proposed program would require transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and fuels. Such transport, use, and disposal must be compliant with applicable regulations as discussed in Section 3.8.2, *Regulatory Setting*, and with construction BMPs implemented in accordance with a site-specific SWPPP. Thus, the proposed program would not create a significant hazard to the public

or the environment through the routine transport, use, or disposal of hazardous materials; therefore, the risk of upset and accidents involving the release of hazardous materials into the environment would be less than significant.

The proposed project site was identified in multiple environmental databases, but no violations were associated with the listings. Additionally, none of the PECs identified in the Phase I ESA were located within the Tier II footprint. However, because Tier II development is scheduled to occur beyond 2035 and environmental conditions can change within the footprint and in the surrounding environment, implementation of mitigation measure **MM-HAZ-4** (below) would reduce construction personnel and the environment's risk of exposure to contaminated media from future environmental conditions.

Mitigation Measures

The following measures are proposed to mitigate impact **HAZ-2**, above.

MM-HAZ-1: Encountering Contaminated Soils: If odiferous, stained, or discolored soil is encountered near the fire station, USTs, or spray booth, a professional environmental consultant specializing in the identification and handling of hazardous materials will be retained by the County to assess the site. Identification of possible hazardous materials would typically involve soil samples and laboratory analysis. The suspect soil will be isolated, covered, and avoided by construction personnel until analytical results are reviewed by qualified personnel. Soils identified as hazardous or contaminated will be handled, transported, and treated in accordance with all federal, state, and local existing hazardous materials regulations (as mentioned under Section 3.8.2, *Regulatory Setting*) and based on the professional environmental consultant's recommendations. Only when the site has been released by the professional environmental consultant and the applicable oversight agencies (such as the LACFD's Health Hazardous Materials Division) will construction activities be allowed to continue on the affected site.

MM-HAZ-2: Engineering Controls and Best Management Practices during Construction: To minimize human exposure to potentially contaminated soils during construction, contractors will employ the use of engineering controls and BMPs. Engineering controls and construction BMPs will include, but are not limited to, the following:

- Contractor employees working onsite handling potentially contaminated media will be certified in the Occupational Health and Safety Administration's 40-hour Hazardous Waste Operations and Emergency Response training.
- Contractors will water or mist soil as it is being excavated and stockpiled or loaded onto transportation trucks.
- Contractors will place any stockpiled soil in areas shielded from prevailing winds or cover stockpiles with staked and/or anchored sheeting.

MM-HAZ-3: Encountering Asbestos-Containing Materials and Lead Based Paint: In order to minimize exposure, a Hazardous Building Materials Survey (HBMS) and evaluations for asbestos-containing materials and lead-based paint will be conducted prior to demolition activities in buildings that are to be demolished or renovated. Abatement measures will be implemented in accordance with the recommendations of these evaluations. Asbestos surveys will be conducted in accordance with SCAQMD Rule 1403, which specifies that all surveys are to be carried out by a Cal/OSHA-certified asbestos consultant and will follow established survey protocols, notification, and work practice requirements. Lead-based paint surveys will be

carried out by California Department of Public Health(CDPH)-certified inspector/assessor. If necessary, a lead abatement plan would be prepared by the CDPH-certified project monitor or supervisor, and demolition activities would be performed by CDPH-certified workers.

MM-HAZ-4: Project-Level Hazardous Materials Sites Assessment Prior to Construction Activities: To avoid exposure of construction workers, the public, or the environment to contaminated media, prior to any ground-disturbing activities, contractors will be required to retain a professional environmental consultant specializing in hazardous materials impact assessment to conduct a project-level analysis to determine if there are existing hazardous materials conditions in the vicinity of the construction site and if there is potential for existing hazardous materials conditions to affect construction. This assessment will consist of a search for environmental-related information present in publicly accessible databases. The information will be reviewed to determine if the construction footprint or adjacent properties are listed in the databases. If the construction footprint or adjacent properties are listed in the databases, the professional environmental consultant will determine the potential risk to construction workers, the public, or the environment from rehabilitation activities and identify all necessary avoidance, abatement, remediation, cleanup, disposal, monitoring, reporting, notifications, and/or other measures to prevent significant impacts. The contractor will implement all measures as directed by the professional environmental consultant.

Level of Significance after Mitigation

Less than significant after implementation of **MM-HAZ-1**, **MM-HAZ-C2**, **MM-HAZ-3**, and **MM-HAZ-4**.

Operational Impacts

Tier I

Hazardous material use in the hospital and central plant locations are expected to remain similar to existing conditions. The Ambulatory Care Center, Restorative Care Village, and Materials Management/Supply Services Building would handle, and therefore increase, the amounts of onsite hazardous materials. The materials used in the ambulatory care center and residential care facilities are expected to be similar to what is currently being used in the hospital, and their handling and storage would be subject to all hazardous materials laws and regulations currently being adhered to. As discussed, the materials management building would handle pharmaceutical supplies and regulated medical waste. The handling of these materials is also part of the existing hospital operations and would comply with laws and regulations being adhered to. Continued compliance with existing laws and regulations would reduce potential operational impacts to the public or the environment. Furthermore, it is expected that any spills that may occur would be limited in scope and spill area and would be cleaned up soon after they occur. Impacts would be less than significant.

Tier II

Tier II development could include a new hospital and supply services building. The new hospital would be expected to handle and store hazardous materials similar to what is being stored in the existing hospital (materials summarized in Section 3.8.3, *Environmental Setting*, of this EIR). The supply services building is expected to house routine hazardous materials used for day-to-day maintenance. These materials would be used similar to existing conditions and any releases involving these materials would be localized and cleaned up as it occurs. Furthermore, continued compliance with existing laws and regulations related to the routine transport, use, or disposal of hazardous materials would reduce potential operational impacts to less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Impacts would be less than significant.

Impact HAZ-3: Would the Proposed Project Emit Hazardous Emissions or Involve Handling Hazardous or Acutely Hazardous Materials, Substances, or Waste within 0.25 Mile of an Existing or Proposed School?

Construction Impacts

Tier I

The closest existing school is PUC Lakeview Charter High School, approximately 0.60 mile to the southwest of the proposed project site. Other schools in the vicinity include Olive Vista Middle School and The Concordia Schools–Sylmar Campus, located 0.77 mile south and 0.95 mile to the southeast, respectively. As such, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials within 0.25 mile of a school. No impacts would occur.

Tier II

There are no schools located within 0.25 miles of the proposed Tier II development. No impacts would occur.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

No impacts would occur.

Operational Impacts

Tier I

There are no schools located within 0.25 miles of the proposed Tier I structures. No impacts would occur.

Tier II

There are no schools located within 0.25 miles of the proposed Tier II structures. No impacts would occur.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

No impacts would occur.

Impact HAZ-4: Would the Proposed Project Be Located on a Site that Is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5 and, as a Result, Create a Significant Hazard to the Public or the Environment?

Construction and Operational Impacts

Tier I

As previously mentioned, the Olive View–UCLA Medical Center Campus was found in multiple environmental databases. Although the current Olive View–UCLA Medical Center Campus is listed in these databases, there were no reports of any past or present violations. However, the Los Angeles County Fire Station #04, located within the proposed project footprint (at 14425 Olive View Drive), was listed on the LUST database as having contaminated soil. No current site status was provided. As such, the presence of a LUST case on the proposed project site was identified as a PEC and the potential to encounter contaminated soil during construction activities exists. Implementation of **MM-HAZ-1** and **MM-HAZ-2** would reduce potential impacts related to encountering contaminated soil (in the area near the fire station) during construction activities to less than significant.

Also, during the environmental database research portion of the Phase I ESA, various sites were identified as being located within a 1-mile radius of the proposed project site. However, these surrounding properties were not considered potential impacts to the proposed project site by the ESA. Therefore, implementation of the proposed project would not create any significant impacts associated with being included on list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Impacts would be less than significant.

Tier II

The Olive View–UCLA Medical Center Campus was listed in multiple environmental databases. According with the Phase I ESA, there were no violations associated with these listings. The Los Angeles County Fire Station #04 found within the proposed project footprint was identified in the LUST database, but is found within the proposed Tier I development.

Because Tier II development is scheduled to occur beyond 2035, and environmental conditions can change within the footprint and in the surrounding environment, implementation of **MM-HAZ-4** would reduce the risk of exposure to contaminated media from future environmental conditions. Impacts would be less than significant.

Mitigation Measures

MM-HAZ-1 and **MM-HAZ-2** are proposed to mitigate potential Tier I impacts. **MM-HAZ-4** is proposed to mitigate potential Tier II impacts.

Level of Significance after Mitigation

Less than significant after implementation of **MM-HAZ-1**, **MM-HAZ-2**, and **MM-HAZ-4**.

Impact HAZ-5: Would the Proposed Project Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan?

Construction Impacts

Tier I

Implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project would not result in any substantial traffic queuing along Olive View Drive and would not allow any construction vehicles or equipment to park or remain stationary within the roadway. Moreover, proposed project construction would occur in the existing Olive View–UCLA Medical Center Campus footprint, which does not include any characteristics (e.g., permanent road closures, long-term blocking of road access) that would physically impair or otherwise interfere with emergency response or evacuation in the project vicinity. All large construction vehicles entering and exiting the site would be guided by the use of personnel using signs and flags to direct traffic. The nearest County designated emergency/disaster routes to the project site are the SR 210 freeway and Glenoaks Boulevard, both of which are located south of the campus (County of Los Angeles 2012). Although construction traffic may use these roadways, the volume of traffic is not expected to be sufficient to substantial impair or adversely affect operation of these roadways.

During construction activities, the proposed project would be required to comply with applicable requirements set forth by the Los Angeles County Operational Area Emergency Response Plan, the LACFD, and the Los Angeles County Sherriff's Department. Project features, such as not allowing construction vehicles and equipment to park or stop along Olive View Drive, the use of flag personnel to ensure the continued flow of traffic, and compliance with the aforementioned Plan and facilitating agencies' requirements, would reduce the potential impact on emergency response to less than significant.

Tier II

Potential construction impacts associated with Tier II development would be similar to potential construction impacts as part of Tier I. As such, the analysis for Tier I above would apply for the implementation of Tier II.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Impacts would be less than significant.

Operational Impacts

Tier I

As mentioned under the construction discussion above, implementation of the proposed project would occur on the existing Olive View–UCLA Medical Center Campus footprint and does not include any (short- or long-term) characteristics that would physically interfere with emergency response or evacuation in the project vicinity. Tier I facilities would continue to comply with applicable

requirements set forth by the Los Angeles County Operational Area Emergency Response Plan during an emergency. No or less-than-significant impacts would occur.

Tier II

Potential operational impacts associated with Tier II development would be similar to potential operational impacts under Tier I. As such, the analysis for Tier I above would apply for the implementation of Tier II.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

No or less-than-significant impacts would occur.

3.8.5 Cumulative Impacts

The study area for cumulative hazardous materials impacts has been defined as the area within approximately 0.25 mile of the boundaries of the project site because it is unlikely that the hazardous materials impacts of the proposed project would extend beyond the immediate project vicinity. Construction associated with ongoing and future projects in the project area could result in cumulative impacts through the release of hazardous materials to soils and/or groundwater during site excavation and grading and building demolition and renovation. It is anticipated that construction and operation of the related projects in the study area would comply with all applicable hazardous materials regulations governing the transport, use, and disposal of hazardous materials. Consequently, construction and operation of the related projects are not expected to result in significant cumulative hazards to the public or the environment. If a hazardous materials release were to occur as a result of proposed project implementation, impacts would be site-specific (and typically in small, localized quantities), and are therefore unlikely to combine with other hazardous material impacts in the surrounding area. Additionally, construction and operation of proposed Master Plan facilities would comply with all applicable hazardous waste laws and regulations. Given that fact, the limited potential for impacts to extend beyond the boundaries of the project site, and the implementation of the mitigation measures described above, development of the Master Plan would not contribute to a cumulatively considerable impact related to hazardous materials.

As noted in the discussion of impact **HAZ-5,** above, during construction activities, the proposed project would be required to comply with applicable requirements set forth by the Los Angeles County Operational Area Emergency Response Plan, the LACFD, and the Los Angeles County Sherriff's Department. Project features, such as not allowing construction vehicles and equipment to park or stop along Olive View Drive, using flag personnel to ensure the continued flow of traffic, and compliance with the aforementioned Plan and facilitating agencies' requirements would reduce the potential impact on emergency response to less than significant. Consequently, the proposed project is not expected to contribute to any cumulative impacts on emergency responses or evacuation plans.

3.9 Hydrology/Water Quality

3.9.1 Introduction

This section describes the affected environment and regulatory setting for hydrology and water quality. It also describes impacts on hydrology and water quality that would result from implementation of the proposed project, as well as proposed mitigation measures to reduce any identified significant impacts. The information in this section is based on available literature, including the *Hydrology Technical Memorandum for the Los Angeles County Olive View–UCLA Medical Center EIR* (Appendix H of this EIR), which was prepared for the proposed project by Watearth (2016) and updated April 26, 2019. Hydrologic and low impact development (LID) analyses are based on the Tier I development concept and layout described in the Master Plan. Tier II development is addressed at a conceptual, less detailed level without calculations as development plans are less solidified and would occur over a longer timeframe.

3.9.2 Regulatory Setting

3.9.2.1 Federal

Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. It is based on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit. Permit review is the CWA's primary regulatory tool. The CWA requires states to adopt water quality standards for receiving waters. Water quality standards designate beneficial uses for receiving waters and include the criteria required to support such uses. Water quality criteria are either narrative statements related to the quality of the water that support a particular use or maximum concentration levels for pollutants (i.e., bacteria, etc.). As part of the CWA, when monitoring data indicate that a concentration level for a pollutant has been exceeded, the receiving water is classified as *impaired* and placed on the CWA Section 303(d) List of Water Quality–Limited Segments Requiring TMDLs (303[d] list). A Total Maximum Daily Load (TMDL) is then developed for the pollutant(s) that caused the impairment. The purpose of the TMDL is to limit the volume of pollutants discharged into the receiving water from all sources (i.e., stormwater runoff, wastewater, agriculture).

Federal Antidegradation Policy

The Federal Antidegradation Policy requires states to develop statewide antidegradation policies and identify methods for implementing them (EPA 2010). Pursuant to the Code of Federal Regulations, state antidegradation policies and implementation methods must, at a minimum, protect and maintain (1) existing in-stream water uses; (2) existing water quality, where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of the nation's drinking water. (U.S. Code 1996). Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers that implement those standards. SDWA was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells.

National Pollutant Discharge Elimination System General Construction Permit

The National Pollutant Discharge Elimination System (NPDES) was established per 1972 amendments to the Federal Water Pollution Control Act to control discharges of pollutants from point sources (Section 402). The 1987 amendments to the CWA created a section devoted to stormwater permitting (Section 402[p]), with individual states designated for administration and enforcement of the provisions of the CWA and the NPDES permit program. The State Water Resources Control Board (SWRCB) issues both Construction General Permits and Individual Permits under this program.

Projects that will disturb more than 1 acre of land during construction are required to file a Notice of Intent (NOI) with the SWRCB to be covered under the NPDES Construction General Permit for discharges of stormwater associated with construction activity. The project proponent must develop measures that are consistent with the Construction General Permit. Furthermore, a Stormwater Pollution Prevention Plan (SWPPP) must be developed and implemented for each site covered under the Construction General Permit. The SWPPP describes the best management practices (BMPs) the discharger will use to protect stormwater runoff and reduce potential impacts on surface water quality through the construction period.

The SWPPP must contain the following:

- A visual monitoring program,
- A chemical monitoring program for nonvisible pollutants (to be implemented if a BMP failure occurs), and
- A sediment monitoring plan if the site discharges directly to a water body on the 303(d) list for sediment.

The area that would be disturbed under the proposed project exceeds 1 acre; therefore, the project would be required to comply with the Construction General Permit.

3.9.2.2 State

Porter–Cologne Water Quality Control Act of 1969

The Porter–Cologne Water Quality Control Act (Porter–Cologne or the Act) established the SWRCB and divided the state into nine regional basins, each with a Regional Water Quality Control Board (RWQCB). The SWRCB is the primary state agency with responsibility for protecting the quality of the state's surface water and groundwater.

The act authorizes the SWRCB to draft policies regarding water quality in accordance with CWA Section 303. In addition, the Act authorizes the SWRCB to issue waste discharge requirements

(WDRs) for projects that would discharge to state waters. Porter–Cologne requires the SWRCB or the RWQCB to adopt water quality control plans, otherwise referred to as *basin plans*, for the protection of water quality.

A basin plan must:

- Identify beneficial uses for the water to be protected,
- Establish water quality objectives for the reasonable protection of the beneficial uses, and
- Establish an implementation program for achieving the water quality objectives.

Basin plans also provide the technical basis for determining WDRs, taking enforcement actions, and evaluating clean water grant proposals. Basin plans are updated and reviewed every 3 years in accordance with Article 3 of Porter–Cologne and CWA Section 303(c).

California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB in 1968. Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state, not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual basin plans, such high quality will be maintained and discharges to that water body will not unreasonably affect present or anticipated beneficial use of such water resource.

California Toxics Rule

In 2000, the California Environmental Protection Agency (Cal-EPA) promulgated the California Toxics Rule, which establishes water quality criteria for certain toxic substances to be applied to waters in the state (EPA 2001). Cal-EPA promulgated this rule based on its determination that the numeric criteria are necessary in the state to protect human health and the environment. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water, such as inland surface waters and enclosed bays and estuaries that are designated by the Los Angeles Regional Water Quality Control Board (LARWQCB) as having beneficial uses protective of aquatic life or human health.

National Pollutant Discharge Elimination System

For compliance with the CWA within California, the SWRCB and RWQCBs are responsible for assessing water quality monitoring data for surface waters every 2 years to determine if they contain pollutants that exceed the levels established in water quality standards. The SWRCB administers water rights, water pollution control, and water quality functions throughout the state, while the RWQCBs conduct planning, permitting, and enforcement activities. The proposed project is located within the jurisdiction of the LAWQCB.

The SWRCB and RWQCBs implement, monitor, and enforce the NPDES permitting requirements within their jurisdictions. In general, the regulations require all communities with populations of more than 50,000 to develop programs for reducing pollutants carried by stormwater runoff into waters of the United States. As with WDRs, the SWRCB and RWQCBs can issue individual NPDES

permits to cover individual dischargers or general permits (state or regional) to cover a category of dischargers.

Construction General Permit

Pursuant to CWA Section 402(p), and as related to the goals of the Porter–Cologne Water Quality Control Act, the SWRCB has issued a statewide NPDES General Permit (Construction General Permit) for Stormwater Discharges Associated with Construction Activity (Order No. 2009-009-DWQ, NPDES No. CAS000002, as amended by Order 2010-014-DWQ and 2012-06-DWQ), adopted September 2, 2009. Every construction project that disturbs 1 or more acres of land surface, or that is part of a common plan of development or sale that disturbs more than 1 acre of land surface, requires coverage under the Construction General Permit. Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, that result in soil disturbances of at least 1 acre of total land area.

Municipal General Permit

CWA Section 402 mandates permits for municipal stormwater discharges, which are regulated under the NPDES General Permit for MS4s. Phase I MS4 permit regulations cover medium-sized municipalities (between 100,000 and 250,000 people) and large municipalities (more than 250,000 people). Phase II MS4 permit regulations require that stormwater management plans/programs be developed by municipalities with populations of less than 100,000, including non-traditional small MS4s, which are facilities such as military bases, public campuses, and prison and hospital complexes.

3.9.2.3 Local

Water Quality Control Plan, Los Angeles Region

The Porter–Cologne Water Quality Control Act authorizes the regional waster boards to adopt, review, and revise policies for all waters of the state (including surface and groundwater) and directs them to develop regional basin plans. Section 13170 of the California Water Code also authorizes the SWRCB to adopt basin plans on its own initiative. RWQCBs are required, by law, to develop, adopt, and implement a basin plan for the entire region. Water quality standards are set forth in the regional basin plan.

According to Section 13050 of the California Water Code, basin plans consist of designation or establishment of beneficial uses to be protected, water quality objectives to protect those uses, and a program of implementation needed for achieving the objectives for the waters within a specified area. Because beneficial uses, together with their corresponding water quality objectives, can be defined per federal regulations as water quality standards, the basin plans are regulatory references for meeting the state and federal requirements for water quality control.

County of Los Angeles Hydrology Manual

Drainage and flood control in the city are subject to review and approval by the Department of Public Works, Bureau of Engineering (Bureau of Engineering). Storm drains within the city are constructed by both the city and the Los Angeles County Flood Control District (County Flood Control). The County Flood Control constructs and has jurisdiction over regional facilities such as

major storm drains and open flood control channels, while the city constructs and is responsible for local interconnecting tributary drains.

Per the city's Special Order No. 007-1299 of December 3, 1999, the city has adopted the Los Angeles County Department of Public Works (LACDPW)'s *Hydrology Manual* as its basis of design for storm drainage facilities. The *Hydrology Manual* requires that a storm drain conveyance system be designed for a 25-year storm event and that the combined capacity of a storm drain and street flow system accommodate flow from a 50-year storm event. Areas with sump conditions are required to have a storm drain conveyance system capable of conveying flow from a 50-year storm event. The County also limits the allowable discharge into existing storm drain facilities based on the MS4 Permit and is enforced on all new developments that discharge directly into the County's storm drain system.

Drainage and flood control structures and improvements within the city are subject to review and approval by the city's Department of Public Works, Bureau of Engineering, and Department of Building and Safety. As required by the Department of Public Works, all public storm facilities must be designed in conformity with the standards set forth by Los Angeles County. The Department of Public Works reviews and approves storm drain plans prior to construction.

Storm Water Program

The Watershed Protection Division of the city of Los Angeles Department of Public Works, Bureau of Sanitation (BOS), is responsible for stormwater pollution control throughout the city in compliance with the Los Angeles County Municipal NPDES Permit. The Watershed Protection Division administers the city's stormwater program, which has two major components: pollution abatement and flood control. The Watershed Protection Division publishes a two-part handbook that provides guidance to developers for compliance with the County's Municipal NPDES permit through the incorporation of water quality management into development planning. *The Development Best Management Practices Handbook, Part A: Construction Activities* (3rd edition, September 2004) reiterates the policies contained within the Construction General Permit, provides specific minimum BMPs for all construction activities, and requires the preparation of a SWPPP and the filing of an NOI to comply with the State NPDES Construction General Permit requirements with the LARWQCB. *The Development Best Management Practices Handbook* provides guidance to developers to ensure the post-construction operation of newly developed and redeveloped facilities comply with the developing planning program regulations of the city's stormwater program.

Low Impact Development

The LACPWD prepared the *Low Impact Design Standards Manual* (LACPWD 2014) to comply with the requirements of the 2012 MS4 Permit and supersede the County Standard Urban Stormwater Mitigation Plan. The *LID Standards Manual* provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. Unlike traditional stormwater management, which collects and conveys stormwater runoff through storm drains, pipes, or other conveyances to a centralized stormwater facility, LID uses site design and stormwater management to maintain the site's pre-development runoff rates and volumes. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall.

Los Angeles County Municipal Stormwater NPDES Permit (MS4 Permit)

The current MS4 permit for Los Angeles County (Order No. R4-2012-175) was adopted on November 8, 2012, became effective December 28, 2012, and expired on December 28, 2017. In accordance with Section 2235.4 of Title 23 of the California Code of Regulations, the terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on continuation of expired permits are complied with. Accordingly, if a new order is not adopted by the expiration date above, then the permittees will continue to implement the requirements of Order No. R4-2012-175 until a new one is adopted. Order No. R4-2012-175 is the fourth iteration of the stormwater permit for the MS4s in the Los Angeles region, which includes the Los Angeles County Flood Control District, Los Angeles County, and 84 incorporated cities (including the city of Los Angeles) within the County watersheds, excluding the city of Long Beach. The permit contains the requirements necessary to improve efforts to reduce the discharge of pollutants in stormwater runoff to the maximum extent practicable and achieve water quality standards. This permit requires runoff issues to be addressed during major phases of urban development (planning, construction, and operation) to reduce the discharge of pollutants from stormwater to the MEP, effectively prohibit non-stormwater discharges, and protect receiving waters.

3.9.3 Environmental Setting

3.9.3.1 Surface Water Quality

The Olive View–UCLA Medical Center Campus is located in Sylmar, west of single-family housing, north of residential and commercial-industrial land uses, east of the Santa Susana Mountains, and south of the San Gabriel Mountains. The location of the project site is considered part of the San Fernando Valley, within the city of Los Angeles. More specifically, the site is bounded by the Angeles National Forest on the north, Olive View Drive on the, south Wilson Canyon Channel on the east, and Bucher Avenue to the west. The Olive View project site is an institutional space with elevations ranging from 1,415 feet at the southern edge of the campus to 1,540 feet at its highest elevation. This range is due to the mountain landscape within the Angeles National Forest just north of and adjacent to the campus. The project site is mostly developed, and current land use consists of medical and administrative buildings, paved roadways and parking lots, and tracts of vegetated open space throughout, with an existing impervious cover of approximately 65 percent of the area within the Tier I development boundaries (eastern part of campus). There are currently large tracts of open space in and around the campus, consisting of various types of vegetation (e.g., trees, shrubs, turf grass, bare soil) in the Tier II area (western part of campus). Land uses at the project site include a mix of public facilities and landscape/open space uses. Land uses in the area surrounding the campus are largely composed of open space with a few single-family homes in the immediate vicinity. The area north of the site is mostly vacant/undifferentiated open space containing flood waterways and electrical power facilities-powerlines. The areas directly to the east and west of the site are also vacant/undifferentiated open space. The area south of the campus, across Olive View Drive, contains low-rise apartments, low-density single-family homes, and freeways/major roads and is considered retail/commercial land use for the water quality analysis.

The existing site does not include water quality or stormwater controls, such as stormwater BMPs, LID features, or hydromodification management facilities, nor are stormwater detention or other flood control features present onsite. Instead, the existing site manages rainfall and stormwater

runoff by overland sheet flow toward Wilson Canyon and primarily toward a series of onsite catch basins and discharges to the city of Los Angeles storm drain line at Olive View Drive.

Stormwater Runoff (Typical Pollutants from Project Site)

Stormwater runoff from the existing site is typical of developed areas, which include moderate amounts of pollutants. Total suspended solids (TSS) and trash are common in single-family residential and commercial areas. Additionally, nutrients from fertilizers, as well as herbicides and pesticides associated with landscape maintenance, are also likely to be present in stormwater runoff from the vicinity into Wilson Canyon. Many of the drainage inlets in roadways adjacent to the site include grates or screens to prevent or limit trash from entering the storm drain system and discharging to the receiving water (i.e., Wilson Canyon). The site drains to Wilson Drain and Schoolhouse Drain, but most flows to the Olive View Drive storm drain system. Urban runoff and human activities may generate bacteria and other pollutants around Wilson Canyon and Schoolhouse Canyon.

Table 3. 9-1 summarizes typical pollutants of concern based on land use. The majority of the pollutants identified are from the LADPW's *Low Impact Development Standards Manual* (City of Los Angeles 2011). Also included in this table are other pollutants that the U.S. EPA recognizes to be typically associated with land use present on the project site.

Table 3.9-1. Pollutants of Concern by Land Use

Land Use	Pollutants of Concern													
	Suspended Solids[2]	Total Phosphorus[2]	Total Nitrogen[2]	Total Kjedahl Nitrogen[2]	Cadmium, Total[2]	Chromium, Total[2]	Copper Total[2]	Lead Total[2]	Zinc, Total[2]	Biological Oxygen Demand[5]	Chemical Oxygen Demand[5]	Fecal Coliform[5]	Hydrocarbons[5]	Trash[5]
Commercial	x	x	x	x	[4]	[4]	x	x	x	–	–	–	–	–
Industrial	x	x	x	x	[4]	[4]	x	x	x	–	–	–	–	–
Transportation (streets, roads)	x	x	x	x	[4]	[4]	x	x	x	–	–	–	–	–
Institutional (educational facilities)	x	–	–	–	[4]	[4]	x	–	x	–	–	–	–	–
Vacant/ Undeveloped[5]	x	x	x	x	–	–	–	x	x	–	–	–	–	–
Project Site	x	x	x	x	x	x	x	x	x	x	x	x	x	x

[1] Adapted from Table A-3 of the *Technical Manual for Stormwater Best Management Practices in the County of Los Angeles* (2004) and Southern California Coastal Water Research Project Land Use-Specific Stormwater Monitoring Data. X= exceedance of "standard" by observed median/average concentration; blank = no exceedance of "standard" by observed median/average concentration.

[2] Derived from Table 11 of the 2012 Los Angeles County MS4 Permit (page 104).

[3] Critical facilities include automobile dismantling (SIC 50xx), automobile repair (SIC 75xx), metal fabrication (SIC 34xx), motor freight (SIC 42xx), automobile dealerships (SIC 55xx), chemical manufacturing (SIC 28xx), and machinery manufacturing (SIC 35xx).

[4] No available data exists to determine if these pollutants of concern originate from this land use. Pollutant is assumed to be produced by this land use unless otherwise proven by the project applicant.

[5] Based on *Guide to Stormwater Pollutant Concentrations* (EPA 2006).

Source: Watearth 2016.

Pollutants of Concern Based on Receiving Water Impairment

The CWA requires that states adopt water quality standards for receiving waters. Water quality standards designate beneficial uses for the receiving water and include criteria required to support those beneficial uses. Water quality criteria are either narrative statements related to the quality of water to support a particular use or maximum concentrations of levels of pollutants (i.e., bacteria, etc.). As part of the CWA, when monitoring data indicates that a pollutant level is exceeded, the receiving water is classified as impaired and placed on the CWA Section 303(d) List of Water Quality Limited Segments Requiring TMDLs (303(d) List). A total maximum daily load (TMDL) is then developed for the pollutant(s) causing the impairment. The purpose of the TMDL is to limit the amount of pollutant(s) discharged to the receiving water from all sources (i.e., stormwater runoff, wastewater, agriculture).

There are several pollutants of concern related to the receiving body of water, including those with a developed TMDL requirement, other pollutants listed on the 303(d) List, and pollutants of concern for the Sylmar watershed management area, based on the *Water Quality Compliance Master Plan for Urban Runoff 2009*. The project is located adjacent to Wilson Canyon, just upstream of the confluence with Schoolhouse Canyon. Table 3.9-2 includes data from the SWRCB, based on the combined California 2010 303(d) List and includes pollutants that have a completed TMDL, require development of a TMDL, and that are being addressed by actions other than a TMDL. The project area is located within the Lower Pacoima Watershed, which was not listed in the 303(d) List. It is, however, within the Tujunga Wash Watershed shown in the *Water Quality Compliance Master Plan for Urban Runoff*. The table specifically addresses the Tujunga Watershed and Reach 4 of the Los Angeles River, into which runoff from the Lower Pacoima Watershed eventually discharges.

Table 3.9-2. Los Angeles River Impaired Waters 303(d) List[1]

Water Body Name	Pollutant	Pollutant Category	TMDL Status	USEPA TMDL Approval Date
Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	Copper	Metals/ Metalloids	Completed	29-Oct-08
Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	Lead	Metals/ Metalloids	Completed	29-Oct-08
Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	Ammonia	Nutrients	Completed	18-Mar-04
Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	Nutrients (Algae)	Nutrients	Completed	18-Mar-04
Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	Coliform Bacteria	Pathogens	Completed	23-Mar-12
Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	Trash	Trash	Completed	24-Jul-08
Tujunga Wash (LA River to Hansen Dam)	Copper	Metals/ Metalloids	Completed	29-Oct-08
Tujunga Wash (LA River to Hansen Dam)	Ammonia	Nutrients	Completed	18-Mar-04
Tujunga Wash (LA River to Hansen Dam)	Coliform Bacteria	Pathogens	Completed	23-Mar-12
Tujunga Wash (LA River to Hansen Dam)	Trash	Trash	Completed	24-Jul-08
Source: EPA 2010; Watearth 2016.				

The project site is located within the Tujunga Water Management Area, according to Figure 2-6 of the County of Los Angeles *LID Handbook*. Multiple TMDLs are in effect for the Tujunga Watershed Management Area for the following pollutants:

- Metals (copper and lead)
- Nutrients (algae and ammonia)
- Trash

[1] 2010 EPA approved 303(d) Final List.

- Coliform Bacteria

Table 3.9-3 shows pollutant and other constituent concentrations as measured at the Los Angeles mass emissions site, as identified in Section 5 of the Los Angeles River Watershed Report (2005).

Table 3.9-3. Annual Mean Concentration for Constituents Measured at the Los Angeles River Mass Emission Site, 2004–2005

Constituent	Units	Annual Mean Concentration	Pollutant Category
Alkalinity	ug/l	78.40	Metals/Metalloids
Total Aluminum	ug/l	2,378.00	Metals/Metalloids
Ammonia	ug/l	1.26	Other Organics
Total Arsenic	ug/l	2.27	Metals/Metalloids
Bicarbonate	ug/l	93.30	Other Organics
BOD	ug/l	29.60	Other Organics
Total Cadmium	ug/l	0.64	Metals/Metalloids
Calcium	ug/l	25.20	Other Organics
Total Organic Carbon	ug/l	14.49	Other Organics
Chloride	ug/l	31.00	Other Organics
COD	ug/l	50.39	Other Organics
Total Coliform	ug/l	1,600,260.00	Bacteria
Total Copper	ug/l	36.80	Metals/Metalloids
Cyanide	ug/l	0.26	Other Inorganics
Dissolved Oxygen	ug/l	7.80	Other Organics
Dissolved Phosphorus	ug/l	0.23	Other Organics
Total Dissolved Solids	ug/l	199.00	Other Organics
Enterococcus	ug/l	248,100.00	Bacteria
Fecal Coliform	ug/l	190,034.00	Bacteria
Fluoride	ug/l	0.24	Other Organics
Hardness	ug/l	85.00	Hardness
Total Lead	ug/l	29.90	Metals/Metalloids
Magnesium	ug/l	5.43	Metals/Metalloids
MBAS	ug/l	0.18	Other Organics
NH3-N	ug/l	1.03	Other Organics
Nitrate	ug/l	5.83	Other Organics
Oil and Grease	ug/l	2.10	Other Inorganics
Total Phenols	ug/l	1.96	Other Inorganics
pH	ug/l	7.16	pH
Total Phosphorus	ug/l	0.42	Other Organics
Potassium	ug/l	5.69	Metals/Metalloids
Total Selenium	ug/l	2.57	Metals/Metalloids
Sodium	ug/l	30.34	Other Organics
Specific Conductivity	ug/l	300.00	Conductivity

Constituent	Units	Annual Mean Concentration	Pollutant Category
Total Suspended Solids	ug/l	376.00	Other Organics
Sulfate	ug/l	39.38	Other Organics
Turbidity	ug/l	52.00	Turbidity
Total Zinc	ug/l	127.00	Metals/Metalloids
Source: Watearth 2016.			

Table 3.9-4 lists the pollutants of concern for the Los Angeles River Watershed Management Area in which the project site occurs.

Table 3.9-4. Tier 3 Pollutants of Concern for the Los Angeles River Watershed Management Area

Parameter
pH
E. coli Bacteria
Total Coliform Bacteria[1]
Fecal Coliform Bacteria[1]
Enterococcus Bacteria[1]
Chloride
Nitrite Nitrogen, Total (as N)
Sulfate
Total Dissolved Solids
Turbidity
Aluminum, Total Recoverable
Cyanide, Total Recoverable
Copper, Total Recoverable
Mercury, Total Recoverable
Selenium, Total Recoverable
Notes: [1] Applies only to discharges to estuaries and the ocean. Source: Watearth 2016.

As mentioned, a TMDL is a regulatory term in the U.S. CWA, describing the value of the maximum amount of a pollutant that may enter a water body while still meeting water quality standards. There are several listed TMDLs for the Los Angeles River area, which are identified in Table 3.9-5, below, from the Los Angeles Region's Basin Plan and from the 2010 US EPA approved 303d list. Among those listed are: trash, cadmium, copper, lead, selenium, zinc, chlordane, dichlorodiphenyltrichloroethane (DDTs), total PCBs, *E. coli* bacteria, fecal coliform, Enterococcus, and total coliform. The loading capacities for each pollutant are listed in Table 3.9-5.

Table 3.9-5. TMDLs for Los Angeles River

Pollutant	Loading Capacity (ug/L)
Trash	0.00
Total Recoverable Metals	
Copper	18.00
Lead	55.00
Selenium	5.00
Zinc	119.00
Toxic Pollutants (Sediment)	
Cadmium	1.20
Copper	34.00
Lead	46.70
Silver	1.00
Chlordane	0.50
DDT	1.58
Total PCBs	22.70
Total PAH	4,022.00
E. Coli (MPN)	126.00
Fecal Coliform (MPN)	200.00
Source: Watearth 2016.	

Table 3.9-6 summaries potential pollutants from the site, based on land use along with pollutants of concern from the various sources described above, and Table 3.9-7 summarizes pollutants of concern specific to the Los Angeles River.

Table 3.9-6. Summary of Potential Pollutants and Pollutants of Concern[1]

Nutrients	Metals	Organics	Other	Pathogens	Sediment/Solids
Kjedahl Nitrogen Total Nitrogen Total Phosphorous Ammonium Magnesium Nitrate Nitrite Algae Potassium	Cadmium Chromium Copper Lead Selenium Silver Zinc Aluminum Arsenic Mercury	BOD COD DDT DO Hydrocarbons TOC PAH PCB Phenols	Chlordane pH Sulfate Trash Chlordane Calcium Bicarbonate Chloride Cyanide Fluoride Hardness MBAS Sodium	Coliform Bacteria Viruses E. coli Bacteria	Suspended Solids Total Dissolved Solids Turbidity

Notes:
[1] Pollutants from the 2010 U.S. EPA approved 303(d) list.
Source: Watearth 2016.

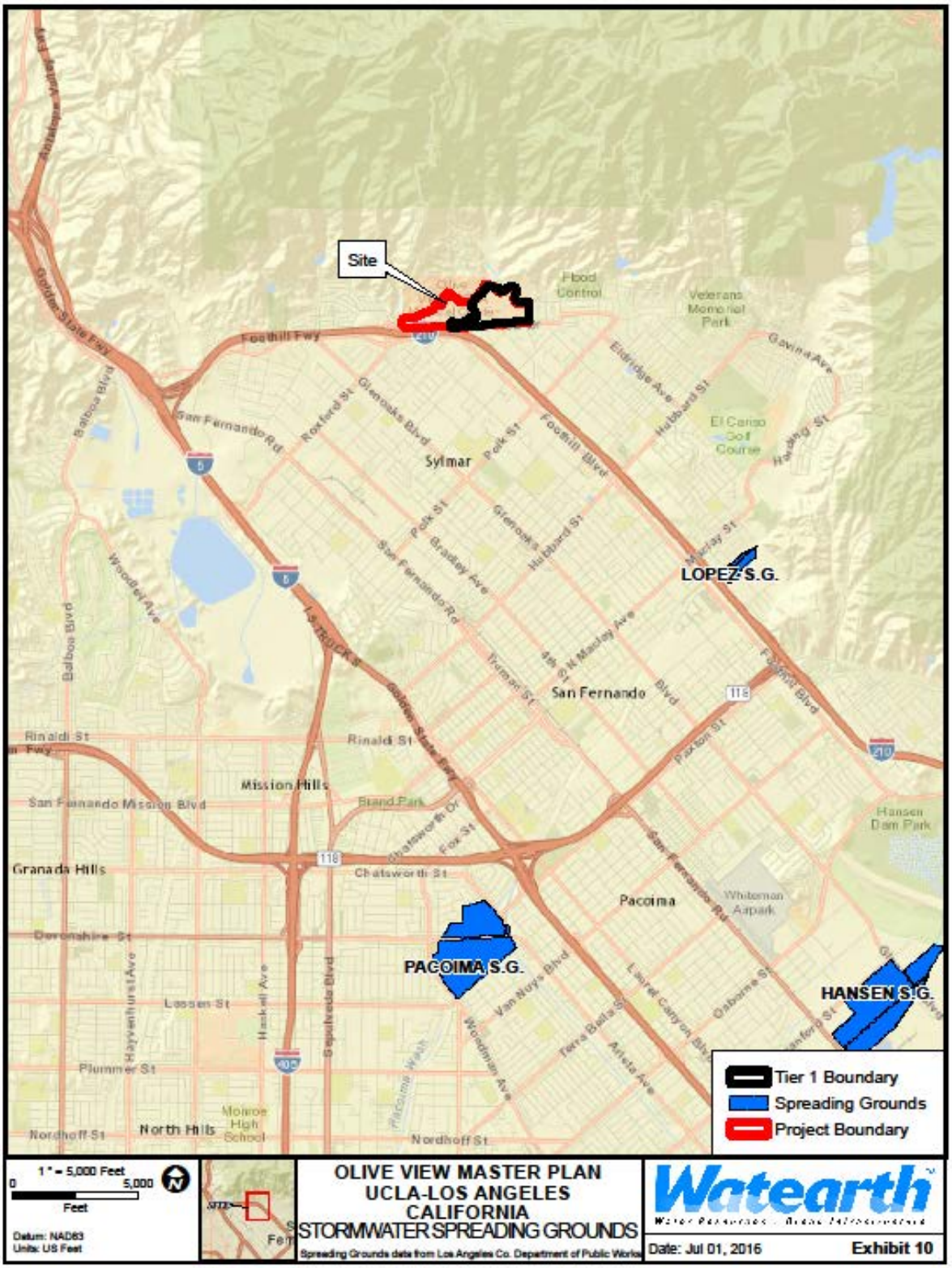
Table 3.9-7. Pollutants of Concern for Los Angeles River

Pollutant	Constituent of Concern	Comparison to 303(d) List
Cyanide	x	
Enterococcus	x	x
Fecal Coliform	x	x
Total Coliform	x	x
Algae		x
Ammonia		x
Oil and Grease		x
Total Aluminum	x	x
Total Copper	x	
Total Lead	x	x
Total Zinc	x	x
Dissolved Cadmium		x
Dissolved Copper	x	x
Dissolved Lead	x	x
Dissolved Zinc	x	x
Chlordane		x
Dichloroethylene		x
Tetrachloroethylene		x
Trichloroethylene		x
Alkalinity		x
Bicarbonate		x
Source: Watearth 2016.		

Groundwater

The project site is located along the northeastern edge of the Sylmar water basin, which is a sub-basin of the Upper Los Angeles River Area basins, a significant distance from existing stormwater spreading grounds, as shown in Figure 3.9-1, below. As such, stormwater runoff from the site will not provide recharge into existing stormwater spreading grounds or introduce pollutants into these spreading grounds.

Figure 3.9-1. Stormwater Spreading Grounds



The Olive View–UCLA Medical Center Campus is within the geographic boundaries of the Sylmar Groundwater Basin (Sylmar Basin) of the Upper Los Angeles River Area (ULARA) basins. According to the ULARA Watermaster website, the Sylmar Basin, located in the northern portion of ULARA, consists of 5,600 acres of land with a storage capacity of 310,000 acre-feet, making up 4.6 percent of the ULARA valley fill. The basin contains flows generally toward to the southeast, with levels ranging from 15 to 100 feet below ground surface. Water levels in this basin have been fairly stable over about the past 20 years, since adjudication of the basin. There are no significant contaminant plumes in the local Sylmar Basin (*City of Los Angeles Granada Hills–Knollwood & Sylmar Community Plans EIR* 2012). According to the 2007 *Groundwater Assessment Study* by The Metropolitan Water District of Southern California, the Sylmar Basin is recharged through the Lopez, Pacoima, and Branford spreading grounds along Pacoima Wash and the Hansen and Tujunga spreading grounds along Tujunga Wash. All spreading grounds are located south of the site.

Water Supply

Based on preliminary utility research presented in the Master Plan, water service for the Olive View–UCLA Medical Center is provided by the city of Los Angeles Department of Water and Power (LADWP). Based on the Los Angeles County Utility System annual billing summary, existing water use for the 2014–2015 fiscal year was approximately 74.58 million gallons.

As discussed in Section 3.17, *Utilities/Service Systems*, of this EIR, the County of Los Angeles coordinated with LADWP to prepare a Water Supply Assessment (WSA) for the proposed Master Plan, which was based on the net increases in building square footage on the campus that could occur under the Master . Based on this projected water demand, as well as water conservation design measures implemented as part the Master Plan, LADWP has determined that there are sufficient water supplies to meet project demand as well as LADWP's other existing and future commitments for water service.

According to the Water Quality section of the LADWP's website, approximately 15 percent of the water provided to the project area is obtained from local groundwater wells. Remaining water supply sources includes approximately 60 percent from the Eastern Sierra via the Los Angeles Aqueduct system and from the Metropolitan Water District's Colorado and Feather River supplies. Approximately 80 percent of the groundwater utilized is from the San Fernando basin.

The LADWP is allotted 3,570 acre-feet of water per year for safe yield from the Sylmar Basin (ULARA Watermaster). Water pumped from the Sylmar Basin accounted for approximately 4 percent of the groundwater utilized for drinking and approximately 0.5 percent of all drinking water sources in 2001 (City of Los Angeles Granada Hills–Knollwood & Sylmar Community Plans EIR Oct 2012).

Depth to Groundwater

According to the *Preliminary Geotechnical Evaluation* prepared by Ninyo & Moore for this EIR, the groundwater at the site has a historic high of 120 feet below ground surface, with levels ranging on average from 120 to 200 feet below ground surface. The evaluation also stated that:

> Groundwater levels may be influenced by seasonal variations, precipitation, irrigation, soil/rock types, groundwater pumping, and other factors and are subject to fluctuations. Onsite infiltration of storm water related to LID guidelines may have an impact on existing and planned site improvements and should be evaluated during the detailed design phase of the project.

Due to its depth, groundwater is not expected to have a significant impact on excavation or other construction activities. However, the *Preliminary Geotechnical Evaluation* suggested that portions of the site located in the northeast region of the project area near the mouth of Wilson Canyon are potentially susceptible to liquefaction due to sections of shallow groundwater.

Recharge

Soils within the project site are Ramona, Hanford Gravelly Sandy, and Hanford Fine Sandy loams. On the northern portion of the site, Los Angeles River soil is present, which consists mainly of recent alluvial deposits. The *Preliminary Geotechnical Evaluation* categorized the northern and western portions of the site as being "underlain by Pacoima Formation and older alluvium composed of weakly consolidated sand and gravel." The evaluation also notes that the southern region of the site, the location of existing improvements, and the area at the base of Wilson Canyon in the east, are "underlain by young (Holocene[2]) alluvial deposits generally composed of gravel, sand, and clay sediments."

These soil types have a relatively high conductivity; based on the continuous simulation modeling results, approximately 3.8 inches per year or 33 percent of the annual rainfall on the Tier I area infiltrates under existing conditions. As such, recharge is expected to occur into the Sylmar Basin within the Tier I boundaries under existing conditions. Additionally, recharge is anticipated to similarly occur into the Sylmar Basin within the Tier II area under existing conditions.

Due to soils with poor cohesion, pre-existing undeveloped areas, and steep slopes present at the site, the *Preliminary Geotechnical Evaluation* (Ninyo and Moore 2016) concluded there is a potential for erosion, especially along the northern edge of the campus where steeper slopes are found.

Groundwater Contamination

Based on the *Phase 1 Hazardous Materials Assessment* prepared by Ninyo & Moore (2016) there were no reports of groundwater contamination in the Sylmar Basin. No other sources or locations of groundwater contamination were found as part of the data review for this project.

Hydrology

Elevations within the Olive View–UCLA Medical Center Campus range from a low of approximately 1,415 feet in the southwestern portion of the campus to a high of approximately 1,540 feet in the northwestern portion. Overland flow within the site is generally from north to south. The San Gabriel Mountains run along the northern extent of the campus, surrounding the site in trees and understory vegetation.

The Wilson Canyon Channel, a concrete structure that serves as a major flood control facility for the site and surrounding areas, runs parallel to the eastern site boundary; overland flow in this vicinity is generally south-southwest toward Olive View Drive and ultimately into the Wilson Canyon Channel, which joins the underground storm drain system at the intersection of Astoria Street and Dronfield Avenue.

There are currently two watersheds north of project site, the Wilson Canyon Channel watershed and the Mansfield Channel watershed, with an average 50-year storm event of 4,690 cubic feet per

[2] The Holocene is second and most recent epoch of the Quaternary period, which began 10,000 years ago at the end of the Pleistocene period.

second (cfs) (Master Plan). The runoff from these areas is conveyed through the Schoolhouse Canyon Diversion to the Pacoima Wash, located at the southeast corner of Pacoima and May canyons. The Wilson Canyon Channel watershed is 1,959 acres and has a 3,758 cfs 50-year storm event discharge (Master Plan). The Mansfield Channel watershed is 455 acres and has a 932 cfs 50-year storm event discharge (Master Plan).

As discussed, the existing site does not appear to include water quality or stormwater controls, such as stormwater BMPs, LID features, or hydromodification management facilities. Additionally, stormwater detention and other flood control features were not observed onsite. Instead, the existing site manages rainfall and stormwater runoff with vertical roof drains, catch basins and drain inlets, underground storm drain systems, curbs, gutters, overland sheet flow, driveways, and other means of conveyance into the onsite and offsite storm drain system.

Impervious cover at the site is 65 percent in Tier I and currently undetermined in Tier II. Additionally, stormwater management and runoff is typical of urbanized runoff from other sites with a similar period of construction. According to the preliminary geotechnical survey, "Storm water catch basins and drains were observed throughout the site during the site reconnaissance. Storm water channels trending north-south were observed at the western and eastern ends of the site."

Stormwater runoff for proposed undeveloped conditions from Wilson Canyon drainage area and the Olive View Drive storm drainage area in Tier I is estimated at 37.2 in (1.0 in/year), based on continuous simulation analysis of the period of record from 1970–2006 (37 years). For existing conditions, stormwater runoff is 184.5 in (5.0 in/year) for the same timeframe due to the high percentage of impervious area (65 percent) in Tier I.

Due to the high percentage of undeveloped land at the project site, there is a high probability of erosion and sedimentation coming from the northern portion of the site, where the campus meets the Angeles Forest. Visual observation at the site noted prior attempts to mitigate erosion and direct flows through the use of dirt mounds and k-rails.

Hydraulics

From the Master Plan and visual observations during site reconnaissance, the existing storm drain system for the Olive View–UCLA Medical Center Campus utilizes vertical roof drains, underground storm drain pipes, overland sheet flow, curbs, gutters, catch basins, and driveways to convey stormwater runoff to the existing public system owned and operated by Los Angeles County Flood Control District (LACFCD).

The city of Los Angeles owns and maintains the Olive View Drive storm drain, which ranges in size from 30 inches to 60 inches in diameter and discharges to a LACFCD Foothill freeway 5-foot x 5-foot reinforced concrete box. There are currently two storm drain laterals to the site: one ties into the catch basin downstream of Mansfield Channel, and the other ties into an existing 36-inch reinforced concrete pipe from the hospital site. The Olive View Drive storm drain system is estimated to have a minimum existing capacity of 26 cfs and is assumed to have adequate capacity for existing peak discharges from the site. The Schoolhouse Debris Basin, tied into the Mansfield Channel, is designed to store 19 acre-feet of debris and drain an area of 0.28 square miles. The Wilson Debris Basin is designed to store 84 acre-feet of debris and drain an area of 2.6 square miles.

Hydrology and hydraulics models for the open channel systems were not provided by the County, and the existing capacity of these systems is not known from available data. However, the 100-year, 24-hour design storm event is mapped in an approximate Zone A as being contained within the Wilson Canyon drain. The Schoolhouse Canyon drain is not a FEMA-studied stream, and information on capacity is not available. The open channel systems are assumed to have adequate capacity for existing peak discharges from the site.

In the event that sheet flow leaves the project site, inlets are regularly spaced within the public roadways bordering the campus. Some of these inlets include the benefits provided by grates that help prevent trash from entering the storm drain system and the Los Angeles River watershed.

Flood Plain

The project site is located within Zone X on the FEMA Flood Insurance Rate Map, which indicates that the area would not be flooded in a 100-year storm. The site is located on Panel 1075F, updated September 26, 2008, between the Wilson Canyon and Schoolhouse drainage channels, which have a 1 percent annual chance of flood discharge. However, the area due north of the site is labeled as Zone D, meaning there are possible, but undetermined, flood hazards due to lack of analysis of the area.

Dam Failure/Tsunamis/Seiches

As shown in the "Dam Locations Within the Planning Area" map included as Figure 7-1 in the *City of Los Angeles Hazard Mitigation Plan*, adopted in January 2018, the project site is not located within a potential inundation area for dam failure. The nearest dam is the Pacoima Dam, and the possible inundation area is located east of the medical center campus site. Similarly, the project site is not located within a potential tsunami inundation area or seiche. However, due to its foothill location, the site is potentially subject to liquefaction/landslides.

3.9.4 Environmental Impact Analysis

3.9.4.1 Methods

The following analysis evaluates potential hydrology and water quality impacts that could result from implementation of the proposed project. It assesses impacts under existing conditions and determines whether they would exceed any of the thresholds listed below. The analysis is based on the conclusions found in the *Hydrology Technical Memorandum for the Los Angeles County Olive View–UCLA Medical Center EIR* prepared for the project by Watearth (2016) and updated April 26, 2019. The potential for Tier I impacts is evaluated in detail and the potential for Tier II impacts is evaluated on a conceptual level, due to the longer timeframe for Tier II improvements.

3.9.4.2 Thresholds of Significance

For the purposes of the analysis in this EIR, and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant environmental impact if it would:

HYD-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

HYD-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

HYD-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 that would:

A) Result in substantial erosion or siltation on- or offsite;

B) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

C) 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; or

D) Impede or redirect flood flows.

HYD-4 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

HYD-5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.9.4.3 Impacts and Mitigation Measures

Impact HYD-1: Would the Proposed Project Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Substantially Degrade Surface or Groundwater Quality?

Construction Impacts

Tier I

The Tier I project site soil is predominantly Hanford fine sandy loam with a zone of Hanford gravelly sandy loam in the eastern corner. The soil is underlain by poorly consolidated alluvium (Ninyo and Moore Preliminary Geotechnical Report, 2016). Both the soils and the underlying geology are susceptible to erosion. Slopes along the northern edge of the proposed Tier I project site range from approximately 5 to 13 percent, further increasing the site susceptibility to erosion. The Tier II project site has similar slopes and soils as Tier I.

During construction, site grading activities and exposed surfaces could cause erosion, temporarily increasing the amount of suspended solids in sheet flow or runoff, which would enter the storm drain system. However, the proposed project would be required to obtain and comply with the Construction General Permit from the SWRCB. This permit and associated NPDES requirements include development and implementation of a SWPPP, with associated monitoring and reporting. Stormwater BMPs are required to limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. Additional source-control BMPs would also be required to prevent runoff contamination by potentially hazardous materials and eliminate non-stormwater discharges.

Compliance with the Construction General Permit, SWPPP, NPDES requirements, and local regulations that require construction-phase BMPs would ensure that construction activities would not degrade the surface water quality of receiving waters to levels below standards considered acceptable by the Los Angeles RWQCB or other regulatory agencies or impair the beneficial uses of the receiving waters.

Construction-related activities could include the use of materials such as fuels, lubricating fluids, solvents, and other materials that could result in polluted runoff. However, the potential consequences of any spill or release of these types of materials would generally be small because of the localized, short-term nature of the releases. Furthermore, the NPDES Construction General Permit and SWPPP require measures regarding the handling of these types of materials and protocols for actions taken if a spill or release does occur. Therefore, impacts associated with these types of pollutants would be less than significant.

Tier II

Similar to Tier I, Tier II would comply with the Construction General Permit, SWPPP, NPDES requirements, and local regulations that require construction-phase BMPs, which would ensure that construction activities would not degrade water quality and impacts, therefore, are expected to be less than significant.

Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

Level of Significance after Mitigation

Impacts would be less than significant.

Operational Impacts

Tier I

The Master Plan incorporates the use of bioretention and permeable pavement LID features. The features would meet the requirements found in the city of Los Angeles Department of Sanitation *Development Best Management Practices Handbook*.

Tier I of the proposed project contains two drainage areas: the eastern half of Tier I drains to the Wilson Canyon open channel, and the western half into Olive View Drive storm drain system, into which Tier II also drains, and ends in the Mansfield Channel. Tier I pollutant effluent concentrations were modeled for both drainage areas. TSS, total nitrogen, copper, lead, zinc, and fecal coliform were modeled for 2-year, 24-hour design storm event and a 37-year continuous simulation model to represent average annual conditions. The results for Wilson Canyon drainage (DA1) and Olive View Drive storm drainage (DA2) are in Tables 9a and 9b in Appendix C of Watearth's *Hydrology Technical Memorandum for the Los Angeles County Olive View–UCLA Medical Center EIR* (see Appendix H of this EIR). All pollutants concentrations decreased under both model scenarios, and, in certain cases, such as nitrogen and lead in DA2, were completely removed. According to the city of Los Angeles Department of Sanitation Development's *Best Management Practices Handbook*, the minimum storage required for bioretention is 2.1 acre-ft. Tier I had 4.3 acre-feet of bioretention storage. Thus, the post construction water quality impacts of Tier I development are expected to be less than significant.

Drainage area discharge model results for 2-year, 10-year and 100-year, 24-hour storm events are provided in Tables 5a and 5b in Appendix C of Watearth's *Hydrology Technical Memorandum for the Los Angeles County Olive View–UCLA Medical Center EIR* (see Appendix H of this EIR). Discharge model results for continuous simulation runs are in Tables 6a and 6b of the same report. The Wilson Canyon drainage peak discharge flow rates decrease between 12 percent and 20 percent, with the greatest decrease occurring in the 100-year, 24-hour design storm event. The DA2 Tier I drainage peak discharge flow decreases between 40 percent and 100 percent with the greatest decrease from the 2-year, 24-hour design storm event. No models resulted in an increase in discharge. Post construction impacts on discharge from Tier I development would be less than significant.

Once the project is operational, materials such as fuels or solvents may be stored onsite, similar to existing conditions. This is not anticipated to be a source of polluted stormwater runoff or dryweather runoff. As under existing conditions, the medical center would continue to adhere to all applicable regulations. Consequently, impacts would be less than significant.

Tier II

Similar to Tier I, Tier II development includes plans for bioretention and permeable pavement. Based on the performance of Tier I water quality and discharge results, it is likely Tier II would also have less than significant impacts on water quality and discharge. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

Level of Significance after Mitigation

Impacts would be less than significant.

Impact HYD-2: Would the Proposed Project Substantially Decrease Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That the Project May Impede Sustainable Groundwater Management of the Basin?

Construction Impacts

Tier I

The groundwater table 1.5 miles south of the project site ranged from 125 to 200 feet over a 20-year period (Ninyo and Moore 2016). The Olive View–UCLA Medical Center is located at the base of the San Gabriel foothills where the valley alluvium meets the mountains. It is possible the groundwater is shallower than 125 feet within the Tier I project boundary. The northeastern section of Tier I is identified in the preliminary geotechnical report as a zone that may have groundwater within 50 ft. This area of the project is mapped as potentially liquefiable, and coincides with the Sylmar Basin, suggesting that the groundwater may be significantly shallower at this location. However, since it is expected that most Tier I construction would occur at depths that are not likely to encounter groundwater, it is not expected that substantial dewatering would be required. Should groundwater be encountered during Tier I construction, dewatering would be conducted in accordance with NPDES requirements. Mitigation measure **MM-HYD-C1**, below, is also proposed to reduce potential dewatering impacts.

Additionally, any water used during Tier I construction (e.g., mixing of construction materials or watering of the site to reduce dust) would be temporary and limited in quantity; therefore, construction is not expected to result in the substantial depletion of local groundwater supplies. Tier I construction activities would also not substantially increase the amount of impervious surfaces during the construction period, and consequently would not substantially interfere with groundwater recharge. Impacts would be less than significant.

Tier II

Although greater than 50 percent of the Tier I proposed project area is within the Sylmar groundwater basin, much of the north/northwestern portions of the Tier II project area do not fall within a groundwater basin. The Sylmar groundwater basin is restricted to the southern edge in the proposed Tier II project boundary. It is located in an area that would be primarily landscaping. Water used during Tier II construction would be temporary and limited in quantity. Similar to Tier I, construction impacts on groundwater supplies or groundwater recharge are expected to be less than significant.

Operational Impacts

Tier I

Proposed new development and landscaping under Tier I would result in an increase in the amount of water consumed on the campus, which could affect local groundwater basins, as well as other sources of water supply. As discussed in Section 3.17, *Utilities*, of this EIR, it is estimated that Tier I activities could increase water consumption by 158,999 gallons per day, compared to existing conditions. As described above in Section 3.9.3, *Environmental Setting*, approximately 15 percent of the water provided in the project area is obtained from local groundwater wells. Consequently, Tier I activities could increase the amount of water withdrawn from local groundwater resources by approximately 138,640 gallons or 155.30 acre-feet per year. This represents an approximately 4 percent of the 3,570 acre-feet of water per year for safe yield from the Sylmar Basin. Consequently, Tier I would not substantially delete groundwater supplies or impede sustainable groundwater management of the Sylmar Basin. Additionally, proposed mitigation measure **MM-HYD-01** would further reduce water consumption.

After Tier I completion, impermeable surfaces would decrease from 65 percent to 50 percent. Landscaped areas (including LID bioretention) in Tier I would increase by 50 percent. Infiltration would increase by 4.6 in (121 percent) across the 72.6-acre Tier I area or by 25.2 acre-feet on an annual basis. The increase in Tier I water demands would exceed the increase in infiltration by approximately 130.1 acre-feet per year, which could affect groundwater depletion. By incorporating reclaimed water, gray water, and harvested rainwater for irrigation, the increased demand for groundwater for irrigation could be reduced. For these reasons, water demand associated with the proposed project would not deplete groundwater supplies substantially. The project would increase groundwater recharge and would not interfere substantially with recharge. Therefore, the impacts on groundwater supplies or recharge during operation would be less than significant, the project would not substantially deplete groundwater supplies or substantially interfere with groundwater recharge. Impacts would be less than significant.

Tier II

Most of the north/northwestern portions of the Tier II project area do not fall within a groundwater basin. Nonetheless, proposed new development and landscaping under Tier II, would result in an increase in the amount of water consumed on the campus, which could affect local groundwater basins, as well as other sources of water supply. As discussed in Section 3.17, *Utilities*, of this EIR, it is estimated that Tier II could increase water consumption 376,913 gallons per day, compared to existing conditions. If all water demands are met by the Sylmar Basin, Tier II would increase the water demand from this basin by approximately 11 percent.

Tiers I and II combined would increase the water demand from the Sylmar Basin (if all demands were met by this basin) by approximately 15 percent. This incremental increase would have a marginal effect on groundwater supplies. Impacts would be less than significant. **MM-HYD-01** would further reduce groundwater supply impacts.

Mitigation Measures

The following measures are proposed to minimize potential construction and operational groundwater impacts identified in Impact **HYD-2**, above.

MM-HYD-C1: Where groundwater seepage could occur, permanent monitoring wells will be installed during construction within and around the perimeter of each building to monitor the groundwater level and evaluate the performance of the dewatering system. Before starting dewatering operations, a baseline conditions survey will be made of all adjacent foundations and structures to assess the impact of deep excavation dewatering on adjacent structures. All signs of existing distress will be recorded.

MM-HYD-O1: Irrigation water demands above existing irrigation demands will be met by alternative supply sources to the maximum extent technically and financially feasible. The use of alternative water supply sources for irrigation will be maximized to reduce the use of potable water for irrigation and approximate existing irrigation demands. Alternative water supply sources include, but are not limited to, gray water and harvested rainwater (stormwater).

Level of Significance after Mitigation

Impacts would be less than significant after mitigation.

Impact HYD-3: Would the Proposed Project 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 that Would Result in Substantial Erosion or Siltation, Flooding On- or Offsite, Exceed the Capacity of Existing or Planned Stormwater Drainage Systems, Impede or Redirect Flood Flows?

Construction Impacts

Tier I

The Olive View–UCLA Medical Center Campus sits between the Schoolhouse and Wilson Canyon debris dams and basins. Minor alterations of the existing drainage patterns on the project site may occur as a result of the implementation of the campus-wide stormwater management system and

due to construction of new facilities and campus improvements, but no change to the course of a stream or river would occur. Grading and excavation would be required for building foundations, which could affect drainage on the project site; however, careful design would prevent substantial alterations to drainage patterns and/or erosion within the project site. Additionally, standard construction-phase BMPs would minimize the potential for any significant erosion or sedimentation from soil disturbance during construction. The County/construction contractor would also be required to submit a grading plan for County approval prior to the commencement of any construction activities, develop a SWPPP, and comply with regional requirements to meet state water quality objectives as part of NPDES Construction General Permit that would be required for Master Plan construction projects. Pending revisions, the NPDES permitting process may require development of a rain-event action plan prior to permit approval. Compliance with regulatory and permit requirements would ensure erosion impacts would be less than significant.

Although implementation of the Master Plan would result in grading throughout the campus, construction activities would not substantially alter the overall topography and drainage patterns; no streams or rivers would be altered to accommodate project construction.

Water would be used during the temporary construction phase of the project (e.g., for dust suppression); however, this water would be mechanically and precisely applied and would, in general, infiltrate or evaporate. Additionally, the pervious nature of the project site would not be significantly altered. Therefore, the rate or amount of surface runoff resulting from project construction activities would be similar to the amount under existing conditions. As such, the project would not result in a substantial increase in the rate or amount of surface runoff or flooding on- or offsite. Impacts would be less than significant.

Tier II

Construction of Tier II would be similar to Tier I. The amount of impervious cover would not increase during construction, and at various stages of construction, it would even be less than the existing amount. Impacts would be less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Impacts would be less than significant.

Operational Impacts

Tier I

Tier I would include new and improved storm drainage pipes and the installation of LID features (bioretention and permeable pavement) to accommodate new development and facilities. These improvements would decrease stormwater discharge rates and sediment loads into local storm drains. According to calculations and model simulations conducted by Watearth, TSS loads (lbs/year) into the Wilson Canyon drain system are expected to decrease by 92 percent based on a 2-year 24-hr storm event and 96 percent based on 37-year continuous simulation run. TSS loads (lbs/year) into the Olive View Drive storm drain system are expected to decrease by 100 percent based on a 2-year 24-hr storm event and a 37-year continuous simulation run.

Due to the planned decrease in impervious surfaces (impervious cover would decrease from 65 percent to 50 percent), storm drain improvements, and proposed LID features under Tier I, development of Master Plan campus facilities and infrastructure would not increase the amount of surface runoff. To determine peak discharges to the Wilson Canyon and Olive View Drive storm drainages, three storm events, the 2- year, 10-year and 100-year, 24-hour design storms, were modeled by Watearth. The peak discharge to the Wilson Canyon drainage system would decrease from 9.8 to 8.7 cfs, 19.6 to 17.1 cfs, and 36.1 to 30.2 cfs, for the 2-year, 10-year and 100-year, 24-hour design storm events, respectively. The peak discharge to the Olive View Drive storm drainage would decrease from 16.0 to 0 cfs, 32.4 to 1.8 cfs, and 57.3 to 34.0 cfs for the 2-year, 10-year and 100-year, 24-hour storm events, respectively.

Tier II

Similar to Tier I, Tier II would include new storm drainage facilities and LID features, which would decrease TSS loads and discharge rates. Drainage and erosion/sedimentation impacts would be less than significant.

Tier II was not modeled. However, similar to Tier I, due to the planned decrease in impervious surfaces and proposed LID features, Tier II development would also likely result in reduced peak stormwater discharges. Thus, the proposed project would not result in flooding on or offsite due to increased surface run-off. Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Impacts would be less than significant.

HYD-4: Would the Proposed Project be Located in Flood Hazard, Tsunami, or Seiche Zones and Risk Release of Pollutants Due to Project Inundation?

Construction Impacts

Tier I

The project site is located approximately 28 miles from the Pacific Ocean, so there is no risk to the site from tsunamis, and the project would not exacerbate tsunami hazards. The Pacoima Reservoir, located 4.5 miles east of campus, is unlikely to produce seiches that would affect the project site, and the proposed project would not exacerbate seiche hazards at the reservoir.

The campus is nestled against the San Gabriel Mountains, and several areas at the northern border of the project site are landslide hazard areas. The Wilson Canyon drainage system, which transects the Tier I portion of the campus, is mapped as containing liquefaction hazards, as well as landslide hazards, directly upstream of the Tier I project boundaries. Areas susceptible to liquefaction in Tier I are primarily landscaped regions, tree-lined streets, and parking lots; however, the eastern corner of the proposed administration building and a portion of the Restorative Care Village facilities do fall within the mapped liquefaction hazard area. This makes mudflows a potential hazard to the site, but mitigation of mudflows upstream of the project is already in place via the Wilson Canyon Debris Dam and Basin upstream of the project site.

During construction, erosion of surface materials could increase TSS and other pollutants, as mentioned in the discussion under Impact **HYD-1**, above. Sedimentation and siltation of runoff during the construction period would be addressed through the implementation of standard construction-phase BMPs and compliance with permit and regulatory requirements. Impacts would be less than significant.

Tier II

Similar to Tier I, Tier II could increase TSS and other pollutants during construction. As mentioned above, implementation of standard construction-phase BMPs and compliance with permit and regulatory requirements would reduce impacts to less than significant.

Operational Impacts

Tier I

Pollutant loads into the Wilson Canyon and Olive View Drive storm drainages with implementation of Tier I development and improvements would not increase, as discussed above under Impact **HYD-1** (also see Tables 9a and 9b in Exhibit C of Watearth's *Hydrology Technical Memorandum for the Los Angeles County Olive View–UCLA Medical Center EIR*). According to Watearth, modeled pollutant loads for a 2-year, 24-hour storm event into the Wilson Canyon drainage would decrease for TSS, nitrogen, copper, lead, and zinc by 92 percent, 57 percent, 69 percent, and 78 percent, respectively. Modeled pollutant loads for a 2-year, 24-hour storm event into the Olive View Drive storm drainage from Tier I would decrease by 100 percent during a 2-year, 24-hour modeled storm event for TSS, nitrogen, copper, lead, and zinc. Fecal coliform would decrease by 7.4 percent and 130 percent for a 2-year, 24-hour modeled storm event into the Wilson Canyon and Olive View Drive storm drainages, respectively. Annual pollutant loads were based on a 37-year continuous simulation model. Annual pollutant loads into the Wilson Canyon drainage would decrease by 96 percent, 76 percent, 82 percent, 87 percent, 91 percent, and 8 percent for TSS, nitrogen, copper, lead, zinc, and fecal coliform, respectively. Annual pollutant loads into the Olive View Drive storm drainage would decrease by 100 percent for TSS, nitrogen, copper, lead, and zinc; fecal coliform would decrease by 28 percent. In addition to the decreased peak discharge and pollutant loadings, drainage from proposed site improvements would be conveyed through a new storm drain system that would be sized for proposed stormwater runoff from the site. The proposed project would not significantly affect the capacity or hydraulic integrity of the proposed onsite storm drain system, the existing Olive View Drive storm drain system, or the Wilson Canyon or Schoolhouse Drain open channel systems or provide substantial additional sources of pollution to these receiving systems. Impacts would be less than significant.

Tier II

Operation of Tier II would be similar to Tier I. Because details about Tier II are unknown, Tier II pollutant loadings were not modeled. However, pollutant loads are expected to remain at existing levels or to decrease below existing levels. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

Level of Significance after Mitigation

Impacts would be less than significant.

HYD-5: Would the Proposed Project Conflict With or Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan?

Construction Impacts

Tier I

The proposed project would include improvements to stormwater quality through the implementation of a campus-wide stormwater management system. Furthermore, construction-phase BMPs would be implemented in accordance with the County of Los Angeles Department of Public Works *Construction Site BMPs Manual* (2007) and the SWPPP prepared in accordance with the requirements of the NPDES Stormwater General Permit. Construction-phase BMPs for the proposed project may involve scheduling, silt fencing, street sweeping and vacuuming, storm drain protection, stabilized construction entrances/exits, water conservation practices, paving and grinding operations, as well as procedures and practices pertaining to vehicle equipment cleaning, fueling, and maintenance. As noted above, the proposed project would be required to adhere to NPDES drainage control requirements during construction and operation, as well as to County drainage control requirements. Otherwise, the proposed project would not include any other waste discharges that could conflict with the basin plan. Therefore, with compliance with NPDES requirements and County drainage control requirements, construction of the proposed project would not result in discharge that would violate any water quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

Tier II

Construction of Tier II would be similar to Tier I. Compliance with NPDES requirements and County drainage control requirements would not result in discharges that would violate any water quality control plan or sustainable groundwater management plan, and impacts would be less than significant

Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

Impacts **HYD-1** to **HYD-4** discusses potential impacts associated with the degradation of water quality during operation. Prior to the commencement of construction activities, the project proponent would be required to prepare and submit drainage plans to the County, which would include post-construction structural and nonstructural BMPs. Routine structural BMPs are intended to address water quality impacts related to drainage, which are inherent in development.

As discussed previously, the LID features proposed under the Master Plan would mitigate pollutant loadings into the storm drainage system and reduce water quality impacts from runoff to a less-than-significant level. However, maintenance would be required to sustain the effectiveness and extend the life cycle of the LID features. For most LID features, sediment removal is one of the most important and significant maintenance activities: once LID features clog or reach the end of their life cycle, major rehabilitation or reconstruction may be needed. Regular inspection of LID features is also a key component of a successful operations and maintenance (O&M) plan.

Bioretention maintenance requirements include removing sediment, trash, and debris to maintain the infiltration capacity. Shredded hardwood mulch should also be removed and replaced annually to remove sediment and any accumulated metals captured by the mulch. Vegetation may require pruning and replanting of dead vegetation. Additionally, irrigation is typically required during the summer months. Because bioretention provides stormwater quality benefits, weeding should be done by hand, and fertilizers, pesticides, and herbicides should not be used. Additionally, mulch and compost should not contain any manure or other animal products that may contribute nutrients to the stormwater runoff.

The maintenance activities associated with permeable pavement are geared toward removal of sediment and debris that may clog the pavement. Sweeping of leaf litter, debris, and sediment is needed to prevent organic materials from decomposing and clogging the pavement. For minor clogging, pressure washing may be used, while vacuum sweeping is recommended twice annually or more for areas with high sediment loads. Any weeds within the permeable pavement should be removed manually, and herbicides should not be used.

While it is preferable to avoid constructing LID features in areas of potential liquefaction, some Tier I LID features could fall within a liquefaction risk area. Any LID features within or adjacent to liquefaction zones should include structural design modifications to ensure continued hydrologic and water quality performance after a liquefaction event. In the event that LID features are damaged by a liquefaction event, repair, maintenance, and/or reconstruction may be needed, based on the results of a field inspection.

There are no other methods by which water quality could be degraded as a result of operations on the project site. Therefore, with implementation of the proposed mitigation measures below (**MM-HYD-O2** and **MM-HYD-O3**), impacts associated with degrading water quality during operation would be less than significant.

Tier II

Similar to Tier I, Tier II routine structural BMPs are intended to address water quality impacts related to drainage, which are inherent in development. Adherence to **MM-HYD-O2** and **MM HYD-O3** will further reduce impacts associated with degrading water quality.

Mitigation Measures

The following measures are proposed to ensure water quality impacts, as described under Impact **HYD-5**, above, would remain less than significant.

> **MM-HYD-O2:** An O&M plan will be developed for LID features at the site during the design of the initial development projects and expanded as development progresses and different LID features are added. The plan will consider impacts on water quality and address issues related

to integrated pest management or organic maintenance practices, including those for hand weeding.

MM-HYD-O3: For any proposed LID features located within an area of potential liquefaction, structural design modifications will be included to mitigate the potential impacts of liquefaction on the performance and operation of the LID features and to maintain the water quality performance as originally designed. The O&M plan should include provisions for inspection, repair, maintenance, and/or reconstruction after liquefaction events for any LID features located within an area of potential liquefaction.

Level of Significance after Mitigation

Impacts would be less than significant after mitigation.

3.9.5 Cumulative Impacts

The study area for cumulative impacts related to hydrology and water quality encompasses the area within a 1-mile radius of the project site for localized cumulative impacts, as well as the watersheds (Lower Pacoima and Tujunga Wash watersheds) that encompass the areas and drain into the major storm drain facilities serving the project site. In Chapter 2 of this EIR, *Project Description,* Table 2-2, Related Projects, lists the related projects in the vicinity of the campus. The locations of the related projects are depicted in Figure 2-9.

With the exception of the construction of six modular trailers at the corner of Bucher Avenue and Sycamore Avenue on the campus and a 7,500-square-foot retail establishment planned for a site approximately .5 miles southwest of the campus, there are no related projects currently planned within a 1-mile radius of the campus. As a consequence, and because regulatory requirements would further minimize the related projects' erosion and water quality impacts during construction and operation, no cumulative adverse impacts to local hydrologic conditions, groundwater recharge, or water quality are expected to occur as a result of the related projects identified in Chapter 2, *Project Description*, of this EIR. Therefore, the proposed Master Plan would not contribute to any significant cumulative localized hydrologic and water quality impacts.

Projected growth and development within the larger cumulative impacts study area (i.e., the Lower Pacoima and Tujunga Wash Watersheds) could result in the cumulative erosion and transfer of sediments to storm drains and surface water resources within the watersheds. Cumulative development could also result in an increase in impervious surface areas, resulting in increased stormwater runoff and flows to study area storm drains and potential increases in pollutant loads on receiving waters within the watersheds. Although adverse cumulative impacts could occur, it is beyond the scope of this EIR to quantify the extent and determine the significance of potential impacts within the watershed for the life of the Master Plan. However, given that the proposed Master Plan and many of the cumulative development projects within the study area would be required to implement BMPs, LID features, and other measures to comply with regulatory and permit requirements, it is likely that cumulative hydrology and water quality impacts would be less than significant. Therefore, it is anticipated that the proposed Master Plan would not result in cumulatively considerable contributions to significant cumulative hydrology or water quality impacts within the watershed areas.

3.10 Land Use/Planning

3.10.1 Introduction

This section describes the land use impacts of the proposed project, including any conflicts with applicable land use plans, policies, or regulations. To assess potential land use impacts, an overview of existing land uses, land use designations, and applicable land use plans and policies is provided. All land use decisions pertaining to the proposed project fall under the jurisdiction of the County of Los Angeles (County) because the land on which the Olive View–UCLA Medical Center Campus is situated is owned and maintained by the County.

3.10.2 Regulatory Setting

3.10.2.1 Federal

No federal land use regulations are applicable to the proposed project or land use impact analysis.

3.10.2.2 State

No land use regulations are applicable to the proposed project or land use impact analysis.

3.10.2.3 Regional

Southern California Association of Governments Regional Comprehensive Plan

The Southern California Association of Governments (SCAG) is designated by the federal government as the Southern California region's Metropolitan Planning Organization and Regional Transportation Planning Agency. SCAG's jurisdiction includes Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura counties. SCAG addresses regional planning issues through various plans and programs, including the *2008 Regional Comprehensive Plan* (RCP), which addresses regional issues, such as housing, traffic/transportation, water, and air quality issues, and serves as an advisory document for local agencies in the Southern California region to use when preparing local plans and handling local issues of regional significance.

The RCP contains the following land use and housing, transportation, and air quality goals that are relevant to the project:

- Land Use and Housing
    - Successfully integrate land and transportation planning and achieve land use and housing sustainability.
- Transportation
    - Provide a more efficient transportation system that reduces and better manages vehicle activity.
    - Provide a cleaner transportation system that minimizes air quality impacts and is energy efficient.

- Air Quality
    - Reduce emissions of criteria pollutants to attain federal air quality standards by prescribed dates and state ambient air quality standards as soon as practicable.
    - Reverse current trends in greenhouse gas (GHG) emissions to support sustainability goals for energy, water supply, agriculture, and other resource areas.
    - Expand green building practices to reduce energy-related emissions from developments and increase economic benefits to businesses and residents.

SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, SCAG's Regional Council adopted the 2016–2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS or Plan). The Plan is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The Plan charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably.

The 2016 RTP/SCS goals are as follows (Southern California Association of Governments 2016):

- Align Plan investments and policies with improving regional economic development and competitiveness.
- Maximize mobility and accessibility for all people and goods in the region.
- Ensure travel safety and reliability for all people and goods in the region.
- Preserve and ensure a sustainable regional transportation system.
- Maximize the productivity of our transportation system.
- Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).
- Actively encourage and create incentives for energy efficiency, where possible.
- Encourage land use and growth patterns that facilitate transit and active transportation.

3.10.2.4 Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.[1]Local

Los Angeles County 2035 General Plan

The Los Angeles County 2035 General Plan (2035 General Plan) was adopted by the Los Angeles County Board of Supervisors on October 6, 2015 (County of Los Angeles 2015). The 2035 General Plan provides the policy framework for how and where the unincorporated county will grow through 2035 while recognizing and celebrating the county's wide diversity of cultures, abundant natural resources, and status as an international economic center. The 2035 General Plan accommodates new housing and jobs within the unincorporated areas in anticipation of population growth in the county and the region.

[1] SCAG does not yet have an agreed-upon security performance measure.

The following policies are applicable to the proposed project:

Land Use Element

- **Policy LU 2.2:** Ensure broad outreach, public participation, and opportunities for community input in community-based planning efforts.
- **Policy LU 2.3:** Consult with and ensure that applicable County departments, adjacent cities, and other stakeholders are involved in community-based planning efforts.
- **Policy LU 2.8:** Coordinate with the Los Angeles County Department of Public Works and other infrastructure providers to analyze and assess infrastructure improvements that are necessary for plan implementation.
- **Policy LU 5.2:** Encourage a diversity of commercial and retail services and public facilities at various scales to meet regional and local needs.
- **Policy LU 6.2:** Encourage land uses and developments that are compatible with the natural environment and landscape.
- **Policy LU 10.1:** Encourage community outreach and stakeholder agency input early and often in the design of projects.
- **Policy LU 10.4:** Promote environmentally sensitive and sustainable design.

Mobility Element

- **Policy M 2.6:** Encourage the implementation of future designs concepts that promote active transportation, whenever available and feasible.

City of Los Angeles General Plan

The City of Los Angeles General Plan is a comprehensive, long-term declaration of purposes, policies, and programs for development in Los Angeles. It sets forth goals, objectives, and programs to provide a guideline for day-to-day land use policies and meet the existing and future needs and desires of the community while integrating a range of state-mandated elements, including transportation, noise, safety, housing, and conservation elements. In place of a Land Use Element, the City of Los Angeles includes community plans that establish policies and standards for each of the 35 geographic areas in the city. As such, the community plans are oriented toward specific geographic areas that locally define the general plan's more general citywide policies and programs.

The project site is within the Sylmar Community Plan, a part of the City of Los Angeles General Plan (City of Los Angeles Department of City Planning 2015). The properties that compose the Olive View–UCLA Medical Center Campus are zoned for public facilities (PF), with the portion that includes Wilson Canyon Debris Basin and Channel zoned for open space (OS) by the city of Los Angeles.

The following objectives are applicable to the proposed project:

- **Objective 1-2.** L new housing appropriately in a manner that reduces vehicular trips and increases accessibility to services and facilities.
- **Objective 1-3.** P and enhance the varied and distinct residential character and integrity of existing single- and multifamily neighborhoods.
- **Objective 1-4.** Pe and enhance structures that have a distinctive and significant historical character.

- **Objective 5-1.** P existing open space resources and, where possible, develop new open space.
- **Objective 8-1.** P adequate police facilities and personnel to correspond with population and service demands in order to provide adequate police protection.
- **Objective 9-1.** Ensure that fire facilities and fire protection services are sufficient for the existing and future population and land uses of Sylmar.
- **Objective 10-1.** Comply with citywide performance standards for acceptable levels of service and ensure that necessary road access and street improvements are provided to accommodate traffic generated by all new development.
- **Objective 15-1.** Promote an adequate system of safe bikeways for commuter, school, and recreational use.
- **Objective 15-2.** Promote pedestrian-oriented mobility and the utilization of the bicycle for commuter, school, recreational use; economic activity; and access to transit facilities.
- **Objective 15-4.** Provide for the development of equestrian trails for recreational use.
- **Objective 16-1.** Provide parking in appropriate locations in accord with citywide standards and community needs.
- **Objective 17-1.** Ensure that the community's historically significant resources are protected, preserved, and/or enhanced.
- **Objective 18-1.** Enhance and capitalize on the contribution of existing cultural and historical resources in the community.

The land on which the Olive View–UCLA Medical Center Campus is situated is owned by the County and therefore not subject to regulation by the City of Los Angeles General Plan. However, because the general plan is applicable to off-site impacts and off-site improvements that might be required to mitigate project impacts, it is included in this section.

City of Los Angeles General Plan Framework

The City of Los Angeles General Plan Framework Element is the citywide plan that establishes how Los Angeles will grow in the future (City of Los Angeles n.d.). Adopted in 1996, and re-adopted in 2001, the Framework Element is a strategy for long-range growth and development, setting a citywide context for the update of community plans and citywide elements. The Framework Element responds to state and federal mandates to plan for the future by providing goals, policies, and objectives on a variety of topics, such as land use, housing, urban form, open space, transportation, infrastructure, and public services. Many of the Framework Element's key guiding principles can be advanced at the community level through community plans.

The following objectives would be applicable to the project:

- **Objective 3.1.** Accommodate a diversity of uses that support the needs of the city's existing and future residents, businesses, and visitors.
- **Objective 3.3.** Accommodate projected population and employment growth within the city and each community plan area and plan for the provision of adequate supporting transportation and utility infrastructure and public services.

City of Los Angeles Planning and Zoning Code

The City of Los Angeles Planning and Zoning Code includes standards for different land uses and identifies which land uses are allowed in various zoning districts (City of Los Angeles Department of City Planning 2019). Specifically, the zoning code consolidates and coordinates all existing zoning regulations and provisions to designate, regulate, and restrict locations and land uses. The project site has a City of Los Angeles (Sylmar Community Plan) zoning designation of PF1, which allows public health facilities, including clinics and hospitals. PF-1 zoning does not have restrictions regarding the heights of buildings or any specific front-, side-, or rear-yard setbacks. The Wilson Canyon Debris Basin and Channel, which runs through the project site, is classified as an OS-1 Open Space Zone.

The County's development of County-owned land on the Olive View–UCLA Medical Center Campus is not subject to regulation by the City of Los Angeles Planning and Zoning Code. However, as noted above, any off-site improvements required to mitigate project impacts would be subject to City of Los Angeles regulations. Figure 3.10-1 shows the City of Los Angeles zoning for the project site and surrounding area.

3.10.3 Environmental Setting

The Olive View–UCLA Medical Center Campus at 14445 Olive View Drive is on several parcels of land owned by the County of Los Angeles. The campus is within the community of Sylmar, at the north end of the San Fernando Valley, in the city of Los Angeles, California. Specifically, the site is bounded by the Angeles National Forest and Wilson Canyon Debris Basin and Channel on the north, Olive View Drive on the south, Los Angeles County Flood Control District facilities and Wilson Canyon Park on the east, and Bucher Avenue on the west. Kennedy Road and Cobalt Street intersect the project site. The site is east of Interstate 5 and north of Interstate 210.

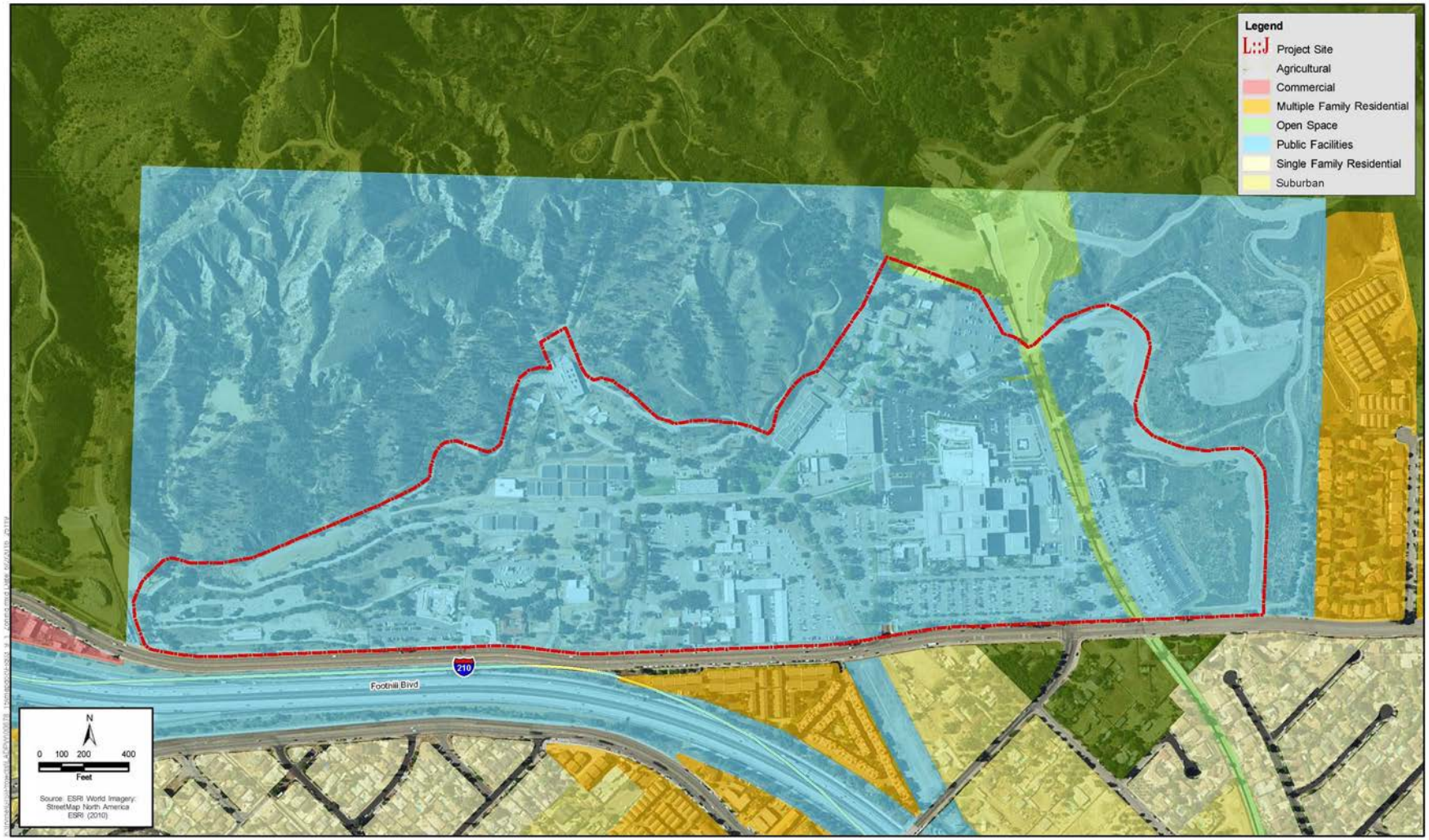
The 230-acre project site is located in an area that is generally surrounded by open space uses to the north and a variety of developed uses to the south, east, and west.

3.10.3.1 Project Site

The Olive View–UCLA Medical Center Campus occupies the project site, which is developed with medical and office uses, surface parking, open spaces, and maintenance facilities. The site is occupied with buildings that are in use as well as some that are currently vacant. Specifically, the campus currently consists of 31 permanent buildings and 29 trailers and other modular structures. The buildings range in age from 5 to 80 years old and therefore exhibit a wide range of architectural styles. The oldest buildings, particularly the bungalows in the northern part of campus, have been repurposed for campus support uses. The modular structures and trailers, which provide space and additional storage for the campus, are scattered throughout the campus. In addition, the Wilson Canyon Debris Basin and Channel runs through the site.

The existing campus consists of a main hospital tower with one- or two-story support buildings in the surrounding areas. The main hospital building is six stories, with an area of 530,000 square feet. Completed in 1987, the hospital tower is clad in quarter-inch tempered glass with a reflective solar cool bronze coating on all exterior façades, from the third floor to the sixth. The first and second floors have ribbed concrete on all sides. The emergency services building and Isolation Unit are the latest additions to the medical center. The imaging center is also attached to the hospital and serves the Radiology Department. Support buildings, such as the supply chain warehouse, education building, and finance building, are relatively close to the hospital.

Figure 3.10-1. Zoning Designations of the Project Site and Surrounding Area



The central utility plant, which is attached to the hospital building, serves the aforementioned hospital and surrounding support buildings. The plant and associated facilities have approximately 67,400 square feet of space. Also located on the campus are a number of single-story wooden structures, some of which date back to the 1920s. Some of the original buildings, such as the old administration building, are vacant and not currently utilized. Administrative uses total approximately 99,400 square feet, while community uses total approximately 9.300 square feet. Approximately 65,600 square feet of vacant uses are also on the campus. The campus currently contains approximately 2,672 surface parking spaces. No parking structures are located on the campus.

Table 3.10-1 provides a breakdown of existing uses, by square footage, on the project site.

Table 3.10-1. Existing Land Uses on the Project Site

Building Program	Square Feet (Beds)
Inpatient hospital	534,300
Community center[1]	9,300
Administration	108,000
Mental health	11,000
Materials management	32,500
Central utility plant	51,000
Support services buildings	16,800
Storage trailers (vacant during survey)	61,000
Parking facilities	2,672 spaces
Surface stalls	2,672
Surface square footage	1,090,000
Total (does not include parking surface)	**823,900**

Notes:
[1] Existing, recently built child care center.
Source: The Smith Group, County of Los Angeles, 2016.

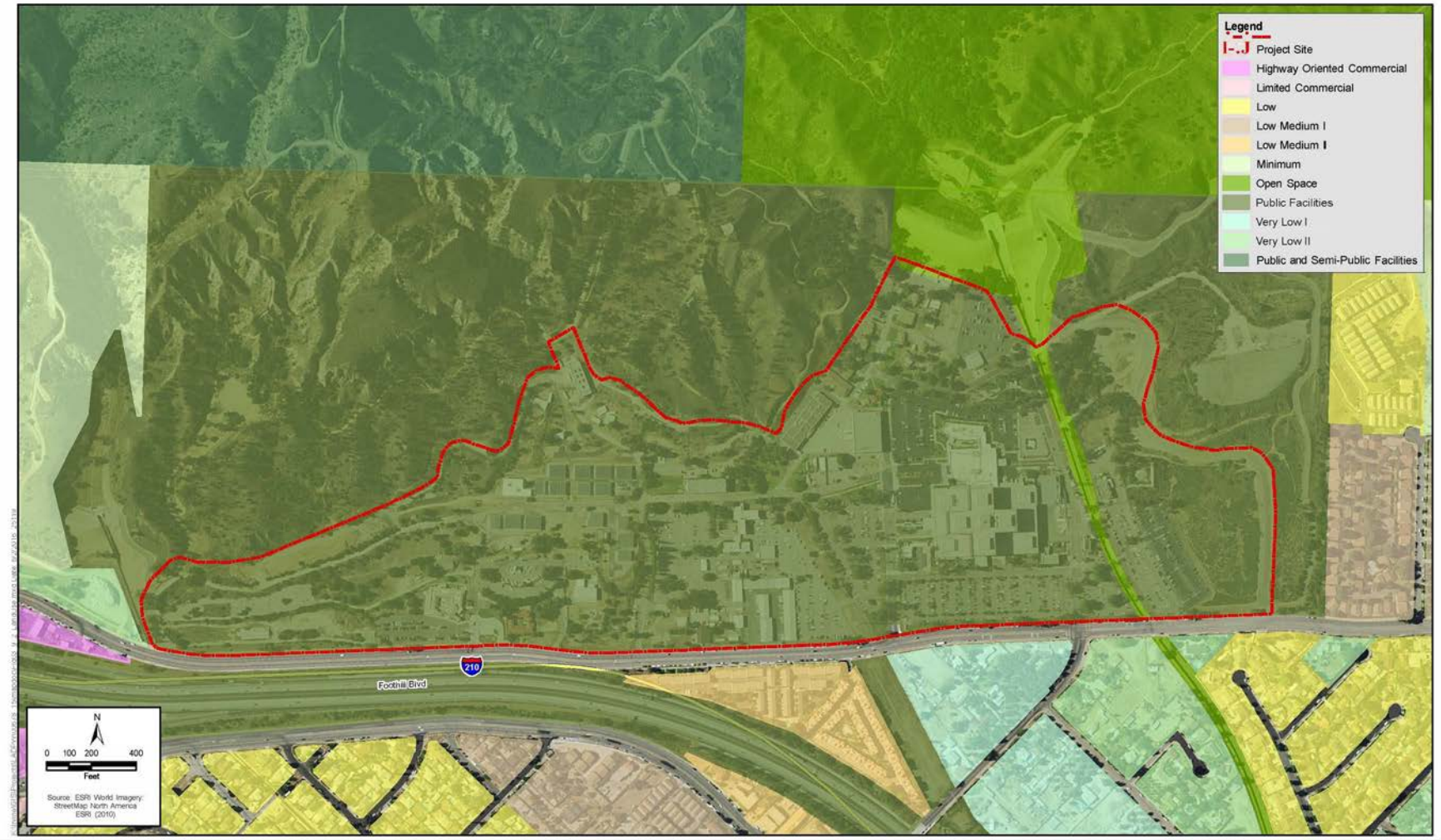
3.10.3.2 Surrounding Land Uses

The 230-acre Olive View–UCLA Medical Center Campus abuts the foothills of the San Gabriel Mountains, which are a part of the Angeles National Forest. The project site is surrounded by a mix of undeveloped natural areas and residential, equestrian, and other recreational (e.g., hiking) uses. The medical center is surrounded by forests and vegetation, mostly to the north. Unique to the campus are the equestrian and hiking trails that run along the northern edge of the campus. Wilson Canyon Park is less than 1 mile northwest of the campus. Stetson Ranch Park is less than 1 mile to the west.

Residential uses surround the project site to the east, west, and south. Predominantly single-family residential neighborhoods are east of the campus. The Oakridge Mobile Home Park is west of the campus. A mix of single-family residences, including ranch-style homes with equestrian facilities, multifamily residences, and some commercial uses are south of the campus across Olive View Drive.

Several institutional and recreational uses are also located in the surrounding area. El Cariso Golf Course is approximately 2 miles southeast of the project site. Pioneer Memorial Cemetery is approximately 0.5 mile south of the campus. Several schools are also within the surrounding area; specifically, Olive Vista Middle School and Sylmar High School are approximately 1.5 miles south of the project site, and Herrick Avenue Elementary School is approximately 2 miles southeast of the campus. Figure 3.10-2, to follow, depicts the designated land uses on the project site and in the surrounding area.

Figure 3.10-2. Land Uses of the Project Site and Surrounding Area



3.10.4 Environmental Impact Analysis

3.10.4.1 Methods

Local plans and policies, including general plans, specific plans, zoning ordinances, land use and zoning maps, etc., were reviewed to analyze the consistency of the proposed project with such plans.

3.10.4.2 Thresholds of Significance

For the purposes of this environmental impact report (EIR), and in accordance with Appendix G of the CEQA Guidelines, the proposed project would have a significant environmental impact if it would:

LU-1 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 lead agency determined in the notice of preparation/initial study (NOP/IS) (see Appendix A) that the proposed project would not result in an impact in the following areas, which were therefore screened from further review in this EIR (please refer to Appendix A of this EIR for a copy of the NOP/IS and additional information regarding these issue areas):

- Physically divide an established community, and
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

3.10.4.3 Impacts and Mitigation Measures

Impact LU-1: Would the Proposed Project 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?

Construction and Operational Impacts

Tiers I and II

Table 3.10-2, below, identifies relevant environmental policies and objectives of local land use plans and discusses whether the proposed project would conflict with those policies and objectives. The reader is also referred to other sections in this chapter for descriptions of potential adverse impacts (e.g., impacts related to air quality, aesthetics, biological resources, noise, cultural resources, geology and soils, hazards and hazardous materials, public services, utilities, transportation/traffic) on land uses in the vicinity of the project site and conflicts with applicable regulations governing those impacts.

Table 3.10-2. Proposed Project's Consistency with Applicable Land Use Plans

Policy/Objective Number	Discussion	Conflict – Yes/No?
SCAG RTP		
Align the plan investments and policies with improving regional economic development and competitiveness.	The proposed Master Plan would guide future development of the campus and improve the delivery of health care services to the region. Proposed new development would provide short-term construction and new long-term jobs, which would have a beneficial effect on the regional economy.	No
Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	The Master Plan proposes new pedestrian, equestrian, and bike paths throughout the campus. Also, see Section 3.2, *Air Quality*, and Section 3.15,*Transportation/Traffic*, of this EIR.	No
Actively encourage and create incentives for energy efficiency, where possible.	One of the objectives of the proposed project is to identify feasible opportunities to exceed state energy requirements and pursue sustainable designs to the maximum extent possible. The Master Plan also includes sustainable building and landscape design guidelines to reduce energy and water consumption.	No
Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	The campus is currently and will continue to be served by bus transit. Also, as noted above, the Master Plan proposes new pedestrian, bicycle, and equestrian trails throughout the campus.	No
County of Los Angeles General Plan		
Land Use Element		
Policy LU 6.2: Encourage land uses and developments that are compatible with the natural environment and landscape.	The proposed Master Plan provides guidelines for new development to reclaim the natural setting and scale of the campus and the surrounding region. In addition, landscaping improvements under the Master Plan are intended to integrate the natural setting of the campus into its design.	No
Policy LU 10.4: Promote environmentally sensitive and sustainable design.	The Master Plan includes sustainable design guidelines that promote efficient energy and water use. Also, as noted above, one of the objectives of the proposed project is to identify feasible opportunities to exceed state energy requirements and pursue sustainable designs to the maximum extent possible.	No

Policy/Objective Number	Discussion	Conflict – Yes/No?
Mobility Element		
Policy M 2.6: Encourage the implementation of future designs concepts that promote active transportation, whenever available and feasible.	The Master Plan proposes new pedestrian, equestrian, and bike paths throughout the campus.	No
City of Los Angeles Sylmar Community Plan		
Objective 1-3: To preserve and enhance the varied and distinct residential character and integrity of existing single- and multifamily neighborhoods.	The proposed project does not include new development within or immediately adjacent to residential neighborhoods that could adversely affect the varied and distinct residential character and integrity of existing single- and multifamily neighborhoods. The proposed Master Plan does include development of new community facilities and open spaces that would benefit residents in the project area.	No
Objective 1-4: To preserve and enhance structures that have a distinctive and significant historical character.	No historical structures would be removed or altered with implementation of the proposed Master Plan.	No
Objective 5-1: To preserve existing open space resources and, where possible, develop new open space.	The landscaping improvements under the Master Plan would integrate the natural setting of the campus into its design. Outdoor healing gardens, courtyard gardens, and gathering spaces would be developed under the proposed project. Proposed pedestrian, equestrian, and bike paths would be provided along Olive View Drive under Tier I and ultimately incorporated throughout the campus (under Tier II).	No
Objective 8-1: To provide adequate police facilities and personnel to correspond with population and service demands in order to provide adequate police protection.	As described in Section 3.13, *Public Services*, of this EIR the proposed project would require implementation of mitigation measure **PS-1** to ensure that impacts on police services during construction would be less than significant. Mitigation measure **PS-2** would ensure that impacts due to increased demand for police protection services resulting from development and operation of Master Plan facilities would be less than significant. Please see Section 3.13, *Public Services*, of this EIR, for further discussion of impacts on police (and fire) services.	No

Policy/Objective Number	Discussion	Conflict – Yes/No?
Objective 9-1: Ensure that fire facilities and protective services are sufficient for the existing and future population and land uses.	Please see the discussion for Objective 8-1, above, and Section 3.13 of this EIR for more information.	No
Objective 10-1: To comply with citywide performance standards for acceptable levels of service and ensure that necessary road access and street improvements are provided to accommodate traffic generated by all new development.	Implementation of development under Tier I would not result in significant traffic impacts at any of the study intersections within the city of Los Angeles.	No
Objective 15-4: Provide for the development of equestrian trails for recreational use.	Pedestrian, equestrian, and bike paths would be provided along Olive View Drive under Tier I and ultimately incorporated throughout the campus (under Tier II) (Figure 2-6). Each path would have a separate, distinguished lane to ensure safety by avoiding conflicts between users. The intent of the Wellness Trails is to bring community and patients closer to nature while providing transitions between vehicular traffic and hospital facilities that are safer and more convenient.	No
Objective 16-1: To provide parking in appropriate locations in accord with citywide standards and community needs.	The Master Plan includes improvement of parking and vehicle circulation at the Olive View–UCLA Medical Center Campus. New parking structures and surface lots are proposed, as are drop-off areas at each main building entry to help reduce walking distances. Under Tier I, 674 spaces would be housed within a new parking facility north of the Ambulatory Care Center. An additional 1,369 spaces in surface lots would remain on campus under Tier I.	No
Objective 17-1: To ensure that the community's historically significant resources are protected, preserved, and/or enhanced.	Implementation of the Master Plan would not result in demolition or alteration of any identified historical resources.	No
Objective 18-1: To enhance and capitalize on the contribution of existing cultural and historical resources in the community.	See the response to Objective 17-1, above.	No
Source: ICF 2018.		

Consistency with Local Plans and Policies

As described above, the project site is owned by the County, and the facilities at the Olive View–UCLA Medical Center Campus are exempt from local land use regulations. Specifically, the proposed project would not be required to be consistent with the City of Los Angeles General Plan land use

designations and zoning. Nonetheless, new construction, renovation, and additions proposed under the Master Plan would be consistent with the current land use designation of Public Facilities and zoning designation of PF. The Public Facilities land use designation allows for public facilities such as fire stations, libraries, and schools. The PF zone allows public health facilities, including clinics and hospitals. As shown in Table 3.10-2, above, the proposed project would be generally supportive of, or consistent with, the relevant environmental policies and objectives of the County of Los Angeles General Plan Land Use Element and Mobility Element and the City of Los Angeles Sylmar Community Plan. Therefore, the proposed Master Plan would not result in a significant land use impact due to conflicts with applicable land use plans, policies, or regulations that have been adopted for the purpose of avoiding or mitigating an environmental effect.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

No impact.

3.10.5 Cumulative

As described above, the proposed project would not conflict with applicable environmental land use plans, policies, or regulations; therefore, it would not contribute to any cumulative land use impacts.

The reader is also referred to the cumulative discussions in other sections of this chapter for a discussion of cumulative adverse impacts on land uses in the vicinity of the project site due to the combined effects of the proposed project and related growth and cumulative development.

3.11 Noise

3.11.1 Introduction

This section describes the potential noise and vibration impacts of the proposed project. It includes a discussion of existing regulatory requirements, the existing noise setting within the project area, and noise and vibration impacts that would result from implementation of the proposed project.

3.11.1.1 Noise Fundamentals and Terminology

Noise is commonly defined as unwanted sound. Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is often defined as sound that is objectionable because it is disturbing or annoying. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and the obstructions or atmospheric factors, which affect the propagation path to the receptor, determine the sound level and the characteristics of the noise perceived by the receptor.

The following sections provide an explanation of key concepts and acoustical terms used in the analysis of environmental and community noise.

Frequency, Amplitude, and Decibels

Continuous sound can be described by *frequency* (pitch) and *amplitude* (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. The amplitude of a sound is typically described in terms of *sound pressure level* (SPL), which refers to the root-mean-square (rms) pressure of a sound wave and can be measured in units called microPascals (µPa). One µPa is approximately one hundred-billionth (0.00000000001) of normal atmospheric pressure. Sound pressure levels for different kinds of noise environments can range from less than 100 to over 100,000,000 µPa. Because of this large range of values, sound is rarely expressed in terms of µPa. Instead, a logarithmic scale is used to describe the sound pressure level (also referred to simply as the sound level) in terms of decibels, abbreviated dB. Specifically, the decibel describes the ratio of the actual sound pressure to a reference pressure and is calculated as follows:

$$SPL = 20 \times \log_{10}\left(\frac{X}{20\mu Pa}\right)$$

where X is the actual sound pressure and 20 µPa is the standard reference pressure level for acoustical measurements in air.

The threshold of hearing for young people is about 0 dB, which corresponds to 20 µPa.

Decibel Addition

Because decibels are logarithmic units, sound pressure levels cannot be added or subtracted through ordinary arithmetic. On the dB scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, their combined sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one excavator produces a sound pressure level of 80 dB, two excavators would not produce 160 dB. Rather, they would combine to produce 83 dB. The cumulative sound level of any number of sources, such as excavators, can be determined using decibel addition. The same decibel addition is used for A-weighted decibels described below.

Perception of Noise and A-Weighting

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the sound pressure level in that range. In general, people are most sensitive to the frequency range of 1,000 to 8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels in various frequency bands are adjusted (or *weighted*), depending on human sensitivity to those frequencies. The resulting sound pressure level is expressed in A-weighted decibels, abbreviated dBA. When people make judgments regarding the relative loudness or annoyance of a sound, their judgments correlate well with the A-weighted sound levels of those sounds. Table 3.11-1 describes typical A-weighted sound levels for various noise sources.

Studies have shown that under controlled conditions in an acoustics laboratory, a healthy human ear is able to discern changes in sound levels of 1 dBA. In the normal environment, the healthy human ear can detect changes of about 2 dBA; however, it is widely accepted that changes of 3 dBA in the normal environment are considered just noticeable to most people. A change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as being twice as loud. Accordingly, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) resulting in a 3-dB increase in sound would generally be barely detectable.

Noise Descriptors

Because sound levels can vary markedly over a short period of time, various descriptors or noise *metrics* have been developed to quantify environmental and community noise. These metrics generally describe either the average character of the noise or the statistical behavior of the variations in the noise level. The most common of these metrics are described below in Table 3.11-1:

Table 3.11-1. Typical A-Weighted Sound Levels

Common Outdoor Noise Source	Sound Level (dBA)	Common Indoor Noise Source
	— 110 —	Rock band
Jet flying at 1,000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher in next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013a.

Equivalent Sound Level (L_{eq})

The equivalent sound level is the most common metric used to describe short-term average noise levels. Many noise sources produce levels that fluctuate over time; examples include mechanical equipment that cycles on and off, or construction work, which can vary sporadically. The equivalent sound level (L_{eq}) describes the average acoustical energy content of noise for an identified period of time, commonly 1 hour. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustical energy over the duration of the exposure. For many noise sources, the L_{eq} will vary depending on the time of day: a prime example is traffic noise that rises and falls depending on the amount of traffic on a given street or freeway.

Maximum Sound Level (L_{max}) and Minimum Sound Level (L_{min})

L_{max} and L_{min} refer to the maximum and minimum sound levels, respectively, that occur during the noise measurement period. More specifically, they describe the rms sound levels that correspond to the loudest and quietest 1-second intervals that occur during the measurement.

Percentile-Exceeded Sound Level ($L_{\%}$)

The percentile-exceeded sound level, $L_{\%}$, is the sound level exceeded for the stated percentage of the noise measurement period. For example, L_{25} is the sound level exceeded 25 percent of the time, and L_{50} is the sound level exceeded 50 percent of the time. The percentile-exceeded noise level is most commonly assessed based on a 1-hour period, such that the L_{25} would correspond to 15 minutes in an hour, and the L_{50} would correspond to 30 minutes in an hour.

Community Noise Equivalent Level (CNEL)

It is recognized that a given level of noise may be more or less tolerable depending on the duration of the exposure experienced by an individual, as well as the time of day during which the noise occurs. The community noise equivalent level (CNEL) is a measure of the cumulative 24-hour noise exposure that considers not only the variation of the A-weighted noise level but also the duration and the time of day of the disturbance. The CNEL is derived from the 24 A-weighted 1-hour L_{eq}s that occur in a day, with penalties applied to the L_{eq}s occurring during the evening hours (7 p.m. to 10 p.m.) and nighttime hours (10 p.m. to 7 a.m.) to account for increased noise sensitivity during these hours. Specifically, the CNEL is calculated by adding 5 dBA to each of the evening L_{eq}s, adding 10 dBA to each of the nighttime L_{eq}s, and then taking the average value for all 24 hours.

Day-Night Sound Level (L_{dn})

Much like CNEL, above, L_{dn} is also a measure of the cumulative 24-hour noise exposure that considers not only the variation of the A-weighted noise level, but also the duration and the time of day of the disturbance. The L_{dn} is derived in exactly the same way as CNEL, except that no penalty is applied to the evening hours of 7 p.m. to 10 p.m. Specifically, the L_{dn} is calculated from the 24 A-weighted 1-hour L_{eq}s that occur in a day by adding 10 dBA to each of the nighttime (10 p.m. to 7 a.m.) L_{eq}s and then taking the average value for all 24 hours.

It is noted that various federal, state, and local agencies have adopted CNEL or L_{dn} as the measure of community noise. While not identical, CNEL and L_{dn} are normally within 1 dBA of each other when measured in typical community environments, and many noise standards/regulations use the two interchangeably.

Sound Propagation

When sound propagates over a distance, it changes in both level and frequency content. The manner in which noise is reduced with distance depends on the following important factors.

Geometric Spreading

Sound from a single source (i.e., a *point* source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. Highway noise is not a single stationary point source of sound. The movement of vehicles on a highway makes the source of the sound appear to emanate from a line (i.e., *line* source), rather than from a point. This results in cylindrical spreading, rather than the spherical spreading resulting from a point source. The change in sound level (i.e., *attenuation*) from a line source is 3 dBA per doubling of distance.

Ground Absorption

Usually the noise path between the source and the observer is very close to the ground. The excess noise attenuation from ground absorption occurs due to acoustic energy losses on sound wave reflection. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is done for simplification only; for distances of less than 200 feet, prediction results based on this scheme are sufficiently accurate. For acoustically *hard* sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or a smooth body of water), no excess ground attenuation is assumed because the sound wave is reflected without energy losses. For acoustically absorptive or *soft* sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dBA per doubling of distance is normally assumed. When added to the geometric spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dBA per doubling of distance for a line source and 7.5 dBA per doubling of distance for a point source.

Atmospheric Effects

Research by the California Department of Transportation (Caltrans) and others has shown that atmospheric conditions can have a major effect on noise levels. Wind has been shown to be the single most important meteorological factor within approximately 500 feet, whereas vertical air temperature gradients are more important over longer distances. Other factors, such as air temperature, humidity, and turbulence, also have major effects. Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lower noise levels. Increased sound levels can also occur because of temperature inversion conditions (i.e., increasing temperature with elevation, with cooler air near the surface, where the sound source tends to be and the warmer air above which acts as a cap, causing a reflection of ground level-generated sound).

Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receptor, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor with the specific purpose of reducing noise. A barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. A higher barrier may provide as much as 20 dB of noise reduction.

3.11.1.2 Groundborne Vibration Fundamentals and Terminology

Groundborne vibration is an oscillatory motion of the ground with respect to the equilibrium position. Most perceptible indoor vibration is caused by sources within buildings, such as the operation of mechanical equipment, movement of people, or the slamming of doors. However, when vibration occurs as a result of groundborne transmission from exterior sources, it can be a serious concern for residents and tenants, causing buildings to shake and rumbling sounds to be heard. Typical outdoor sources of perceptible groundborne vibration are heavy construction equipment (e.g., earthmoving, blasting, and pile driving), steel-wheeled trains, and heavy trucks on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible.

The following sections provide an explanation of key concepts and terms used in the analysis of groundborne vibration.

Displacement, Velocity, and Acceleration

Groundborne vibration can be described in terms of displacement, velocity, or acceleration. Displacement is the easiest descriptor to understand: it is simply the distance that a vibrating point moves from its static position (i.e., its resting position when the vibration is not present). The velocity describes the instantaneous speed of the movement and acceleration is the instantaneous rate of change of the speed. Although displacement is fundamentally easier to understand than velocity or acceleration, it is rarely used for describing groundborne vibration, for the following reasons: 1) human response to ground-borne vibration correlates more accurately with velocity or acceleration; 2) the effect on buildings and sensitive equipment is more accurately described using velocity or acceleration; and, 3) most transducers used in the measurement of ground-borne vibration actually measure either velocity or acceleration. For evaluating the potential environmental impacts of groundborne vibration, velocity is the fundamental measure that is typically used.

The frequency of vibration is expressed in the same unit, Hz, as described under section 3.11.1.1, *Noise Fundamentals and Terminology*, in this EIR, for noise. One Hz is equal to 1 cycle per second, and 1 kHz is equal to 1,000 cycles per second. The description of the vibration amplitude depends on the metric being used, as described below under *Groundborne Vibration Descriptors*. If a person is engaged in any type of physical activity, vibration tolerance increases considerably.

Perception of Groundborne Vibration

There are three primary types of receivers that can be adversely affected by ground vibration: people, structures, and equipment.

People may perceive both primary and secondary effects of groundborne vibration. Primary effects occur when groundborne vibration is felt directly through the ground or the building structure. Secondary effects include phenomena such as the rattling of fixtures or the movement of hanging objects. Any effect (primary perceptible vibration, secondary effects, or a combination of the two) can lead to annoyance. The degree to which a person is annoyed depends on the activity in which they are participating at the time of the disturbance. For example, someone sleeping or reading will be more sensitive than someone who is engaged in any type of physical activity. Reoccurring primary and secondary vibration effects often lead people to believe that the vibration is damaging their home, although vibration levels are well below minimum thresholds for damage potential.

Vibration generated by construction activity has the potential to damage structures. This damage could be structural damage (e.g., cracking of floor slabs, foundations, columns, beams, or wells) or cosmetic architectural damage (e.g., cracked plaster, stucco, or tile). Ground vibration also has the potential to disrupt the operation of vibration-sensitive research and advanced technology equipment, such as optical microscopes, cell probing devices, magnetic resonance imaging (MRI) machines, scanning electron microscopes, photolithography equipment, micro-lathes, and precision milling equipment. The degree to which this equipment is disturbed depends on the type of equipment, how it used, and its support structure.

Groundborne Vibration Descriptors

Peak Particle Velocity (PPV)

Peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak amplitude of the vibration velocity. The unit of measurement is inches per second (in/s). PPV can be used to assess both human response to groundborne vibration and the potential for building damage. PPV is related to the stresses that are experienced by buildings subjected to groundborne vibration.

3.11.2 Regulatory Setting

3.11.2.1 Federal and State

There are no federal and state regulations that are applicable and relevant to the proposed project.

3.11.2.2 Local

Los Angeles County Code

Construction noise is addressed in Section 12.08.440 of the Los Angeles County Code, as follows:

12.08.440 Construction Noise

A) Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited.

B) Noise Restrictions at Affected Structures. The contractor will conduct construction activities in such a manner that the maximum noise levels will not exceed those listed:

(1) At Residential Structures.

(a) Mobile Equipment. Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment:

	Single-Family Residential	Multifamily Residential	Semi-Residential Commercial
Daily, except Sundays and legal holidays, 7 a.m. to 8 p.m.	75 dBA	80 dBA	85 dBA
Daily, 8 p.m. to 7 a.m. and all day Sunday and legal holidays	60 dBA	64 dBA	70 dBA

(b) Stationary Equipment. Maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment:

	Single-Family Residential	Multifamily Residential	Semi-Residential Commercial
Daily, except Sundays and legal holidays, 7 a.m. to 8 p.m.	60 dBA	65 dBA	70 dBA
Daily, 8 p.m. to 7 a.m. and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

(2) At Business Structures.

(a) Mobile equipment. Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment:

(b) Daily, including Sunday and legal holidays, all hours: maximum of 85 dBA.

C) All mobile or stationary internal combustion engine-powered equipment or machinery will be equipped with suitable exhaust and air-intake silencers in proper working order.

D) In case of a conflict between this chapter and any other ordinance regulating construction activities, provisions of any specific ordinance regulating construction activities will control.

The County code includes the following standard, in Section 12.08.560, related to groundborne vibration:

12.08.560 Vibration

Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold will be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hz.

County of Los Angeles General Plan

The Noise Element of the Los Angeles County 2035 General Plan (General Plan) provides a number of policies related to community noise, but does not provide any quantitative standards that are directly applicable to the project.

City of Los Angeles CEQA Thresholds Guide

The *Los Angeles CEQA Thresholds Guide* (City of Los Angeles 2006) defines noise-sensitive land uses as residences, transient lodgings, schools, day-care facilities, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks, and provides noise/land use compatibility guidelines, as summarized in Table 3.11-2.

The *Los Angeles CEQA Thresholds Guide* also establishes significance criteria for four different types of noise sources (construction, operational, railroad, and airport), as summarized below:

Construction Noise

A project would normally have a significant impact on noise levels from construction if:

- Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise-sensitive use;
- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive use; or
- Construction activities would exceed the ambient noise level by 5 dBA at a noise-sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday.

Operational Noise (including project-generated traffic)

A project would normally have a significant impact on noise levels from project operations if the project causes the ambient noise level measured at the property line of affected uses to increase by

3 dBA in CNEL to or within the *normally unacceptable* or *clearly unacceptable* category, or any 5-dBA or greater noise increase.

Table 3.11-2. *LA CEQA Thresholds Guide* Land Use Noise Compatibility Guidelines

Land Use	Community Noise Exposure CNEL, dB			
	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Single-family, duplex, mobile homes	50–60	55–70	70–75	above 70
Multifamily homes	50–65	60–70	70–75	above 70
Schools, libraries, churches, hospitals, nursing homes	50–70	60–70	70–80	above 80
Transient lodging: motels, hotels	50–65	60–70	70–80	above 80
Auditoriums, concert halls, amphitheaters	–	50–70	–	above 65
Sports arena, outdoor spectator sports	–	50–75	–	above 70
Playgrounds, neighborhoods parks	50–70	–	67–75	above 72
Golf courses, riding stables, water, recreation, cemeteries	50–75	–	70–80	above 80

Notes:

[1] *Normally Acceptable*: Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction and without any special noise insulation requirements.

[2] *Conditionally Acceptable*: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air-conditioning, will normally suffice.

[3] *Normally Unacceptable*: New construction or development generally should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

[4] *Clearly Unacceptable*: New construction or development generally should not be undertaken.

Source: City of Los Angeles 2006.

Railroad Noise

A project would normally have a significant impact with regard to exterior noise levels resulting from railroad operations if the project causes noise measured at the property line of a noise-sensitive receptor to increase by 3 dBA in CNEL, to or within the *normally unacceptable* or *clearly unacceptable* category, or any 5-dBA or greater noise increase.

Airport Noise

A significant impact on ambient noise levels would normally occur if noise levels at a noise-sensitive use attributable to airport operations exceed 65 dB CNEL and the project increases ambient noise levels by 1.5 dB CNEL or greater.

City of Los Angeles Municipal Code

Construction Noise

Section 41.40 (a) of the City of Los Angeles Municipal Code prohibits the use, operation, repair, or servicing of construction equipment, as well as job-site delivery of construction materials, between the hours of 9:00 p.m. and 7:00 a.m., where such activities would disturb "persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence." Construction noise emanating from property zoned for manufacturing or industrial uses is exempted from the Section 41.40(a) standards. In addition, Section 41.40(c) prohibits construction, grading, and related job-site deliveries on or within 500 feet of land developed with residential structures before 8:00 a.m. or after 6:00 p.m. on any Saturday or national holiday or at any time on Sunday.

Section 112.05 of the municipal code places limits on the maximum noise levels (75 dBA at a distance of 50 feet for typical construction equipment) that may be produced by powered equipment or tools in, or within 500 feet of, any residential zone between the hours of 7 a.m. and 10 p.m. The proscribed limits will not apply where compliance is technically infeasible, but the burden of proving that compliance is technically infeasible is on the person or persons charged with a violation of the standard. Technical infeasibility will mean that the noise limit cannot be complied with despite the use of mufflers, shields, sound barriers, and/or other noise reduction devices or techniques during the operation of the equipment.

Operational Noise

Chapter XI, *Noise Regulation*, of the City of Los Angeles Municipal Code regulates noise from non-transportation noise sources such as commercial or industrial operations, mechanical equipment, or residential activities. It is noted that while these regulations do not apply to vehicles operating on public rights-of-way, they do apply to noise generated by vehicles on private property, such as truck operations at commercial or industrial facilities. The exact noise standards vary depending on the type of noise source, but the allowable noise levels are generally determined relative to the existing ambient noise levels at the affected location. Section 111.01(a) defines the ambient noise as "the composite of noise from all sources near and far in a given environment, exclusive of occasional and transient intrusive noise sources and of the particular noise source or sources to be measured. Ambient noise will be averaged over a period of at least 15 minutes."

Section 111.03 provides minimum ambient noise levels for various land uses, as described in Table 3.11-3, below. In the event that the actual measured ambient level at the subject location is lower than that provided in the table, the level in the table will be assumed. At the boundary line between two zones, the allowable noise level of the quieter zone will be used. The allowable noise levels are then adjusted if certain conditions apply to the alleged offensive noise, as follows:

- For steady tone noise with an audible fundamental frequency or overtones (except for noise emanating from any electrical transformer or gas metering and pressure control equipment existing and installed prior to September 8, 1986), reduce allowable noise level by 5 dBA.
- For repeated impulsive noise, reduce allowable noise level by 5 dBA.
- For noise occurring less than 15 minutes in any period of 60 consecutive minutes between the hours of 7:00 a.m. and 10:00 p.m., increase allowable noise level by 5 dBA.

Table 3.11-3. City of Los Angeles Assumed Minimum Ambient Noise Levels

Zone	Assumed Minimum Ambient Noise (L_{eq}), dBA	
	Daytime (7 a.m.–10 p.m.)	Nighttime (10 p.m.–7 a.m.)
A1, A2, RA, RE, RS, RD, RW1, RW2, R1, R2, R3, R4, and R5	50	40
P, PB, CR, C1, C1.5, C2, C4, C5, and CM	60	55
M1, MR1, and MR2	60	55
M2 and M3	65	65
Source: City of Los Angeles 2013.		

The city's noise ordinance is not explicit in defining the length of time over which an average noise level should be assessed. However, based on the noted reference to *60 consecutive minutes*, above, it is concluded that the 1-hour L_{eq} metric should be used.

Section 112.02 of Chapter XI addresses noise from air conditioning, refrigeration, heating, pumping, and filtering equipment. It states that such equipment may not generate noise that would exceed the ambient noise level at any adjacent property by more than 5 dBA.

Section 114.02 of Chapter XI addresses noise from motor driven vehicles (it is noted that the code only addresses vehicles on private property and does not address vehicles while operated on public highways). It states that such vehicles may not generate noise that would exceed the ambient noise level at any occupied residential property by more than 5 dBA.

City of Los Angeles Noise Element

The Noise Element of the city of Los Angeles General Plan (city General Plan) defines the following land uses to be noise-sensitive: single- and multifamily dwellings, long-term care facilities (including convalescent and retirement facilities), dormitories, motels, hotels, transient lodgings, and other residential uses, houses of worship, hospitals, libraries, schools, auditoriums, concert halls, outdoor theaters, nature and wildlife preserves, and parks.

The Noise Element contains the following polices that are relevant to the proposed project:

- **Policy 5:** Continue to enforce, as applicable, city, state, and federal regulations intended to abate or eliminate disturbances of the peace and other intrusive noise.
- **Policy 6:** When processing building permits, continue to require appropriate project design and/or insulation measures, in accordance with the California Noise Insulation Standards (Building Code Title 24, Section 3501 et seq.) or any amendments thereto or subsequent related regulations, so as to assure that interior noise levels will not exceed the minimum ambient noise levels, as set forth in the city's noise ordinance (LAMC Section 111 et seq., and any other insulation related code standards or requirements) for a particular zone or noise-sensitive use, as defined by the California Noise Insulation Standards.
- **Policy 11:** For a proposed development project that is deemed to have a potentially significant noise impact on noise-sensitive uses, as defined by this chapter, require mitigation measures, as appropriate, in accordance with California Environmental Quality Act (CEQA) and city procedures.

- **Policy 12:** When issuing discretionary permits for a proposed noise-sensitive use (as defined by this chapter) or a subdivision of four or more detached single-family units and which use is determined to be potentially significantly impacted by existing or proposed noise sources, require mitigation measures, as appropriate, in accordance with procedures set forth in CEQA.

3.11.3 Environmental Setting

3.11.3.1 Existing Noise Environment

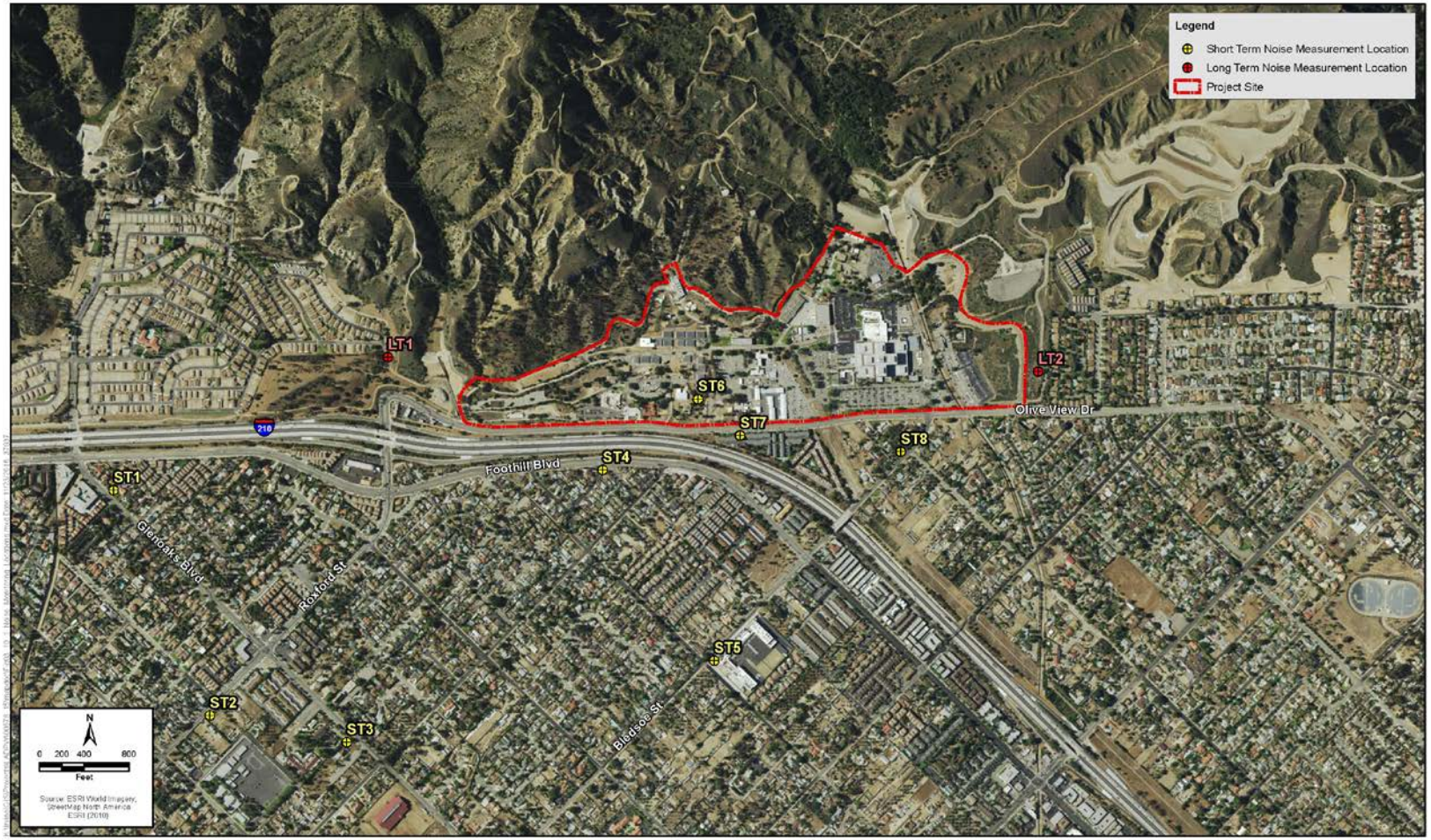
The primary source of noise that currently affects the project vicinity is traffic on State Route (SR-) 210 and surrounding streets. Existing noise levels due to these roadways are estimated as part of the analyses provided in Section 3.11.4.3, below (see Impact NOI-3). Secondary sources of noise include day-to-day neighborhood noise (e.g., landscaping and barking dogs), occasional aircraft overflights, and operations at the existing Olive View-UCLA Medical Center Campus (including mechanical and utility plant equipment, parking lots, ambulance sirens, and occasional heliport operations for air ambulances); a Union Pacific railroad line is located approximately 1.5 miles southwest of the project site.

The closest noise-sensitive receptors to the project site include homes (single- and multifamily) located approximately 200 feet east, 100 feet south (across Olive View Drive), and 900 feet west of the boundaries of the campus. Wilson Canyon Park and Saddletree Open Space are both located north of the campus.

Noise Monitoring

To document the existing noise environment, measurements were obtained at 10 locations throughout the study area. Two long-term (approximately 24 hours) noise measurements were obtained adjacent to residences east and west of the proposed project site. Short-term noise measurements (approximately 15 to 20 minutes) were obtained at seven locations in the surrounding community and at one location on the project site. Both long-term measurements were obtained between approximately 10:30 a.m. on Wednesday, June 15, 2016, and 1:00 p.m. on Thursday, June 16, 2016. Short-term measurements were gathered on Wednesday, June 15, and Thursday, June 16, 2016. The locations are identified in Figure 3.11-1; additional details and a summary of the measurement results are provided in Table 3.11-4 and Table 3.11-5.

Figure 3.11-1. Noise Monitoring Locations



ICF

Figure 3.11-1
Noise Monitoring Locations
Olive View-UCLA Medical Center Master Plan

Source: (ICF 2016)

Table 3.11-4. Summary of Short-Term Noise Measurements

	Measured Noise Levels, dBA							
Location #, Description (Date, Time)	**L_{eq}**	**L_{max}**	**L_{min}**	**L_2**	**L_8**	**L_{25}**	**L_{50}**	**L_{90}**
ST-1, In front of single-family residence at 13800 Glen Oaks Street (6/16/2016, 11:54 a.m.–12:09 a.m.)	57.8	70.9	48.4	65.8	62.6	57.7	53.4	50.5
ST-2, At fence of abandoned property at 15300 Roxford Street (6/16/16, 12.23 p.m.–12:39 p.m.)	71.2	96.0	45.7	74.2	70.1	69.6	64.0	52.9
ST-3, At picnic area northeast of worship space at 13425 Glen Oaks Boulevard (6/16/16, 11:04 a.m.–11:25 a.m.)	62.6	83.1	42.3	72.0	67.7	62.5	54.3	45.3
ST-4, At fence of yard facing Foothill Boulevard at 14734 Bromont Avenue (6/15/2016, 3:24 p.m.–3:39 p.m.)	64.6	72.0	54.5	69.0	67.3	65.6	63.9	60.4
ST-5, West corner of school at 14550 W Bledsoe Street (6/15/2016, 3:57 p.m.–4:13 p.m.)	59.9	74.6	47.0	68.8	64.1	59.5	55.7	49.8
ST-6, On project site adjacent to child center (6/15/2016, 2:05 p.m.–2:21 p.m.)	60.8	64.4	56.8	63.3	62.4	61.5	60.4	59.1
ST-7, At 14500 Olive View Drive, Apartment #142 facing hospital campus (6/15/2016, 12:45 p.m.–1:05 p.m.)	63.7	74.1	53.4	70.9	68.5	64.8	60.2	56.0
ST-8, In front of driveway at 14301 Bledsoe Street (6/16/2016, 10:20 a.m.–10:36 a.m.)	60.7	79.7	47.4	70.2	64.4	58.3	53.0	49.4

Table 3.11-5. Summary of Long-Term Noise Measurements

Location #, Description	Day, Dates	CNEL	Time Period	Range of Hourly Average Levels, L_{eq} (1h), dBA	Range of Hourly Minimum Levels, L_{min}, dBA	Range of Hourly Maximum Levels, L_{max}, dBA
LT-1, On access road at edge of neighboring community west of Medical Center campus	Wednesday, 6/15/2016 and Thursday, 6/16/2016	70.8	Daytime (7 a.m.–7 p.m.)	61.3–69.0 Average: 66.2	53.3–64.4	68.4–80.5
			Evening (7 p.m.–10 p.m.)	64.1–68.6 Average: 66.8	56.5–61.4	71.6–86.3
			Nighttime (10 p.m.–7 a.m.)	61.0–65.1 Average: 63.3	46.3–58.7	70.2–78.6
LT-2, Beside trail next to neighboring community east of Medical Center campus	Wednesday, 6/15/2016 and Thursday, 6/16/2016	55.9	Daytime (7 a.m.–7 p.m.)	46.3–59.7 Average: 52.4	39.2–48.0	56.3–79.3
			Evening (7 p.m.–10 p.m.)	47.2–51.2 Average: 50.1	39.4–44.0	60.9–80.1
			Nighttime (10 p.m.–7 a.m.)	45.0–51.1 Average: 48.4	37.8–42.1	53.2–69.6
Source: ICF 2016.						

3.11.4 Environmental Impact Analysis

This noise impact analysis evaluates the temporary noise and groundborne vibration associated with proposed project construction activities, the changes in noise levels in the study area that would occur as a result of the proposed project (including onsite operations and project-generated traffic), and the effects of noise on the proposed project.

3.11.4.1 Methods

Potential noise and vibration impacts associated with project construction activities were evaluated using an assumed construction equipment schedule, and noise and vibration source levels and modeling methodologies provided by the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) (FHWA 2008).

Traffic noise was analyzed using a proprietary traffic noise model with calculations based on data from the FHWA Traffic Noise Model (TMN) Version 2.5 Look-Up Tables (FHWA 2004). The inputs used in the traffic noise modeling included average daily traffic (ADT) volumes derived from data provided in the Traffic Impact Analysis for the project and by Caltrans (Caltrans 2014a); traffic speeds based on the posted speed limits; and traffic mix (the percentage of automobiles versus medium trucks and heavy trucks) based on published data for typical roadways (County of Orange 1984) and freeways (Caltrans 2014b).

Additional noise sources related to the project were analyzed qualitatively or based on noise measurements of existing or similar facilities, or applicable published noise data.

3.11.4.2 Thresholds of Significance

Because the project site is a County of Los Angeles facility, the County's noise and vibration standards will take precedence in establishing thresholds of significance for potential onsite

impacts. The surrounding community is within the city of Los Angeles, so the city's noise and vibration standards will take precedence in establishing thresholds of significance for potential offsite impacts. With this in mind, and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact on the environment if it:

NOI-1 Generates a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance, or applicable standards of other agencies. This impact will occur if:

1. Any project construction activity takes place outside the hours of 7 a.m. to 7 p.m. on Monday through Friday or 8 a.m. to 6 p.m. on Saturdays (based on the permitted construction hours specified by the city and County government codes);
2. Any project construction activity generates maximum noise levels that exceed 75 dBA at any offsite residential receptor (based on the City of Los Angeles Municipal Code). The 1-hour L_{eq} from project construction activities would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive use (based on the *L.A. CEQA Thresholds Guide*);
3. Any project construction activity generates maximum noise levels that exceed 70 dBA at onsite residential uses (e.g., long-term care or supportive housing), or 85 dBA at other onsite noise-sensitive buildings (based on County code). Noise-sensitive buildings include those where patient care as well as onsite child-care facilities are present;
4. Project operations generate noise levels at any offsite noise-sensitive receptors in excess of those permitted by the City of Los Angeles Noise Ordinance (see Section 111.02);
5. Project traffic or onsite operations increase the CNEL at any offsite noise-sensitive receptor by 3 dB or more to or within the "normally unacceptable" or "clearly unacceptable" noise level range for the receptor's land use, as summarized in Table 3.11-2; or,
6. Project traffic or onsite operations increase the CNEL at any offsite receptor by 5 dB or more.

NOI-2 Generates excessive groundborne vibration or groundborne noise levels. This impact will occur if vibration from construction activities exceeds a PPV of 0.01 at any sensitive building, including onsite medical center buildings that house patients (based on County code).

NOI-3 Is located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and exposes people residing or working in the project area to excessive noise levels.

The project site is more than 4 miles from the nearest public airport, Whiteman Airport in Pacoima. Therefore, no impacts are anticipated relative to a public airport or public use airport, and that issue is not considered further in this section.

3.11.4.3 Impacts and Mitigation Measures

Notes Regarding Tier I and Tier II Analysis

The following sections address a range of potential noise and vibration impacts from a variety of sources. In some cases, the impact analysis and/or assessment is very similar for Tier I and Tier II development. Therefore, the discussion of each potential impact is organized to minimize redundant or repetitive information. For example, in some cases common information that applies to both Tier I and Tier II is presented before an individual discussion of each Tier. In other cases the analysis for both Tiers is so similar that they are discussed together.

Impact NOI-1: Would the Proposed Project Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels in the Vicinity of the Project in Excess of Standards Established in a Local General Plan or Noise Ordinance or Applicable Standards of other Agencies?

Construction Impacts–Maximum Noise Levels

In accordance with the County and city of Los Angeles Municipal Code, construction would take place between the hours of 7 a.m. to 7 p.m. on Monday through Friday or 8 a.m. to 6 p.m. on Saturdays. There are no known plans to construct outside of these hours or at any time on Sundays or legal holidays. If, during development of the final construction schedule, it is deemed necessary to work outside of the permitted hours, the County will follow the necessary procedures to obtain an appropriate variance. All internal combustion engine-powered equipment or machinery would be equipped with suitable exhaust and air-intake silencers in proper working order.

Project construction would be broken down into phases. The phases of construction and anticipated construction equipment are summarized in Table 3.11-6, along with the associated L_{max} at a reference distance of 50 feet. As noted previously, the thresholds of significance, which were established based on the County and city noise standards, are 70 dBA L_{max} at onsite residential buildings (e.g., the long-term care or supportive housing proposed as part of Tier II project development), 85 dBA L_{max} at other onsite noise-sensitive medical center buildings (i.e., buildings where patient care occurs, and child-care facilities), and 75 dBA at offsite residential receptors. Therefore, the maximum distance from each piece of equipment at which these noise levels would occur are also provided in the table. The analysis of construction noise impacts was based on the same construction assumptions used in the air quality impact analysis (see Section 3.2, *Air Quality*, of this EIR) for Tier I. Because Tier II development is more speculative, construction details and schedules have not been established. However, to provide an analysis of potential impacts, it is assumed that the types of construction equipment and activities would be the same as those required for Tier I. As such, the various impact distances described in Table 3.11-6 are used in the assessment of construction noise from both Tier I and Tier II developments.

In addition to the equipment shown in Table 3.11-6, it is possible that pile driving would be necessary at some point in the construction process. Typical maximum pile driving noise levels are 101 dBA at 50 feet, and would be reduced to 85 dBA, 75 dBA, and 70 dBA at distances of 325 feet, 1,027 feet, and 1,826, respectively. Use of driven piles would typically be limited to foundation support for new buildings, as opposed to surface improvements such as driveways and parking lots.

Table 3.11-6. Construction Phasing and Maximum Equipment Noise Levels

Construction Phase	Equipment Item	L_{max} at 50 ft./dBA[1]	Distance Required to Reduce L_{max} to: 85 dBA/ft.[2]	75 dBA/ft.[2]	70 dBA/ft.[2]
Demolition	Concrete/Industrial Saws	89.6	85	267	475
	Excavator	80.7	31	96	171
	Rubber Tired Dozer	81.7	34	108	192
Site Preparation	Rubber Tired Dozer	81.7	34	108	192
	Tractor	84.0	45	141	250
	Loader	79.1	26	80	142
	Backhoe	77.6	22	68	120
Grading	Excavator	80.7	31	96	171
	Grader	85.0	50	158	280
	Rubber Tired Dozer	81.7	34	108	192
	Tractor	84.0	45	141	250
	Loader	79.1	26	80	142
	Backhoe	77.6	22	68	120
Building Construction	Crane	80.6	30	95	169
	Forklift	77.6	22	68	120
	Generator Set	80.6	30	95	169
	Tractor	84.0	45	141	250
	Loader	79.1	26	80	142
	Backhoe	77.6	22	68	120
	Welder	74.0	15	45	79
Paving	Paver	77.2	21	65	114
	Paving equipment	77.2	21	65	114
	Roller	80.0	28	89	158
Architectural Coating	Air compressor	77.7	22	68	121

Notes:
[1] Obtained or estimated from FHWA 2008 (RCNM).
[2] All noise levels assumed to attenuate at a rate of 6 dB per doubling of distance.

Tier I

Standard Construction (no pile driving)

Referring to Table 3.11-6, above, the worst-case (i.e., largest) impact distance for offsite sensitive receptors is 267 feet and is associated with noise from concrete/industrial saws anticipated in the demolition phase. Therefore, construction noise impacts at residences more than 267 feet from the Tier I construction activities would be less than significant. However, maximum noise levels could exceed 75 dBA at offsite noise-sensitive receptors within 267 feet of the Tier I construction, including:

- Homes (single- and multifamily) on the south side of Olive View Drive, between SR-210 and El Casco Street.

- The first row of single-family homes east of the Olive View campus (i.e., homes on the west side of Fenton Lane).

Therefore, noise levels at these locations due to Tier I construction are potentially significant. In addition, demolition of existing facilities and construction of new onsite facilities could occur in close proximity to existing noise-sensitive medical center buildings. Referring to Table 3.11-6, maximum noise levels could exceed 85 dBA at sensitive onsite buildings if construction activity occurs within 15 to 85 feet. This would be a significant impact.

Pile Driving

If pile driving occurs, maximum noise levels could exceed 75 dBA at offsite noise-sensitive receptors within 1,027 feet of proposed Tier I buildings:

- Homes (single- and multifamily) on the south side of Olive View Drive, between SR-210 and Wheeler Avenue.
- Multifamily homes on the south side of SR-210, north of Foothill Boulevard and Bledsoe Street.
- Single-family homes east of the Olive View campus, west of Fenton Avenue.

Therefore, noise levels at these locations due to Tier I construction are potentially significant, if pile driving is used at the site.

In addition, pile driving could occur within 325 feet of noise-sensitive medical center buildings, resulting in noise levels that would exceed 85 dBA, which would be a significant impact.

Tier II

Standard Construction (no pile driving)

Based on current information, Tier II development would occur predominantly on the western portion of the campus and would be more than 267 feet from the closest offsite noise-sensitive receptors. As such, construction noise impacts at offsite receptors would be less than significant unless additional Tier II construction is proposed closer to offsite homes in the future.

Demolition of existing facilities and construction of new onsite facilities during Tier II development could occur in close proximity to noise-sensitive medical center buildings. Referring to Table 3.11-6, maximum noise levels could exceed 85 dBA at sensitive onsite buildings if construction activity occurs within 79 to 475 feet. These would be significant impacts.

Depending on the timing of future construction, construction activities could also occur in close proximity to proposed onsite residential uses (e.g., long-term care or supportive housing). Referring to Table 3.11-6, maximum noise levels could exceed 70 dBA if construction activity occurs within 79 to 85 feet. These would be significant impacts.

Pile Driving

If pile driving occurs, maximum noise levels could exceed 75 dBA at offsite noise-sensitive receptors within 1,027 feet of proposed Tier II buildings:

- Homes (single- and multifamily) on the south side of Olive View Drive, between SR-210 and Reagan Drive.
- Homes (single- and multifamily) on the south side of SR-210, both north and south of Foothill Boulevard, between Roxford Street and Bledsoe Street.

Therefore, noise levels at these locations due to Tier II construction are potentially significant if pile driving is used at the site.

In addition, pile driving could occur within 325 feet of existing onsite noise-sensitive buildings. Resulting noise levels would exceed 85 dBA at sensitive onsite buildings which would be a significant impact.

Depending on the timing of future construction, pile driving could also occur within 1,826 feet of onsite residential uses (e.g., long-term care or supportive housing), resulting in noise levels that would exceed 70 dBA, which would be a significant impact.

Construction Impacts–Ambient Noise Increases

Table 3.11-7, below, summarizes the phases of construction, anticipated construction equipment, and the calculation of the L_{eq} for each construction phase at a reference distance of 50 feet. Existing average daytime ambient noise levels (1-hour L_{eq}) at noise-sensitive offsite receptors in the immediate vicinity of the project site are available in Tables 3.11-4 and 3.11-5, above. All the closest sensitive receptors are homes. At homes west of the project site (measurement LT-1), the average daytime ambient noise levels are approximately 66 dBA L_{eq}. At homes south of the project site (measurement ST-7), the average daytime ambient noise levels are approximately 64 dBA L_{eq}. At homes east of the project site (measurement LT-2), the average daytime ambient noise levels are approximately 52 dBA L_{eq}. Based on the established threshold, a significant impact would occur if the 1-hour L_{eq} from project construction activities would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive use. Therefore, construction noise levels of 71 dBA L_{eq} (66+5=71 dBA), 69 dBA L_{eq} (64+5=69 dBA), and 57 dBA L_{eq} (52+5=57 dBA) could cause a significant impact at homes to the west, south, and east, respectively. Table 3.11-8, below summarizes the 71 dBA L_{eq}, 69 dBA L_{eq}, and 57 dBA L_{eq} noise contour distances from each phase of construction.

In addition to the equipment shown in Table 3.11-7, it is possible that pile driving would be necessary during the construction phase of some buildings. Typical 1-hour L_{eq} pile driving noise levels are 94 dBA at 50 feet, and would be reduced to 71 dBA, 69 dBA, and 57 dBA at distances of 770 feet, 980 feet, and 3,900 feet, respectively.

Tier I

Standard Construction (no pile driving)

Homes to the west of the project site are over 2,500 feet from the closest proposed Tier I development. This is well outside the applicable 71 dBA L_{eq} noise contour distances for all phases of construction. Therefore, impacts at these receptors would be less than significant.

Homes to the south of the project site are approximately 100 feet from the closest proposed Tier I development. This is less than the applicable 69 dBA L_{eq} noise contour distances for all phases of construction except Architectural Coating. Therefore, impacts at these receptors would be potentially significant (for all phases except Architectural Coating).

Homes to the east of the project site are approximately 200 feet from the closest proposed Tier I development. This is less than the applicable 57 dBA L_{eq} noise contour distances for all phases of construction. Therefore, impacts at these receptors would be potentially significant.

Table 3.11-7. Construction Phasing and Average Equipment Noise Levels

Construction Phase/ Equipment Item	L_{max} at 50 feet, dBA[1]	Usage Factor[1,2]	Number of Each Equipment Item	L_{eq} at 50 feet
Demolition				
Concrete/Industrial Saws	89.6	0.2	1	82.6
Excavator	80.7	0.4	3	81.5
Rubber Tired Dozer	81.7	0.4	2	80.7
Combined				**86.5**
Site Preparation				
Rubber Tired Dozer	81.7	0.4	3	82.5
Tractor	84.0	0.4	1	80.0
Loader	79.1	0.4	2	78.1
Backhoe	77.6	0.4	1	73.6
Combined				**85.6**
Grading				
Excavator	80.7	0.4	1	76.7
Grader	85.0	0.4	1	81.0
Rubber Tired Dozer	81.7	0.4	1	77.7
Tractor	84.0	0.4	1	80.0
Loader	79.1	0.4	1	75.1
Backhoe	77.6	0.4	1	73.6
Combined				**85.9**
Building Construction				
Crane	80.6	0.16	1	72.6
Forklift	77.6	0.4	3	78.4
Generator Set	80.6	0.5	1	77.6
Tractor	84.0	0.4	1	80.0
Loader	79.1	0.4	1	75.1
Backhoe	77.6	0.4	1	73.6
Welder	74.0	0.4	1	70.0
Combined				**84.9**
Paving				
Paver	77.2	0.5	2	77.2
Paving equipment	77.2	0.5	2	77.2
Roller	80.0	0.2	2	76.0
Combined				**81.6**
Architectural Coating				
Air compressor	77.7	0.4	1	73.7
Combined				**73.7**

Notes:
[1] Obtained or estimated from FHWA 2008 (RCNM).
[2] Usage Factor = percentage of time equipment is operating in noisiest mode while in use.
Source: ICF 2019.

Table 3.11-8. Estimated Noise Contour Distances for Significant Noise Increases

Construction Phase	L_{eq} at 50 feet, dBA[1]	71 dBA L_{eq}[3] Noise Contour Distance, feet[2]	69 dBA L_{eq}[4] Noise Contour Distance, feet[2]	57 dBA L_{eq}[5] Noise Contour Distance, feet[2]
Demolition	86.5	310	390	1,580
Site Preparation	85.6	280	360	1,430
Grading	85.9	290	370	1,470
Building Construction	84.9	260	330	1,320
Paving	81.6	180	220	900
Architectural Coating	73.7	70	90	360

Notes:
[1] From Table 3.11-7, based on FHWA 2008 (RCNM).
[2] All noise levels assumed to attenuate at a rate of 6 dB per doubling of distance.
[3] 71 dBA L_{eq} is the noise impact threshold at homes west of the project site.
[4] 69 dBA L_{eq} is the noise impact threshold at homes south of the project site.
[5] 57 dBA L_{eq} is the noise impact threshold at homes east of the project site.
Source: ICF 2019.

It is noted that, due to the size of the project site, much of the Tier I construction activity would take place farther from the nearest homes than the noise contour distance identified in Table 3.11-8. Impacts from construction at these distances would be less than significant.

Pile Driving

Homes to the west of the project site are over 2,500 feet from proposed the closest Tier I development. This is well outside the applicable 71 dBA L_{eq} noise contour distance (770 feet) for pile driving. Therefore, impacts at these receptors would be less than significant if pile driving is used during Tier I construction.

Homes to the south of the project site are approximately 100 feet from the closest proposed Tier I development. This is less than the applicable 69 dBA L_{eq} noise contour distance (980 feet) for pile driving. Therefore, impacts at these receptors would be potentially significant if pile driving is used during Tier I construction.

Homes to the east of the project site are approximately 200 feet from the closest proposed Tier I development. This is less than the applicable 57 dBA L_{eq} noise contour distance (3,900 feet) for pile driving. Therefore, impacts at these receptors would be potentially significant if pile driving is used during Tier I construction.

It is noted that, due to the size of the project site, some of the possible pile driving could take place farther from the nearest homes to the west and south than the calculated noise contour distances. Impacts from pile driving at these distances would be less than significant.

Tier II

Standard Construction (no pile driving)

Homes to the west of the project site are approximately 850 feet from the closest proposed Tier II development. This is outside the applicable 71 dBA L_{eq} noise contour distances for all phases of construction. Therefore, impacts at these receptors would be less than significant.

Homes to the south of the project site are approximately 100 feet from the closest proposed Tier II development. This is less than the applicable 69 dBA L_{eq} noise contour distances for all phases of construction except Architectural Coating. Therefore, impacts at these receptors would be potentially significant (for all phases except Architectural Coating).

Homes to the east of the project site are approximately 2,250 feet from the closest proposed Tier II development. This is outside the applicable 57 dBA L_{eq} noise contour distances for all phases of construction. Therefore, impacts at these receptors would be less than significant.

It is noted that, due to the size of the project site, much of the Tier II construction activity would take place farther from the nearest homes than the noise contour distance identified in Table 3.11-8. Impacts from construction at these distances would be less than significant.

Pile Driving

Homes to the west of the project site are approximately 850 feet from the closest proposed Tier II development. This is outside the applicable 71 dBA L_{eq} noise contour distance (770 feet) for pile driving. Therefore, impacts at these receptors would be less than significant if pile driving is used during Tier II construction.

Homes to the south of the project site are approximately 100 feet from the closest proposed Tier II development. This is less than the applicable 69 dBA L_{eq} noise contour distance (980 feet) for pile driving. Therefore, impacts at these receptors would be potentially significant if pile driving is used during Tier II construction.

Homes to the east of the project site are approximately 2,250 feet from the closest proposed Tier II development. This is less than the applicable 57 dBA L_{eq} noise contour distance (3,900 feet) for pile driving. Therefore, impacts at these receptors would be potentially significant if pile driving is used during Tier II construction.

It is noted that, due to the size of the project site, possible pile driving could take place farther from the nearest homes to the west, south, and east than the calculated noise contour distances. Impacts from pile driving at these distances would be less than significant.

Mitigation Measures

The following measure is proposed to mitigate construction noise Impact **NOI-1**, above.

MM-NOI-C1: Reduce Construction Noise to the Extent Possible. The County will implement the following noise reduction measures during construction:

- Construction activities will be limited to between the hours of 7:00 a.m. to 7:00 p.m. on Monday through Friday and 8 a.m. to 6 p.m. on Saturdays and will not occur at any time on Sundays or legal holidays. Construction personnel will not be permitted on the job site, and material or equipment deliveries and collections will not be permitted outside of these hours.

- To the fullest extent practicable, the quietest available type of construction equipment will be used. Newer equipment is generally quieter than older equipment. The use of electric powered equipment typically is quieter than diesel- or gasoline-powered equipment, and hydraulic-powered equipment typically is quieter than pneumatic power.
- Where possible, impact pile driving will be replaced with other piling techniques, such as vibratory pile driving, or vibration- and percussive-free methods (e.g., hydraulic press-in piles or cast-in-drilled-hole piles).
- All mobile and fixed noise-producing equipment used on the proposed project that is regulated for noise output by a local, state, or federal agency will comply with such regulation while in the course of project activity.
- All construction equipment will be properly maintained. Poor maintenance of equipment can cause excessive noise levels.
- All construction equipment, stationary and mobile, will be equipped with properly operating and maintained mufflers, air inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features that meet or exceed original factory specification. Mobile or fixed package equipment (e.g., arc welders, air compressors) will be equipped with shrouds and noise-control features that are readily available for that type of equipment.
- All noisy equipment will be operated only when necessary and will be switched off when not in use.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only. To the extent practicable, temporary barriers will be employed around the project site and/or around noisy construction equipment. For barriers to be effective they will break the line-of site between the equipment and any noise-sensitive receiver. These barriers may be constructed as follows:
    - From commercially-available acoustical panels lined with sound absorbing material (i.e., the sound absorptive faces of the panels will face the construction equipment).
    - From common construction materials such as plywood and lined with sound absorptive material (i.e., the sound absorptive material will face the construction equipment).
    - From acoustical blankets hung over or from a supporting frame. The blankets will provide a minimum sound transmission class (STC) rating of 28 and a minimum noise reduction coefficient (NRC) of 0.80 and will be firmly secured to the framework with the sound absorptive side of the blankets oriented toward the construction equipment. The blankets will be overlapped by at least 6 inches at seams and taped so that no gaps exist. The largest blankets available will be used in order to minimize the number of seams. The blankets will be draped to the ground to eliminate any gaps at the base of the barrier.
- Construction contractors will ensure that construction employees are trained in the proper operation and use of the equipment.
- Storage, staging, parking, and maintenance areas will be located away from sensitive receptors. Where this is not possible, the storage of waste materials, earth, and other supplies will be positioned in a manner that will function as a noise barrier to the closest sensitive receivers.

- Stationary noise sources, such as generators and compressors, will be positioned as far away as possible from noise-sensitive areas.
- Construction equipment will be stored on the project site while in use. This will eliminate noise associated with repeated transportation of the equipment to and from the site.
- To the extent possible, haul roads should not be designated through noise-sensitive areas.

Level of Significance after Mitigation

While **MM-NOI-C1** would reduce construction noise levels, it would not eliminate the predicted significant noise impacts entirely; therefore, for the purposes of this EIR, construction noise impacts are considered significant and unavoidable after mitigation.

Operational Impacts

Project operational noise sources would include traffic on the surrounding streets and onsite noise sources such as mechanical equipment, parking lot activities, deliveries, and activities at proposed outdoor spaces such as trails and gardens. Each of these is discussed below.

Traffic Noise

Tier I

To analyze noise increases associated with project-generated traffic, four different traffic scenarios were analyzed: (1) existing, (2) existing plus project, (3) cumulative base, and (4) cumulative plus project. *Cumulative scenarios* refer to year 2035. The *cumulative base scenario* describes traffic without implementation of the project, but including cumulative growth from non-project sources. *Cumulative plus project* includes both cumulative growth and project-related growth from Tier I development.

Using the results of these analyses, it was possible to determine the effects of the project by comparing the existing noise levels to the existing plus project noise levels, and the cumulative base noise levels to the cumulative plus project noise levels. The traffic noise modeling results are provided in Appendix I of this EIR and summarized in Table 3.11-9. Referring to the table, project-generated traffic would increase traffic noise levels in the project vicinity by between 0 and 1.6 dB CNEL. This is less than both the 3-dB and 5-dB thresholds and the impact would be less than significant.

Table 3.11-9. Estimated Traffic Noise Levels

Roadway/Segment	Estimated Traffic Noise Levels at 50 feet from Roadway Centerline, dB CNEL					
	Existing	Existing Plus Project	Increase Over Existing	Cumulative Base	Cumulative Plus Project	Increase Over Cumulative Base
Bledsoe Street						
North of Olive View Dr.	55.4	57.0	1.6	55.6	57.2	1.6
Olive View Dr. to Foothill Blvd.	58.0	58.5	0.5	58.4	58.8	0.4
Foothill Blvd. to Glenoaks Blvd.	61.4	61.5	0.1	61.7	61.8	0.1
South of Glenoaks Blvd.	62.4	62.4	0.0	63.1	63.1	0.0
Foothill Boulevard						
West of Glenoaks Blvd.	67.3	67.5	0.2	67.7	67.9	0.2
Glenoaks Blvd. to Roxford St..	65.6	65.9	0.3	66.1	66.3	0.2
Roxford St. to Bledsoe St.	66.8	66.8	0.0	67.2	67.2	0.0
Bledsoe St. to Polk St.	69.4	69.5	0.1	69.8	70.0	0.2
E of Polk St.	70.4	70.5	0.1	71.3	71.3	0.0
Glenoaks Boulevard						
N of Foothill Blvd.	58.5	58.5	0.0	58.8	58.8	0.0
Foothill Blvd. to Roxford St.	61.5	61.5	0.0	61.9	61.9	0.0
Roxford St. to Bledsoe St.	65.4	65.4	0.0	66.1	66.2	0.1
E of Bledsoe St.	66.4	66.4	0.0	66.7	66.7	0.0
Olive View Drive						
W of Bledsoe St.	63.8	65.0	1.2	64.1	65.3	1.2
E of Bledsoe St.	62.4	63.0	0.6	62.7	63.3	0.6
Polk Street						
North of I-210 WB Ramps	68.2	68.2	0.0	69.2	69.2	0.0
I-210 WB Ramps to I-210 EB Ramps	69.1	69.1	0.0	70.0	70.0	0.0
I-210 EB Ramps to Foothill Blvd.	70.2	70.2	0.0	71.0	71.1	0.1
South of Foothill Blvd.	68.8	68.8	0.0	69.2	69.2	0.0
Roxford Street						
Olive View Dr to I-210 WB Ramps	65.9	67.0	1.1	66.2	67.2	1.0
I-210 WB Ramps to I-210 EB Ramps	65.8	66.6	0.8	66.5	67.1	0.6
I-210 EB Ramps to Foothill Blvd.	66.3	66.6	0.3	67.3	67.5	0.2
Foothill Blvd. to Glenoaks Blvd.	65.0	65.2	0.2	66.2	66.4	0.2
Glenoaks Blvd. to San Fernando Rd.	66.2	66.4	0.2	66.8	67.0	0.2
San Fernando Rd. to Encinitas Ave/I-5 NB Ramps	67.7	67.8	0.1	68.4	68.5	0.1
Encinitas Ave/I-5 NB Ramps to I-5 SB Ramps	68.3	68.4	0.1	68.9	69.0	0.1
San Fernando Road						
West of Roxford St.	65.9	65.9	0.0	67.6	67.6	0.0
East of Roxford St.	66.6	66.7	0.1	67.4	67.4	0.0
Source: Appendix I of this EIR.						

Tier II

Tier II development would occur in the long-term future, beyond 2035. A quantitative transportation analysis of Tier II traffic was not prepared because no specific entitlements for development of that long-term vision for the medical center are currently sought. Therefore, a full quantitative traffic noise analysis has not been prepared for Tier II development.

Parking Lot Activity

Tier I and Tier II

Based on trip generation data provided in the project traffic study, there could be up to 1,067 vehicle trips (total including both inbound and outbound trips) during the daily peak hour at the project site with Tier I development and up to 1,593 vehicle trips during the daily peak hour at the project site with Tier I and II development combined. Noise generated by these vehicles while on site would not be sufficient to exceed city noise standards at offsite noise-sensitive receptors for the following reasons:

- These vehicles would be spread out between various parking facilities throughout the project site, including parking structures located on the north side of campus away, from the closest noise-sensitive receptors.
- Typical noise sources within parking lots are of very short duration (engines starting, doors slamming, etc.) and do not contribute significantly to overall noise levels when averaged over a 1-hour period.
- Proposed new parking areas and structures would be shielded from the closest noise-sensitive receptors by intervening medical center buildings.
- There is substantial distance between proposed parking areas and the closest noise-sensitive receptors. Based on the conceptual Master Plan layout, the closest distance between any proposed parking spot and the nearest noise-sensitive receptor would be approximately 100 feet. Average distances between noise-sensitive receptors and onsite parking lots or structures would be in the range of 200 to 1000 feet.

Therefore, noise impacts from the parking lots associated with the project would be less than significant.

Mechanical Equipment

Tier I and Tier II

The project would introduce a variety of new mechanical equipment throughout the project site. This would include rooftop heating, ventilation and air conditioning (HVAC) equipment, and new central plant equipment. Due to the size of the project site, much of this equipment would be located at large distances from offsite sensitive receptors and/or would be shielded by intervening structures and would not be expected to exceed the applicable noise standards of the city of Los Angeles municipal code. However, because the Master Plan is conceptual and programmatic in nature, the final type, location, and configuration of mechanical equipment is unknown, and the possibility exists that some onsite mechanical equipment would increase ambient noise levels and exceed the applicable noise standards at offsite sensitive receptors, which would be a significant impact.

Emergency Vehicles

Tier I and Tier II

Sirens from emergency vehicles (i.e., ambulances) are an existing source of daytime and nighttime noise source associated with the Olive View–UCLA Medical Center Campus. Emergency vehicles currently access the site from the campus driveway at the intersection of Olive View Drive and Bledsoe Street, to take patients directly to the emergency services building. Under Tier I of the Master Plan, the emergency services building would remain in its current location and emergency vehicles would continue to use the same access route. While sirens generate very high short-term noise levels (measurements conducted adjacent to another County medical center in Los Angeles indicated maximum noise levels of 103 dBA at a distance of approximately 40 feet), they are generally excluded from local noise standards and would not be considered a violation of the city's municipal code. Furthermore, implementation of the project would not expand onsite emergency room facilities and is not anticipated to increase the number of emergency ambulances accessing the site (relative to numbers existing without the project) or alter their routes to the site. Therefore, the project would not cause an increase in emergency vehicle noise levels, or the frequency of their occurrence, in the surrounding community and the impacts would be less than significant.

Deliveries and Unloading

Tier I and Tier II

Tier I development includes a proposed 30,500-square-foot Materials Management/Supply Services Building. Linen, food, and pharmacy supplies would be delivered to this building, and then stored or sent out to other locations on the campus. There are no plans to construct similar facilities as part of Tier II development, so it is assumed this building would also serve Tier II buildings. The Materials Management/Supply Services Building would include a loading dock that would generate noise from sources such as delivery trucks, refrigeration units, and general loading/unloading noise (e.g., opening and closing truck doors and loading dock doors, use of forklifts or dollies, dropping of boxes or pallets, etc.). Noise would also be generated during the loading and operation of trash compactors at the building. At its proposed location northwest of the existing hospital, the building would be more than 700 feet from the closest noise-sensitive receptors (homes south of Olive View Drive); in addition, the loading dock would be located on the opposite side of the building (i.e., the north side). The noise reduction provided by the large distances and shielding would reduce noise from deliveries and unloading to less than significant.

Outdoor Activities

Tier I and Tier II

The proposed project includes community open space, such as healing gardens, courtyard gardens, a fitness and therapy area, and sculpture gardens. It would also include wellness trails, consisting of pedestrian, equestrian, and bike paths, as well as a recreation area in the proposed woodland on the far eastern area of the campus. A green amphitheater for community engagement would be located in the circular drop-off adjacent to the Ambulatory Care Center and existing hospital. Noise generated by passive day-to-day use of the outdoor spaces would be limited primarily to the intermittent sounds of people talking, laughing, yelling, etc. Large events, such as concerts with amplified music, are not proposed as part of the project. Based on the nature of the proposed outdoor activities, as well as the relatively large distances between activity areas and the closest

homes to the east, south, and west, outdoor activity noise levels would not be expected to exceed the applicable noise standards of the city of Los Angeles Municipal Code at offsite noise-sensitive receptors; impacts would be less than significant.

Mitigation Measures

The following measures are proposed to mitigate operational noise Impact **NOI-1**, above.

> **MM-NOI-O1:** Design Project Facilities to Ensure all Mechanical Equipment Complies with Chapter XI of the City of Los Angeles Municipal Code. During the architectural and engineering design phase of each new facility (building, central plant, etc.) that would introduce new mechanical equipment to the project site, and prior to the issuance of any building permits for the facility, the County will retain an acoustical consultant to evaluate the design and provide recommendations, as necessary, to ensure that the mechanical equipment complies with Chapter XI of the City of Los Angeles Municipal Code. Such recommendations may include, but are not limited to: changes in equipment locations, upgrades to central plant buildings, rooftop parapet walls, acoustical louvers or screens, or intake and exhaust silencers.

Level of Significance after Mitigation

All operational noise impacts would be less than significant after mitigation.

Impact NOI-2: Would the Proposed Project Generate Excessive Groundborne Vibration or Groundborne Noise Levels?

Construction Impacts

Heavy construction equipment has the potential to produce groundborne vibration levels that are perceptible to people in the surrounding area.

Referring to the equipment schedule provided above, in Table 3.11-6, various pieces of heavy equipment such as graders and excavators would be used at the project site. Based on data published by Caltrans (Caltrans 2013b), this type of equipment typically produces PPV vibration levels of 0.089 in/s at a distance of 25 feet. If pile driving is conducted at the project site, source vibration levels would be increased to 0.65 in/s at 25 feet.

Vibration levels from construction equipment attenuate as they radiate from the source. The equation to determine vibration levels at a specific distance states that

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.3}$$

where PPV_{ref} is the PPV at a reference distance of 25 feet, and D is the distance from the equipment to the sensitive receptor, and the value of 1.3 is s a value related to the vibration attenuation rate through the ground (Caltrans, 2013b).[1]

Using this equation, it was calculated that heavy construction equipment (e.g., graders, excavators, etc.) would generate groundborne vibration levels of 0.01 in/s or greater at distances of up to 140 feet. If pile driving is used, this impact distance would increase to 645 feet.

[1] Geological data for the site (Ninyo & Moore 2016) indicates construction would occur primarily on soils characterized by alluvial deposits generally composed of gravel, sand, and clay sediments; some new construction may also occur on older alluvium comprised of weakly consolidated sand and gravel.

Tier I

Standard Construction (no pile driving)

Referring to the analysis above, the impact distance (at which the PPV would be 0.01 in/s or greater) is 140 feet for standard construction. Therefore, construction vibration impacts at offsite sensitive buildings more than 140 feet from the Tier I construction activities would be less than significant. However, vibration levels could exceed 0.01 in/s PPV at offsite sensitive receptors within 140 feet of the Tier I construction; these receptors are homes (single- and multifamily) on the south side of Olive View Drive, between SR-210 and El Casco Street. Therefore, groundborne vibration levels at these locations due to Tier I construction are potentially significant.

In addition, demolition of existing facilities and construction of new onsite facilities would occur within 140 feet of existing sensitive medical center buildings and would cause a significant impact.

Pile Driving

If pile driving occurs, the resulting impact distance (at which the PPV would be 0.01 in/s or greater) would increase to 645 feet. Therefore, construction vibration impacts at offsite sensitive buildings more than 645 feet from the Tier I construction activities would be less than significant. However, vibration levels could exceed 0.01 in/s PPV at offsite sensitive receptors within 645 feet of Tier I building construction; these receptors are homes (single- and multifamily) on the south side of Olive View Drive, in the area bounded by Olive View Drive, SR-210, and Bledsoe Street. Therefore, groundborne vibration levels at these locations due to Tier I construction are potentially significant if pile driving is used.

In addition, construction of new onsite buildings would occur within 645 feet of existing sensitive medical center buildings and would cause a significant impact if pile driving is used.

Tier II

Standard Construction (no pile driving)

As noted above, the impact distance for standard construction is 140 feet. Based on the proposed site plan, there are no sensitive buildings within 140 feet of proposed Tier II construction. Groundborne vibration levels at offsite receptors would be less than 0.01 in/s PPV and impacts would be less than significant.

Depending on the ultimate details of the Tier II site plan and the sequence of construction, demolition of existing facilities and construction of new onsite facilities could occur within 140 feet of sensitive medical center buildings, which would cause a significant impact.

Pile Driving

As noted above, the impact distance for pile driving is 645 feet. Therefore, construction vibration impacts at offsite sensitive buildings more than 645 feet from the Tier II construction activities would be less than significant. However, vibration levels could exceed 0.01 in/s PPV at offsite sensitive receptors within 645 feet of the Tier II building construction; these receptors are:

- Homes (single- and multifamily) on the south side of Olive View Drive, in the area bounded by Olive View Drive, SR-210, and Bledsoe Street.
- Homes on the south side of SR-210 and Foothill Boulevard, between Dronfield Place and Cambria Way.

Therefore, groundborne vibration levels at these locations due to Tier II construction are potentially significant if pile driving is used.

In addition, construction of new onsite buildings would occur within 645 feet of existing sensitive medical center buildings and would cause a significant impact if pile driving is used.

Mitigation Measures

The following measure is proposed to mitigate Impact **NOI-2**, above.

> **MM-NOI-C2: Reduce Construction-Generated Groundborne Vibration to the Extent Possible.** The County will implement the following vibration reduction measures during construction:
>
> - Where possible, impact pile driving will be replaced with other piling techniques, such as vibratory pile driving or, preferably, vibration- and percussive-free methods (examples include hydraulic press-in piles or cast-in-drilled-hole piles).
> - To the extent possible, heavy construction equipment will not be operated within 140 feet of onsite or offsite sensitive receptors.

Level of Significance after Mitigation

While **MM-NOI-C2** would reduce construction vibration levels, it may not eliminate the predicted significant impacts entirely; therefore, for the purposes of this EIR, construction vibration impacts are considered significant and unavoidable.

Operational Impacts

There are no proposed operational activities at the project site that would generate substantial groundborne vibration or generate groundborne vibration that would be perceptible at any surrounding land uses. Therefore, there would be no impact from operation of the project.

Mitigation Measures

No mitigation measures are required for project operation.

Level of Significance after Mitigation

No mitigation is required and there would be no impact.

Impact NOI-3: Would the Proposed Project Be Located in the Vicinity of a Private Airstrip or an Airport Land Use Plan Area, or, Where Such a Plan has not Been Adopted, Within Two Miles of a Public Airport or Public Use Airport, and Expose People Residing or Working in the Project Area to Excessive Noise Levels?

Construction and Operational Impacts

Tier I and Tier II

The existing Olive View–UCLA Medical Center Campus includes a helipad for the transportation of patients to the emergency services building by air ambulance. The helipad is located immediately northeast of the existing hospital and emergency services buildings and would remain in the same location under the proposed project. Flight paths associated with the helipad are not anticipated to

change, and the overall number of helipad operations is not expected to increase as a result of the project. In addition, individual landings and takeoffs would be relatively short in duration. For these reasons, the long-term average noise levels generated by helicopters are expected to be relatively low compared to other existing noise sources and are not expected to change as a result of the project. Therefore, the noise impacts associated with the helipad would be less than significant.

Furthermore, the project site is not located within an airport land use plan or within 2 miles of a public airport or public use airport. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise from airports and no impacts would occur.

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Impacts would remain less than significant.

3.11.5 Cumulative Impacts

The study area for cumulative noise and vibration impacts consists of the area in the general vicinity of the medical center campus that could be affected by the combined effects of the proposed project and other nearby related projects. For the purposes of this analysis, a radius of 2,000 feet from the project site boundaries was considered.

3.11.5.1 Construction

There are no related projects within 2,000 feet of the project site. The closest related project is a retail development at 13530 Glenoaks Boulevards, approximately 0.5 mile (2,640 feet) southwest of the Olive View–UCLA Medical Center Campus. As a result, noise and vibration levels would be significantly attenuated by both the distance and the shielding effects of intervening buildings, and construction noise or vibration contributions from related projects would be negligible at any receptors that might be affected by project construction activities. Therefore, there would be no significant cumulative impacts.

3.11.5.2 Operational Noise

Traffic

The traffic data used in the analysis of cumulative conditions includes growth attributable to cumulative projects in the area that would increase traffic over time. Based on the traffic noise analysis described under Impact **NOI-3**, above, estimated cumulative traffic noise levels for Tier I development are provided in Appendix I of this EIR and summarized in Table 3.11-10, along with the noise increases relative to both existing and cumulative base conditions. Referring to the table, cumulative traffic would increase traffic noise levels in the project vicinity by between 0.3 and 1.8 dB CNEL. This is less than both the 3-dB and 5-dB thresholds and the impact would be less than significant. The Tier I project contribution to cumulative traffic noise increases would be between 0.0 and 1.6 dB CNEL.

Table 3.11-10. Estimated Cumulative Traffic Noise Levels

Roadway/Segment	Estimated Traffic Noise Levels at 50 feet from Roadway Centerline, dB CNEL				
	Existing	Cumulative Base	Cumulative Plus Project	Increase Over Cumulative Base	Cumulative Increase Over Existing
Bledsoe Street					
North of Olive View Dr.	55.4	55.6	57.2	1.6	1.8
Olive View Dr. to Foothill Blvd.	58.0	58.4	58.8	0.4	0.8
Foothill Blvd. to Glenoaks Blvd.	61.4	61.7	61.8	0.1	0.4
South of Glenoaks Blvd.	62.4	63.1	63.1	0.0	0.7
Foothill Boulevard					
West of Glenoaks Blvd.	67.3	67.7	67.9	0.2	0.6
Glenoaks Blvd. to Roxford St.	65.6	66.1	66.3	0.2	0.7
Roxford St. to Bledsoe St.	66.8	67.2	67.2	0.0	0.4
Bledsoe St. to Polk St.	69.4	69.8	70.0	0.2	0.6
East of Polk St.	70.4	71.3	71.3	0.0	0.9
Glenoaks Boulevard					
North of Foothill Blvd.	58.5	58.8	58.8	0.0	0.3
Foothill Blvd. to Roxford St.	61.5	61.9	61.9	0.0	0.4
Roxford St. to Bledsoe St.	65.4	66.1	66.2	0.1	0.8
East of Bledsoe St.	66.4	66.7	66.7	0.0	0.3
Olive View Drive					
West of Bledsoe St.	63.8	64.1	65.3	1.2	1.5
East of Bledsoe St.	62.4	62.7	63.3	0.6	0.9
Polk Street					
North of I-210 WB Ramps	68.2	69.2	69.2	0.0	1.0
I-210 WB Ramps to I-210 EB Ramps	69.1	70.0	70.0	0.0	0.9
I-210 EB Ramps to Foothill Blvd.	70.2	71.0	71.1	0.1	0.9
South of Foothill Blvd	68.8	69.2	69.2	0.0	0.4
Roxford Street					
Olive View Dr. to I-210 WB Ramps	65.9	67.3	67.5	0.2	1.3
I-210 WB Ramps to I-210 EB Ramps	65.8	66.2	66.4	0.2	1.3
I-210 EB Ramps to Foothill Blvd.	66.3	66.8	67.0	0.2	1.2
Foothill Blvd. to Glenoaks Blvd.	65.0	68.4	68.5	0.1	1.4
Glenoaks Blvd. to San Fernando Rd.	66.2	68.9	69.0	0.1	0.8
San Fernando Rd. to Encinitas Ave./I-5 NB Ramps	67.7	67.3	67.5	0.2	0.8
Encinitas Ave./I-5 NB Ramps to I-5 SB Ramps	68.3	66.2	66.4	0.2	0.7
San Fernando Road					
West of Roxford St.	65.9	67.6	67.6	0.0	1.7
East of Roxford St.	66.6	67.4	67.4	0.0	0.8
Source: Appendix I.					

Onsite Operations

No new impacts associated with onsite operations are expected as a result of the cumulative effects of related projects because all related projects are at least 0.5 mile from the project site and would be shielded by large numbers of intervening buildings. As such, noise, as well as groundborne vibration, from related projects would be negligible (typically inaudible or not perceptible) at any noise-sensitive or vibration-sensitive receptors that might be exposed to noise or vibration from the proposed project.

Onsite operations would have no significant cumulative noise or vibration impacts.

3.12 Population/Housing

3.12.1 Introduction

This section provides information regarding general neighborhood population and housing characteristics and projected population growth for the study area, which includes areas of the city and County of Los Angeles. This section describes potential population and housing impacts due to development that could occur under the proposed Master Plan and identifies mitigation measures, if required.

3.12.2 Regulatory Setting

3.12.2.1 Federal

There are no federal regulations that apply to this project.

3.12.2.2 State

CEQA Guidelines Section 15126.2(d)—Growth-Inducing Effects

Pursuant to Section 15126.2(d) of the State CEQA Guidelines, an EIR must discuss whether a project will directly or indirectly foster growth (Association of Environmental Professionals 2016). Section 15126.2(d), Consideration and Discussion of Significant Environmental Impacts, Growth-Inducing Impact of the Proposed Project, reads as follows:

> Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

3.12.2.3 Local

Southern California Association of Governments

The Regional Comprehensive Plan (RCP), a major advisory plan prepared by the Southern California Association of Governments (SCAG), addresses important regional issues and responds to the SCAG Regional Council directive in the 2002 Strategic Plan to develop a holistic, strategic plan for defining and solving the region's inter-related housing, traffic, water, air quality, and other challenges. The RCP serves as an advisory document to local agencies in the Southern California region for their information and voluntary use when preparing local plans and handling local issues of regional significance and includes goals and outcomes to measure progress toward a sustainable region.

The most recent RCP's (2008) Land Use and Housing chapter, which outlines the Compass Blueprint growth vision, 2% Strategy, and the Goals, Outcomes and Action Plan, promotes sustainable

planning for land use and housing in Southern California by maximizing the efficiency of the existing and planned transportation network, providing the necessary amount and mix of housing for the region's growing population, enabling a diverse and growing economy, and protecting important natural resources (SCAG 2009).

SCAG is also responsible for developing regional and subarea growth forecasts. Therefore, SCAG makes projections related to three major growth indicators in the region: population, number of households, and employment. The regional growth forecast represents the most likely future growth scenario for the Southern California region, taking into account a combination of recent and past trends, reasonable key technical assumptions, and regional growth policies. The regional growth forecast is the basis for the Regional Transportation Plan, Sustainable Communities Strategy (RTP/SCS), and the Regional Housing Needs Assessment (SCAG 2016). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals.

For subareas, SCAG develops socioeconomic estimates and growth projections pertaining to population, the number of households, and employment for cities and transportation analysis zones in the SCAG region. These estimates and projections provide the analytical foundations for SCAG's transportation planning and other programs (SCAG 2016).

Los Angeles County General Plan

The Los Angeles County General Plan 2035 (General Plan), adopted October 6, 2015, provides the policy framework for how and where the unincorporated County will grow through the year 2035, while recognizing and celebrating the County's wide diversity of cultures, abundant natural resources, and status as an international economic center. The General Plan guides growth through goals, policies, and programs that discourage sprawling development patterns; protects areas with hazard, environment, and resource constraints; encourages infill development in areas near transit, services, and infrastructure; and makes a strong commitment to ensuring services and infrastructure. The General Plan identifies 11 Planning Areas and is composed of 10 elements, including Land Use and Housing elements. The Olive View–UCLA Medical Center campus is located within the San Fernando Valley Planning Area.

As discussed in the General Plan's Los Angeles County Housing Element, 2014–2021, denser and more compact housing types are necessary in unincorporated areas to accommodate the housing needs of the growing senior citizen population, younger individuals who live alone, low-income households, and others who need and/or desire apartments, condominiums, and smaller, more affordable housing units (County of Los Angeles 2014).

City of Los Angeles General Plan

The City of Los Angeles General Plan is a comprehensive, long-range declaration of purposes, policies, and programs for the development of the city of Los Angeles. The Housing Element of the city's general plan outlines a strategy for short-term housing development, establishing a citywide context that guides all housing activities in the city. The primary goal of the Housing Element is to provide a range of housing opportunities that meet evolving household types and sizes and include a greater variety of price points affordable to people at all income levels (City of Los Angeles 2013).

Sylmar Community Plan

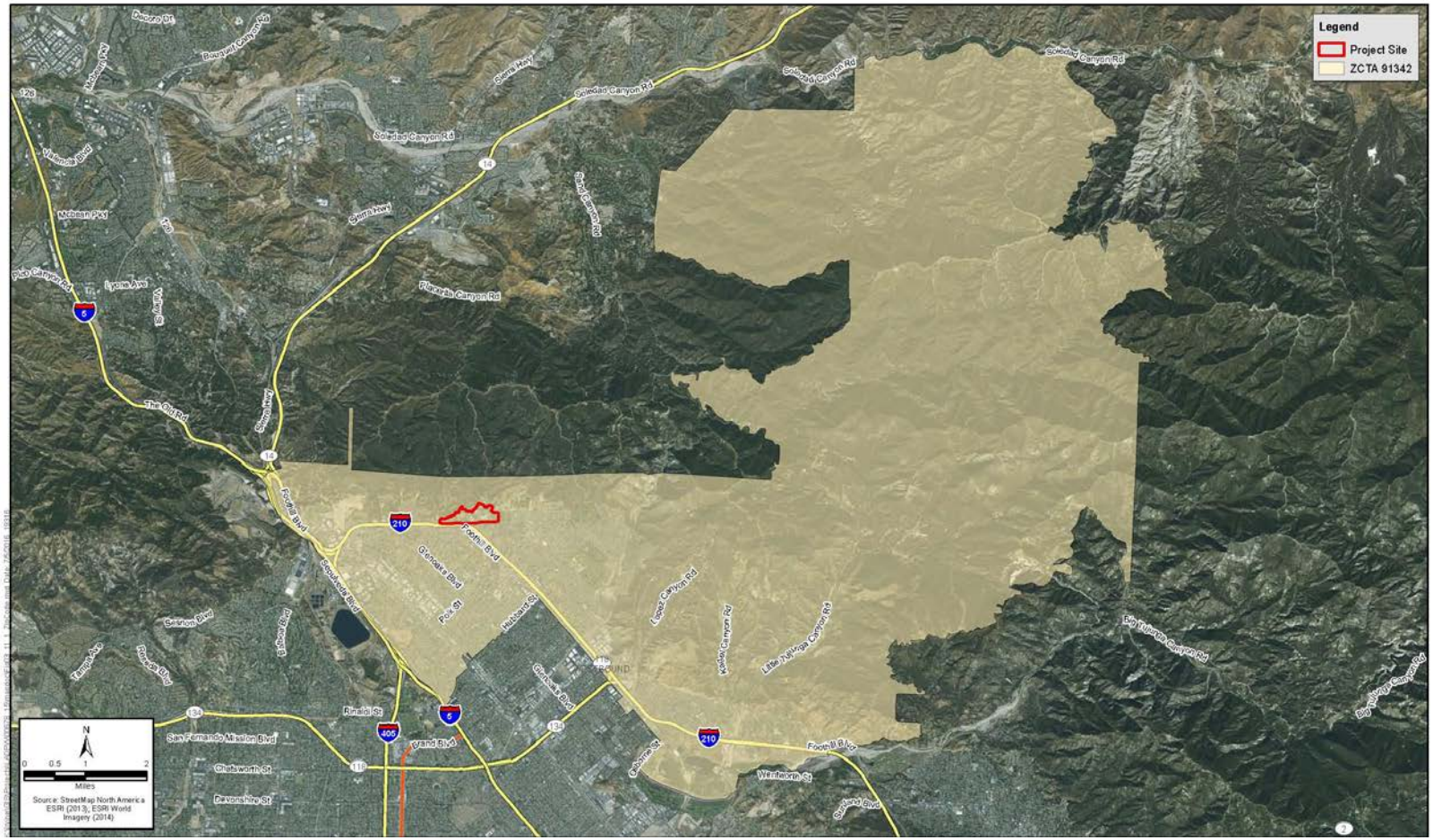
The Sylmar Community Plan (Sylmar Plan), which is included in the city of Los Angeles's General Plan (2016), provides a framework for future growth and development within the community. According to the Sylmar Plan, patterns of residential land use vary greatly in the Sylmar community, with development density driven by topography, population characteristics, housing markets, age of housing, and degree of existing development in the area. As discussed in the Sylmar Plan, the preservation of existing housing, as well as the development of new housing, is needed to meet the diverse economic and physical needs of Sylmar residents. The Sylmar Plan also puts forth guidelines for residential site planning, design, and parking. The Sylmar Plan generally maintains the existing land use pattern and housing density, aiming to preserve residential and equine-keeping areas and limit residential development along the foothills and open space areas.

3.12.3 Environmental Setting

The Olive View–UCLA Medical Center campus is located in the city of Los Angeles, on Los Angeles County-owned land, within the Sylmar community, a largely semi-rural area located in the foothills of the San Gabriel Mountains, at the northern edge of the San Fernando Valley. The majority of residents live in single-family residential neighborhoods, while the remainder reside in multifamily dwellings.

The project site lies within the zip code tabulation area (ZCTA) for Sylmar, California. Population information regarding race and ethnicity for the city of Los Angeles, the County of Los Angeles, and Sylmar (ZCTA 91342) were used to create Table 3.12-1, below, which summarizes the characteristics of the regional and local population for the 5-year estimate between 2010 and 2014. Data regarding ZCTA 91342 diverge from the city- and County-wide demography. In this area, 75 percent of respondents identified themselves as belonging to the Hispanic or Latino group, compared with 48.1 percent and 48.6 percent within the County and city, respectively. Figure 3.12-1 shows the Sylmar ZCTA boundaries.

Figure 3.12-1: Sylmar ZCTA Boundaries



Source: ICF 2019

The majority of the population in the city of Los Angeles is female, with males representing just under 50 percent of residents (U.S. Census Bureau 2014a). Most people who live in the city (77 percent) are over the age of 18. The city maintains a normal distribution of ages within its population, with 21.6 percent between the ages of 35 and 49, 17.1 percent between the ages of 25 and 34, and 16.9 percent between the ages of 50 and 64. Of the remaining population over the age of 18, 8.3 percent is between the ages of 20 and 24, and 10.9 percent is over the age of 65 (U.S. Census Bureau 2014a).

According to the U.S. Census Bureau's 2010–2014 American Community Survey (ACS), the population of the city of Los Angeles as of the time of the ACS was 3,862,210. This 5-year estimate found that Hispanic/Latino was the largest ethnic group in the city of Los Angeles, with 1,876,711 individuals, or 48.6 percent of the total population, identifying themselves as such. Of the remaining population, 28.5 percent identified themselves as White, 11.4 percent as Asian, and 8.9 percent as African-American. American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Other, and Two or More Races were also represented, accounting for 0.2 percent, 0.2 percent, 0.3 percent, and 2.1 percent of the gross population, respectively. These statistics are relatively consistent with County data from the same survey, as shown in Table 3.12-1.

Table 3.12-1. Regional and Local Race/Ethnicity Distribution

	County of Los Angeles		City of Los Angeles		ZCTA 91342 (Sylmar)	
Race/Ethnicity	**Population**	**%**	**Population**	**%**	**Population**	**%**
Hispanic/Latino	4,800,491	48.1	1,876,711	48.6	68,783z	75.0
White	2,711,665	27.2	1,100,413	28.5	12,868	14.0
Asian	1,377,333	13.8	439,382	11.4	5,241	5.7
African American	802,132	8.0	341,960	8.9	3,368	3.7
American Indian/Alaska Native	18,207	0.2	6,323	0.2	392	0.4
Native Hawaiian/Other Pacific	23,921	0.2	5,969	0.2	59	0.1
Some Other Race	24,807	0.2	10,749	0.3	112	0.1
Two or More Races	215,647	2.2	80,703	2.1	878	1.0
Totals	**9,974,203**	**99.9**	**3,862,210**	**100.2**	**91,701**	**100.0**
Source: U.S. Census Bureau 2014b.						

Housing information regarding occupancy rates and types for the city of Los Angeles, the County of Los Angeles, and ZCTA 91342 was also used to create the two tables below. Table 3.12-2 summarizes the occupancy rates and Table 3.12-3 summarizes the occupancy type (i.e., owner- versus renter-occupied) for the study area, using the U.S. Census Bureau 2010–2014 ACS. In the city of Los Angeles, there were approximately 1,427,355 housing units within city limits, of which 93.1 percent were occupied. Of the occupied units, 37.2 percent were owner occupied, and the remaining 835,503 units (62.8 percent) were occupied by renters. The renter-occupied percentage at the County level is somewhat lower (53.6 percent). The renter-occupied units in ZCTA 91342 were substantially lower, at 31 percent. Persons per household was also tabulated, with the County average at 3.2 persons per household for owner-occupied units and 2.87 persons per household for renter-occupied units. The city average was 3.05 persons per household for owner-occupied units

and 2.72 persons per household for renter-occupied units. The average for ZCTA 91342 was 3.75 persons per household for owner-occupied units and 3.87 persons per household for renter-occupied units (U.S. Census Bureau 2014c).

Table 3.12-2. Existing Regional and Local Housing Characteristics—Occupancy Rate

Area	Occupied Units	Owner-Occupied Units	Owner-Occupied %	Renter-Occupied Units	Renter-Occupied %
County of Los Angeles	3,462,075	3,242,391	93.7	219,684	6.3
City of Los Angeles	1,427,355	1,329,372	93.1	97,983	6.9
ZCTA 91342	25,207	23,787	94.4	1,420	5.6
Source: U.S. Census Bureau 2014c.					

Table 3.12-3. Existing Regional and Local Housing Characteristics—Occupancy Type

Area	Occupied Units	Owner-Occupied Units	Owner-Occupied %	Renter-Occupied Units	Renter-Occupied %
County of Los Angeles	3,242,391	1,503,915	46.4	1,738,476	53.6
City of Los Angeles	1,329,372	493,869	37.2	835,503	62.8
ZCTA 91342	23,787	16,421	69.0	7,366	31.0
Source: U.S. Census Bureau 2014c.					

In accordance with the policies of the RCP, SCAG has adopted forecasts regarding the estimated and projected future population, housing, and employment numbers for Southern California cities. The estimates are for the years 2012, 2020, 2035, and 2040. For the city of Los Angeles, the population is expected to grow by 19.9 percent between the 2012 baseline estimate and 2040 (see the forecasts in Table 3.12-4). For the County of Los Angeles, population is expected to grow at the slightly lower rate of 16.0 percent over the same period. Similarly, housing and employment in the County are projected to increase at a lower rate than in the city.

Table 3.12-4. Projected Regional Population, Housing and Employment

Area	Data Type	2012	2020	2035	2040[1]	Growth %
County of Los Angeles	Population	9,922,600	10,326,200	11,145,100	11,514,800	16.0
	Housing	3,493,700	3,493,700	3,809,300	3,946,600	13.0
	Employment	4,246,600	4,662,500	5,062,100	5,225,800	23.1
City of Los Angeles	Population	3,845,500	4,017,000	4,442,500	4,609,400	19.9
	Housing	1,325,500	1,441,400	1,618,900	1,690,300	27.5
	Employment	1,696,400	1,889,500	2,104,100	2,169,100	27.9
[1] 2040 projections compared to 2012 baseline. Source: SCAG 2016.						

As proposed, the project site encompasses 230 acres of County-owned land in a completely developed area that supports a variety of land uses. According to the draft Master Plan, there are 2,938 full-time equivalent employees at the campus.

3.12.4 Environmental Impact Analysis

3.12.4.1 Methods

Potential population and employment increases due to development that could occur under the Master Plan were calculated and compared with existing and projected population data to determine potential project impacts. The analysis presented below also discusses whether the proposed project would displace existing housing and residents.

3.12.4.2 Thresholds of Significance

For the purposes of this EIR, and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would result in a significant environmental impact if it would:

POP-1 Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through the extension of roads or other infrastructure).

POP-2 Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing elsewhere.

3.12.4.3 Impacts and Mitigation Measures

Impact POP-1: Would the Proposed Project Induce Substantial Population Growth in an Area, either Directly (e.g. by Proposing New Homes and Businesses) or Indirectly (e.g., Through the Extension of Roads or Other Infrastructure?

Construction Impacts

Tier I

Under Tier I, the proposed project would include development of the Ambulatory Care Center, administration building, the Community Center, the Restorative Care Village (which would include the Recuperative Care Center, Residential Treatment Programs facility, Mental Health Urgent Care Center, and Mental Health Wellness Center), Central Utility Plant, Materials Management/Supply Services Building, appurtenant parking facilities, and partial renovation of the existing hospital. Construction activities would include demolition of some on-site buildings and structures, site preparation and grading, and construction of new and renovated facilities. The number of construction workers employed and working on-site would vary over the course of the construction period and over the lifetime of the Master Plan. The County has a large pool of construction labor from which to draw within commuting distance of the project site. Additionally, because of the highly specialized nature of most construction projects, workers are likely to be employed on the job site only for as long as their skills are needed to complete a particular phase of the construction process. For those reasons, it is reasonable to assume that most construction workers would not relocate their households to work on proposed Master Plan development and improvement projects. Therefore, construction activities would not induce substantial population growth. Impacts would be less than significant.

Tier II

Tier II development would include a new hospital, central plant, Materials Management/Supply Services Building, mental health facility, retail space, a fitness center, county buildings, and two parking structures. Impacts under Tier II would be similar to those described above under Tier I, and would be less than significant.

Mitigation Measures

Impacts are less than significant; thus, no mitigation measures are needed.

Operational Impacts

Tier I

Under Tier I, the proposed Master Plan would include the development of a 48-bed Recuperative Care Center which would provide temporary housing for individuals who are discharged from the hospital and need additional time to recuperate and recover from minor physical injuries or illnesses, and an 80-bed residential treatment program facility, which would provide a short-term treatment alternative to inpatient psychiatric services for person experiencing a psychiatric crisis. These services are designed to resolve the immediate crisis and improve the functioning level of the individuals to allow them to return to less intensive community living. Both facilities would provide short-term (less than 3 months) housing. The growth inducement impacts of this relatively small increase in the residential population would be less than significant. In addition, under Tier I, the proposed Master Plan would include new and renovated facilities and would result in a net increase in the square footage of medical office, retail, and other building space. Given the net increase in square footage (see Table 3.12-5), it is estimated that development of Tier I of the Master Plan could generate a net increase of 1,997 employees.

Table 3.12-5. Tier I Employee Projections

Type Description	Employee Generation Factor	Building Size (sq. ft.)	Number of Employees
Existing uses to be demolished			
Administration	3.29 employees/1,000 sq. ft.	52,300	(172)
Materials management	2.16 employees/1,000 sq. ft.	32,500	(70)
Central utility plant	2.16 employees/1,000 sq. ft.	51,000	(110)
Total			**(352)**
Proposed uses			
Ambulatory Care Center	4.83 employees/1,000 sq. ft.	296,000	1,430
Community Center	2 employees/1,000 sq. ft.	20,000	40
Administration	3.29 employees/1,000 sq. ft.	96,000	316
Materials Management/Supply Services Building	2.16 employees/1,000 sq. ft.	30,500	66
Central utility plant	2.16 employees/1,000 sq. ft.	77,000	166
Recuperative Care Center	30 employees: 8 a.m.–4:30 p.m. 15 employees: 4 p.m.–12:30 a.m. 15 employees: 12 a.m.–8:30 a.m.	N/A[1]	60
Residential Treatment Programs	10 employees: 7 a.m.–3:30 p.m.	N/A[1]	187

Type Description	Employee Generation Factor	Building Size (sq. ft.)	Number of Employees
Facility	90 employees: 8 a.m.–5 p.m. 62 employees: 3 p.m.–11 p.m. 25 employees: 11 p.m.–7:30 a.m.		
Mental Health Urgent Care Center	4.83 employees/1,000 sq. ft.	10,000	48
Mental Health Wellness Center	4.83 employees/1,000 sq. ft.	7,500	36
Total			**2,349**
Net Increase			**1,997**

[1] The inpatient hospital would be renovated under Tier I for SB1953 NPC 4 and 5 compliance upgrades and would not add or remove licensed beds; therefore, the number of employees would remain unaffected.
Note: Employee Generation Factor for employees/bed uses Structural and Geographical Information for Large Hospitals provided by the U.S. Energy Information Administration.
Source: Institute of Transportation Engineers Trip Generation Handbook 2017.

SCAG projections anticipate citywide employment growth of 24 percent by 2035 (27.9 percent by 2040) and County growth of 19.2 percent by 2035 (23.1 percent by 2040). The increase in employee population that could occur with anticipated development under Tier I of the Master Plan would represent a relatively small percentage of the employment growth SCAG has projected for the city and the County. Additionally, the proposed project does not include the extension of roads or other infrastructure improvements in undeveloped areas outside the boundaries of the campus that would indirectly induce substantial population growth in those areas. Therefore, employment growth impacts would be less than significant.

Tier II

Given the net increase in square footage (see Table 3.12-6, below), it is estimated that development of Tier II of the Master Plan could generate a net increase of 1,632 employees. When considered in conjunction with Tier I development, buildout of the Master Plan (Tier I plus Tier II development) could result in a net increase of 3,629 employees, which represents 0.44 percent of the forecasted increase in employment in Los Angeles County between 2008 and 2035 and 0.37 percent of the forecasted employment increase between 2008 and 2040 (see Table 3.12-4, above, for employment projections). Additionally, retail space proposed under Tier II may draw visitors to the campus and could potentially foster economic growth in the area.

Impacts under Tier II would be similar to those described above under Tier I, and the combined effect of Tier I and Tier II development on population growth would be less than significant.

Table 3.12-6. Tier II Employee Projections

Type Description	Employee Generation Factor	Area/Beds	Number of Employees
Existing uses to be demolished[1]			
Administration	3.29 employees/1,000 sq. ft.	55,700	(183)
Mental health	4.83 employees/1,000 sq. ft.	11,000	(53)
Support services	2.16 employees/1,000 sq. ft.	16,800	(36)
Total			**(272)**

Type Description	Employee Generation Factor	Area/Beds	Number of Employees
Proposed uses			
Inpatient hospital	3.65 employees/bed	355	1,296
Research and development	2.47 employees/1,000 sq. ft.	120,000	296
Retail	2 employees/1,000 sq. ft.	40,000	80
Materials management	2.16 employees/1,000 sq. ft.	30,500	66
Central utility plant	2.16 employees/1,000 sq. ft.	77,000	166
Total			**1,904**
Net Increase			**1,632**

[1]Storage Trailers were vacant during survey, as such, the number of employees would remain unaffected.
Note: Employee Generation Factor for employees/bed uses Structural and Geographical Information for Large Hospitals provided by the U.S. Energy Information Administration.
Source: Institute of Transportation Engineers Trip Generation Handbook 2017.

Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

Impact POP-2: Would the Proposed Project Displace Substantial Numbers of Existing Housing Units, Necessitating the Construction of Replacement Housing Elsewhere?

Construction and Operational Impacts

As mentioned above, all development and facilities proposed under the Master Plan would be constructed within the existing boundaries of the medical center campus. There are currently no permanent housing units on campus. Thus, no displacement of existing housing would occur as a result of anticipated development under the Master Plan.

Mitigation Measures

No housing displacement impacts would occur. No mitigation measures are required.

3.12.5 Cumulative

The proposed project would not displace local housing or people; therefore, it would not contribute to any cumulative displacement impacts. However, implementation of the proposed Master Plan would result in additional development and an increase in the employee population on the campus, as described above. Therefore, the cumulative impact analysis below focuses on induced population growth due to the proposed project and cumulative development in the project area and the region.

The study areas for the cumulative growth-inducement impacts analysis would consist of the community of Sylmar, the city of Los Angeles, and the County of Los Angeles. The approach to the cumulative impacts analyses is based on the list of related projects for the immediate project area (see Table 2-2 in Chapter 2, *Project Description*, of this EIR) and local and regional plans/projections for the city and County of Los Angeles.

According to Table 2-2, 14 related projects are located within approximately 2 miles of the campus, including 646 residential units, approximately 25,900 square feet of office space, 26,176 square feet

of retail space, and 225,000 square feet of industrial space, as well as a new high school for 500 students and a 9.9-acre recreational facility. Although the proposed and related projects would increase employee and residential populations within the immediate project area and this growth could result in impacts on the environment (see the discussions in other sections of Chapter 3, *CEQA Environmental Impact Assessment*, of this EIR, as well as the environmental documents for the related projects referenced above), the cumulative growth would occur within a developed suburban/urban area currently well served by existing infrastructure and would be consistent with the growth projections within the Sylmar Plan. According to that plan, the population in the plan area is expected to increase from 71,794 in 2005 to 85,993 in 2030, and employment is expected to increase from 19,616 in 2005 to 25,660 in 2030. The cumulative growth due to the proposed and related projects also would be subject to existing zoning regulations that regulate the density of development. Therefore, the proposed and related projects would not result in substantial induced growth beyond the growth anticipated and accommodated by local plans. As a consequence, the proposed project would not result in cumulatively considerable contribution to a significant cumulative induced-growth impact in the immediate project area.

With regards to the city and County of Los Angeles, the projected increases in residential and employee populations (see Table 3.12-4, above), and the accompanying development for accommodating those population increases, would result in impacts to the environment. However, because population increases resulting from the proposed project and other development in the region are expected to be within regional growth forecasts and are accounted for in the existing general plans for the city and County (as well as the SCAG RCP), the proposed project would not result in cumulatively considerable contribution to a significant cumulative induced-growth impact in the region.

3.13 Public Services

3.13.1 Introduction

This section discusses the public services (fire, police, schools, libraries, and parks) that serve the project site. Public service providers are identified and potential impacts on public services that could occur as a result of construction and operation of the proposed project are evaluated.

3.13.2 Regulatory Setting

The following identifies the various codes, regulations, and policies applicable to public service agency operations and the project.

3.13.2.1 Federal

There are no federal regulations that apply to the project.

3.13.2.2 State

California State Fire and Building Codes

By state law, the State Fire Marshal (SFM) is responsible for coordination of the state's fire and life safety codes. The SFM must review the proposed regulations of state agencies that promote fire and life safety before the regulations can be submitted for approval. The SFM Code Development and Analysis Program staff regularly reviews Title 19 of the California Code of Regulations, titled Public Safety (which discusses fire safety standards), for relevancy, necessity, conflict, duplication, and overlap. They also implement legislative mandates to develop regulations related to fire and life safety involving the various occupancy classifications under the authority of the California SFM. This encompasses the actual administrative processing of regulations from concept to promulgation in the California Code of Regulations (California Building Standards Commission 2014).

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of fire hazard severity zones within State Responsibility Areas (SRAs) and Local Responsibility Areas (LRAs). Within SRAs, fire hazard areas are designated as moderate, high, and very high Fire Hazard Severity Zones (FHSZ) and are based on relevant factors such as fuels, terrain, and weather. These zones provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires (CAL FIRE 2007). Within LRAs, mapping of Very High Fire Hazard Severity Zones (VH FHSZ) is based on data and models of potential fuels over a 30- to 50-year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure (including firebrands) to buildings (CAL FIRE 2011).

In late 2005, and effective as of 2008, the California Building Commission adopted California Building Code Chapter 7A requiring new buildings in VH FHSZs to use ignition resistant construction methods and materials. These new codes include provisions to improve the ignition resistance of buildings, especially from firebrands. The updated VH FHSZs are used by building officials for new building permits in LRAs. The updated zones will also be used to identify property whose owners must comply

with natural hazards disclosure requirements at time of property sale and 100-foot defensible space clearance (CAL FIRE 2011).

Senate Bill 50, the Leroy F. Greene School Facilities Act of 1998

The Leroy F. Greene School Facilities Act of 1998 (Senate Bill [SB] 50) was signed into law August 1998 and became fully effective with the approval of Proposition 1A on November 3, 1998. SB 50 describes three levels of fees that can be statutorily levied against a project for mitigation of school facilities and declares that payment of the specified development fees, where necessary, is full and complete mitigation for impacts on school facilities. It also prohibits a public agency from denying a legislative or adjudicative act on the basis of refusal to provide school facilities mitigation that exceeds the amounts authorized under the bill.

3.13.2.3 Local

Los Angeles County General Plan 2035

The Los Angeles County General Plan 2035 provides the policy framework for how and where the unincorporated areas will grow through 2035 and establishes goals, policies, and programs to foster healthy, livable, and sustainable communities (County of Los Angeles 2015). As a County-run facility operated on County-owned land, the Olive View–UCLA Medical Center is subject to elements of the General Plan.

Chapters 10, 12, and 13 of the General Plan address parks and recreation, safety, and public services and facilities, respectively. The purpose of the Parks and Recreation Element is to assess existing park acreage and future recreation needs; identify goals, objectives, and policies for appropriate future actions; and provide recommendations based on needs, goals, and public involvement to guide the future direction of parks and recreation. For example, pursuant to the Parkland Development goal, Policy P/R 3.8 states that new parks should be sited near schools, libraries, senior centers, and other community facilities where possible. The Safety Element identifies the goals and policies that reduce the potential risk of death, injuries, and economic damage resulting from natural and human-made hazards. Also, the State Board of Forestry and CAL FIRE have drafted a comprehensive document for wildland fire protection in California. The Forestry Division's Fire Plan Unit is in charge of implementing the California Fire Plan in Los Angeles County. Finally, the Public Services and Facilities Element summarizes some of the major public services and facilities that serve the unincorporated areas, and establishes policies that guide the provision of public services and facilities in conjunction with projected growth.

City of Los Angeles Municipal Code

The city of Los Angeles Municipal Code, last amended on December 31, 2015, contains 18 chapters, including Chapter 5, Public Safety and Protection, which focuses on fire and police protection (City of Los Angeles 2013a). Article 2, Police and Special Officers, contains regulations governing administrative issues, such as requirements for police badges and uniforms, and Article 7, Fire Protection and Prevention, contains the fire code for the city. The Los Angeles Fire Code prescribes laws that may be enforced by the Los Angeles Fire Department (LAFD) to help safeguard life and property from fire, explosion, panic, or other hazardous conditions that may arise. The fire code includes information pertaining to administrative issues, such as the requirements for filling out and submitting Hazardous Materials Release Response Plans and Inventory Statements, and technical

requirements associated with the storage, management, and disposal of hazardous materials, such as underground chemical storage tanks, asbestos-containing materials/asbestos-containing building material, and various other combustible and flammable materials.

City of Los Angeles General Plan

The city of Los Angeles General Plan, approved by the city of Los Angeles Planning Commission and the mayor and adopted by the City Council, is a comprehensive, long-range declaration of purposes, policies, and programs for development in the city.

The Safety Element sets forth specific policies and objectives that emphasize hazard mitigation, emergency response, and disaster recovery. Fire prevention, fire protection, and emergency medical services within the city operate under the Fire Protection and Prevention Plan, which is an element of the city's General Plan. The Fire Protection and Prevention Plan serves as a guide for the construction, maintenance, and operation of fire protection facilities in the city. It sets forth policies and standards for fire station distribution and location, fire suppression water flow (or "fire flow"), fire hydrant standards and locations, firefighting equipment access, emergency ambulance services, and fire prevention activities. Population density, nature of onsite land uses, and traffic flow are also considered by LAFD in evaluating the adequacy of fire protection services for a specific area.

The city of Los Angeles General Plan also includes a Parks and Recreation Element that defines the or land use various park types and sets forth guidelines for developing and locating public facilities to provide the greatest benefit to the greatest number of people with the least cost and environmental impact. An overall provision of 10 acres of land per 1,000 persons for total recreational facilities is recommended (City of Los Angeles 2002).

Sylmar Community Plan

As part of the city of Los Angeles General Plan, the Sylmar Community Plan is one of 35 community plans that compose its Land Use Element. The plan encompasses the area generally bounded by the Los Angeles City boundary line on the north and east, the City of San Fernando on the south and southeast, and the San Diego (Interstate [I-] 405) and Golden State (I-5) Freeways on the west. The Angeles National Forest and the City of Santa Clarita lay directly north of the community. The 7,900-acre area (12.1 square miles) is occupied by roughly 80,000 inhabitants living in a collection of communities and neighborhoods. Sylmar continues to develop into a low- to moderate-density urban community, while maintaining an agricultural heritage. The general purpose of the plan is to preserve and enhance the character of Sylmar while providing a variety of new opportunities and growth in the area, including housing, transportation, and public utility improvements. The plan contains specific goals, objectives, and policies for park and recreation facilities, schools, libraries, and police protection and fire protection to ensure a livable community environment and the adequate provision of public services and facilities for its resident population (City of Los Angeles 2013b).

3.13.3 Environmental Setting

Public services for the proposed project site and the surrounding communities are provided by the County of Los Angeles Fire Department (LACFD), LAFD, the Los Angeles Police Department (LAPD), Los Angeles County Sheriff's Department (LASD), Los Angeles Unified School District (LAUSD), Los Angeles Public Library (LAPL), and the Los Angeles Department of Recreation and Parks. Public services have been actively developing in tandem with growth in the communities and the region. A

discussion of the current provisions to deliver public services within the Olive View–UCLA Medical Center and surrounding areas is provided below, along with any planning efforts to accommodate increases in demand due to future growth.

Figure 3.13-1 identifies the location of the fire stations, police stations, libraries, and parks in the vicinity of the proposed project. Figure 13.2-2 provides the locations of all public schools within the vicinity of the proposed project.

3.13.3.1 Fire Protection and Prevention and Emergency Services

Due to the campus' location abutting the foothills of the San Gabriel Mountains and Angeles National Forest immediately to the north, the campus is subject to wildland fire hazards and is designated as a VH FHSZ within an LRA on CAL FIRE maps (CAL FIRE 2011). The area immediately north of the campus is within a designated VH FHSZ in an SRA (CAL FIRE 2007).

The most recent wildland fire that resulted in damage to campus buildings was the Sayre Fire in November of 2009. The Sayre Fire damaged or destroyed 48 structures on the campus. Other recent fires that have occurred in the vicinity include the Creek Fire, which started on December 5, 2017, and resulted in the destruction of 60 residential and 63 outbuildings and damaged another 55 residential and 26 outbuildings, as of December 11, 2017 (CAL FIRE 2017). The fire encompassed 15,619 acres and was located approximately 2 miles east/southeast of the campus.

State and Federal Agencies

CAL FIRE provides fire protection and stewardship of over 31 million acres of California's privately-owned wildlands. In addition, CAL FIRE provides varied emergency services in 36 of the state's 58 counties via contracts with local governments. CAL Fire facilities include 21 operational units, 237 stations, and 575 local government fire stations operated by CAL FIRE via contract (CAL FIRE 2016). CAL FIRE's Southern Region Operations Headquarters, which is the primary operations coordination center for all emergency responses directed to CAL FIRE in the southern half of the state, is in the City of Riverside in Riverside County.

The Department's firefighters, fire engines, and aircraft respond to an average of more than 5,600 wildland fires each year. Those fires burn more than 172,000 acres annually. Beyond its wildland fire fighting role, CAL FIRE answers the call more than 350,000 times for other emergencies each year.

The Southern California Geographic Area Coordination Center is the focal point for coordinating the mobilization of resources for wildland fire and other incidents throughout the geographic area. The Center also provides Intelligence and Predictive Services related-products designed to be used by the internal wildland fire community for purposes of wildland fire and incident management decision-making (Southern California Geographic Area Coordination Center 2017).

Figure 3.13-1. Public Service Locations Map

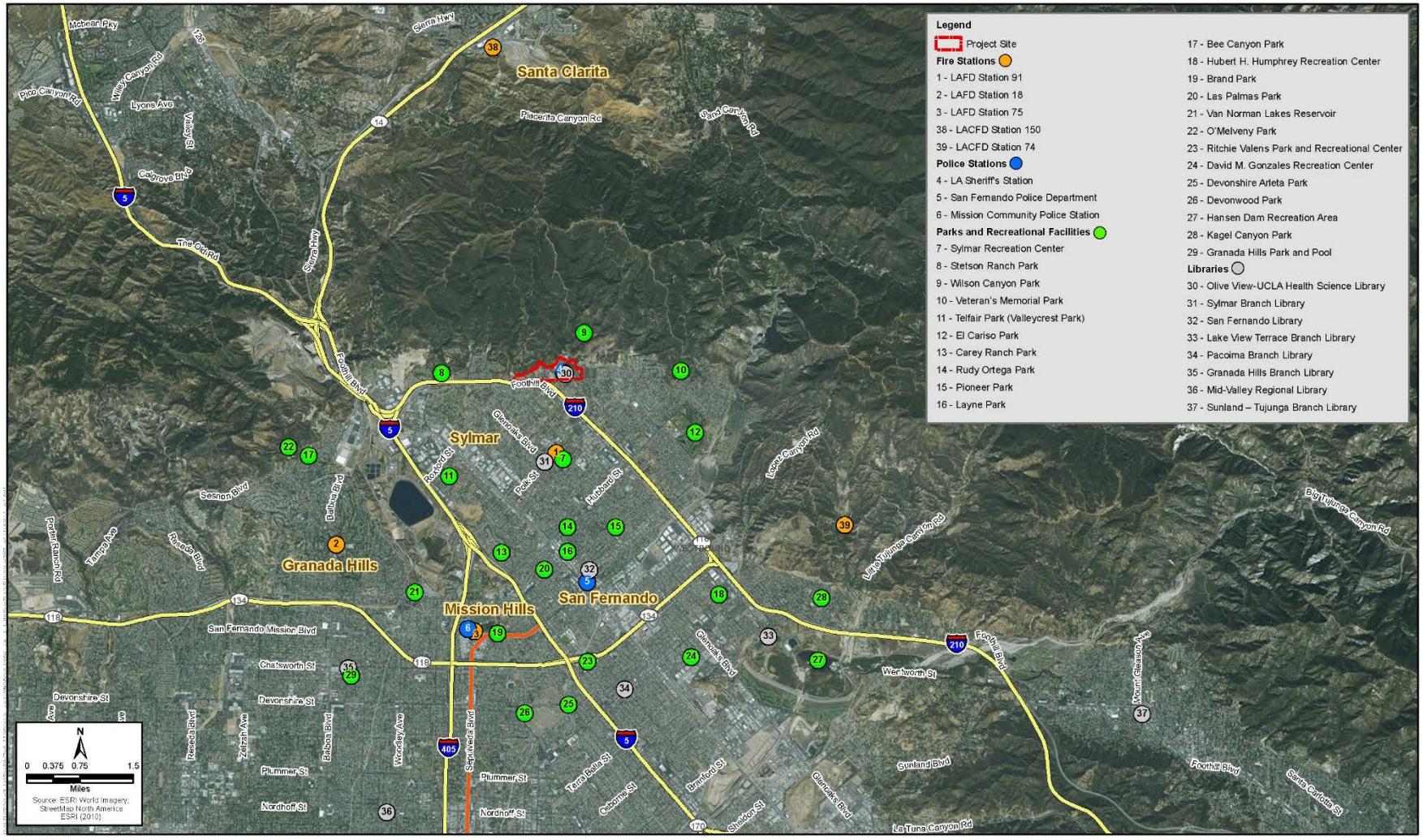
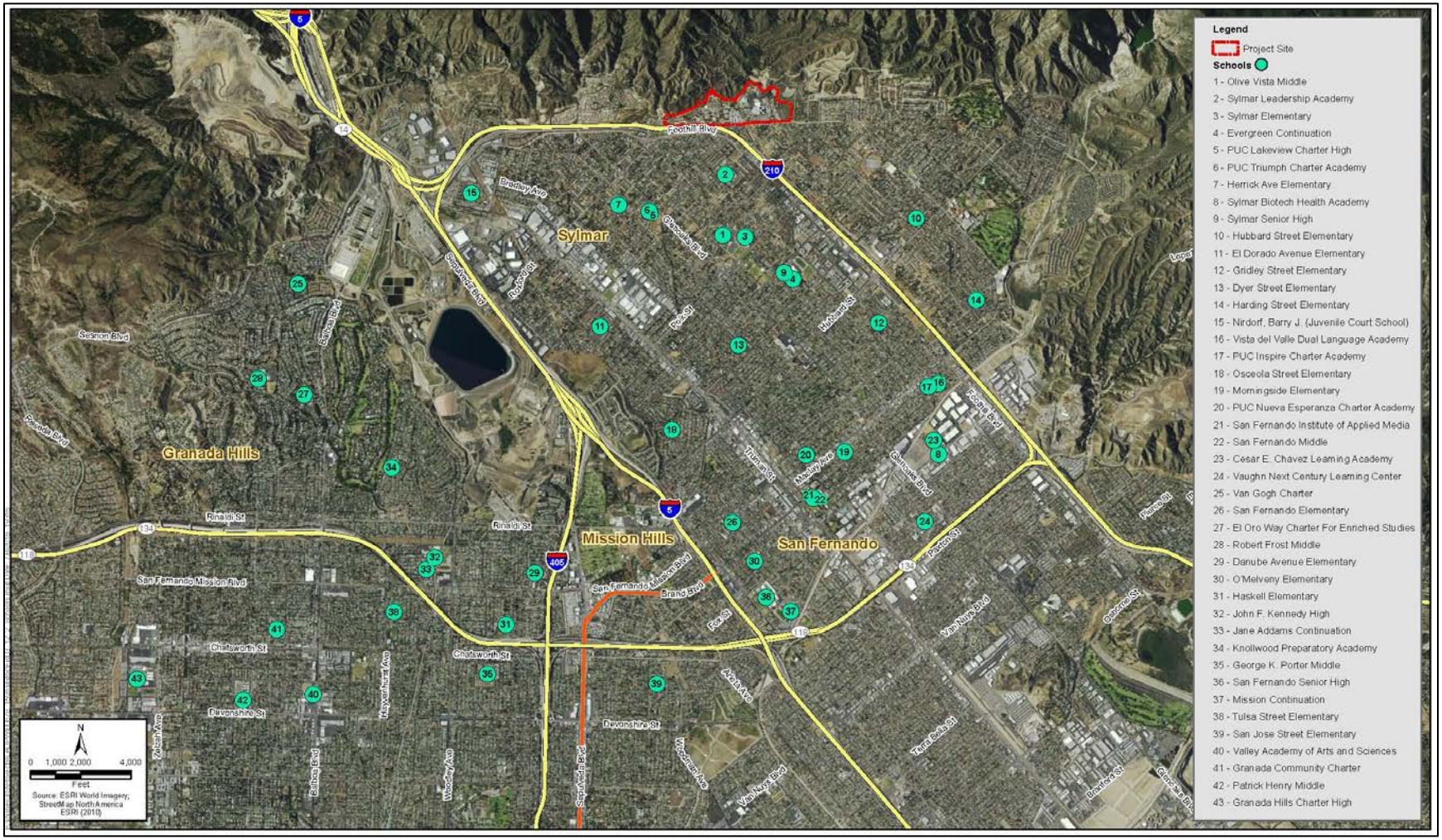


Figure 3.13-2. Public School Locations Map



Source: ICF 2017.

The California Wildland Fire Coordinating Group (CWFCG) was established to provide an interagency approach to wildland fire management and all-risk support on all land ownerships within the State of California. CWFCG includes representatives from CAL FIRE, the National Park Service (Pacific West Region), Governor's Office of Emergency Services, California Bureau of Land Management, U.S. Forest Service (Pacific Southwest Region), U.S. Fish and Wildlife Service (Pacific Southwest Region), and Bureau of Indian Affairs. The purpose of CWFCG is to further interagency cooperation, communications, and coordination, and to provide interagency fire management direction and all-risk support for the northern and southern California geographical areas (CWFCG 2017).

County of Los Angeles Fire Department

The LACFD provides fire, safety, and emergency medical services to the unincorporated areas of Los Angeles County. Additionally, many cities within Los Angeles County contract with the LACFD for fire protection services. There are three major geographic regions serviced by the LACFD, which are divided into nine divisions and 22 battalions. Division 3 covers the unincorporated area to the north and east of the project site as well as the cities of Santa Clarita and La Canada Flintridge. There are three battalions located within this service area with 22 stations. The nearest battalions to the project site are Battalion 6 and Battalion 4. The southern border of Battalion 6 lies immediately north of the project site and has five fire stations, one Division headquarters, and one Battalion and regional headquarters. The LACFD station nearest to the project area in Battalion 6 is County Fire Station #150 located at 19190 Golden Valley Road in Santa Clarita, approximately 4.5 miles to the north. Battalion 4 covers the unincorporated area east of the project site including the City of La Canada Flintridge and has six fire stations and one Battalion headquarters. The LACFD station nearest to the project area in Battalion 4 is County Fire Station #74 located at 12587 Dexter Park Road in San Fernando, approximately 5.25 miles east of the project site. It should be noted that while the LACFD would be the first responder to a brush fire in the unincorporated areas to the north and east of the project site, LAFD would be the first responder to an emergency on the project site.

Los Angeles Fire Department

LAFD provides fire protection and prevention and emergency services to and around the project site. LAFD is a full-spectrum life-safety agency that serves people who live and work in the city of Los Angeles. Its 3,246 uniformed fire personnel and 353 professional support personnel are responsible for fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education, and community service (Los Angeles Fire Department 2017a). LAFD maintains 106 fire stations across the department's 471-square-mile jurisdiction, and has continued to see rises in emergency responses, both pertaining to fire and emergency medical services (EMS) (Los Angeles Fire Department 2017b). LAFD has a breadth of command, fire rescue, and EMS resources, enabling the department to serve a complex region.

Fire stations with proximity to the Olive View–UCLA Medical Center are listed in Table 3.13-1. For the purposes of this analysis, fire stations serving the project site and surrounding communities (Sylmar, Granada Hills, Mission Hills, and San Fernando) were identified. The locations of each station are shown on Figure 3.13-1. The primary responding fire station for the proposed project site would be LAFD Fire Station 91, located at 14430 Polk Street, approximately 1.5 miles south of the project site. The station maintains one engine, one ambulance, four engine crew members, and two ambulance crew members (Duff pers. comm.). According to LAFD's FireStatLA, Station 91's response metrics from January to December 2018 was an average of 52 seconds for turnout and 5 minutes and 27 seconds for

travel time for 5,477 EMS incidents.[1] Non-EMS response metrics were 50 seconds for turnout and 5 minutes, 37 seconds for travel time for 940 incidents (Los Angeles Fire Department 2018). A summary of the emergency and non-emergency calls and average response times for Fire Station 91 is provided in Table 3.13-2.

The National Fire Protection Association (NFPA) is a voluntary association of fire and emergency service organizations that seeks to establish and maintain standards for organizational, deployment and operational activities as well as recommended practices and benchmarks. NFPA maintains that the response time standard (turnout + travel) for the first fire resources is 5 minutes and 20 seconds (City of Los Angeles 2012). Fire Station 91's average emergency response time is outside the NFPA's 5-minute and 20-second national benchmark (turnout + travel), and also outside the 4- to 6-minute average response time suggested for all LAFD stations (Table 3.13-2).

Table 3.13-1. Fire Stations in the Vicinity of the Proposed Project

Map ID	Facility	Address	Distance from Project Site[1]
1	Fire Station 91	14430 Polk Street Sylmar, CA 91342	1.5 miles
2	Fire Station 18	12050 Balboa Boulevard Granada Hills, CA 91344	5.5 miles
3	Fire Station 75	15345 San Fernando Mission Boulevard Mission Hills, CA 91345	7.1 miles
Source: City of Los Angeles Fire Department 2018. [1] The Distance from Project Site metric represents the driving distance between facilities rather than the actual distance.			

Table 3.13-2. LAFD Station 91 Response Times (January–March 2019)

Call Type	Number of Incidents (EMS)	Average Turnout Time	Average Travel Time
Emergency	1,334	51 seconds	5 minutes, 33 seconds
Non-emergency	206	48 seconds	5 minutes, 37 seconds
Source: City of Los Angeles Fire Department 2019.			

3.13.3.2 Police Protection

The Olive View–UCLA Medical Center Campus is patrolled by the LASD, and the surrounding community is within the service area of LAPD's Mission District of the Valley Bureau.

Table 3.13-3 lists police stations in the vicinity of the project site and provides their addresses and respective distances from the Olive View–UCLA Medical Center Campus. For the purposes of this analysis, police stations serving the project site and surrounding communities (Sylmar, Mission Hills, San Fernando, and Granada Hills) were identified. The locations of each station are shown on Figure 3.13-1.

[1] *Turnout* is the time from when the station acknowledges notification of the emergency until the time the response apparatus leaves the station.

Table 3.13-3. Police Stations in the Vicinity of the Proposed Project

Map ID	Facility Name	Address	Distance from Project Site[1]
4	LASD Satellite Station	14445 Olive View Drive Sylmar, CA 91342	On campus
5	San Fernando Police Department	910 1st Street San Fernando, CA 91340	4.0 miles
6	Mission Community Police Station	11121 N. Sepulveda Boulevard Mission Hills, CA 91345	6.1 miles

Source: Los Angeles Police Department 2016.
[1] The Distance from Project Site metric represents the driving distance between facilities rather than the actual distance.

Los Angeles County Sheriff's Department

Headquartered in Monterey Park, LASD maintains 23 stations across the southern California region to patrol 40 contract cities; 90 unincorporated communities; 216 facilities, hospitals, and clinics; 9 community colleges, the Metropolitan Transit Authority, and 47 Superior Courts. Its members are responsible for providing protection and service to almost 10 million people within a 4,084-square-mile area (Los Angeles County Sheriff's Department 2017a, 2017b).

The LASD station nearest to the project site is located on campus at 14445 Olive View Drive in Sylmar, in Trailer L1. The station maintains 6 squad cars and 16 sworn officers, and oversees an additional 9 non-sworn private security staff (Benning pers. comm.). These personnel operate 24 hours per day in three separate shifts and patrol the campus by way of radio dispatched cruisers, foot patrol, bicycles, and T-3 motorized vehicles. On average, they responded to 20 to 30 calls and 20 to 30 incidents per day with an average response time of 2 to 5 minutes. The nature of the incidents include emergencies, psychiatric needs, assault, vehicle crimes, vandalism, theft, parking issues, moving vehicle violations, and assisting citizens (Benning pers. comm.). The performance standard maintained for Sheriff services is a response time of 20 minutes for priority calls (Benning pers. comm.).

Los Angeles Police Department

LAPD's 21 community police stations, 10,007 sworn officers, and 2,819 civilian officers are the responsible local law enforcement agency for the city of Los Angeles's 4.0 million people, covering 468 square miles (Los Angeles Police Department 2017a). The community police station closest to the Olive View–UCLA Medical Center is the Mission Community Police Station, located approximately 6.1 miles to the southwest at 11121 N. Sepulveda Boulevard.

The Mission Community Police Station serves an area that has a population greater than 225,849 and covers 25.1 square miles. The station serves the communities of Arleta, Mission Hills, North Hills, Panorama City, and Sylmar and is under the jurisdiction of the LAPD's Valley Bureau (Los Angeles Police Department 2017b). A summary of recent crime statistics for the Mission area is shown in Table 3.13-4.

As mentioned above, LASD has jurisdiction over the project site; thus, any activities on site that require police protection services are handled by LASD. Activities requiring the LAPD on the project site involve transporting a patient to the hospital or responding to a call that occurred on city land.

Table 3.13-4. Mission Area Crime Statistics (through December 2, 2017)

Crime Type	YTD 2015	YTD 2016	YTD 2017	percent Change (2015–2017)
Total Violent	906	1,164	1,165	28.6 percent
Total Property	4,050	4,157	3,931	-2.9 percent
Source: COMPSTAT 2019.				

3.13.3.3 Schools

The Los Angeles County Office of Education (LACOE) and Los Angeles Unified School District (LAUSD) provide facilities and resources for K–12 education and supplemental programming to the community surrounding the Olive View–UCLA Medical Center.

The Los Angeles County Office of Education

LACOE is a regional provider of services to students within the communities surrounding the proposed project site and throughout Los Angeles County. LACOE oversees educational programs and supports 80 local school districts and other agencies with academic, business, administrative, and consulting services related to special education, computer applications, and teaching strategies (Los Angeles County Office of Education 2011).

In addition to providing educational services to the County's 2 million preschool and school-age children, LACOE administers programs that benefit those who are unable to attend conventional school facilities, such as the physically and mentally disabled, wards of the juvenile court, preschool children, and students in job training programs (Los Angeles County Office of Education 2011).

Los Angeles Unified School District

The LAUSD area of service covers over 710 square miles and includes the city of Los Angeles as well as some parts of smaller municipalities and unincorporated areas within Los Angeles County. More than 640,000 students in kindergarten through 12th grade are enrolled in the district, which comprises more than 900 schools and 224 public charter schools (Los Angeles Unified School District 2017). There are 42 LAUSD campuses located within the vicinity of the project site.

Table 3.13-5 lists schools near the project site and provides the addresses, school type, and most recent enrollment information for each individual facility. For the purposes of this analysis, educational facilities serving the project site and surrounding communities (Sylmar, Mission Hills, San Fernando, and Granada Hills) were identified. Their locations are shown on Figure 3.13-2.

Table 3.13-5. Educational Facilities

Map ID	School Name	Address	School Type	2014–2015 Enrollment	Distance from Project Site[1]
1	Olive Vista Middle	14600 Tyler Street Sylmar, CA 91342-282	6–8	1,195	1.2 miles
2	Sylmar Leadership Academy	14550 Bledsoe Street Sylmar, CA 91342-141	6–12	952	1.3 miles

Map ID	School Name	Address	School Type	2014–2015 Enrollment	Distance from Project Site[1]
3	Sylmar Elementary	13291 Phillippi Avenue Sylmar, CA	K–5	607	1.5 miles
4	Evergreen Continuation	13101 Dronfield Avenue Sylmar, CA 91342-436	9–12	105	1.7 miles
5	PUC Lakeview Charter High	13361 Glenoaks Boulevard Sylmar, CA 91342-211	9–12	312	1.7 miles
6	PUC Triumph Charter Academy	13361 Glenoaks Boulevard Sylmar, CA 91342-211	K–8	292	1.7 miles
7	Herrick Avenue Elementary	13350 Herrick Avenue Sylmar, CA 91342	K–5	583	1.8 miles
8	Sylmar Biotech Health Academy	13050 Borden Avenue Sylmar, CA 91342-425	9–12	N/A	1.8 miles
9	Sylmar Senior High	13050 Borden Avenue Sylmar, CA 91342-425	K–5	2,306	1.8 miles
10	Hubbard Street Elementary	13325 Hubbard Street Sylmar, CA 91342-322	K–5	731	2.1 miles
11	El Dorado Avenue Elementary	12749 El Dorado Avenue Sylmar, CA 91342	K–5	572	2.2 miles
12	Gridley Street Elementary	1907 Eighth Street San Fernando, CA 91340-1009	K–5	725	2.3 miles
13	Dyer Street Elementary	14500 Dyer Street Sylmar, CA 91342	K–5	788	2.4 miles
14	Harding Street Elementary	13060 Harding Street Sylmar, CA 91342-481	K–5	501	2.5 miles
15	Nirdorf, Barry J. (Juvenile Court School)	16350 Filbert Street Sylmar, CA 91342	9–12	156	2.8 miles
16	Vista del Valle Dual Language Academy	12441 Bromont Avenue San Fernando, CA 91340-1306	K–5	452	2.8 miles
17	PUC Inspire Charter Academy	919 Eighth Street. San Fernando, CA 91340-1312	6–8	N/A	3.2 miles
18	Osceola Street Elementary	14940 Osceola Street Sylmar, CA 91342	K–5	349	3.5 miles
19	Morningside Elementary	576 North Maclay Avenue San Fernando, CA 91340-2497	K–5	706	3.6 miles
20	PUC Nueva Esperanza Charter Academy	1218 North Fourth Street San Fernando, CA 91340-2314	6–12	346	3.6 miles
21	San Fernando Institute of Applied Media	130 North Brand Boulevard San Fernando, CA 91340-2901	6–8	406	4.0 miles
22	San Fernando Middle	130 North Brand Boulevard San Fernando, CA 91340-2996	6–8	842	4.0 miles

Map ID	School Name	Address	School Type	2014–2015 Enrollment	Distance from Project Site[1]
23	Cesar E. Chavez Learning Academy	1001 Arroyo Avenue San Fernando, CA 91340-1817	9–12	521	4.1 miles
24	Vaughn Next Century Learning Center	13330 Vaughn Street San Fernando, CA 91340-2216	P–12	2,603	4.2 miles
25	Van Gogh Charter	17160 Van Gogh Street Granada Hills, CA 91344-1217	K–5	495	4.7 miles
26	San Fernando Elementary	1130 Mott Street San Fernando, CA 91340-4126	K–5	651	4.8 miles
27	El Oro Way Charter For Enriched Studies	12230 El Oro Way Granada Hills, CA 91344-1600	K–5	475	5.5 miles
28	Robert Frost Middle	12314 Bradford Place Granada Hills, CA 91344-1918	6–8	1,542	5.8 miles
29	Danube Avenue Elementary	11220 Danube Avenue Granada Hills, CA 91344-4319	K–5	464	6.6 miles
30	O'Melveny Elementary	728 Woodworth Street San Fernando, CA 91340-4219	K–5	577	6.8 miles
31	Haskell Elementary	15850 Tulsa Street Granada Hills, CA 91344-5525	K–5	568	7.0 miles
32	John F. Kennedy High	11254 Gothic Avenue Granada Hills, CA 91344-3709	9–12	2,119	7.2 miles
33	Jane Addams Continuation	16341 Donmetz Street Granada Hills, CA 91344-3773	9–12	188	7.3 miles
34	Knollwood Preparatory Academy	11822 Gerald Avenue Granada Hills, CA 91344-2849	K–5	449	7.7 miles
35	George K. Porter Middle	15960 Kingsbury Street Granada Hills, CA 91344-7144	6–8	1,665	8.1 miles
36	San Fernando Senior High	11133 O'Melveny Avenue San Fernando, CA 91340-4426	9–12	2,390	8.2 miles
37	Mission Continuation	11015 O'Melveny Avenue San Fernando, CA 91340-4424	9–12	93	8.5 miles
38	Tulsa Street Elementary	10900 Hayvenhurst Avenue Granada Hills, CA 91344-5121	K–5	521	8.5 miles
39	San Jose Street Elementary	14928 Clymer Street Mission Hills, CA 91345-2111	K–5	707	8.7 miles
40	Valley Academy of Arts and Sciences	10445 Balboa Boulevard Granada Hills, CA 91344-7323	9–12	1,220	9.1 miles
41	Granada Community Charter	17170 Tribune Street Granada Hills, CA 91344-4899	K–5	410	9.8 miles
42	Patrick Henry Middle	17340 San Jose Street Granada Hills, CA 91344-6131	6–8	954	9.8 miles

Map ID	School Name	Address	School Type	2014–2015 Enrollment	Distance from Project Site[1]
43	Granada Hills Charter High	10535 Zelzah Avenue Granada Hills, CA 91344-5902	9–12	4,273	10.4 miles

Source: Public Schools Database (U.S. Department of Education 2016).
[1] The Distance from Project Site metric represents the driving distance between facilities rather than the actual distance.
N/A = Enrollment data not available.

3.13.3.4 Parks

Within the vicinity of the project site, there are 18 neighborhood and community parks and 5 recreation centers (City of Los Angeles Department of Recreation and Parks 2015). The California Department of Parks and Recreation and the city of Los Angeles Department of Recreation and Parks are in charge of facility maintenance. The City of San Fernando Recreation and Community Services is responsible for the maintenance of the parks within their jurisdiction. The parks provide a wide variety of recreational and community services, including early childhood classes, special interest classes, workout classes, adult sports leagues and tournaments, recreation for people with special needs, senior recreation, and fine arts programs.

Table 3.13-6 lists the parks and recreational facilities near the proposed project site and provides their addresses, amenities, and respective distances to the Olive View–UCLA Medical Center Campus. For the purposes of this analysis, parks within 5 miles of the project site were identified. Their locations are shown on Figure 3.13-1.

Table 3.13-6. Parks and Recreational Facilities in the Project Area

Map ID	Park or Recreational Facility	Address	Amenities	Distance from Project Site[1]
7	Sylmar Recreation Center	13109 Borden Avenue Sylmar, CA 91342	Two gymnasiums (also serve as auditoriums), baseball diamond (lighted), basketball courts (lighted/outdoor), children's play area, community room, indoor gym (without weights), picnic tables, soccer field (unlighted), tennis courts (lighted), summer pool (unheated/outdoor)	1.2 miles
8	Stetson Ranch Park	13877 Glenoaks Boulevard Sylmar, CA 91342	Equestrian trails, horse ranch, riding arenas, shows, stables	1.3 miles
9	Wilson Canyon Park	14450 Olive View Drive Sylmar, CA 91342	Equestrian trails, hiking, bike paths,	0.4 mile
10	Veteran's Memorial Park	13000 Sayre Street Sylmar, CA 91342	Green space with picnic and camping areas	1.9 miles

Map ID	Park or Recreational Facility	Address	Amenities	Distance from Project Site[1]
11	Telfair Park (Valleycrest Park)	15721 Cobalt Avenue Sylmar, CA 91342	Picnic tables, walk away, water fountain	2.2 miles
12	El Cariso Park	13100 Hubbard Street Sylmar, CA 91342	Picnics, tennis courts, and public pool	2.4 miles
13	Carey Ranch Park	15021 Briarhill Drive Sylmar, CA 91342	Baseball field	2.8 miles
14	Rudy Ortega Park	2025 Fourth Street San Fernando, CA 91340	Tea house, walking trail (heritage park)	3.0 miles
15	Pioneer Park	828 Harding Street San Fernando, CA 91340	Baseball fields, outdoor basketball court, outdoor tennis courts, playground, picnic areas, public barbecues, concession stand	3.1 miles
16	Layne Park	120 North Huntington Street San Fernando, CA 91340	Outdoor basketball court, playground, picnic areas	3.5 miles
17	Bee Canyon Park	13150 Sesnon Boulevard Granada Hills, CA 91344	Children's play area, picnic tables, hiking trails	3.7 miles
18	Hubert H. Humphrey Recreation Center	12560 Filmore Street Pacoima, CA 91331	Barbecue pits, baseball diamond (lighted), basketball courts (lighted/outdoor), children's play area, football field (lighted), handball courts (lighted), indoor gym (without weights), picnic tables, soccer field (lighted), volleyball courts (lighted)	3.7 miles
19	Brand Park	15174 San Fernando Mission Road Mission Hills, CA 91345	Baseball diamond (unlighted), soccer (unlighted), historical site	3.8 miles
20	Las Palmas Park	505 S Huntington Street San Fernando, CA 91340	Multipurpose rooms, indoor gymnasium, baseball fields (4), outdoor basketball courts (6), playground, outdoor fitness area, picnic areas, public barbecues, concession stand	3.8 miles
21	Van Norman Lakes Reservoir	15800 Rinaldi Street Granada Hills, CA 91344	Baseball diamond (unlighted)	3.8 miles
22	O'Melveny Park	17300 Sesnon Boulevard Granada Hills, CA 91344	Baseball diamond (unlighted), soccer (unlighted), historical site	3.9 miles
23	Ritchie Valens Park and Recreational Center	10731 Laurel Canyon Boulevard Pacoima, CA 91331	Auditorium, basketball courts (lighted/indoor/outdoor), baseball diamond (lighted),	4.2 miles

Map ID	Park or Recreational Facility	Address	Amenities	Distance from Project Site[1]
			children's play area, community room, handball courts (unlighted), indoor gym (without weights), picnic tables, soccer field (unlighted), tennis courts (lighted), summer pool (unheated/outdoor)	
24	David M. Gonzales Recreation Center	10943 Herrick Avenue Arleta, CA 91331	Auditorium, baseball diamond (lighted), basketball courts (lighted/indoor/outdoor), children's play area, community room, handball courts (lighted), indoor gym (without weights), outdoor gym (with weights), picnic tables, soccer field (lighted)	4.4 miles
25	Devonshire Arleta Park	14215 West Devonshire Street Pacoima, CA 91331	Children's play area, picnic tables	4.7 miles
26	Devonwood Park	10230 Woodman Avenue Panorama City, CA 91345	Children's play area, picnic tables	4.8 miles
27	Hansen Dam Recreation Area	11770 Foothill Boulevard Lakeview Terrace, CA 91040	Barbecue pits, baseball diamond (unlighted), children's play area, picnic tables, soccer field (unlighted), swim lake and aquatic center/pool, skate park	4.8 miles
28	Kagel Canyon Park	11435 Kagel Canyon Street Lakeview Terrace, CA 91342	Barbecue pits, children's play area, picnic tables	4.9 miles
29	Granada Hills Park and Pool	16730 Chatsworth Street Granada Hills, CA 91344	Summer pool (outdoor/unheated), auditorium, barbecue pits, baseball diamond (lighted/unlighted), basketball courts (lighted/indoor/outdoor), children's play area, community room, indoor gym (without weights), picnic tables, tennis courts (lighted)	5.0 miles

Source: City of Los Angeles Department of Recreation and Parks 2018.

[1] The Distance from Project Site metric represents the driving distance between facilities rather than the actual distance.

3.13.3.5 Library Facilities

LAPL, with support from the Library Foundation of Los Angeles, maintains the Central Library and its 73 branches. With millions of books, audiobooks, periodicals, DVDs, and CDs, the LAPL system hosts more than 16 million visitors annually who check out more than 15 million items (Los Angeles Public Library 2014). There are six public libraries within the vicinity of the Olive View–UCLA Medical Center. The LAPL branch closest to the proposed project site is the Sylmar Branch Library, at 14561 Polk Street (1.7 miles away).

Table 3.13-7 lists the libraries in the vicinity of the proposed project site and provides their addresses and respective distances from the Olive View–UCLA Medical Center Campus. For the purposes of this analysis, libraries serving the project site and surrounding communities (Sylmar, San Fernando, Mission Hills, and Granada Hills) were identified. Their locations are shown on Figure 3.13-1.

Table 3.13-7. Libraries in the Vicinity of the Proposed Project

Map ID	Facility Name	Address	Distance from Project Site[1]
30	Olive View–UCLA Health Science Library	14445 Olive View Drive Sylmar, CA 91342	On campus
31	Sylmar Branch Library	14561 Polk Street Sylmar, CA 91342	1.7 miles
32	San Fernando Library	217 N Maclay Avenue San Fernando, CA 91340	5.4 miles
33	Lake View Terrace Branch Library	12002 Osborne Street Lake View Terrace, CA 91342	6.6 miles
34	Pacoima Branch Library	13605 Van Nuys Boulevard Pacoima, CA 91331	7.8 miles
35	Granada Hills Branch Library	10640 Petit Avenue Granada Hills, CA 91344	9.1 miles
36	Mid-Valley Regional Library	16244 Nordhoff Street North Hills, CA 91343	9.7 miles
37	Sunland – Tujunga Branch Library	7771 Foothill Boulevard Tujunga, CA 91042	11.9 miles

Source: Los Angeles Public Library 2016.
[1] The Distance from Project Site metric represents the driving distance between facilities rather than the actual distance.

3.13.4 Environmental Impact Analysis

3.13.4.1 Methods

The proposed project was evaluated to determine if fire protection, police, schools, libraries, and parks and recreation facilities are staffed and located so that they could continue to serve the proposed project site and surrounding communities in an adequate manner without the need for additional facilities. Emergency services agencies (fire and police) were contacted to obtain information

regarding their existing and projected service capacity, as well as the projected impacts that could result from implementation of the proposed project. Potential impacts were assessed through significance criteria established for this project based on the State CEQA Guidelines.

3.13.4.2 Thresholds of Significance

For the purposes of the analyses in this EIR, and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant environmental impact if it would:

PS-1 Provide or require the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable services ratios, response times, or other performance objectives for any of the following public services:

- Fire Protection
- Police Protection
- Schools
- Parks
- Other Public Facilities

3.13.4.3 Impacts and Mitigation Measures

Impact PS-1: Would the Proposed Project Provide or Require the Need for New or Physically Altered Government Facilities, the Construction of Which Could Cause Significant Environmental Impacts, in Order to Maintain Acceptable Services Ratios, Response Times, or Other Performance Objectives for Any of the Public Services?

Fire Protection

Construction Impacts

Tier I

Tier I of the proposed Master Plan would include development of a new outpatient facility, a Restorative Care Village (which is composed of the Recuperative Care Center, Residential Treatment Program facility, the Mental Health Urgent Care Center, and the Mental Health Wellness Center), administration building, central utility plant, materials management, a community center, parking facilities, and the renovation of the existing hospital. Construction activities would include demolition of some onsite buildings and structures, site preparation and grading, and construction of new and renovated facilities. During construction, LAFD would respond to any incidents on-campus, as they do now. Thus, while construction could temporarily increase demand for fire protection services, it is unlikely that it would result in the need for new or altered fire protection facilities to provide fire protection services to the campus during construction. Therefore, the temporary increased demand for fire protection services during construction would be a less-than-significant impact.

However, emergency access to the project site could be affected by construction. Temporary lane closures and construction-related traffic could delay or obstruct the movement of emergency vehicles,

which is considered to be a potentially significant impact for the purposes of this EIR. In order to ensure emergency access, traffic flow, and the LAFD's ability to maintain an adequate response time between 4 and 6 minutes, the County would implement mitigation measure **MM-PS-1**.

Tier II

Impacts under Tier II would be similar to those described under Tier I. Impacts would be less than significant after incorporation of mitigation measure **MM-PS-1.**

Mitigation Measures

The following measure is proposed to mitigate the construction impacts described in **Impact PS-1**.

> **MM-PS-1:** The Los Angeles County project manager and construction contractor will regularly notify and coordinate with the LAFD, LASD, and LAPD on project construction design, activities, and scheduling, including any on- and off-campus street or lane closures related to proposed development projects before construction begins.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

Increases in building square footage (see Table 2-1 in Chapter 2, *Project Description*, of this EIR) and the number of campus employees (see Table 3.11-5) and visitors that could occur under the proposed Master Plan could result in increased demand for fire protection services. However, new development would be constructed in accordance with current building and fire/life/safety ordinance and codes including all applicable County code requirements related to construction, access, water mains, fire flows, and hydrants. Additionally, proposed development under the Master Plan would be generally consistent with current use(s) and would not occur outside the existing campus boundaries.

Furthermore, as part of the standard project approval process, the County of Los Angeles Fire Department would review and approve all project plans to ensure compliance with applicable fire codes and standards including access and facility requirements as well as acceptable service ratios and response times, thereby minimizing the risk of increased operational fire hazards and impacts on performance objectives. Though LAFD is the primary emergency responder to the Olive View–UCLA Medical Center Campus (LACFD would be the first responder in the event of a brush fire in the project area), plan check reviews would be completed by the County of Los Angeles Fire Department's Engineering Section. Coordination with LAFD would be through the County of Los Angeles Fire Department's County Facilities Unit. Therefore, the proposed project would not require the construction of new or altered fire facilities at Station 91 or any of the stations in the area that serve the surrounding communities. Operational impacts to fire services as a result of the proposed project would be less than significant.

Tier II

Fire protection impacts under Tier II would be similar to those described under Tier I. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Police Protection

Construction Impacts

Tier I

The proposed project would include development of new, or renovation of existing, campus facilities. During construction, the construction site(s) would be protected by fencing, lighting, and security patrols. LASD is responsible for patrolling existing on-campus structures. Thus, while construction activities could temporarily increase the demand for police protection services, it is unlikely that such activities would result in the need for new or altered LASD facilities to maintain acceptable performance objectives.

During construction, emergency access to the project site could be affected by temporary lane closures to accommodate construction activities, and construction-related traffic could delay or obstruct the movement of emergency vehicles, a potentially significant impact. In order to ensure emergency access, traffic flow, and the LASD and LAPD's ability to maintain adequate response times and other performance objectives, mitigation measure **MM-PS-1** is proposed.

Tier II

Impacts on police protection services under Tier II are expected to be similar to those described under Tier I. Impacts would be less than significant after incorporation of mitigation measure **MM-PS-1**.

Mitigation Measures

See **MM-PS-1** under *Fire Protection* for measures to mitigate the construction impacts on police protection services.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

The projected level of development that could occur under Tier I of the Master Plan would result in an estimated increase of 1,997 on-campus employees, as well as increased visitors to the campus. Increases in the number of employees and visitors could result in an increase in the number of incidents requiring an LASD response, which could affect LASD's service ratios and response times and result in a need for additional law enforcement staff. However, new facilities are not expected to be necessary under Tier I to meet this increased demand; therefore, the operational police protection impacts are considered to be less than significant. However, to minimize any potential operational impacts, mitigation measure **MM-PS-2** is proposed to ensure coordination with LASD continues

through development of the Master Plan and adequate planning and staffing is provided to serve the increased demands that could occur due to Master Plan development. With implementation of mitigation measure **MM-PS-2**, impacts on LASD services would be less than significant.

In addition, as the LAPD would not be the primary responder and would only assist in emergent situations, it is not expected that new or altered facilities, the construction of which would result in significant impacts for the LAPD, would be necessary to maintain adequate service levels. Therefore, operational impacts on LAPD services would be less than significant.

Tier II

Under Tier II, it is estimated that development could result in an increase of 1,632 on-campus employees, as well as increased visitors to the campus. When considered in conjunction with Tier I, the Master Plan could result in an estimated increase of 3,629 employees on the campus. Similar, to Tier I, increases in the number of employees and visitors could result in an increase in the number of incidents requiring an LASD response, thus potentially affecting LASD's service ratios and response times, and resulting in a need for additional law enforcement staff. However, it should be noted that under Tier II of the Master Plan, the existing Sheriff's building would be relocated to the west end of the campus. It is assumed that as the on-campus population increases, consultation and coordination with LASD would continue to determine the exact location and size of the building and staffing levels that would be necessary to meet projected demand. Therefore, development of a new on-campus LASD facility as part of the Master Plan would likely diminish the need for any off-campus LASD or LAPD facilities to meet the demand due to the increased campus population. Impacts would be less than significant. Additionally, mitigation measure **MM-PS-2** is proposed to ensure coordination with LASD continues through development of the Master Plan, and adequate planning and staffing is provided to serve the increased demands that could occur due to Master Plan development.

Mitigation Measures

The following measure is proposed to mitigate the potential operational impacts on LASD service.

> **MM-PS-2:** The Los Angeles County project manager and construction contractor will continue to coordinate with LASD on project design and development under the Master Plan, to ensure LASD is able to plan and staff adequate resources to continue to serve the campus for police protection services.

Level of Significance after Mitigation

Less than significant.

Schools

Construction Impacts

Tiers I and II

Given the large pool of construction workers within commuting distance of the project site, it is unlikely that construction workers would choose to permanently relocate their households to the area, thereby increasing local school enrollment. Thus, construction activities are not expected to result in the need for new or altered schools or school facilities to maintain acceptable personnel ratios or other

performance and learning objectives. Construction impacts on educational facilities would be less than significant.

For a discussion of construction-period air quality and noise impacts on local schools and school children, please see Section 3.2, *Air Quality*, and Section 3.10, *Noise*, in this EIR.

Mitigation Measures

The impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tiers I and II

The projected development that could occur under the Master Plan could result in an increase of 3,608 employees on the campus. Given the campus' proximity to the freeway network and transit facilities, these new employees would be expected to be dispersed over a wide geographic area within commuting distance of the campus. Thus, the new households formed by these new employees would not likely result in significant increases in student enrollment at any one school in the region. Therefore, the indirect impact of these employees on student enrollment is not expected to require the construction of new schools or school facilities to maintain acceptable personnel ratios or other performance and learning objectives.

Additionally, because the Recuperative Care Center and Residential Treatment Program facility proposed under Tier I of the Master Plan would provide temporary transitional housing for individuals discharged from the hospital, they would not generate or induce population growth such that new or altered schools or school facilities would be required. Operational impacts on educational facilities would be less than significant.

Mitigation Measures

The impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Parks

Construction Impacts

Tiers I and II

Given the large pool of construction workers within commuting distance of the project site, it is unlikely that construction workers would choose to permanently relocate to the area. Additionally, construction workers have limited opportunities to use local parks during the workday. Therefore, the presence of construction workers would not result in a significant increase in demand for local park facilities. Construction impacts would be less than significant.

For additional information regarding potential construction-related impacts on parks and recreational facilities, please see the Section 3.13, *Recreation*, of this EIR.

Mitigation Measures

The impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tiers I and II

The projected level of development under the Master Plan (Tier I plus Tier II) could increase the campus employee population by an estimated 3,608 employees, attract new visitors to the campus, and provide temporary transitional recuperative care at the Recuperative Care Center and the Residential Treatment Program facility on the campus. Given the proposed project includes riparian areas, gardens, courtyards, equestrian, bicycle, and pedestrian paths, and development intended to create accommodating open space for campus employees, patients, and visitors, it is unlikely the proposed Master Plan would result in a significant increase in the use of and demand for local, off-campus park facilities. Therefore, development that could occur under the Master Plan is not expected to require new or altered off-campus parks and recreation facilities to maintain acceptable service ratios or other performance objectives. Operational impacts on parks would be less than significant.

For additional information regarding potential operation-related impacts on parks and recreational facilities, please see Section 3.13, *Recreation*, of this EIR.

Mitigation Measures

The impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Other Public Facilities

Construction Impacts

Tiers I and II

Another potentially affected public service and facility considered for the purposes of this EIR is libraries. Given the large pool of construction workers within commuting distance of the project site, it is unlikely that construction workers would choose to permanently relocate to the area and thereby increase the demand for local library services. Also, construction workers would have limited opportunities to use local libraries during the workday while working on campus. Thus, new or altered library facilities to maintain acceptable service ratios or other performance objectives are not anticipated, and construction impacts on libraries would be less than significant.

Mitigation Measures

The impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tiers I and II

The estimated increase in the campus employee population and increased visitors could result in an increased demand for local library services. However, this increase is not expected to be significant given the limited opportunity for employees to use local libraries during the work day and the fact that visitors to the campus are more likely to use campus facilities than the closest off-campus library, which is approximately 1.7 miles from the campus. Additionally, employees are likely to reside within a large geographic area within commuting distance of the campus; thus, no one library in the surrounding region is expected to experience a significant increase in demand as a result of the proposed Master Plan. Therefore, operational impacts on libraries would be less than significant.

Mitigation Measures

The impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

3.13.5 Cumulative Impacts

The public facilities that currently serve the Olive View–ULCA Medical Center Campus are those most likely to experience adverse cumulative impacts due to the proposed and related projects. Therefore, the study area, for the purposes of this cumulative impacts analysis, generally encompasses the service areas of those facilities. All of the related projects listed in Chapter 2, *Project Description*, in this EIR, fall within this study area and include a range of development types: residential, school, retail/commercial, industrial, and a park.

3.13.5.1 Fire Protection

The cumulative increases in study area employee and residential populations and area visitors would increase the demand for fire protection services, which may or may not require the construction of new facilities to meet that cumulative demand. However, the County and fire service providers require payment of development fees for new development as part of the permitting and approval process, which is intended to offset some of these cumulative effects resulting from new development. In addition, as part of the standard project approval process for the proposed project, the County of Los Angeles Fire Department would review and approve all project plans to ensure compliance with applicable fire codes and standards, thereby minimizing the risk of increased operational fire hazards and impacts on performance objectives from the proposed project. For these reasons, and because it is not known what, if any, new facilities would need to be constructed to maintain acceptable service

ratios, the cumulative impacts due to the proposed and related projects are not considered to be significant.

3.13.5.2 Police Protection

Cumulative increases in study area employee, residential, and visitor populations would result in increased demand for police protection services. In order to maintain acceptable service ratios and response times, reallocation of staff resources or construction of new facilities to meet that cumulative demand may be required. However, the proposed Master Plan project includes mitigation measure **MM-PS-2,** which directs the County to continue coordination with LASD to ensure the proposed development under the Master Plan is accounted for when LASD reviews and determines any changes to current staffing and resource allocation at the campus. Development under the Master Plan would likely result in a minor increase in demand for offsite LAPD police protection services, as LASD is the primary responder for police protection services on the Olive View–UCLA Medical Center Campus and LAPD only assists in emergency situations. Additionally, it is not known whether new LAPD police facilities would need to be constructed to accommodate increased demand for police services in the study area and whether construction of needed facilities would result in significant impacts or the environment. Therefore, the cumulative impacts of the proposed and related projects on police protection services are not considered to be significant.

3.13.5.3 Schools

The related projects include development of almost 500 units of condominium and single-family dwelling units. Construction of new residential units could increase student enrollment at local schools. It is, however, not known whether the related projects would require expansion of existing, or construction of new, schools to accommodate increased student enrollment. In addition, there are two relevant, education projects included in the related projects list: one involves construction of a new high school and the other consists of construction of certain elements of the Los Angeles Mission College Master Plan. Development of these projects could reduce potential impacts on schools. Moreover, it should be noted that pursuant to Government Code Section 65995, the payment of the requisite school impact fees under the provisions of SB 50 would be deemed to be full mitigation of a project's impacts on school facilities. Therefore, for those reasons, the cumulative impacts on schools due to the proposed and related projects are considered to be less than significant.

3.13.5.4 Parks

The related projects include development of almost 500 units of condominium and single-family dwelling units, Lakeside Park, and construction of certain elements of the Los Angeles Mission College Master Plan, which would likely result in increased demand for and use of local parks. However, it should be noted that residential subdivisions proposed within the city of Los Angeles are required to provide local park space to serve their respective populations, pay a fee in lieu of the provision of such parkland, or a combination of both in accordance with the local ordinance in the Los Angeles Municipal Code, which would mitigate the cumulative impacts on park and recreational facilities resulting from residential development in the city of Los Angeles. In addition, the Los Angeles Mission College Master Plan would include construction of a health fitness and athletics complex that would be accessible to students and on-campus staff. Moreover, the proposed Olive View–UCLA Medical Center Campus Master Plan would create additional open space and passive recreational areas on the campus that could be used by campus visitors, employees, and local community residents. Therefore, the proposed Master Plan and related projects would not result in significant cumulative impacts on parks.

3.13.5.5 Other Public Facilities

The proposed residential development projects in the cumulative impacts study area could result in an increase in the residential population and thereby an increased use of local libraries. However, this impact is not expected to be significant given the relatively modest increase in the residential populations and the fact that it is unlikely that new library facilities would be required to meet this demand. For that reason and because the proposed project is expected to have a less-than-significant impact on libraries, the cumulative impact of the proposed and related projects would be less than significant.

3.14 Recreation

3.14.1 Introduction

This section identifies existing park and recreational facilities in the project vicinity and evaluates potential recreational impacts that could occur as a result of the construction and operation of the proposed Olive View–UCLA Medical Center Campus Master Plan.

3.14.2 Regulatory Setting

3.14.2.1 State

Public Park Preservation Act of 1971

The California Public Park Preservation Act of 1971 provides that no city, county, public district, agency of the state government, or public utility may acquire any real property, which is in use as a public park at the time of acquisition, for the purpose of utilizing the property for any non-park purpose, unless the acquiring entity pays or transfers to the legislative body of the entity operating the park sufficient compensation or land, or both, to enable the operating entity to replace the parkland and its facilities. This act authorizes changes in the general character and location of the park if certain requirements are met.

3.14.2.2 Local

Los Angeles County 2035 General Plan

The Los Angeles County 2035 General Plan includes policies related to recreation in the Parks and Recreation Element. The Parks and Recreation Element of the general plan provides policy direction for the maintenance and expansion of the County's parks and recreation system. Applicable policies from the Parks and Recreation Element include the following:

- **Policy P/R 1.2:** Provide additional active and passive recreational opportunities based on a community's setting, as well as its recreational needs and preferences.
- **Policy P/R 1.3:** Consider emerging trends in parks and recreation when planning new parks and recreational programs.
- **Policy P/R 1.4:** Promote efficiency by building on existing recreation programs.
- **Policy P/R 1.8:** Enhance existing parks to offer balanced passive and active recreation opportunities through more efficient use of space and the addition of new amenities.
- **Policy P/R 1.11:** Provide access to parks by creating pedestrian and bicycle-friendly paths and signage regarding park locations and distances.
- **Policy P/R 2.5:** Support the development of multi-benefit parks and open spaces through collaborative efforts among entities such as cities, County, state, and federal agencies, private groups, schools, private landowners, and other organizations.
- **Policy P/R 4.1:** Create multi-use trails to accommodate all users.

- **Policy P/R 4.2:** Develop staging areas and trail heads at strategic locations to accommodate multi-use trail users.
- **Policy P/R 4.4:** Maintain and design multi-purpose trails in ways that minimize circulation conflicts among trail users.
- **Policy P/R 5.3:** Protect and conserve natural resources on County park properties, including natural areas, sanctuaries, and open space preserves.

City of Los Angeles General Plan

The Public Recreation Plan, a portion of the Service Systems Element of the Los Angeles City General Plan, establishes standards for the city's parks and recreation system to ensure:

1. Sufficient land is reserved for parks and recreation,
2. Recreation areas are properly distributed in residential areas throughout the city, and
3. Facilities are provided to meet different recreation needs (i.e., active and passive recreation for all age groups) to accommodate a wide variety of users.

The Public Recreation Plan emphasizes neighborhood and community recreational sites and parks because of their immediate importance to the daily lives of the city's people, especially its children. The Plan recommends 10 acres of land for recreational facilities per 1,000 persons and identifies short, intermediate, and long-range standards for the city's neighborhood, community, and regional recreational sites. These standards are summarized below:

- **Neighborhood Parks** should be provided at a minimum of 2 acres of parkland per 1,000 persons within a 0.5-mile service radius. The City of Los Angeles Department of Recreation and Parks (LADRP), which manages the city's park and recreational facilities, tries to locate parks so that users do not have to cross major roadways to access the parks and provide facilities and programs that are tailored to the clientele served.
- **Community Parks** should also be provided at a minimum of 2 acres per 1,000 residents. However, the minimum desirable size is 15 acres and the ideal park should contain at least 20 acres, and the facilities or programs offered should reach a larger service radius, which is usually 2 miles. Community parks may offer swimming pools, community buildings, tennis, shuffleboard, and basketball courts, baseball diamonds, or senior citizen facilities.
- **Regional Parks** should have more than 50 acres and provide specialized facilities, such as lakes, golf courses, campgrounds, wilderness areas, and museums, and should serve persons living throughout the Los Angeles basin.

Framework Element

The Framework Element of the city of Los Angeles General Plan contains goals, objectives, and policies for the provision, management, and conservation of the city of Los Angeles' open space resources. The goals, objectives, and policies address issues related to the outdoor recreational needs of the city's residents. They are also intended to guide amendments to the general plan's Open Space and Conservation Elements.

Chapter 6 (Open Space and Conservation) of the Framework Element contains the following objectives and policies related to open space and conservation that are applicable to the proposed project:

- **Objective 6.1:** Protect the city's natural settings from the encroachment of urban development, allowing for the development, use, management, and maintenance of each component of the City's natural resources to contribute to the sustainability of the region.
- **Objective 6.2:** Maximize use of the city's existing open space network and recreational facilities by enhancing those facilities and providing connections, particularly from targeted growth areas, to the existing regional and community open space system.
- **Objective 6.3:** Ensure that open space is managed to minimize environmental risks to the public.
    - **Policy 6.3.1:** Preserve flood plains, landslide areas, and steep terrain areas as open space, wherever possible, to minimize the risk to public safety.
- **Objective 6.4:** Ensure that the city's open spaces contribute positively to the stability and identity of the communities and neighborhoods in which they are located or through which they pass.
    - **Policy 6.4.1:** Encourage and seek to provide usable open space and recreational facilities throughout the city.
    - **Policy 6.4.8:** Maximize use of existing public open space resources at the neighborhood scale and seek new opportunities for private development to enhance the open space resources of the neighborhood.
- **Objective 6.10:** Provide for the joint use of open space with existing and future public facilities, where feasible.

Sylmar Community Plan

The Sylmar Community Plan area encompasses the Olive View–UCLA Medical Center Campus. The Sylmar Community Plan is one of 35 community plans that comprise the land use element of the city of Los Angeles' General Plan. Applicable parks and recreational goals and policies from the Sylmar Community Plan include the following:

- **Goal PF5**: A variety of well-maintained parks and recreational facilities and services that meet the existing and future recreational needs of the community.
    - **CF5.1. Parkland Preservation**. Protect parklands from uses that would result in a loss of acreage for recreational purposes.
    - **CF5.2. Site Enhancements**. Enhance and improve all parks and recreation areas by providing amenities where appropriate, such as pedestrian paths, and bike and equestrian trails.
    - **CF5.3. Surplus Property**. Coordinate with the Forestry Division of Recreation and Parks (RAP) and other applicable City departments, such as the Department of General Services and Department of transportation, to review and evaluate surplus property as potential sites for parks and recreational activities.

- **CF5.4. Vacant Land**. Encourage continuous efforts by public agencies to acquire vacant parcels for publicly owned open space and parks.
- **CF5.5. Public Rights-of-Way**. Support the creation of new parks and park expansions within public rights-of-way, such as flood control channels, utility easements, debris basins, and other unused and underutilized public properties. Hiking, bicycle, and equestrian trails in Sylmar should connect these facilities with the Angeles National Forest, Hansen Dam Recreation Area, El Cariso Regional Park, and Pacoima Wash.
- **CF5.6. New Development**. Encourage and allow opportunities for new development to provide pocket parks, small plazas, community gardens, commercial spaces, and other gathering places that are available to help meet recreational demands.
- **CF5.7. Location.** Encourage neighborhood parks and recreational centers near concentrations of residential areas and include safe pedestrian walkways and bicycle paths that encourage non-motorized use.
- **CF5.8. Design.** Encourage the development of new park facilities to contribute to the semi-rural suburban character of the community by utilizing architectural features and building materials that embrace the area's agricultural and equestrian heritage.
- **CF5.9. Joint-Use**. Support the establishment of joint-use agreements with other public and private entities to increase recreational opportunities in Sylmar, including shared use of land owned by public agencies and private property owners.

In addition to the policies and goals for parks and recreational facilities identified above, the Sylmar Community Plan includes the following relevant open space policies and goals:

- **Goal CF6.** A community with sufficient open space in balance with new development to serve the recreational, environmental, health, and safety needs of the area and to protect environmental and aesthetic resources.
  - **CF6.1. Conservation.** Preserve passive and visual open space that provides wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas, and other natural resource areas.
  - **CF6.2. Protection.** Protect significant open space resources and environmentally sensitive areas from environmental hazards and incompatible land uses.
  - **CF6.3. Stream Alterations.** Minimize the alteration of natural drainage patterns, canyons, and water courses, except where improvements are necessary to protect life and property.
  - **CF6.6. Ecologically Sensitive Areas.** Coordinate with County of Los Angeles in the identification of significant ecological areas featuring ecological or scenic resources that should be preserved and protected within state reserves, preserves, parks, or natural wildlife refuges.
  - **CF6.7. Open Space Integration.** Integrate the use of open space with public facilities adjacent to reservoirs, land reclamation sites, spreading grounds, power line rights-of-way, and flood control channels.
  - **CF6.8. Trail Linkages.** Continue to expand and maintain trail linkages that reinforce the viability of equine uses and accessibility to open spaces by designing development and infrastructure improvement projects that abut or connect with a trail to develop and/or improve the trail system.

- **CF6.9. Greenways.** Establish, where feasible, multi-use greenways along waterways, rail lines, and utility corridors to provide additional open space for passive or active recreation and to connect adjoining neighborhoods to one another and to regional open space resources.
- **CF6.10. Access and Connections.** Improve connectivity and access to the Rim of the Valley trails corridor and other adjacent open space resources using such tools as easements and trail and greenway linkages.

3.14.3 Environmental Setting

The Olive View–UCLA Medical Center Campus sits at the southern foothills of the San Gabriel Mountains, which provide the Sylmar community with access to open space and recreational areas. Equestrian facilities and trails are a defining feature of the Sylmar community, with trails connecting the suburban residential areas to the west, south, and east to the foothills and mountains to the north.

There are no existing recreational resources located on the campus other than passive open spaces and equestrian trails along portions of the perimeter of the campus that provide access to the trails north of the campus.

Parks and recreational facilities that are located within 3 miles of the project site are identified and described in Table 3.14-1, below, and shown in Figure 3.13-1, in Section 3.13, *Public Services*, of this EIR. These park and recreational facilities are owned and operated by LADRP, the Los Angeles County Parks and Recreation Department (LACPRD), or the Santa Monica Mountains Conservancy (SMMC), which was established by the California State Legislature in 1980 to help create and preserve parkland in both wilderness and urban settings. The mountains and open space to the north of the campus within the Angeles National Forest are under the jurisdiction of the Department of Agriculture's U.S. Forest Service.

The nearest designated recreational area to the campus is Wilson Canyon Park, which covers an expanse of the mountains directly north of the campus and is owned and operated by SMMC.

Table 3.14-1. Parks and Recreational Facilities in the Study Area

Park or Recreational Facility/Agency	Address	Amenities	Distance from Project Site
Wilson Canyon Park/ SMMC	14450 Olive View Dr., Sylmar, CA 91342	Equestrian trails, hiking, camping, and bike paths	Borders Campus
Saddletree Open Space/ SMMC	Sylmar, CA 91342	Equestrian trails, hiking, picnic areas, and bike paths	0.17 mi
Sylmar Recreation Center/ LADRP	13109 Borden Ave., Sylmar, CA 91342	Two gymnasiums (also serve as auditoriums), baseball diamond (lighted), basketball courts (lighted/outdoor), children's play area, community room, indoor gym (without weights), picnic tables, soccer field (unlighted), tennis courts (lighted), summer pool (unheated/outdoor)	1.21 mi

Park or Recreational Facility/Agency	Address	Amenities	Distance from Project Site
Stetson Ranch Park/ LADRP	13877 Glenoaks Blvd., Sylmar, CA 91342	Equestrian trails, horse ranch, riding arenas, shows, stables	1.33 mi
Veteran's Memorial Park/ LACPRD	13000 Sayre St., Sylmar, CA 91342	Green space with picnic and camping areas	1.9 mi
El Cariso Park/ LACPRD	13100 Hubbard St., Sylmar, CA 91342	Picnics, tennis courts, and public pool	2.4 mi
Telfair Park (Valleycrest Park)/ LADRP	15721 Cobalt Ave., Sylmar, CA 91342	Picnic tables, water fountain, playground	2.18 mi
Carey Ranch Park/ LADRP	15021 Briarhill Dr., Sylmar, CA 91342	Baseball field	2.78 mi
Note: The "distance from project site" metric in the table represents the driving distance between facilities, rather than the straight-line distance. Sources: ICF, LADRP, City of Los Angeles Department of Recreation and Parks, 2016.			

3.14.4 Environmental Impact Analysis

3.14.4.1 Methods

The impacts analysis presented below is based on a desktop inventory that was conducted to identify recreational uses that might be affected by construction and operation of the facilities that would be developed under the proposed Olive View–UCLA Center Campus Master Plan. Information was compiled from regional/local maps and planning documents, including the Sylmar Community Plan, city of Los Angeles General Plan, and Los Angeles County General Plan, which were reviewed to provide insight into recreational goals and regulations for the community surrounding the project. The analysis evaluated the proposed Master Plan's consistency with applicable community, city, and County plans and policies related to recreation, as well as any potential impacts resulting from construction and operation of the project.

3.14.4.2 Thresholds of Significance

For the purposes of the analysis in this EIR, and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant environmental impact if it would:

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; or

REC-2 Include recreational facilities or require the construction or expansion of recreational facilities that would have a substantial adverse physical effect on the environment.

3.14.4.3 Impacts and Mitigation Measures

Impact REC-1: Would the Proposed Master Plan 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 Impacts

Tier I

Construction of the proposed project facilities would require employing several crews of construction workers on the campus over a period of years. The exact number of workers on-site at any one time will depend on the construction schedules for the individual development projects proposed under the Master Plan, which remain to be determined. However, given the general accessibility of the project site and availability of construction workers, it is unlikely that a substantial number of construction workers and their families would relocate to the immediate vicinity of the project such that use of existing parks or recreational facilities would increase to the point that substantial deterioration would occur.

Additionally, although users of nearby parks, particularly Wilson Canyon Park and Saddletree Open Space, and equestrian and hiking trails in the immediate vicinity of the campus may experience noise, dust, diminished access, and other nuisance impacts during construction, it is not expected that these temporary construction impacts would result in the substantial physical deterioration of any of the parks or recreational facilities listed in Table 3.14-1. Therefore, construction-period impacts due to park use and deterioration would be less than significant.

Tier II

Impacts under Tier II would occur primarily within the western two-thirds of the campus. Although construction activities would affect a larger area of the campus than under Tier I, impacts would be similar to those described above for Tier I and would be less than significant.

Mitigation Measures

Construction impacts during Tiers I and II would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

Under Tier I, a 48-bed Recuperative Care Center and an 80-bed Residential Treatment Program facility would be constructed to provide temporary housing and a supportive, home-like setting for patients to recover after being discharged from the hospital. It is anticipated that the length of stay for the occupants of the facilities would be between 10 and 14 days. In addition, a Mental Health Urgent Care Center and a Mental Health Wellness Center would be constructed to provide immediate mental health services and serve as intermediary levels of service between psychiatric emergency rooms and psychiatric hospitals. The occupants of the facilities may use the parks and

recreational facilities on the campus or in the immediate vicinity. Additionally, development under Tier I would result in increases in the number of campus employees (1,997 additional employees) and visitors, who could choose to use nearby recreational facilities. Since local recreational resources are most frequently used by local residents, rather than campus employees or visitors or hospital patients, Tier I development is not expected to directly result in a substantial increase in use of local parks. Therefore, substantial deterioration of local parks and recreational facilities is not expected to occur as a result of the potential increase in the on-campus populations that could occur under Tier I. Furthermore, Tier I would include new recreational facilities (mostly passive open space) for use by employees, visitors to the Campus, occupants of the proposed Restorative Care Village facilities, and the community. These facilities, as described in the Master Plan, could include sculpture gardens, community gardens, courtyards, areas for sports and active recreation, a fitness and therapy garden, a community green and amphitheater, wildflower gardens, and woodland areas. Additionally, the increase in the number of households that could indirectly occur because of an increase in the number of medical center employees would most likely be dispersed over a wide geographic area within commuting distance of the campus. As a consequence, the demand for park facilities that could indirectly occur due to the Tier I development would be similarly dispersed over a wide geographic area. Impacts would be less than significant.

Tier II

Development under Tier II would also result in an increase in the number of campus employees and visitors (an additional 1,632 employees under Tier II or a net increase of 3,629 employees under Tier I and Tier II combined). However, development would include the construction of new landscaped and open space areas on campus to provide easily accessible outdoor experiences for employees, visitors to the campus, and the public. Proposed recreational areas under Tier II include the expansion of equestrian, bicycle, and pedestrian pathways, riparian gardens, a bird and butterfly garden, meditation garden, healing garden, and an art program that may include large-scale games and bocce courts. As a consequence, Tier II development is not expected to result in an increase in the use of off-campus recreational facilities in the project vicinity such that substantial deterioration of those facilities would occur. Impacts would be less than significant.

Mitigation Measures

Operational impacts during Tiers I and II would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Impact REC-2: Would the Proposed Master Plan include Recreational Facilities or Require the Construction or Expansion of Recreational Facilities that Would Have a Substantial Adverse Physical Effect on the Environment?

Construction Impacts

Tier I

Development under Tier I would include new landscaped and open space areas, which are intended to encourage outdoor recreation (primarily passive in nature), increase mobility within the campus, facilitate access to and throughout the site, and promote a sense of community with spaces

accessible to residents in the project vicinity. These facilities include trailheads, gardens, and open community spaces. Construction of these proposed landscaped and open space areas would require demolition, grading, and excavation activities and the construction of permanent facilities. These construction activities would result in a temporary increase in noise and a decrease in air quality that would be experienced by local residents and hospital patrons. The reader is referred to Sections 3.2, *Air Quality*, and 3.11, *Noise*, of this EIR, for detailed descriptions of the proposed project's potential construction impacts, as well as the best management practices (BMPs) and mitigation measures proposed to minimize any adverse or potentially significant impacts.

Tier II

Impacts under Tier II would be similar to those described under Tier I. Under Tier II, equestrian, bicycle, and pedestrian pathways would be completed, creating a fabric of pathways through the campus that connect the site to the community, and the mountains in the north. Additional gardens, courtyards, and wooded areas would be developed to provide recreational opportunities to campus visitors and residents. Please see Section 3.2, *Air Quality,* and Section 3.11, *Noise,* for descriptions of the proposed project's potential construction impacts, as well as the BMPs and mitigation measures proposed to minimize any adverse or potentially significant impacts.

Mitigation Measures

Please see Section 3.2, *Air Quality,* and Section 3.11, *Noise,* of this EIR for measures to reduce the impacts due to construction of Master Plan facilities, including any on-campus recreational or passive open space areas.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

As noted above, the proposed Master Plan includes new landscaped and open space areas, which are intended to encourage outdoor recreational activities. It is not expected that routine daily use of these open space areas would result in significant operational impacts on the environment.

As discussed above, the potential increase in number of households associated with the increased on-campus employee population and the presence of the Residential Treatment Program is unlikely to result in a significant increase in the demand for recreational facilities in any one area. Therefore, it is unlikely that construction of new recreational facilities would be required to meet a widely dispersed demand for parks and recreational facilities. Additionally, implementation of the Master Plan would result in new landscaped and open space areas, which could help offset any potential increases in the use of existing local recreational facilities due to new employees who choose to reside in the immediate vicinity of the campus. Impacts would be less than significant.

Tier II

Operational impacts under Tier II would be similar to those described for Tier I. Given that Tier II would include new landscaped and open space areas for passive recreational use, development on the campus and the resulting increase in employee and visitor populations is unlikely to result in a significant increase in demand for offsite recreational facilities. Therefore, it is not anticipated that

construction of new offsite facilities would be required to meet that demand; as a consequence, recreation impacts under Tier II would be less than significant.

Mitigation Measures

Operational impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

3.14.5 Cumulative Impacts

The study area for the cumulative recreation impacts consists of the related projects within an approximately 2-mile radius of the project site. These related projects, which are listed in Table 2-2 and depicted in Figure 2-9 of Chapter 2, *Project Description*, of this EIR, consist of 647 units of predominantly multifamily housing, as well as commercial, industrial, and institutional uses, and a 9-acre recreational facility. Development of these related projects would increase the residential and employee populations in the project area, which would increase the use of and demand for local recreational facilities. However, it should be noted that residential subdivisions proposed within the city of Los Angeles are required to provide local park space to serve their respective populations, pay a fee in lieu of the provision of such parkland, or do a combination of both in accordance with the local ordinance in the LAMC, which would mitigate the cumulative impacts on park and recreational facilities resulting from residential development in the city of Los Angeles. Given this fact and because the proposed Master Plan would create additional open space and passive recreational areas on the campus that could be used by campus visitors, employees, and local community residents, the proposed Master Plan and related projects would not result in significant cumulative impacts on local recreational and park resources due to the increased use and resulting physical deterioration of these facilities.

As noted in the discussion of Impact **REC-2** above, construction of proposed campus facilities, including open space and recreational areas, would result in a temporary increase in noise and lower air quality that would be experienced by local residents and hospital patrons. The reader is referred to Sections 3.2, *Air Quality*, and 3.11, *Noise*, of this EIR, for detailed descriptions of the proposed project's potential construction impacts, as well as the BMPs and mitigation measures proposed to minimize any adverse or potentially significant impacts. Because of the distance separating the related projects from the campus (the closest related project is approximately a half-mile from the medical center campus), it is unlikely the related projects would contribute to or exacerbate Master Plan impacts on nearby sensitive land uses. Therefore, construction of proposed Master Plan recreational and open space facilities would not result in a cumulatively considerable contribution to a significant recreation impact.

3.15 Transportation/Traffic

3.15.1 Introduction

This section summarizes the potential transportation and traffic impacts due to construction and operation of the proposed project. The information is based on the traffic study prepared for the project by Fehr & Peers (2019), which is included as Appendix J of this EIR. This section includes a review of existing conditions, a summary of applicable policies and regulations related to transportation and traffic, and an analysis of the traffic impacts of the project, including potential cumulative effects. Where feasible, mitigation measures are recommended to reduce expected impacts that are identified as significant.

3.15.2 Regulatory Setting

There are no relevant federal or state regulations for transportation and traffic. This section summarizes local regulations that apply to the proposed project.

3.15.2.1 Regional Transportation Planning

Southern California Area Governments Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is a Joint Powers Authority under California state law. SCAG was established as an association of local governments and agencies. These local governments and agencies voluntarily convene as a forum to address regional issues.

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, and six county transportation commissions, which have primary responsibility for programming and implementing transportation projects, programs, and services in their respective counties.

SCAG is designated under federal law as a Metropolitan Planning Organization, a Regional Transportation Planning Agency, and a Council of Governments under state law. SCAG bylaws provide for representation of air districts in the region. SCAG develops long-range regional transportation plans, including growth forecast components, regional transportation improvement programs, and a portion of the South Coast Air Quality District's management plans.

According to SCAG, its Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range visioning plan that balances future mobility and transportation needs with economic, environmental, and public health goals. The RTP/SCS is a vision for the region's future. It was developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the region.

More than 4,000 transportation projects from local county plans, ranging from highway improvements to railroad grade separations, bicycle lanes, new transit hubs, and replacement bridges, were included in the 2016 RTP/SCS to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone.

3.15.2.2 County of Los Angeles

General Plan 2035

Mobility Element

The Mobility Element provides an overview of the County's transportation infrastructure and strategies for developing an efficient and multimodal transportation network. The element assesses the challenges and constraints for the County's transportation system and offers policy guidance to reach the County's long-term mobility goals. Two sub-elements—the Highway Plan and Bicycle Master Plan—supplement the Mobility Element. These plans, which establish policies for roadway and bikeway systems in unincorporated areas, coordinate with policies for roadway and bikeway networks in the County's 88 incorporated cities. The general plan also establishes a program for preparing community pedestrian plans, with guidelines and standards that promote walkability and connectivity throughout the unincorporated areas.

Los Angeles County Metropolitan Transportation Authority's Congestion Management Program

The Los Angeles Congestion Management Program (CMP) is a state-mandated program that was enacted by the California state legislature with the passage of Proposition 111 in 1990, as administered by the Los Angeles County Metropolitan Transportation Authority (Metro). The purpose of the CMP is to develop a coordinated approach to managing and decreasing traffic congestion by linking various transportation, land use, and air quality planning programs throughout the county. One required element of the CMP is a process to evaluate the transportation and traffic impacts of large projects on the regional transportation system. That process is undertaken by local agencies, project applicants, and traffic consultants through a transportation impact report, usually prepared as part of the California Environmental Quality Act (CEQA) project review process.

The 2010 CMP for the county (adopted October 28, 2010) was developed in part to link local land use decisions with their impacts on regional transportation. The CMP identifies a system of highways and roadways, with the minimum level-of-service (LOS) performance measurement designated as LOS E (unless exceeded in base-year conditions) for highway segments and key roadway intersections on this system. A traffic impact analysis (TIA) is required for projects that generate at least 50 new trips at CMP intersections during the peak hour or 150 trips to mainline freeway locations. The analysis must investigate measures that will mitigate significant CMP system impacts; develop cost estimates, including fair-share costs to mitigate the impacts of a proposed project; and indicate the responsible agency. Selection of the final mitigation measures is left to the discretion of the local jurisdiction. Once a mitigation program is selected, the jurisdiction self-monitors implementation through the existing mitigation monitoring requirements of CEQA.

3.15.2.3 City of Los Angeles

City of Los Angeles Mobility Plan 2035

In August 2015, the city of Los Angeles updated the Transportation Element of the City's General Plan, now referred to as Mobility Plan 2035, or MP 2035, to reflect policies and programs that will lay the policy foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit

users, and vehicles throughout the city. MP 2035 and the final environmental impact report (EIR), adopted on August 11, 2015, are compliant with the 2008 Complete Streets Act, which mandated that the Circulation Element of a city's general plan must be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

City of Los Angeles 1999 General Plan Transportation Element

The Transportation Element includes a discussion of existing roadway infrastructure in the city of Los Angeles. Goals, objectives, and policies are included in the Transportation Element to ensure efficient circulation within the city and region.

Traffic Study Policies and Procedures

The Los Angeles Department of Transportation's (LADOT) Traffic Study Policies and Procedures establishes significant traffic impact thresholds and procedures for determining project impacts on operations at intersections and along roadway/freeway segments (City of Los Angeles 2014).

3.15.3 Environmental Setting

The assessment of conditions relevant to this study includes a description of the study area, an inventory of the local street system in the vicinity of the project site, a review of traffic volumes on these facilities, an assessment of the resultant operating conditions, and the current transit service in the study area. A detailed description of these elements is presented in the following sections.

3.15.3.1 Study Area

The proposed project is located at 14445 Olive View Drive in the Sylmar community of Los Angeles. All intersections are within the city of Los Angeles. Nine driveways along Olive View Drive provide access to the site. The study area extends from the project site southwest to Interstate (I) 5 and southeast to Polk Street.

The area around the medical center contains a mature network of freeways and arterial, collector, and local streets that are accessible to drivers, both from a local and a regional perspective.

Major freeways near the medical center include the Foothill Freeway (I-210) and the Golden State Freeway (I-5). I-210, with access ramps at Roxford Street and Polk Street, follows an east–west path through the region and provides access to San Bernardino. I-5, with an access ramp at Roxford Street, providing access to I-210, runs north–south approximately 2 miles to the west and provides access to Los Angeles and Santa Clarita as well as areas beyond. High-occupancy toll (HOT) lanes, which are available to vehicles with more than one occupant or drivers with pre-paid transponders, are provided on I-5, beginning at the intersection of I-5 and State Route 118 and continuing north to the Santa Clara River as well as areas beyond.

The area around the medical center is served by a network of streets that generally run northeast–southwest or northwest–southeast, according to local topography and historic development patterns. Olive View Drive and Foothill Boulevard, which are south of the campus, are east–west

arterial facilities. Roxford Street and Polk Street, which are west and east of the campus, are north–south arterial facilities.

Following extensive coordination with staff members from the County of Los Angeles, California Department of Transportation (Caltrans), and LADOT, 14 intersections were selected to be studied as part of the TIA for the proposed project:

1. Foothill Boulevard and Glenoaks Boulevard
2. I-210 westbound ramps and Roxford Street
3. I-210 eastbound ramps and Roxford Street
4. Foothill Boulevard and Roxford Street
5. Glenoaks Boulevard and Roxford Street
6. San Fernando Road and Roxford Street
7. I-5 northbound off-ramp/Encinitas Avenue and Roxford Street
8. I-5 southbound ramps and Roxford Street
9. Olive View Drive and Bledsoe Street
10. Foothill Boulevard and Bledsoe Street
11. Glenoaks Boulevard and Bledsoe Street
12. I-210 westbound ramps and Polk Street
13. I-210 eastbound ramps and Polk Street
14. Foothill Boulevard and Polk Street

All intersections are controlled by traffic signals, with the exception of Olive View Drive and Bledsoe Street (Intersection 9), which is an all-way stop-controlled intersection. Per LADOT guidelines, this location was analyzed to determine the need for signalization. Figure 3.15-1 shows the project site and the 14 intersections that were analyzed for the traffic study.

Existing Street System

Primary regional access to the site is provided by I-5 and I-210. The following is a brief description of the streets that serve the site.

Freeways

- **Foothill Freeway (I-210):** The Foothill Freeway runs east–west to the south of the project site. Access from the project site to the Foothill Freeway is provided by interchanges at Roxford Street and Polk Street.
- **Golden State Freeway (I-5):** The Golden State Freeway runs north–south approximately 2 miles west of the project site. Access from the project site to the Golden State Freeway is provided by an interchange at Roxford Street and from the Foothill Freeway.

- **Olive View Drive:** Olive View Drive is designated as an Avenue II and part of the Neighborhood Enhanced Network, according to MP 2035. The roadway runs east–west adjacent to the project site and provides two travel lanes in each direction and a two-way left-turn lane. Unrestricted parking is generally available on either side of the street. The posted speed limit is 40 mph.

Figure 3.15-1. Project Site and Study Area

Source: Fehr & Peers 2019.

Northwest–Southeast Roadways

- **San Fernando Road:** San Fernando Road, designated as an Avenue I, is part of the Bicycle Enhanced Network and the Transit Enhanced Network, according to MP 2035. The roadway runs northwest–southeast to the south of the project site and provides two travel lanes in each direction and a two-way left-turn lane. Unrestricted parking is available on many portions of the west side of the street. No parking is allowed adjacent to the Metrolink tracks on the east side of the street. The posted speed limit is 40 mph.
- **Glenoaks Boulevard:** Glenoaks Boulevard is designated as an Avenue II, according to MP 2035. The roadway runs northwest–southeast to the south of the project site and provides two travel lanes in each direction, with intersection turn lanes on portions of the roadway. Unrestricted parking is available on portions of both sides of the street. The posted speed limit is 35 mph.
- **Foothill Boulevard:** Foothill Boulevard is designated as an Avenue I, according to MP 2035. The roadway provides two travel lanes in each direction and a center turn lane north, except between Filbert Street and Bledsoe Street where there is one travel lane in each direction and a two-way left-turn lane. There is a bicycle lane between Hubbard Street and Polk Street and between Tyler Street and Balboa Boulevard. Restricted and unrestricted parking is available on portions of both sides of the street. The posted speed limit is 45 mph.
- **Encinitas Avenue:** Encinitas Avenue is designated as an Avenue II, according to MP 2035. The roadway runs northwest–southeast approximately 2 miles to the southwest of the project site. North of Cobalt Street, the roadway provides two travel lanes, one heading north and one heading south. South of Cobalt Street, there is one travel lane in each direction. The street also has a two-way left-turn lane. Restricted and unrestricted parking is available on both sides of the street on portions of the roadway. There is no posted speed limit on the street.

Northeast–Southwest Roadways

- **Roxford Street**. Roxford Street is designated as an Avenue I, according to MP 2035. The roadway runs northeast–southwest to the west of the project site. The street provides two travel lanes and a center turn lane in each direction south of Ralston Avenue and one travel lane in each direction and a center turn lane north of Ralston Avenue. Unrestricted parking is available on either side of the street on portions of the roadway. The posted speed limit is 35 mph.
- **Bledsoe Street**. Bledsoe Street is designated as an Avenue I west of Glenoaks Boulevard and an Avenue II south of San Fernando Road, according to MP 2035. The roadway runs northeast–southwest to the south of the project site and provides one vehicle travel lane in each direction. There is also a bicycle lane in each direction between San Fernando Road and De Garmo Avenue. Unrestricted parking is available on either side of the street on most portions of the roadway. The posted speed limit is 25 mph north of Foothill Boulevard and 35 mph south of Foothill Boulevard.
- **Polk Street.** Polk Street is designated as an Avenue I, according to MP 2035. The roadway runs northeast–southwest to the south of the project site and provides two travel lanes in each direction and a center turn lane. There is also a bicycle lane in each direction between Laurel Canyon Boulevard and Sunrise Ridge Road and between San Fernando Road and Glenoaks Boulevard. Restricted and unrestricted parking is available on either side of the street. The posted speed limit is 35 mph in some locations and 40 mph in others.

Existing Transit Service

Five bus lines currently operate in the study area. These transit lines are operated by Metro and LADOT. Transit lines are described below and illustrated in Figure 3.15-2.

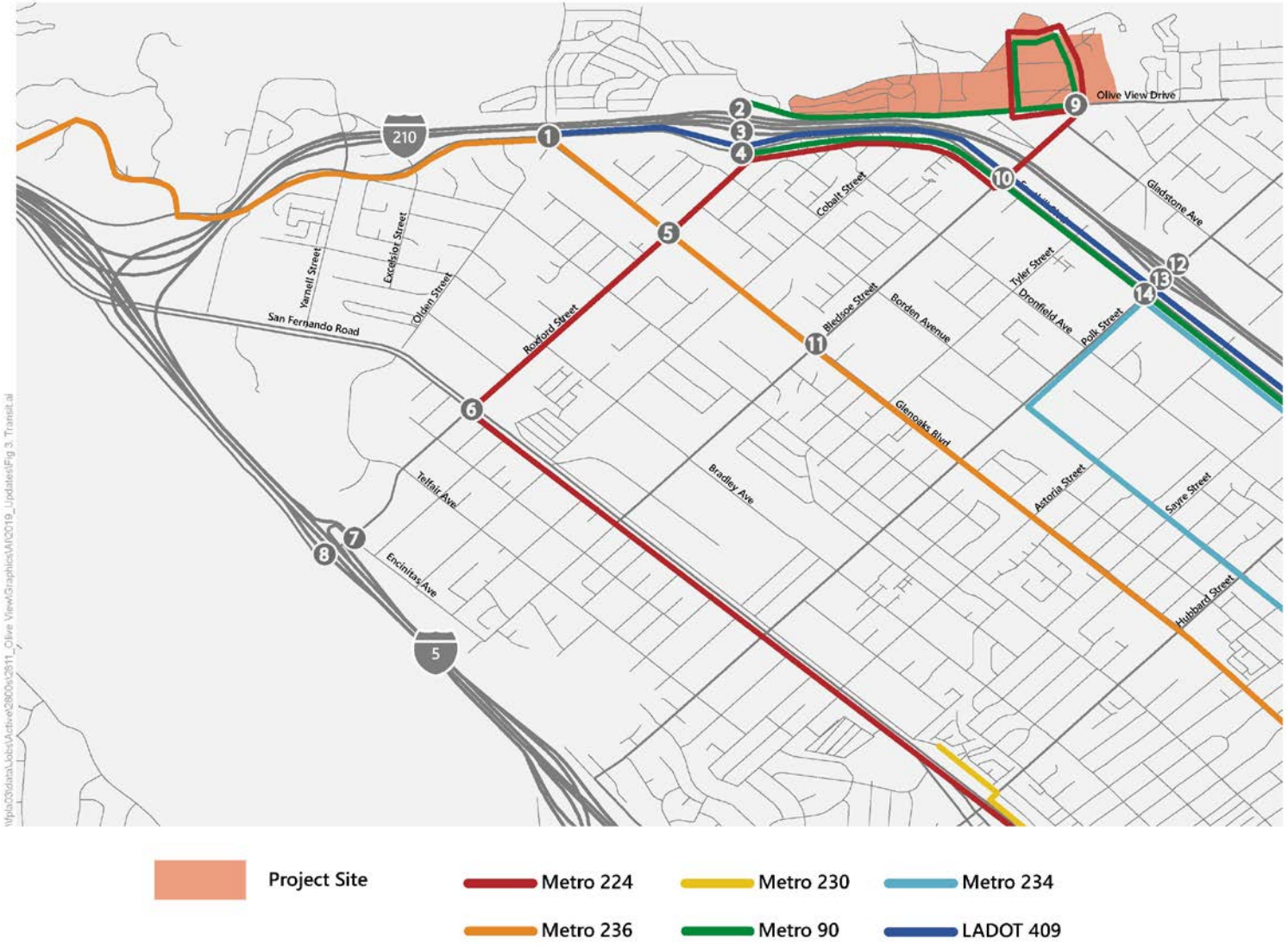
- **Metro Line 90:** Line 90 is a north–south line that runs from downtown Los Angeles to Olive View–UCLA Medical Center. The line has 30- to 60-minute headways during the a.m. peak period and 30-to 50-minute headways during the p.m. peak period. The line runs on Foothill Boulevard, Roxford Street, and Olive View Drive within the study area, with stops every few blocks, and provides site access from a stop on Reagan Road within the campus.
- **Metro Line 22:** Line 224 is a north–south line that runs from the Universal/Studio City Red Line station to Olive View–UCAL Medical Center. The line has 8- to 20-minute headways during the a.m. peak period and 20- to 30-minute headways during the p.m. peak period. The line runs on San Fernando Road, Roxford Street, Foothill Boulevard, Bledsoe Street, and Olive View Drive within the study area with stops every few blocks. Project site access is provided from the final stop on the line on Kennedy Road within the Olive View–UCLA Medical Center Campus.
- **Metro Line 234**: Line 234 is a north–south line that runs from Sherman Oaks to Mission College in Sylmar, with weekend, early-morning, and late-night service to the Sepulveda Expo Line station. The line has 15- to 25-minute headways during the a.m. peak period and 45- to 40-minute headways during the p.m. peak period. The line runs on Polk Street within the study area, with project site access provided from a stop at the intersection of Polk Street and Foothill Boulevard.
- **Metro Line 236:** Line 236 is a north–south line that runs from Encino to the Sylmar Metrolink station. The line has 60- to 65-minute headways during a.m. and p.m. peak periods and runs on Foothill Boulevard and Glenoaks Boulevard within the study area. Project site access is provided from a stop at the intersection of Glenoaks Boulevard and Roxford Street.
- **LADOT Commuter Express 409**: Commuter Express 409 is a north–south line that runs from downtown Los Angeles to Foothill Boulevard and Glenoaks Boulevard in Sylmar. It provides directional morning and afternoon peak-period service on weekdays only. The line has 25- to 40-minute headways during the a.m. peak period and 15- to 20-minute headways during the p.m. peak period. During the a.m. period, all buses run southbound; during the p.m. period, all buses run northbound. The line runs on Foothill Boulevard within the study area and provides project site access from a stop at Foothill Boulevard and Bledsoe Street.

Existing Bicycle and Pedestrian Facilities

There is limited dedicated bicycle infrastructure within the study area. South of the project site, a bicycle path (Class I facility) runs along San Fernando Road south of Roxford Street. With the exception of a gap between Tyler Street and Bledsoe Street, bicycle lanes (Class II facilities) exist along much of Foothill Boulevard near the project site. There are additional bicycle lanes at the edge of the study area on Bledsoe Street and Polk Street. MP 2035 provides for future bicycle lanes within the study area at the following locations:

- Foothill Boulevard between Polk Street and Tyler Street
- All of Polk Street in the study area
- Roxford Street between Telfair Avenue and Foothill Boulevard
- San Fernando Road north of Roxford Street to the edge of the study area
- All of Glenoaks Boulevard in the study area

Figure 3.15-2. Existing Transit Lines



Source: Fehr & Peers, 2019.

In addition, the following segments are part of the Neighborhood Enhanced Network:

- All of Olive View Drive in the study area
- Roxford Street between Foothill Boulevard and Olive View Drive
- All of Herrick Drive in the study area
- All of Dronfield Avenue in the study area
- Gladstone Avenue between Polk Street and Astoria Street
- The entire length of Eldridge Avenue in the study area
- Telfair Avenue east of Roxford Street
- Astoria Street between San Fernando Road and Gladstone Avenue

The pedestrian network in the study area is incomplete. Bledsoe Street does not have sidewalks north of Foothill Boulevard. Olive View Drive has incomplete segments of sidewalk. Sidewalks are generally provided on streets in the study area southwest of Foothill Boulevard, but portions of many streets lack sidewalks on one or both sides. Crosswalks that exist at signalized intersections are either pre-timed or actuated by push buttons. The portion of Olive View Drive between Roxford Street and the project site is part of the Enhanced Pedestrian Network in MP 2035.

Existing and planned bicycle facilities are illustrated in Figure 3.15-3.

3.15.3.2 Existing Traffic Volumes and Levels of Service

Weekday a.m. and p.m. peak-period traffic counts were conducted at the 14 analyzed intersections in March and June of 2016. Existing peak-hour weekday traffic volumes are illustrated in Figure 5 of the traffic study (see Appendix J of this EIR). The 2016 volumes were increased by 0.46 percent per year, the area-wide traffic growth factor discussed in Section 3.15.1.1, to estimate 2019 volumes for the intersection analysis.

Intersection Level-of-Service Standards and Methodology

LOS is a qualitative measure that is used to describe the condition of traffic flow, ranging from excellent conditions (LOS A) to overloaded conditions (LOS F). LOS D is typically recognized as the minimum desirable LOS in urban areas. Table 3.15-1 shows the LOS definitions.

The city of Los Angeles requires the use of the Critical Movement Analysis (CMA) methodology to evaluate operations at intersections. This methodology is accepted by the County of Los Angeles, the lead agency for this study. The CMA method of intersection capacity analysis determines the intersection volume-to-capacity (V/C) ratio as well as the corresponding LOS for turning movements and intersection characteristics at signalized intersections. The CALCADB software package developed by LADOT was used to implement the CMA methodology.

The City's Automated Traffic Surveillance and Control (ATSAC) system is a computer-based traffic signal control system that monitors traffic conditions and system performance to manage signal timing and improve traffic flow. The Adaptive Traffic Control System (ATCS) is an enhancement to ATSAC that provides traffic-adaptive signal control, which is based on real-time traffic conditions.

Figure 3.15-3. Existing and Planned Bicycle Facilities

Source: Fehr & Peers 2019.

Table 3.15-1. Level-of-Service Definitions for Signalized Intersections

Level of Service	V/C Ratio	Definition
A	0.000–0.600	**EXCELLENT**. No vehicle waits longer than one red light, and no approach phase is fully used.
B	0.601–0.700	**VERY GOOD**. Occasionally, an approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701–0.800	**GOOD**. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801–0.900	**FAIR**. Delays may be substantial during portions of the rush hours, but enough lower-volume periods occur to clear developing lines and prevent excessive backups.
E	0.901–1.000	**POOR**. This represents the maximum number of vehicles the intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	**FAILURE**. Backups from nearby locations or on cross streets may restrict or prevent the movement of vehicles out of the intersection approaches. Tremendous delays, with continuously increasing queue lengths.
Source: Transportation Research Board. 1980. *Transportation Research Circular No. 212, Interim Materials on Highway Capacity*.		

All of the signalized intersections in the study area are currently operating under the City's ATSAC system. Deployment of ATCS control has not yet been completed, though it will be operational by 2016. ATSAC and, where installed, ATCS improve operating conditions. In accordance with city of Los Angeles procedures, a credit amounting to a 0.07 V/C ratio reduction was applied to study intersections to reflect the benefits of ATSAC. An additional 0.03 V/C reduction was applied at each intersection where ATCS is implemented.

Signal Warrant Analysis

LADOT requires that unsignalized intersections be studied to determine if there is a need for the installation of a traffic signal. A signal warrant analysis was conducted for Olive View Drive and Bledsoe Street, using volumes from the a.m. and p.m. peak hours. The warrant analyses were conducted in accordance with the procedures described in Chapter 4C of the *California Manual on Uniform Traffic Control Devices* (CA-MUTCD) (2014).

The warrant for a traffic signal is met if the following conditions exist for the same 1 hour of an average day:

1. The total delay (stopped time) experienced by traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds four vehicle hours for a one-lane approach or five vehicle hours for a two-lane approach.
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes.
3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

To conduct the signal warrant analysis, the *Highway Capacity Manual* (HCM) (Transportation Research Board 2010) methodology was used to calculate delay for the unsignalized intersection that is part of the study.

Existing Levels of Service

The existing traffic volumes were analyzed using the methodologies described above to determine current operating conditions at signalized intersections. Table 3.15-2 summarizes the existing (2019) LOS analysis results for the signalized intersections. As shown in the table, all of the intersections are currently operating at LOS D or better during the analyzed peak hours.

Table 3.15-2. Existing (2019) Intersection Level-of-Service Analysis

ID	North/South Street Name	East/West Street Name	Peak Hour	Existing	
				V/C	LOS
1	Glenoaks Boulevard	Foothill Boulevard	a.m.	0.243	A
			p.m.	0.167	A
2	Roxford Street	I-210 westbound ramps	a.m.	0.474	A
			p.m.	0.443	A
3	Roxford Street	I-210 eastbound ramps	a.m.	0.489	A
			p.m.	0.307	A
4	Roxford Street	Foothill Boulevard	a.m.	0.507	A
			p.m.	0.373	A
5	Roxford Street	Glenoaks Boulevard	a.m.	0.483	A
			p.m.	0.294	A
6	Roxford Street	San Fernando	a.m.	0.424	A
			p.m.	0.374	A
7	Roxford Street	Encinitas Avenue/ I-5 northbound	a.m.	0.633	B
			p.m.	0.462	A
8	Roxford Street	I-5 southbound ramps	a.m.	0.848	D
			p.m.	0.572	A
10	Bledsoe Street	Foothill Boulevard	a.m.	0.343	A
			p.m.	0.281	A
11	Bledsoe Street	Glenoaks Boulevard	a.m.	0.409	A
			p.m.	0.281	A
12	Polk Street	I-210 westbound ramps	a.m.	0.655	B
			p.m.	0.569	A
13	Polk Street	I-210 eastbound ramps	a.m.	0.791	C
			p.m.	0.527	A
14	Polk Street	Foothill Boulevard	a.m.	0.738	C
			p.m.	0.653	B

Notes:
Intersections 3 and 9 are stop controlled and analyzed only to determine the need for signalization, per LADOT guidelines.
Source: Fehr & Peers 2019.

3.15.4 Environmental Impact Analysis

This section describes the traffic and transportation impacts that could occur with implementation and buildout of Tier I of the proposed Master Plan. It discusses the methods that were used to determine the impacts of the project and lists the thresholds that were considered to determine whether the impacts would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, compensate for) significant impacts accompany the impacts discussion.

3.15.4.1 Methods

To evaluate the potential impacts of the proposed project on the street system, it was necessary to develop estimates regarding future traffic conditions in the study area, both with and without the project. Baseline and future traffic volumes were first estimated for the study area without the project. The future forecasts reflect traffic increases due to general regional growth and traffic expected to be generated by other developments in the vicinity of the project, representing cumulative base (no-project) conditions. Because the proposed project would include demolition of some parking facilities and the construction of others, travel patterns in the immediate vicinity would change. Trips generated by existing uses that would be removed were estimated and unassigned from the surrounding street system. Project traffic was estimated and separately assigned to the surrounding street system. The sum of existing baseline and project-generated traffic represents the existing-plus-project scenario. The sum of the cumulative base and project-generated traffic represents cumulative-plus-project conditions.

Project Traffic Projections

The development of trip generation estimates for the proposed project involves a three-step process that considers trip generation, trip distribution, and traffic assignment.

Project Trip Generation

The proposed Master Plan would guide future development on the Olive View–UCLA Medical Center Campus. Trip generation rates from *Trip Generation,* 10th edition (Institute of Transportation Engineers [ITE] 2017) were used to estimate the number of trips associated with the development that could occur under Tier I of the Master Plan (see Tables 3a and 3b of the traffic study in Appendix J of this EIR).

Internal trip credits, defined as reductions applied to trip generation estimates related to trips made within the site between land uses, are applied at a rate of 10 percent of the daily and peak-hour trips to all land uses on the site. The buildings and activities on the Olive View–UCLA Medical Center Campus are related to one another. This would continue as the site adds complementary uses. The estimation of internal trip credits was based on the recommended factors provided in *Trip Generation, a* review of traffic studies for projects in the region, and consultation with County and city of Los Angeles staff members as part of the Memorandum of Understanding process.

A 2 percent transit, walk, and bike credit was applied to the all land uses on the site, based on recent data collected by the South Coast Air Quality Management District on travel-to-work behavior at this site. The credits account for trips to and from the project site, using modes other than automobiles. The site is within walking distance of the several Metro bus lines. In addition, a 10 percent carpool trip credit was taken for the site, also based on data collected by the South Coast Air Quality Management District on travel-to-work behavior for the site.

Development under Tier I of the proposed Master Plan is expected to generate a net increase in daily trips totaling 3,841, including 393 trips during the a.m. peak hour (288 inbound/105 outbound) and 401 trips during the p.m. peak hour (101 inbound/300 outbound) (see Tables 3a and 3b of the traffic study in Appendix J of this EIR).

Project Traffic Distribution and Assignment

The geographic distribution of trips generated by the proposed project is dependent on the characteristics of the street system that serves the project site, the level of accessibility to routes to and from the project site, and the locations of employment and commercial centers to which residents of the project would be drawn. The general distribution pattern for this EIR, as illustrated in Figure 3.15-4, was developed in consultation with LADOT and County staff members. Aggregated data on existing home zip codes for staff members and patients were used to determine origins for trips to and from the project site.

The traffic expected to be generated by the proposed project was assigned to the street network, using the distribution pattern illustrated in Figure 3.15-4. The net increase in project traffic was based on the vehicle access and circulation diagram from the Olive View–UCLA Medical Center Campus Master Plan, as seen in Figure 3.15-5. Figure 8 of the traffic study in Appendix J of this EIR illustrates the assignment of net new project traffic under the Tier I development scenario at the 14 intersections analyzed in this study.

Existing Baseline-plus-Project Traffic Projections

Estimated project traffic was added to existing traffic volumes to estimate existing-plus-project traffic volumes. Existing-plus-project traffic volumes were analyzed to determine projected V/C ratios and the LOS for each intersection. Table 3.15-3 summarizes the existing-plus-project LOS. None of the study intersections are projected to operate at LOS E or F during any peak hours.

Future Street Network Changes

The draft Sylmar Community Plan anticipates that an existing one-block gap between Olive View Drive and Eldridge Avenue will be removed following construction of a new street segment. There are also plans to connect Encinitas Avenue to Laurel Canyon Boulevard and Amboy Avenue to Edgecliff Avenue. The plan also calls for widening Roxford Street between Telfair Avenue and Foothill Boulevard to two travel lanes in each direction. According to information from LADOT, a new traffic signal will be installed at the intersection of West Way and Olive View Drive on the western edge of the Olive View–UCLA Medical Center Campus.

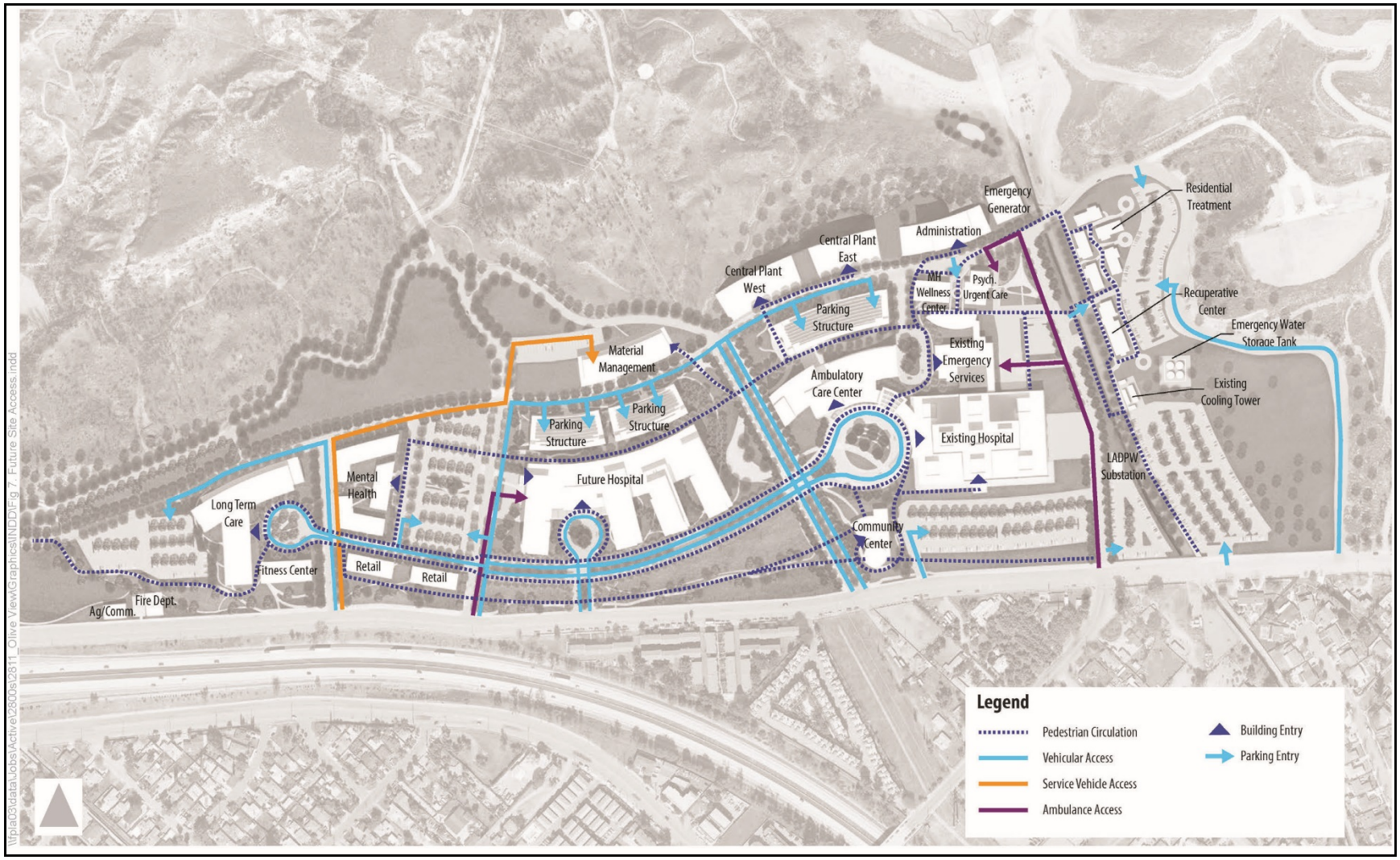
Cumulative (2035) Base Traffic Generation

To evaluate the potential impact of the proposed project in the future on the surrounding street system, it was necessary to develop estimates of future traffic conditions, both with and without the project. Future traffic volumes without the project were first estimated (i.e., cumulative base conditions). Trips generated by the proposed project were then estimated and separately assigned to the surrounding street system.

Figure 3.15-4. Project Trip Distribution

Source: Fehr & Peers 2019.

Figure 3.15-5. Future Site Access and Circulation



Source: Fehr & Peers 2019.

Table 3.15-3. Existing-plus-Project Intersection Level-of-Service Analysis

ID	North/South Street Name	East/West Street Name	Peak Hour	Existing		Existing plus Project		Project Increase in V/C	Significant Impact?
				V/C	LOS	V/C	LOS		
1	Glenoaks Boulevard	Foothill Boulevard	a.m.	0.247	A	0.266	A	0.019	No
			p.m.	0.171	A	0.191	A	0.20	No
2	Roxford Street	I-210 westbound ramps	a.m.	0.482	A	0.528	A	0.046	No
			p.m.	0.450	A	0.545	A	0.095	No
3	Roxford Street	I-210 eastbound ramps	a.m.	0.489	A	0.614	B	0.125	No
			p.m.	0.307	A	0.346	A	0.039	No
4	Roxford Street	Foothill Boulevard	a.m.	0.571	A	0.602	B	0.031	No
			p.m.	0.379	A	0.396	A	0.017	No
5	Roxford Street	Glenoaks Boulevard	a.m.	0.492	A	0.517	A	0.025	No
			p.m.	0.299	A	0.311	A	0.012	No
6	Roxford Street	San Fernando Road	a.m.	0.431	A	0.443	B	0.012	No
			p.m.	0.381	A	0.389	A	0.008	No
7	Roxford Street	Encinitas Avenue/I-5 northbound	a.m.	0.686	B	0.696	B	0.010	No
			p.m.	0.469	A	0.480	A	0.011	No
8	Roxford Street	I-5 southbound ramps	a.m.	0.861	D	0.866	D	0.005	No
			p.m.	0.581	A	0.593	A	0.012	No
10	Bledsoe Street	Foothill Boulevard	a.m.	0.261	D	0.279	A	0.018	No
			p.m.	0.194	A	0.216	A	0.022	No
11	Bledsoe Street	Glenoaks Boulevard	a.m.	0.417	A	0.421	A	0.004	No
			p.m.	0.287	A	0.291	A	0.004	No
12	Polk Street	I-210 westbound ramps	a.m.	0.665	B	0.681	B	0.016	No
			p.m.	0.579	A	0.587	A	0.008	No
13	Polk Street	I-210 eastbound ramps	a.m.	0.803	D	0.810	D	0.007	No
			p.m.	0.536	A	0.550	A	0.014	No
14	Polk Street	Foothill Boulevard	a.m.	0.749	C	0.758	C	0.009	No
			p.m.	0.664	B	0.683	B	0.019	No
Note: Intersection 9 is stop controlled and analyzed only to determine the need for signalization, per LADOT guidelines. Source: Fehr & Peer, 2019.									

Cumulative (2035) base traffic projections reflect growth in traffic from two primary sources: background or ambient growth in existing traffic volumes, reflecting the effects of overall regional growth both inside and outside the study area, and traffic generated by specific projects in, or in the vicinity of, the study area. These factors are described below.

Areawide Traffic Growth

As part of the Memorandum of Understanding process, area-wide traffic growth of 0.46 percent per year for the study area was agreed upon with agency staff members, based on data in the most recent CMP for Los Angeles County. Future increases in background traffic volumes due to regional growth and development are expected to continue at this rate, at least through 2035. Existing baseline 2019 traffic volumes were adjusted upward by a factor of 9.1 percent to reflect areawide regional growth up to 2035.

Traffic Generation from Related Projects

Specific cumulative development projects, also called related projects, expected to be built in the vicinity of the project site prior to buildout represent the second major source of traffic growth in the study area. Data describing cumulative projects in the area were gathered from LADOT, the Los Angeles Department of City Planning, Los Angeles County Department of Regional Planning, and recent environmental studies. A total of 14 cumulative projects were identified in the surrounding area (see Appendix J for a list of these related projects and their locations). Trip generation estimates for these related projects are conservative in that they do not in every case account for either the existing uses to be removed or the possible use of non-motorized travel modes (transit, walking, etc.).

Trip Distribution and Traffic Assignment from Related Projects

The geographic distribution of traffic generated by cumulative projects is dependent on several factors. These factors include the types and densities of the proposed land uses, the geographic distribution of the population from which employees and potential patrons of the proposed developments would be drawn, the location of employment and commercial centers to which residents would be drawn, and the locations of the projects in relation to the surrounding street system. If available, trip distribution from a cumulative project's traffic study was used in this analysis. When trip distribution was not available for a cumulative project, it was based on the factors described above.

Cumulative (2035) Base Traffic Volumes

Related project volumes were added to the cumulative traffic volumes to create the cumulative (2035) base volumes.

Cumulative-plus-Project Traffic Volumes

Estimated project traffic volumes were added to cumulative (2035) base traffic volumes to create the cumulative-plus-project volumes. The cumulative-plus-project scenario presents future traffic conditions following completion of the proposed project.

Table 3.15-4 summarizes the cumulative-plus-project LOS analysis. Three of the study intersections are projected to operate at LOS E during the a.m. peak hour:

1. Roxford Street and I-5 southbound ramp
2. Polk Street and I-210 eastbound ramps
3. Polk Street and Foothill Boulevard

3.15.4.2 Thresholds of Significance

Local and Regional Transportation Impact Thresholds

Intersection Thresholds

Although the County of Los Angeles is the lead agency for the proposed project, all study intersections are in the city of Los Angeles. The County defers to city of Los Angeles thresholds of significance for this project.

The city of Los Angeles has established threshold criteria to determine the significant traffic impacts of projects in its jurisdiction. Under LADOT guidelines, an intersection would be significantly affected if it experienced an increase in the V/C ratio equal to or greater than 0.04 for intersections operating at LOS C, equal to or greater than 0.02 for intersections operating at LOS D, and equal to or greater than 0.01 for intersections operating at LOS E or F after the addition of project traffic. Intersections operating at LOS A or B after the addition of the project traffic are not considered significantly affected, regardless of the increase in the V/C ratio.

The following summarizes the impact criteria:

Intersection Condition with Project Traffic

LOS	V/C Ratio	Project-Related Increase in V/C Ratio
C	> 0.70–0.80	Equal to or greater than 0.04
D	> 0.80–0.90	Equal to or greater than 0.02
E or F	> 0.90	Equal to or greater than 0.01

CMP Arterials and Freeway Mainlines Thresholds

The 2010 guidelines from the County's CMP require the geographic scope of the study area to be the first issue addressed. The criteria for determining the study area for CMP arterial intersection and freeway monitoring locations are:

- All CMP arterial intersections where the proposed project will add 50 or more trips during either the a.m. or p.m. peak hours, and
- All CMP mainline freeway locations where the proposed project will add 150 or more trips, in either direction, during either the a.m. or p.m. peak hours.

The CMP traffic impact analysis guidelines state that a significant project impact occurs when a proposed project increases traffic demand on a CMP facility by 2 percent or more (V/C 0.02), causing LOS F (V/C > 1.00).

Table 3.15-4. Cumulative-plus-Project Intersection Level-of-Service Analysis

ID	North/South Street Name	East/West Street Name	Peak Hour	Cumulative		Cumulative Project		Project Increase In V/C	Significant Impact?
				V/C	LOS	V/C	LOS		
1	Glenoaks Boulevard	Foothill Boulevard	a.m.	0.283	A	0.301	A	0.018	No
			p.m.	0.197	A	0.217	A	0.020	No
2	Roxford Street	I-210 westbound ramps	a.m.	0.596	A	0.642	B	0.046	No
			p.m.	0.539	A	0.634	B	0.095	No
3	Roxford Street	I-210 eastbound ramps	a.m.	0.607	B	0.692	B	0.085	No
			p.m.	0.419	A	0.459	A	0.040	No
4	Roxford Street	Foothill Boulevard	a.m.	0.747	C	0.779	C	0.032	No
			p.m.	0.508	A	0.523	A	0.015	No
5	Roxford Street	Glenoaks Boulevard	a.m.	0.639	B	0.655	B	0.025	No
			p.m.	0.411	A	0.423	A	0.012	No
6	Roxford Street	San Fernando Road	a.m.	0.588	A	0.592	A	0.004	No
			p.m.	0.487	A	0.495	A	0.008	No
7	Roxford Street	Encinitas Avenue/I-5 northbound ramps	a.m.	0.809	D	0.819	D	0.010	No
			p.m.	0.568	A	0.579	A	0.011	No
8	Roxford Street	I-5 southbound ramps	a.m.	0.969	E	0.973	E	0.004	No
			p.m.	0.703	C	0.715	C	0.012	No
10	Bledsoe Street	Foothill Boulevard	a.m.	0.292	A	0.310	A	0.018	No
			p.m.	0.220	A	0.242	A	0.022	No
11	Bledsoe Street	Glenoaks Boulevard	a.m.	0.492	A	0.493	A	0.001	No
			p.m.	0.336	A	0.340	A	0.004	No
12	Polk Street	I-210 westbound ramps	a.m.	0.807	D	0.822	D	0.015	No
			p.m.	0.729	C	0.737	C	0.008	No
13	Polk Street	I-210 eastbound ramps	a.m.	0.945	E	0.951	E	0.006	No
			p.m.	0.666	B	0.680	B	0.014	No
14	Polk Street	Foothill Boulevard	a.m.	0.909	E	0.918	E	0.009	No
			p.m.	0.836	D	0.854	D	0.018	No

Note: Intersection 9 is stop controlled and analyzed only to determine the need for signalization, per LADOT guidelines.
Source: Fehr & Peers 2019.

Freeway Mainline Thresholds

Following consultation with County and Caltrans staff members, it was agreed that, for the purposes of this study, an impact would be considered adverse if the analyzed freeway segment were found to operate at LOS F and the V/C ratio increased by more than 2 percent. This condition is not met at any of the analyzed freeway segments. The project impact would be considered less than significant.

Freeway Ramp Queuing Thresholds

Following consultation between County and Caltrans staff members, it was agreed that, for the purposes of this study, an impact would be considered adverse if the off-ramp queue were to extend beyond the length of the ramp itself and onto the mainline of the freeway during the peak arrival period. For the purposes of this project, the queuing analysis uses 85 percent of the ramp length as the effective length.

Transit

Project impacts on public transit services would be considered significant if the project were to result in a substantial increase in ridership on the existing public transit system, thereby creating capacity shortages on the system and necessitating system improvements to accommodate additional transit demand.

CEQA Thresholds

The thresholds above have been established by local and regional transportation agencies. For the purposes of this EIR, in accordance with Appendix G of the CEQA Guidelines, the proposed project would result in a significant environmental impact if it would:

TRAF-1 Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

TRAF-2 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

TRAF-3 Result in inadequate emergency access.

3.15.4.3 Impacts and Mitigation Measures

Impact TRAF-1: Would the Proposed Project Conflict with a Program Plan, Ordinance, or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle, and Pedestrian Facilities?

Construction Impacts

Tier I

The proposed project could involve intermittent lane and sidewalk closures during construction of the Master Plan elements, which could impede vehicle, pedestrian, equestrian, and bicycle circulation. No long-term closure of off-site roadways, bicycle or equestrian paths, or sidewalks are anticipated. Therefore, traffic and circulation impacts are expected to be less than significant. Nonetheless, to ensure that construction transportation impacts due to projects proposed under the

Master Plan would be minimized and remain less than significant, construction traffic control measures would be developed and implemented (see mitigation measure **MM-TRAF-1**, below).

Tier II

The impacts related to transportation are expected to be similar to those described for Tier I. Therefore, impacts would be less than significant.

Mitigation Measures

The following measure is proposed to ensure that potential construction traffic impacts remain less than significant.

MM-TRAF-1: The County will develop and implement traffic control measures for Master Plan projects that result in lane or sidewalk closures, removal of parking, or similar traffic disruptions. Temporary traffic controls during construction will meet CA-MUTCD requirements. Daytime closures will be covered by the applications shown in Chapter 6 of the manual. Overnight closures, long-term closures, and detours will require a traffic control plan, which will be prepared as part of the project design package, according to CA-MUTCD requirements. The traffic control plan may include, but would not be limited to, the elements listed below. Note that some of these elements may not be feasible or appropriate in all circumstances. The project-level environmental analysis will identify the appropriate measures for each project.

- Provide a roadway layout that shows the locations of construction activity and surrounding roadways to be used as detour routes, including special signage.
- Establish detour routes in coordination with the city of Los Angeles to minimize disturbances to local traffic conditions; review potential detour routes to make sure adequate capacity is available.
- Avoid creating additional delays at intersections that are currently operating under congested conditions, either by choosing routes that avoid these locations or constructing during non-peak times of day.
- Maintain access to existing residences at all times.
- Work with the Los Angeles Unified School District, Los Angeles Fire Department, and Los Angeles Police Department to coordinate all construction-related plans and minimize disturbances for local emergency medical service providers; ensure that alternative evacuation and emergency routes are designed to maintain response times during construction.
- Provide adequate off-street parking areas at designated staging areas for construction-related vehicles.
- Work with local and regional transit providers to maintain access and circulation routes to existing stops and stations during construction phases, and identify appropriate detours to provide traffic rerouting during construction while minimizing disturbance to bus services.
- Work with the city of Los Angeles to maintain continuity and operation of existing pedestrian and bicycle facilities during construction.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

Intersection Impacts

To determine operational traffic impacts, in compliance with CEQA, two scenarios were analyzed: 1) existing (2019) plus project and 2) cumulative (2035) plus project. Existing baseline-plus-project traffic volumes were analyzed to determine potential operational conditions and traffic impacts resulting from the incremental addition of project-generated traffic associated with buildout of Tier I of the Olive View–UCLA Medical Center Campus Master Plan on existing (2019) street conditions. Table 3.15-3 shows the results of this analysis. As indicated in Table 3.15-3, after applying the city of Los Angeles significant impact criteria, the proposed project would result in no significant impacts on any of the intersections under existing-plus-project conditions.

Table 3.15-4 presents the impacts of cumulative-plus-project traffic generated in 2035 at the study intersections. As shown in the table, using the criteria for the determination of significant impacts, the proposed project would result in no significant impacts on any of the analyzed intersections under cumulative-plus-project conditions.

Regional Transportation Impacts

CMP Arterial Monitoring Station Impacts

The CMP arterial monitoring stations nearest to the project study area are Sierra Highway and San Fernando Road to the north and Victory Boulevard and Woodman Avenue to the south. These intersections are approximately 3 and 10 miles from the project site, respectively. Based on project trip generation estimates and distribution, the proposed project would not add 50 or more vehicle trips through either of these stations. Therefore, no further analysis is required for the CMP arterial intersections.

CMP Freeway Mainline Monitoring Station Impacts

In accordance with CMP guidelines, an analysis of the proposed project's traffic impacts at CMP mainline freeway monitoring locations was conducted. The CMP mainline freeway monitoring locations nearest to the project site are:

- I-5 north of State Route 14 (Station 1008)
- I-5 at Osborne Street (Station 1007)
- I-210 east of Polk Street (1058)

According to the trip generation estimates (see Tables 3a and 3b in the traffic study in Appendix J of this EIR) and trip distribution estimates presented in Figure 3.15-4, the project would result in up to 58 additional inbound trips in the morning and up to 60 additional outbound trips in the evening peak hour on I-5 north of State Route 14, up to 129 additional inbound trips in the morning and up to 135 additional outbound trips in the evening peak hour on I-5 at Osborne Street, and up to 72 additional inbound trips in the morning and up to 74 additional outbound trips in the evening peak

hour on I-210 east of Polk Street. Because fewer than 150 trips would be added during the a.m. or p.m. peak hours in the vicinity of the study area, no further analysis of the freeway segments is required for CMP purposes. Further analysis of the regional freeway system, using both Caltrans and CMP methodology, is provided below.

Freeway Mainline Impacts

Morning and afternoon peak-hour analysis of two selected I-210 freeway mainline segments in the project vicinity (i.e., I-210 west of State Route 118 and I-210 east of I-5) was conducted in response to a request from Caltrans. Table 3.15-5 shows the existing-plus-project and cumulative-plus-project peak-hour freeway segment analysis. As shown in the table, no freeway mainline segments operate at LOS F and have a V/C ratio increase of more than 2 percent. Therefore, for the purposes of this EIR, these freeway mainline impacts are considered to be less than significant.

Freeway Ramp Queuing Impacts

A freeway ramp queuing analysis was conducted at five freeway ramp terminal intersections in the project vicinity in response to a request from Caltrans:

- I-210 westbound off-ramp at Roxford Street (Exit 2)
- I-210 eastbound off-ramp at Roxford Street (Exit 2)
- I-210 westbound off-ramp at Polk Street (Exit 3)
- I-210 eastbound off-ramp at Polk Street (Exit 3)
- I-5 northbound off-ramp at Roxford Street (Exit 159A)

Table 3.15-6 presents a summary of the ramp queuing analysis for existing conditions as well as the existing-plus-project and cumulative-plus-project scenarios. The queue lengths are shown to not exceed the available ramp storage at any of the locations.

At the request of Caltrans, the existing and projected traffic queues on the northbound left-turn lane from Roxford Street onto westbound I-210 were calculated. The northbound left-turn lane from Roxford Street onto eastbound I-210 is approximately 180 feet long. Under existing conditions, the 95th percentile queue is calculated to be approximately 230 feet in the a.m. peak hour and 80 feet in the p.m. peak hour, increasing under existing-plus-project conditions to 245 feet in the a.m. peak hour and 145 feet in the p.m. peak hour. The projected 95th percentile northbound left-turn queue under cumulative-plus-project conditions is approximately 355 feet in the a.m. peak hour and 180 feet in the p.m. peak hour. Thus, the available storage length is exceeded under existing and future conditions in the a.m. peak hour. In the p.m. peak hour, under all scenarios, the available storage area would not be exceeded. Potential options to increase queue storage on the northbound approach could include (a) modifying the signal timing to provide more green time for this movement when needed or (b) extending the turn lane by restriping the median and left-turn lane. Queuing on a local street is not identified as significant impact in this study, and these options are not recommended as mitigation measures but are provided for informational purposes at the request of Caltrans.

Table 3.15-5. Existing (2019) and Cumulative (2035) Peak-Hour Freeway Segment Analysis

Name (a)	PeMS Station ID	Peak Hour	Direction	Existing (2019)			Project Trips	Change in V/C	Existing (2019) plus Project			Change in Density	Project Impact? (b)
				Volume	Density (pc/mi/ln)*	LOS			Volume	Density (pc/mi/ln)*	LOS		
I-210 between Yarnell Street and Roxford Street	768297	a.m.	EB	6,518	46	F	131	0.018	6,647	48	F	2	No
	770303	a.m.	WB	4,131	23	C	48	0.007	4,179	23	C	0	No
	768297	p.m.	EB	6,214	32	D	46	0.007	6,260	33	D	1	No
	770303	p.m.	WB	6,562	47	F	135	0.019	6,697	49	F	2	No
I-210 between Polk Street and Hubbard Street	770012	a.m.	EB	6,214	41	E	26	0.004	6,240	42	E	1	No
	770229	a.m.	WB	4,936	29	D	72	0.010	5,008	29	D	0	No
	770012	p.m.	EB	5,582	34	D	75	0.010	5,657	35	D	1	No
	770229	p.m.	WB	8,159	98	F	25	0.004	8,184	100	F	2	No

Name (a)	PeMS Station ID	Peak Hour	Direction	Existing (2035)			Project Trips	Change in V/C	Existing (2035) plus Project			Change in Density	Project Impact? (b)
				Volume	Density (pc/mi/ln)*	LOS			Volume	Density (pc/mi/ln)*	LOS		
I-210 between Yarnell Street and Roxford Street	768297	a.m.	EB	7,172	59	F	125	0.019	7,301	62	F	3	No
	770303	a.m.	WB	4,566	26	C	57	0.006	4,614	26	D	0	No
	768297	p.m.	EB	5,893	38	E	67	0.006	5,939	38	E	0	No
	770303	p.m.	WB	7,162	59	F	112	0.019	7,297	62	F	3	No
I-210 between Polk Street and Hubbard Street	770012	a.m.	EB	6,758	50	F	25	0.003	6,784	50	F	0	No
	770229	a.m.	WB	5,417	33	D	53	0.011	5,489	33	D	0	No
	770012	p.m.	EB	6,097	40	E	50	0.010	6,172	41	E	1	No
	770229	p.m.	WB	8,840	175	F	29	0.003	8,865	180	F	5	No

Notes:
* pc/mi/ln denotes passenger cars per mile per lane
EB = eastbound; WB = westbound
[a] Analyzed using freeway methodology from *Highway Capacity Manual* (Transportation Research Board 2010).
[b] Impact criteria for this project are defined under two conditions. Under the first, mainline LOS F with the project is compared to mainline LOS < F without the project. Under the second, the mainline without the project is already at LOS F; the mainline with the project represents a 2 percent increase in the V/C ratio.

Table 3.15-6. Cumulative Base and Cumulative-plus-Project Off-Ramp Queuing Analysis

Ramp/Cross Street	Ramp Length (ft) [a]	85 percent Ramp Length (ft)	Ramp Turn Lanes at Intersection			Control	Existing (2019)				Cumulative (2035) plus Project				Queue 85 percent Exceeds Storage
							AM Queue		PM Queue		AM Queue		PM Queue		
			Lanes	Move	Length [a]		Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	
I-210 WB off-ramp/Roxford Street	1,110	940	2	Left	520	Signal	152	152	106	106	200	200	116	116	No
				Right/Through/Left	1,110		95		63		163		66		
I-210 EB off-ramp/Roxford Street	1,050	890	2	Right	550	Signal	46	187	39	72	149	354 [b]	46	101	No
				Through/Left	1,050		187		72		354 [b]		101		
I-210 WB off-ramp/Polk Street	930	790	2	Right	460	Signal	20	176	45	435 [b]	46	234	89	535 [b]	No
				Through/Left	930		176		435 [b]		234		535 [b]		
I-210 EB off-ramp/Polk Street	1,180	1,000	2	Right	690	Signal	118	118	112	112	140	140	136	136	No
				Through/Left	1,180		58		66		71		80		
I-5 SB off-ramp/Roxford Street	980	830	2	Through/Left	980	Signal	410 [b]	410 [b]	340 [b]	340 [b]	500 [b]	500 [b]	473 [b]	473 [b]	No
				Through/Right	250		98		52		108		57		
I-5 NB off-ramp at Encinitas Avenue/Roxford Street	1,500	1,280	2	Left	190	Signal	53	310 [b]	40	572 [b]	62	373 [b]	15	448 [b]	No
				Through/Right	1,500		310 [b]		572 [b]		373 [b]		448 [b]		

Notes:
EB = eastbound; WB = westbound; SB = southbound; NB = northbound
[a] Storage lengths based on scaled distances from online aerial photographs.
[b] Ninety-fifth percentile volume exceeds capacity; queue may be longer.
Source: Fehr & Peers 2019.

Transit Impacts

Section D.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project, based on the number of vehicle trips. This methodology assumes an average vehicle ridership (AVR) factor of 1.4 to estimate the number of person trips to and from the project site and provides guidelines regarding the percentage of person trips assigned to public transit, depending on the type of use (commercial versus residential) and the proximity to transit services. Because the project site is not within 0.25 mile of a designated CMP transit corridor, the CMP guidelines estimate that approximately 3.5 percent of the total number of person trips generated might be made with the use of public transit to and from the site. It should be noted that the trip generation estimates for this project include a more conservative transit estimate of 2 percent, based on data collected at the site.

Based on the trip generation shown in Table 3 of the traffic study (see Appendix J of this EIR), including transit/walking/biking, and carpool credits, the existing site is estimated to generate 6,132 daily trips, and the proposed project is estimated to generate 9,973 daily trips. This equates to 3,841 net new daily trips. Using this same methodology, there are 393 net new a.m. trips and 401 net new p.m. trips. Applying the CMP guidelines, converting vehicle trips to person trips by multiplying by an AVR factor of 1.4 (393 net a.m. peak-hour trips x 1.4 = 550, and 401 net p.m. peak-hour trips x 1.4 = 561) and applying a 3.5 percent transit use factor (550 net a.m. peak-hour person trips x 3.5 percent = 19, and 561 net p.m. peak-hour person trips x 3.5 percent = 20) results in approximately 20 new transit person trips during the weekday a.m. and p.m. peak hours.

Within 0.25 mile of the project site, Metro operates two local lines; within 2 miles, LADOT operates one express bus. These routes have peak-period headways of between 20 and 40 minutes. The bus services have the capacity for approximately 560 persons during the peak hours, based on a seating capacity of 40 persons for a standard bus and 40 persons for an express bus and a policy load factor of 1.0. The proposed project would utilize 4 percent of the available transit capacity during the peak hours. Based on this estimate, the project impact on transit is expected to be less than significant.

Signal Warrant Analysis

Olive View Drive and Bledsoe Street (Intersection 9) is currently unsignalized. The city of Los Angeles traffic analysis methodology and significance criteria apply to signalized intersections only. An impact analysis is not conducted for unsignalized intersections. LADOT Traffic Study Policies and Procedures state that "unsignalized intersections should be evaluated solely to determine the need for the installation of a traffic signal or other traffic control device."

Traffic volumes and lane configurations were used to prepare signal warrant analyses at the unsignalized intersections under existing, existing-plus-project, cumulative base, and cumulative-plus-project conditions. The warrant analyses were conducted in accordance with the procedures described in Chapter 4C of the CA-MUTCD (2014).

The warrant for a traffic signal is met if the following conditions exist for the same 1 hour of an average day:

1. The total delay (stopped time) experienced by traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds four vehicle hours for a one-lane approach or five vehicle hours for a two-lane approach.

2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes.
3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

The results of the signal warrant analysis conducted for the proposed project (see TIA in Appendix J of this EIR) indicate that the Bledsoe Street and Olive View Drive intersection does not meet the signal warrant thresholds.

Pedestrian, Bicycle, and Equestrian Impacts

As discussed in the Environmental Setting section, the pedestrian network, both within the Olive View–UCLA Medical Center Campus and adjacent to the site, is incomplete. Sidewalks exist on portions of Olive View Drive (i.e., adjacent to developed residential properties), but sidewalks are discontinuous in front of the site. Many streets in the vicinity are bordered by dirt paths that are used by both pedestrians and equestrians. Not all intersections with sidewalks have Americans with Disabilities Act–compliant accessible ramps, and there are currently no marked crossings on Olive View Drive. Bledsoe Street, the most direct access route for pedestrians coming from the south, also does not have sidewalks or marked crossings north of Foothill Boulevard, with the exception of the bridge crossing at I-210.

Within the western portion of the Olive View–UCLA Medical Center Campus, there is little dedicated pedestrian infrastructure in place. Throughout the eastern portion of the campus, however, near the hospital, sidewalks are generally present. Marked crosswalks connect the hospital building with adjacent parking lots. Sidewalks do not exist within the parking lots adjacent to the hospital, thereby requiring pedestrians to walk through the aisles to access the pedestrian network. Sidewalks and crosswalks exist near the mental health building, and several crosswalks are also present on Bucher Avenue and Mesa Avenue. Within the site, the pedestrian facilities that exist are generally in good condition; the sidewalks are well maintained and crosswalks are clearly visible. There is currently no dedicated bicycle infrastructure either within the project site or immediately adjacent to the project site.

The Master Plan for the Olive View–UCLA Medical Center Campus would modify pedestrian circulation patterns within the site, as shown in Figure 3.15-5. New sidewalks and paths would be provided on the north side of Olive View Drive, creating uniform pedestrian facilities that would board the campus. Internally, new pedestrian paths would link the existing hospital building, the new ambulatory care center, and administration building to the parking structure. These improvements would address many of the existing gaps in the pedestrian network within the site. Although increased traffic on local streets due to the additional on-campus development that could occur under Tier I of the Master Plan could increase the potential for conflicts between motorists and pedestrians, bicyclists, or pedestrians, with implementation of these improvements, impacts on existing bicycle, pedestrian, and equestrian facilities, as well as users of those facilities, are expected to be less than significant.

Tier II

The increase in the number of project trips associated with full buildout of Tier II development and the expected increase in the number of ambient trips beyond 2035 could lead to impacts at some intersections in the vicinity.

Estimated trip generation at full buildout of the Master Plan would be approximately 190 percent to 280 percent higher than that of Tier I development in each of the analyzed peak hours. Although no intersection-level impacts were identified, based on projected cumulative-plus-project LOS and applicable threshold criteria, the increased traffic with full development could result in significant impacts at two study intersections: Polk Street and the I-210 eastbound ramps (Intersection 13) and Polk Street and Foothill Boulevard (Intersection 14). Overall, the level of the project-related increase in traffic at the other analyzed intersections would be higher than it would be with Tier I development only. Other locations could also be significantly affected.

Tier II development could also result in significant traffic impacts on freeway mainline segments and freeway ramp queues. However, given that Tier II development would occur far in the future, beyond 2035, it would be speculative to attempt to determine the significance and extent of potential impacts on the local and regional transportation system. In addition, it should be noted that, in the future, when individual projects under Tier II of the Master Plan are proposed, additional environmental analysis and documentation would be required, in compliance with CEQA regulations, to determine the significance of Tier II project impacts and identify measures to mitigate any significant impacts.

Mitigation Measures

All Tier I impacts would be less than significant. Therefore, no mitigation measures are required.

Further analysis will be required when Tier II projects are proposed to determine if significant impacts would occur and if there are feasible measures to mitigate any significant impacts.

Level of Significance after Mitigation

Less than significant under Tier I.

Further analysis will be required for Tier II projects when they are proposed.

Impact TRAF-2: Would the Proposed Project Substantially Increase Hazards Due to a Geometric Design Feature (e.g., Sharp Curves or Dangerous Intersections) or Incompatible Uses (e.g., Farm Equipment)?

Construction Impacts

Tier I

Construction activities would increase the mix of heavy construction vehicles and general purpose traffic and could result in an increase in safety hazards due to the higher proportion of heavy trucks. However, these hazards would be temporary and intermittent. In addition, implementation of construction contractor safety plans, best management practices, and **MM-TRAF-1** would ensure that potential hazards would be minimized and remain less than significant.

Tier II

The impacts related to safety impacts are expected to be similar to those described for Tier I.

Mitigation Measures

See mitigation measure **MM-TRAF-1**, above.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

Tier I of the Master Plan would include improved sidewalks and safe, pleasant pedestrian walking paths throughout the campus. Project improvements to access, wayfinding, and the general orientation of campus facilities would also improve safety for motorists, pedestrians, and bicyclists as they travel to and around the campus. Therefore, impacts would be less than significant.

Tier II

The impacts related to hazards are expected to be similar to those described for Tier I and less than significant.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Impact TRAF-3: Would the Proposed Project Result in Inadequate Emergency Access?

Construction Impacts

Tier I

As mentioned in Impact **TRAF-1**, above, in some cases, construction could require temporary road or lane closures that could affect emergency vehicle access, a potentially significant impact. However, coordination with emergency medical service providers that serve the campus and surrounding communities, as described in **MM-TRAF-1**, would ensure that impacts on emergency access during construction would be less than significant.

Tier II

The impacts related to emergency access are expected to be similar to those described for Tier I. **MM-TRAF-1** would reduce any impacts on emergency access to a less-than-significant level.

Mitigation Measures

See **MM-TRAF-1**, above.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

Section 3.12, Public Services, discusses in detail the proposed project's potential impacts on the provision of public services, including police and fire protection. Operation of proposed facilities under the Master Plan, including traffic generated by new development under Tier I of the Master Plan, would not substantially affect emergency access to the campus and surrounding community. Impacts would be less than significant.

Tier II

Tier II development is expected to occur far in the future, beyond 2035. As a consequence, as described under Impact **TRAF-1**, above, Tier II development could result in increases in congestion on local streets and highways, which could adversely affect emergency vehicle access. However, because Tier II development would occur far in the future, it would be speculative to attempt to determine the significance of potential impacts on emergency access. In addition, it should be noted that when individual projects under Tier II of the Master Plan are proposed in the future, additional environmental analysis and documentation would be required, in compliance with CEQA regulations, to determine the significance of Tier II project impacts and identify measures to mitigate any significant impacts.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Mitigation Measures

No mitigation measures would be required under Tier I. Further analysis is required when Tier II projects are proposed to determine if additional parking would be required to meet Tier II demands.

Level of Significance after Mitigation

Less than significant for Tier I. Further future analysis would be required for Tier II when projects are proposed.

3.15.5 Cumulative

The study area for the cumulative traffic impact analysis encompasses the 14 intersections shown in Figure 3.15-1 and listed in Table 3.15-2 as well as the freeway mainline segments, freeway ramps, and CMP facilities identified in the impacts discussion above in Section 3.15.4. The projected cumulative-plus-project conditions presented in Table 3.15-4, above, depict the impacts of traffic generated by cumulative development and related projects combined with project-generated traffic in 2035 on the study area intersections. Existing (2019) traffic conditions at the 12 signalized study intersections are shown in Table 3.15-2. Under existing conditions, none of the study intersections would operate at LOS E or F; however, three intersections would operate at an unacceptable LOS of E or F in the a.m. or p.m. peak hour under cumulative-plus-project conditions. As noted in Section 3.15.3.2, above, LOS D is typically recognized as the minimum desirable LOS in urban areas.

Therefore, the proposed Tier I development and cumulative development would result in significant cumulative traffic impacts. In addition, traffic from the proposed Tier I development, related projects, and other cumulative development could also result in significant cumulative impacts on freeway mainline segments and freeway ramps.

3.16 Tribal Cultural Resources

3.16.1 Introduction

This section evaluates potential Tribal Cultural Resources (TCRs) impacts associated with construction and operation of the proposed project. The applicable laws, regulations, and methods used to determine the effects of the proposed project alternatives on TCRs are largely the same as those applied to historic and archaeological resources, as described in Section 3.4, *Cultural Resources*, in this EIR. This section first describes the ethnographic setting of the surrounding region and project area, and then describes the TCR regulations pertinent to the project and evaluates the potential for impacts involving TCRs. The discussion of TCRs relies upon a Sacred Lands File Search obtained from the Native American Heritage Commission (NAHC) and consultation conducted between the County and the Fernandeño Tataviam Band of Mission Indians (see Confidential Appendix K, retained in the files of the County).

TCRs include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are included or determined to be eligible for inclusion in the California Register of Historical Resources (CRHR); included in a local register of historical resources; or determined by a lead agency, in its discretion and supported by substantial evidence, to be significant under CRHR criteria (Public Resources Code [PRC] Section 21074). TCRs may contain physical cultural remains (e.g., materials found in archaeological sites), or they may be floral or faunal resources or places within the natural landscape.

3.16.2 Regulatory Setting

3.16.2.1 Federal

No federal laws are relevant to the proposed project with respect to tribal cultural resources.

3.16.2.2 State

California Environmental Quality Act

In accordance with Section 21084.1 of CEQA, the proposed project would have a significant adverse environmental impact if it "causes a substantial or potentially substantial adverse change in the significance of an historical resource." Because significant TCRs are considered historical resources for the purposes of CEQA, PRC Section 21084.1 applies and is described in Section 3.4, *Cultural Resources*, of this EIR.

Assembly Bill (AB) 52

Recent legislation known as Assembly Bill (AB) 52 (Public Resources Code 21073-21084) amended CEQA to require that the analysis of project impacts on cultural resources include an analysis of impacts on Tribal Cultural Resources. Signed into law on September 25, 2014, AB 52 requires Lead Agencies to evaluate a project's potential to affect TCRs and establishes a consultation process for California Native American Tribes as part of CEQA. TCRs include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that

are eligible for inclusion in the CRHR or included in a local register of historical resources. AB 52 also gives Lead Agencies the discretion to determine whether a resource qualifies as a TCR on the basis of criteria for listing in the CRHR. The lead agency must support such a determination with substantial evidence.

The intent of AB 52 is to "set forth a process and scope that clarifies California tribal government involvement in the CEQA process, including specific requirements and timing for lead agencies to consult with tribes on avoiding or mitigating impacts to tribal cultural resources." It applies to projects with Notices of Preparation or Notices of Negative Declaration/Mitigated Negative Declaration released on or after July 1, 2015.

AB 52 defines TCRs, amends Appendix G of the CEQA Guidelines to include a separate section for TCRs, and creates a formal requirement for consultation with California Native American Tribes in the CEQA process. Pursuant to PRC Section 21080.3.2, Tribal Governments can request consultation with a lead agency and give input regarding potential impacts on TCRs before the agency decides what type of environmental review is necessary for a project. The PRC further requires avoiding damage to TCRs, if feasible. If not, Lead Agencies must mitigate impacts on TCRs to the extent feasible.

As set forth in PRC Section 21074, TCRs are defined as follows.

> (a) "Tribal cultural resources" are either of the following:
>
> (1) Sites, features, places, and objects with cultural value to descendant communities or cultural landscapes, that are any of the following:
>
> (A) Included in or eligible for inclusion in the CRHR.
>
> (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
>
> (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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency will consider the significance of the resource to a California Native American Tribe.
>
> (b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
>
> (c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

For projects with a Notice of Preparation after July 1, 2015, the lead agency is required to consult with California Native American Tribes that are traditionally and culturally affiliated with the project area if (1) the tribe requests to the lead agency in writing to receive notification of projects; and (2) the tribe requests consultation on a specific project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report. Consultation is:

> "…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 will be conducted in a way that is mutually respectful of each party's sovereignty. Consultation will also

recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance." (Government Code Section 65362.4)

PRC Section 21080.3.2(a) lists consultation topics that may be discussed, including TCRs, project alternatives, project impacts, and possible mitigation measures.

Consultation ends when one of the following outcomes occurs:

1. Both parties agree to measures to avoid or mitigate significant effects on a TCR. The agreed-upon mitigation measures are included in the environmental document (PRC Section 21082.3(a)); or
2. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Sections 21080.3.2(b)(1-2) and 21080.3.1(b)(1)).

California Health and Safety Code

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the California Government Code or any other related provisions of law concerning investigation of the circumstances, manner, and cause of any death. If the coroner determines that the remains are not subject to his or her authority and 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, he or she will contact, by telephone within 24 hours, the California Native American Heritage Commission (NAHC). The NAHC will identify the most likely descendant (MLD), who will be consulted regarding treatment or repatriation of the remains.

California Public Resources Code (PRC)

PRC Section 5097.5 defines the unauthorized disturbance or removal of archaeological, historical, or paleontological resources located on public lands as a misdemeanor. The Section also prohibits the knowing destruction of objects of antiquity without a permit (expressed permission) on public lands issued by the public agency that has jurisdiction over the lands and provides for criminal sanctions.

PRC Section 5097.94 provides for the NAHC to make recommendations to encourage private property owners to protect and preserve sacred places in a natural state and to allow appropriate access to Native Americans for ceremonial or spiritual activities. The NAHC is authorized to assist Native Americans in obtaining appropriate access to sacred places on public lands and to aid state agencies in any negotiations with federal agencies for the protection of Native American sacred places on federally administered lands in the state.

PRC Sections 5097.98–99 require that the NAHC be consulted whenever Native American graves are found. According to these Sections, it is illegal to take or possess remains or artifacts taken from Native American graves; however, it does not apply to materials taken before 1984.

3.16.2.3 Local

Los Angeles County General Plan

The Los Angeles County General Plan, Conservation and Natural Resources Element, contains the following policies regarding cultural resource protection (2015):

- **Goal 14:** Protected historic, cultural, and paleontological resources.
    - **Policy 14.1:** Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.
    - **Policy 14.2:** Support an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources.
    - **Policy 14.3:** Support the preservation and rehabilitation of historic buildings.
    - **Policy 14.4:** Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).
    - **Policy 14.5:** Promote public awareness of historic, cultural, and paleontological resources.
    - **Policy 14.6:** Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

City of Los Angeles Cultural Heritage Ordinance

The City of Los Angeles maintains a list of all sites, buildings, and structures that have been designated through the Cultural Heritage Ordinance as Historic-Cultural Monuments (HCMs). TCRs may be included in a local register of historical resources, and therefore would be considered to be historical resources for the purposes of CEQA.

City of Los Angeles Conservation Element

The Conservation Element of the City of Los Angeles General Plan (adopted September 2001) is designed to enhance, preserve, and protect the City's existing natural resources and other resources. TCRs may include archaeological sites, and the Conservation Element specifically addresses archaeological resources in Section 3 of Chapter 2, with the objective to "protect the City's archaeological…resources for historical, cultural, research and/or educational purposes." Moreover, its policy is to "continue to identify and protect significant archaeological…sites and/or resources known to exist or that are identified during land development, demolition or property modification activities."

3.16.3 Environmental Setting

The identification of historical and archaeological resources within the project area is based on a study prepared by Cogstone Resource Management, Inc., entitled *Archaeological Resources Assessment for the Olive View–UCLA Medical Center Master Plan EIR*, Los Angeles County, California (Lev-Tov and Valasik 2016) (see Appendix D of this EIR).

3.16.3.1 Ethnography

People have lived in California for more than 13,000 years, with their presence in the greater Los Angeles area dating prior to 9000 B.P.(before present). Two groups of Native Americans were present prehistorically in the San Fernando Valley, the Tongva and Tataviam. After the advent of the missions in California, the Tataviam were called the Fernandeño, and the Tongva were called the Gabrieliño. Many modern-day descendants are active members of current tribes of Tataviam and Tongva.

The Fernandeño/Tataviam Band of Mission Indians

The project site is within traditional tribal territory of the Tataviam, whose lands stretched from Antelope Valley, through the Tejon Ranch area, and into the San Fernando Valley. On July 14, 2016, the Fernandeño provided information stating that the project area was located within the sensitivity zone of two villages, Passenga and Achoicominga, providing as evidence PDF copies of two supporting documents, "Tataviam Geography and Ethnohistory" (Johnson and Earle 1990) and "Ethnographic Overview of the Angeles National Forest: Tataviam and San Gabriel Mountain Serrano Ethnohistory" (Chester King 2004).

The Tataviam belong to the family of Serrano peoples, who migrated down into the Antelope, Santa Clarita, and San Fernando valleys some time before 450 A.D. The Tataviam may be among the larger Shoshonean migration into Southern California that occurred 2,000 to 3,000 years ago (Johnson and Earle 1990). The Tataviam people lived primarily on the upper reaches of the Santa Clara River drainage system, east of Piru Creek, but they also marginally inhabited the upper San Fernando Valley, including the present-day city of San Fernando and neighborhood of Sylmar, which they shared with their inland Gabrieliño neighbors.

Organized into a series of clans throughout the region, the Tataviam lived in small villages, becoming semi-nomadic when food was scarce. Hunter-gatherers, with communal expeditions held at certain times of the year, the Tataviam prepared their foodstuffs in much the same way as their neighbors. Cooking and food preparation utensils consisted primarily of lithic (i.e., stone) knives and scrapers, mortars and metates, pottery, and bone or horn utensils. Larger game was hunted with bow and arrow, while snares, traps, and pits were used for capturing smaller game; meat was generally boiled, sun-dried, or cooked in earthen ovens. These resources were supplemented with roots, bulbs, shoots, and seeds, which, if not available locally, could be obtained in trade with other groups. Jimsonweed, native tobacco, and other plants found along the local rivers and streams provided raw materials for baskets, cordage, and netting. Resources available to the desert-dwelling Tataviam included honey mesquite, piñon, yucca, mesquite, and cacti fruits (Solis 2008).

There is little information regarding Tataviam social organization, although information from neighboring groups shows similarities among Tataviam, Chumash, and Gabrieliño ritual practices. At first contact with the Spanish in the late eighteenth century, the population of this group was estimated at less than 1,000 persons. By 1810, nearly all of the Tataviam population had been baptized at San Fernando Mission (King and Blackburn 1978).

The Gabrieliño

The project area also lies within the territory of the Gabrieliño Native American people, a Uto-Aztecan (or Shoshonean) group that may have entered the Los Angeles Basin as recently as 1500 B.P. (Bean and Smith 1978). In early protohistoric times, the Gabrieliño occupied a large territory that included the entire Los sAngeles Basin, encompassing the coast from Malibu to Aliso Creek, parts of the Santa Monica Mountains, the San Fernando, San Gabriel, and San Bernardino valleys, the northern parts of the Santa Ana Mountains, and much of the middle to lower Santa Ana River. They also occupied the islands of Santa Catalina, San Clemente, and San Nicolas. Within this large territory were more than 50 residential communities, with populations ranging from 50 to 150 individuals. The Gabrieliño spoke a language that falls within the Cupan group of the Takic subfamily of the Uto-Aztecan language family, which is extremely large and includes the Shoshonean groups of the Great Basin. Given the geographic proximity and linguistic similarities of Serrano and Gabrieliño bands living in the area, ethnographers have suggested that they shared the same ethnic origins (Kroeber 1925).

Because the Gabrieliño were not studied until the 1920s, by which time they had already been greatly influenced by missionaries and settlers (Kroeber 1925), very little is known about their early social organization. Kroeber's work indicates that theirs was a hierarchically ordered society, with a chief who oversaw social and political interactions not only within the Gabrieliño culture, but also with other groups (1925). Yet given even what little is known of their overall economic, ritual, and social organization, the Gabrieliño, along with the Chumash, their coastal neighbors to the northwest, are characterized as one of the most complex societies in native Southern California (Bean and Smith 1978:538; Kroeber 1925:621).

The Gabrieliño had access to a broad and diverse resource base that included numerous plants and animals for food, medicines, tools, and shelter (Kroeber 1976: 649–650). Mountain shrubs, ash, elder, and willow were used for shelters and tool materials, (e.g., bows), and over 20 plants were used regularly for medicinal purposes. Although acorns and various grass seeds were important (Bean 1978:538–549), the Gabrieliño made the greatest use of food seeds, followed by foliage, shoots, fruits, and berries. Inland resource exploitation was focused on village-centered territories, and hunting ranged from deer, rabbits, wood rats, squirrels, and other small game to quail, ducks and other birds. Along the coast, wetlands and ocean resources were exploited for freshwater fish, saltwater mollusks, crustaceans, and sea mammals. Fishing technology included basket fish traps, nets, bonefish hooks, harpoons, and vegetable poisons, and ocean fishing was conducted from wooden plank canoes lashed and asphalted together.

The Gabrieliño had multiple settlements, ranging from seasonal satellite villages to larger, more permanent settlements. Constructed of tule, fern, and/or *carrizo*, Gabrieliño homes were thatched, circular, domed structures, built large enough to house several families. Smaller, earth-covered structures were used in a variety of ways, as sweathouses, meeting places for adult males, ritual huts, and ceremonial enclosures (Heizer 1952:289–293).

This wealth of resources, coupled with an effective subsistence technology, a vast trade network and a well-developed ritual system, resulted in a society that was among one of the most materially wealthy and culturally sophisticated cultural groups in California at the time of contact (Bean and Smith 1978), yet recorded ethnographic and archaeological sites associated with Gabrieliño settlements are few. This is directly attributable to the extensive and prolonged urban development of the City of Los Angeles region over the last 150 years (California Department of Parks and Recreation 2005:16).

3.16.4 Environmental Impact Analysis

3.16.4.1 Methods

In compliance with AB 52, the County provided formal notification of the proposed project to the Fernandeño/Tataviam Band of Mission Indians on April 11, 2016. The letter included a description and location of the proposed project and the County's contact information. Letters were sent via certified mail.[1] A record of this letter is included as Confidential Appendix K to this EIR. The County received a letter response from the Fernandeño/Tataviam Band of Mission Indians (Sedna

[1] The Fernandeño/Tataviam Band of Mission Indians formally requested notification on CEQA projects, under AB 52, that the County proposes to undertake. This notification affords California Native American Tribes the opportunity for consultation pursuant to PRC Section 21080.3.1. Analysis of potential impacts related to TCRs was based on information from the NAHC and from confidential tribal consultation conducted under the provisions of AB 52.

Villavicencio, Tribal Historic and Cultural Preservation Officer), on April 21, 2016 requesting tribal consultation. On July 14, 2016, the Fernandeño provided information stating that the project area was located within the sensitivity zone of two villages, Passenga and Achoicominga. As support, the Fernandeño provided PDF copies of two supporting documents, "Tataviam Geography and Ethnohistory" (Johnson and Earle 1990) and "Ethnographic Overview of the Angeles National Forest: Tataviam and San Gabriel Mountain Serrano Ethnohistory" (Chester King 2004). A qualified archaeologist reviewed and researched the documentation provided by the tribe, as well as the evaluation of impacts presented in this section. Any maps or other evidentiary consultation materials provided by the tribe are considered confidential and are retained in the County's administrative files for the proposed project. On September 15, 2017, the Fernandeño provided additional information detailing two TCRs: Patzkunga (Passenga) and another village, Sikwange. In addition to the information provided on the two TCRs, the Fernandeño also stated that locations near natural springs of water, mature oak trees, and along the foothills of mountains have the highest potential for subsurface TCRs. The current project is located within 2 miles of numerous natural springs, less than 0.4 miles from California oak woodland, and is located at the foothill of the San Gabriel Mountains, where the entrances to traditional and historic trails are located.

On December 19, 2018, the County sent a letter to the Fernandeño regarding changes to the proposed master plan. A response was received on February 1, 2019, from tribal representative Jairo Avila, who requested that sufficient archaeological monitors be present each work day during ground disturbance activities to ensure that thorough levels of monitoring coverage be provided if there will be simultaneous work areas. Mr. Avila also requested that the tribe be provided with the name of the contracted qualified archaeological monitor once the master plan projects are ready to move forward into construction and a copy of the Cultural Resource Monitoring and Mitigation Plan (CRMMP) for the project.

3.16.4.2 Thresholds of Significance

For the purposes of this EIR, and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would result in a significant environmental impact if it would:

TCR-1 Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as a site, feature, place, or 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 that is:

i. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

ii. 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 will consider the significance of the resource to a California Native American tribe.

3.16.4.3 Impacts and Mitigation Measures

Impact TCR-1: Would the Proposed Project Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource?

Construction Impacts

Tiers I and II

Potential impacts on TCRs during construction of the proposed project are analyzed by determining if the proposed activities have the potential to affect TCRs, identifying whether the work would be located at or near a TCR, applying the criteria for determining the significance of impacts on TCRs set forth in Section 15064.5 of the CEQA Guidelines, in consultation with one or more consulting parties, and relating them to the relevant plans and policies.

As discussed in Section 3.16.4, the County is conducting consultation with Fernandeño/Tataviam Band of Mission Indians pursuant to AB 52. The Fernandeño have provided detailed information about three TCRs, including two villages in the vicinity of the campus. While the proposed project is not directly located within the village habitation areas, it is within the use area for each village, which extends 3 miles from the village center. In addition, the proposed project's location near natural springs, California oak woodland, and known traditional and historic trails indicates a moderate sensitivity for subsurface TCRs. Therefore, the proposed project has a moderate potential to affect TCRs in areas on the campus not previously disturbed. If TCRs are encountered and disturbed during construction, the impact would be significant under CEQA. To reduce potential impacts if TCRs are encountered, mitigation measures **MM-CR-1** through **MM-CR-6** (see Section 3.4, *Cultural Resources*, of this EIR) will be implemented.

Mitigation Measures`

CR-1 through **CR-6**, as presented in Section 3.4, *Cultural Resources,* of this EIR, would mitigate or reduce potential impacts to TCRs, archaeological resources, and human remains, respectively, to a level that is less than significant.

Level of Significance after Mitigation

Less than significant.

3.16.5 Cumulative Impacts

As provided in Chapter 2, a total of 14 related development projects have been identified in the vicinity of the project site. The project and the related projects are located within a semi-urbanized area that has been disturbed and developed over time. Cumulative growth and development in the cumulative impacts study areas could result in significant impacts if TCRs are encountered and disturbed or damaged during construction activities. It should be noted that a great deal of historical-period debris can be found during construction (e.g., bricks, bottles, broken cups, and plates), but this material is seldom considered a significant resource. Additionally, although the potential for an individual cumulative project to affect TCRs is unknown, given the geographic extent of the cumulative impacts study areas, it is probable that cumulative growth and development would have impacts on TCRs. Although there is a moderate likelihood of encountering TCRs on the Olive View–UCLA Medical Center Campus, the possibility remains that project excavation activities could affect unknown TCRs, a potentially significant project impact. In the event that tribal cultural

resources are uncovered, each related project would be required to comply with the applicable regulatory requirements discussed in detail above. Any cumulative impacts to tribal cultural resources would be reduced by compliance with applicable regulatory requirements and the City's standard condition of approval in the event of inadvertent discovery. In addition, related projects would be required to comply with the consultation requirements of AB 52 to determine and mitigate any potential impacts to tribal cultural resources. Therefore, cumulative impacts to tribal cultural resources would be less than significant and would not be cumulatively considered.

3.17 Utilities/Service Systems

3.17.1 Introduction

This section describes the existing utility systems that serve the project site, including water supply, wastewater conveyance and treatment, stormwater conveyance, solid waste generation and disposal, and electrical service and availability, and the impacts on those systems that could occur due to implementation of the Olive View–UCLA Medical Center Master Plan (Master Plan or proposed project). Measures that would mitigate significant impacts are also identified.

3.17.2 Regulatory Setting

3.17.2.1 Federal

Clean Water Act

Passed in 1972, the Clean Water Act is a federal regulation whose objective is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands (USEPA 2013). Its National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The Donald C. Tillman Water Reclamation Plant (DCTWRP), which treats wastewater generated by the Olive View–UCLA Medical Center, is subject to NPDES permit (NPDES No. CA0056227) requirements.

Leadership in Energy and Environmental Design

Leadership in Energy and Environmental Design (LEED) is a rating system devised by the United States Green Building Council (USGBC) to evaluate the environmental performance of a building and encourage market transformation toward sustainable design. The system is credit based, allowing projects to earn points for environmentally friendly actions taken during construction and use of a building. LEED was launched in an effort to develop a "consensus-based, market-driven rating system to accelerate the development and implementation of green building practices." The program is not rigidly structured; not every project must meet identical requirements to qualify.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. Amended in 1986 and 1996, the law requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. The SDWA applies to every public water system in the United States.

The SDWA authorizes the U.S. EPA to set national health-based standards for drinking water to protect against both naturally occurring and manmade contaminants that may be found in drinking water. The U.S. EPA, states, and water systems work together to make sure that these standards are met.

Originally, the SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing that source

water protection, operator training, funding for water system improvements, and public information are important components of having safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap.

3.17.2.2 State

California Water Plan

The California Water Plan, prepared by the California Department of Water Resources, provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future. The Water Plan, which is updated every five years, presents basic data and information about California's water resources, including water supply evaluations and assessments of agricultural, urban, and environmental water uses to quantify the gap between water supplies and uses.

The Water Plan also identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the state's water needs. The Plan provides resource management strategies and recommendations to strengthen integrated regional water management. The resource management strategies help regions meet future demands and sustain the environment, resources, and economy, involve communities in decision-making, and meet various goals. A resource management strategy is a project, program, or policy that helps local agencies and governments manage their water and related resources. These strategies can reduce water demand, improve operational efficiency, increase water supply, improve water quality, practice resource stewardship, and improve flood management.

California Water Code

The California Water Code contains provisions that control almost every consideration of water and its use. Division 2 of the California Water Code provides that the State Water Resources Control Board (SWRCB) consider and act upon all applications for permits to appropriate waters. Division 6 of the California Water Code controls conservation, development, and utilization of the state water resources, and Division 7 addresses water quality protection and management.

Senate Bill 610

Senate Bill 610 (Water Code Sections 10910 and 10912) took effect on January 1, 2002. SB 610 seeks to promote more collaborative planning between local water suppliers and cities and counties. It requires that water supply assessments occur early in the land use planning process for all large-scale development projects.[1] The required assessments must include detailed analyses of historic,

[1] In accordance with the Section 15155 of the 2016 CEQA Statute and Guidelines, a project is considered to be a "water-demand project" if one of the following definitions applies:

(a) A residential development of more than 500 dwelling units;
(b) A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
(c) A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
(d) A hotel or motel, or both, having more than 500 rooms;
(e) An industrial, manufacturing, or processing plant or an 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.

current, and projected groundwater pumping, and an evaluation of the sufficiency of the groundwater basin to sustain a new project's demands. It also requires an identification of existing water entitlements, rights, and contracts and a quantification of the prior year's water deliveries.

Senate Bill 221

Enacted in 2001, SB 221, which has been codified in the California Water Code beginning with Section 10910, requires that the legislative body of a city or county that is empowered to approve, disapprove, or conditionally approve a subdivision map must condition such approval upon proof of sufficient water supply. The term "sufficient water supply" is defined in SB 221 as the total water supplies available during normal, single dry, and multiple dry years within a 20-year projection that would meet the projected demand associated with the proposed subdivision. The definition of sufficient water supply also includes the requirement that sufficient water encompass not only the proposed subdivision, but also existing and planned future uses, including, but not limited to, agricultural and industrial uses. SB 221 requirements do not apply to the general plans of cities and counties, but rather to specific development projects.

California Urban Water Management Act

The California Urban Water Management Planning Act requires urban water suppliers to prepare and adopt an Urban Water Management Plan (UWMP) every 5 years. The main goal of the UWMP is to forecast future water supply and demand for under-average and dry-year conditions, identify future water supply projects, such as recycled water, provide a summary of water conservation best management practices, and provide a single and multi dry year management strategy. In June 2016, city of Los Angeles LADWP (LADWP), which is the water supplier to the project site, approved the 2015 UWMP for the Los Angeles metropolitan area.

Health and Safety Code Section 17921.3

Health and Safety Code Section 17921.3 requires low-flush toilets and urinals in the majority of buildings.

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (Assembly Bill 939) requires each city and county in the state of California and regional solid waste management agencies to enact plans and implement programs to divert 25 percent of its waste stream by 1995 and 50 percent by 2000.

California Solid Waste Reuse and Recycling Access Act

The California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327) was enacted on October 11, 1991, and added Chapter 18 to Part 3 of Division 30 of the Public Resources Code. It required each jurisdiction to adopt an ordinance by September 1, 1994, requiring any development project for which an application for a building permit is submitted to provide an adequate storage area for collection and removal of recyclable materials.

(f) A mixed-use project that includes one or more of the projects specified in subdivisions (a)(1)(A), (a)(1)(B), (a)(1)(C), (a)(1)(D), (a)(1)(E), and (a)(1)(G) of this section.
(g) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

Assembly Bill 75

AB 75 (Public Resources Code 42920–4297) required all state agencies and large state facilities to divert at least 25 percent of all solid waste from landfills by January 1, 2002, and 50 percent by January 1, 2004. The law also requires each state agency and large facility to submit an annual report to the California Department of Resources Recycling and Recovery (CalRecycle) summarizing its yearly progress in implementing waste diversion programs. As described in further detail below, the city of Los Angeles initiated a Solid Waste Integrated Resources Plan in the spring of 2007 and is moving toward zero waste by 2030.

Assembly Bill 341

Assembly Bill 341 (Public Resources Code 41730–42649), signed in February 2011, directed that no less than 75 percent of solid waste generated in California be source reduced, recycled, or composted by 2020 and required CalRecycle to provide a report to the legislature that recommends strategies to achieve the policy goal by January 1, 2014. AB 341 also mandated local jurisdictions implement commercial recycling by July 1, 2012.

California Code of Regulations, Title 24, Part 6

Title 24, Part 6 of the California Code of Regulations (also known as the California Energy Code) establishes energy conservation standards for new construction. These standards relate to insulation requirements, glazing, lighting, shading, and water and space heating systems. Local governmental agencies may adopt and enforce energy standards for newly constructed buildings, additions, alterations, and repairs to existing buildings provided the California Energy Commission finds that the standards will require buildings to be designed to consume no more energy than permitted by Title 24, Part 6. Section 91.1300 of the city of Los Angeles Municipal Code incorporates these state requirements.

2010 California Green Building Standards Code

The 2010 California Green Building Standards (CALGreen) is a statewide mandatory green building code all cities in California were required to adopt by January 1, 2011. CALGreen requires new standards in materials reuse, locally sourced materials, water/energy efficiency, and indoor air quality. To meet CALGreen requirements, the Los Angeles County Board of Supervisors adopted the Los Angeles County Green Building Standards Code (Title 31), which is designed to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts that have a reduced negative impact or a positive environmental impact, and encouraging sustainable construction practices in planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental air quality (City of Los Angeles 2010).

Senate Bill 1078

In 2002, SB 1078 (Public Utilities Code, Chapter 2.3, Section 387, 390.1, and 399.25) implemented a renewable portfolio standard (RPS), which established a goal that 20 percent of the energy sold to customers be generated by renewable resources by 2017. The goal was accelerated in 2006 under SB 107 and expanded in 2011 under SB 2, which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 (LADWP Power Integrated Resource Plan 2015).

Senate Bill 100

In 2018, SB 100 (Public Utilities Code, Chapter 312, Section 399.11, 399.15, 399.30, and 454.53) increased the RPS target and established state policy that renewable energy resources and zero-carbon resources supply all electricity procured to serve California end-use customers and the State Water Project (SWP) by 2045. This requires the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), the Department of Water Resources (DWR), and the California Air Resources Board (ARB) to incorporate this policy into all relevant planning and use existing programs to achieve this policy.

California Public Utility Commission

The CPUC regulates privately owned electric, telecommunications, natural gas, water, and transportation companies, as well as household goods movers and rail safety. The CPUC's Energy Division sets electric rates, protects consumers, and promotes energy efficiency, electric system reliability, and utility financial integrity. The CPUC regulates local natural gas distribution facilities and services, natural gas procurement, intrastate pipelines, and intrastate production and gathering. It works to provide opportunities for competition when, in the interest of consumers, it takes the lead in environmental review of natural gas-related projects, recognizes the growing interaction of electric and gas markets, and monitors gas energy efficiency and other public purpose programs.

3.17.2.3 Local

Regional

Greater Los Angeles County Integrated Regional Water Management Plan

This Integrated Regional Water Management Plan (IRWMP) reflects the Greater Los Angeles County Region's collaborative efforts to ensure a sustainable water supply through the more efficient use of water, the protection and improvement of water quality, and environmental stewardship. The plan integrates water supply, water quality, flood management, and open space strategies to maximize the utilization of local water resources. The region includes approximately 10 million residents, 84 cities, and portions of four counties. To make governance and stakeholder involvement manageable, the region is organized into subregions: the Lower San Gabriel and Los Angeles Rivers, North Santa Monica Bay, South Bay, Upper Los Angeles River, and Upper San Gabriel and Rio Hondo Rivers (LADWP 2014). The Olive View–UCLA Medical Center Campus at 14445 Olive View Drive is located in the Upper Los Angeles River Area (ULARA) subregion. The Upper Los Angeles River also has a subregional plan to guide the protection and improvement of its water resources.

County of Los Angeles

Los Angeles County General Plan

The Conservation and Natural Resources Element of the County's sGeneral Plan serves to augment the protection, conservation, and preservation of natural resource and open space areas in Los Angeles County. This element addresses open space resources, biological resources, local water resources, agricultural resources, mineral and energy resources, scenic resources, and historical, cultural and paleontological resources (Los Angeles County General Plan 2015). The primary goals for the Local Water Resources component are to protect and use local surface water, groundwater, and watershed resources. This is proposed to be done through a combination of goals and policies in the Conservation and Natural Resources Element. These include but are not limited to minimizing

water pollution; actively engaging with stakeholders in the formulation and implementation of surface water preservation and restoration plans, river master plans, restoration projects, and other natural resource conservation aims; requiring compliance by all County departments with adopted Municipal Separate Storm Sewer System (MS4), general construction, and point source NPDES permits; actively supporting the design of new and retrofit of existing infrastructure to accommodate watershed protection goals; protecting natural groundwater recharge areas and regional spreading grounds; preventing stormwater infiltration where inappropriate and unsafe; promoting the development of multi-use regional facilities for stormwater quality improvement, groundwater recharge, detention/attenuation, flood management, retaining non-stormwater runoff, and other compatible uses (Los Angeles County General Plan, Conservation and Natural Resources Element 2015).

Los Angeles County Integrated Waste Management Plan

The California Integrated Waste Management Act (AB 939) mandates that jurisdictions meet a diversion goal of 50 percent by 2000 and thereafter. In addition, each county is required to prepare and administer a Countywide Integrated Waste Management Plan. This plan is composed of the County's and cities' solid waste reduction planning documents, an Integrated Waste Management Summary Plan (Summary Plan), and a Countywide Siting Element (CSE) (LADWP 2012). In order to assess jurisdiction's compliance with AB 939, the Disposal Reporting System was established to measure the amount of disposal from each jurisdiction and determine if it has met the goals.

City of Los Angeles

LADWP 2015 Urban Water Management Plan

The California Urban Water Management Planning Act requires water suppliers to develop water management plans every 5 years. LADWP most recently completed a 5-year update in 2015. LADWP's 2015 Urban Water Management Plan, which was adopted by the city's Board of Water and Power Commissioners on June 7, 2016, describes how water resources are used and presents strategies that will be used to meet the city's current and future water needs, which focus primarily on water supply reliability and water use efficiency measures. The plan projects water demand and supplies through 2040; total demand for water is predicted to be 685,500 acre-feet[2] in 2030 and 709,500 acre-feet in 2040, with passive water conservation for a single dry year, and 652,900 acre-feet in 2030 and 675,700 acre-feet in 2040 with passive water conservation for an average weather year. LADWP expects it will be able meet their forecasted demand for water resources with a combination of existing supplies, planned supplies, and Metropolitan Water District (MWD) purchases (LADWP 2015a).

City of Los Angeles Water Integrated Resources Plan

Prepared jointly by the city of Los Angeles Bureau of Sanitation (BOS) and the LADWP, the city of Los Angeles adopted its Water Integrated Resources Plan (IRP) in 2006. It contains an implementable facilities plan through the year 2020 that integrates water supply, water conservation, water recycling, runoff management, and wastewater facilities planning using a regional watershed approach. The adopted IRP contains recommendations that would be achieved through a series of projects and policy directions to staff (City of Los Angeles Water Integrated Resources Plan 2012).

[2] 1 acre-foot = 325,851 gallons.

Citywide Exclusive Franchise System for Municipal Solid Waste Collection and Handling

Solid waste collection, management, and disposal in the city of Los Angeles is handled by BOS crews and various permitted private solid waste haulers. The city provides solid waste collection, recycling, and green waste collection services primarily to single-family uses and multifamily uses with four units or less. Private solid waste haulers collect from most multifamily residential uses with more than four units and commercial uses based on an open permit system. Permitted waste haulers must obtain an annual permit, submit an annual report, and pay quarterly fees. However, unlike the BOS, private waste haulers are not required to provide recycling services, operate clean vehicles, offer similar costs for similar services, or reduce vehicle miles traveled. Thus, the existing open permit system limits the availability of the city to address compliance with state environmental mandates and the city's waste diversion goals. Although the city has obtained a 76 percent solid waste diversion rate, as identified in the 2013 Zero Waste Progress Report, nearly 3 million tons of solid waste are still deposited in landfills annually, with nearly 70 percent composed of waste collected by private waste haulers from multifamily residential and commercial customers.

To respond to these challenges, and in response to the City Council directive, the BOS established an executive franchise system for municipal solid waste collection and handling services for multifamily residential uses of five or more and commercial, industrial, and institutional uses serviced by private solid waste haulers. The Exclusive Franchise System Ordinance (Ordinance No. 182986) was adopted by the City Council on April 8, 2014. In 2017, city officials put the new system into effect, replacing the city's open market collection and handling system in those sectors. The exclusive franchise system established a number of franchise collection zones, in which a single franchised waste hauler collects, manages, and disposes of solid waste from both commercial and multifamily residential properties. Among other requirements, the city would mandate maximum annual disposal levels and specific diversion requirements for each franchise zone to promote solid waste diversion from landfills in an effort to meet the city's zero waste goals.

City of Los Angeles Emergency Water Conservation Plan (Ordinance No. 181288)

The city adopted Ordinance No. 181288 (amendment to Chapter XII, Article I of LAMC) to clarify prohibited uses and modify certain water conservation requirements of the City of Los Angeles Emergency Water Conservation Plan. The purpose of the ordinance is to minimize the effect of a water shortage on the customers of the city of Los Angeles and to adopt provisions that will significantly reduce water consumption over an extended period of time.

The revised Water Conservation Ordinance contains five water conservation phases, which correspond to severity of water shortage, with each increase in phase requiring more stringent conservation measures. Water conservation phases define outdoor watering restrictions, as appropriate, including sprinkler use restrictions and other prohibited water uses.

Industrial Waste Control Ordinance

The Industrial Waste Management Division of the BOS was established to protect local receiving waters by regulating industrial wastewater discharges to the city's sewer system and by administering and enforcing the Industrial Waste Control Ordinance (Los Angeles Municipal Code Section 64.30) as well as federal EPA pretreatment regulations.

Industrial facilities and certain commercial facilities that plan to discharge industrial wastewater to the city's sewage collection and treatment system are required first to obtain an industrial wastewater permit. Permits are issued when a determination has been made by the Board of Public

Works for the city of Los Angeles that the wastewater to be discharged will not violate any provisions of the ordinance, the Board's Rules and Regulations, the water quality objectives for receiving waters established by the California Water Quality Control Board, Los Angeles Region, or applicable federal or state statutes, rules, or regulations.

City of Los Angeles Sewer Allocation (Ordinance No. 166060)

City Ordinance No. 166,060 (Sewer Allocation) limits the annual increase in wastewater flows discharged into the Hyperion Treatment Plant (HTP) system to 5 million gallons per day (mgd). The Los Angeles Department of Public Works, Bureau of Engineering, Special Order No. SO06-0691 changed the design peak dry weather flow for sanitary sewers from three-quarter depth to one-half the sewer diameter to implement the city-adopted goal of no overflows or diversions from the wastewater collection system.

Sewer System Management Plan

On May 2, 2006, the SWRCB adopted the Statewide General WDRs for publicly owned sanitary sewer systems. Under the WDRs, the owners of such systems must implement a written Sewer System Management Plan and make it available to the public.

The city of Los Angeles's sewer system is one of the largest in the world, with more than 6,600 miles of sewers serving a population of more than 4 million in the Hyperion Sanitary Sewer System, Terminal Island Water Reclamation Plant Sanitary Sewer System, and the city of Los Angeles Regional Sanitary Sewer System. To comply with the WDRs, a Sewer System Management Plan was prepared for each of the city's three sanitary sewer systems. The Sewer System Management Plan must be updated every 5 years. The goal of the city's Sewer System Management Plan is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system, which will help reduce and prevent Sanitary Sewer Overflows (SSOs), as well as mitigate any SSOs that do occur (Sewer System Management Plan–Hyperion Sanitary Sewer System 2015).

LADWP Power Integrated Resources Plan

LADWP is also responsible for the construction, operation, maintenance, and management of electric works and property for the benefit of the city and its habitats. The goal of the Power Integrated Resources Plan (IRP) is to identify a portfolio of generation resources and power system assets that meets the city's future energy needs at the lowest cost and risk consistent with LADWP's environmental priorities and reliability standards (LADWP 2015b). The 2015 Power IRP provides a 20-year framework to ensure that current and future energy needs of the city can be met over the next 20 years.

The Power IRP provides objectives and recommendations to reliably supply LADWP customers with power and to meet the updated SB 1078's goal of 50 percent renewable energy by 2030.

3.17.3 Environmental Setting

3.17.3.1 Water Supply

Water service to the project site is provided by LADWP. In addition to LADWP, the two other major water utility providers that serve the area in the vicinity of the project site are the Metropolitan Water District (MWD) and the California Water Service (CWS).

LADWP covers an area of 465 square miles, serving residents and businesses in Los Angeles and its surrounding communities. With over 3.9 million residents, there are 674,000 water customers with active service connections (LADWP 2013). Water supply and conveyance structures within the LADWP system include a series of 114 tanks and reservoirs and a network of pipelines, including 7,263 miles of distribution mains. In Fire Year 2013–2014, LADWP supplied 177 billion gallons (543,193 acre-feet) of water, whereas the average daily use for all customers was 131 gallons per capita per day (LADWP 2016).

The Los Angeles Aqueducts, local groundwater, and supplemental water purchased from MWD are the primary sources of water supply for the city of Los Angeles. The Los Angeles Aqueduct supplies an average of 34 percent of the city's water, MWD purchases account for about 53 percent, local groundwater resources comprise 12 percent, and recycled water supplies 1 percent (5-year average from Fire Years 2010–2014; LADWP 2016). The water from MWD is delivered through the Colorado River Aqueduct and the State Water Project's California Aqueduct, sources that have historically delivered an adequate and reliable supply to serve the city's needs. Recycled water projects are expected to fill a larger role in Los Angeles's water supply portfolio, and stormwater capture projects for groundwater recharge to improve groundwater reliability are also being developed.

The 2015 UWMP projects water demand for their service area through the year 2040, as summarized in Table 3.17-1.

Table 3.17-1. LADWP Projected Water Demand through Year 2040

Demand Forecast	**Year**		
Total (single dry year)	2020	2030	2040
	642,400 AFY[1]	685,500 AFY	709,500 AFY
Total (average weather year)	2020	2030	2040
	611,800 AFY	652,900 AFY	675,700 AFY
Notes: [1] Acre-feet per year Source: Los Angeles LADWP 2015a .			

The UWMP also projects that LADWP's reliance on MWD purchases for their water supply will be reduced to 11 percent by Fiscal Year 2039–2040 (under average year conditions) (LADWP 2015a).

Using the LADWP UWMP projections, the Greater Los Angeles County Integrated Regional Water Management Plan also makes demand forecasts. For comparative purposes, the projections for the ULARA subregion can be seen in Table 3.17-2.

Table 3.17-2. ULARA Water Demand through Year 2035

Year		
2015	**2025**	**2035**
439,000 AFY	477,00 AFY	500,000 AFY
Source: LADWP 2014.		

Water usage at the Olive View–UCLA Medical Center is currently estimated at approximately 227,861 gallons per day or 83,169,372 gallons per year (Los Angeles County 2016).

Based on the 1982 site utility plan, there is an existing 12-inch domestic water loop around the hospital, with two connections to the street water main along Olive View Drive, one on the southwest corner and the other at the southeast corner of the property (Olive View–UCLA Medical Center Master Plan 2015). A portion of the 12-inch water main that runs through the building foundation was later abandoned and replaced by LADWP with a 16-inch gravity cold water line (CW) along Bledsoe Street that connects to the 12-inch main line.

An existing 500,000-gallon emergency water reservoir is located on the northeast side of the property, across from the Los Angeles flood control channel. Per Olive View–UCLA Medical Center facilities staff, this tank has been decommissioned. The reservoir is provided with a 6-inch cold water inlet pipe connected to the existing 12-inch water main. An 18-inch suction pipe is connected to the reservoir and serves as the emergency water supply (EWS) going to the Central Utility Plant (CUP). The 18-inch EWS and the 6-inch CW make-up water are routed below the flood control channel.

Based on the as-built drawings, there are three vertical turbine multistage emergency water pumps, with total capacity of 1030 GPM at 208 feet of head. The water pumps take suction from the 18-inch EWS, with 6-inch CW bypass connected to the discharge line from the pumps. A 6-inch CW is shown as supplying the hospital, with the pump discharge connected to the same CW line from street main.

The onsite water distribution system conveys flow from the offsite water main system to the campus water main facilities, providing flow to meet domestic water service, fire protection, and irrigation demands.

3.17.3.2 Sewers and Wastewater Treatment

The hospital's sanitary sewer system is routed and collected south of the building. Four existing 8-inch sanitary sewers are connected from the building to the 8-inch main site sewer lines on Olive View Drive. An existing 17,500-gallon sanitary sewage tank is located in the parking lot, south of the hospital.

The tank size is assumed to be a minimum of 53,250 gallons (Olive View–UCLA Medical Center Master Plan 2015). An existing 10-inch sanitary sewer that serves the Central Utility Plant is located along Bledsoe Street. It is understood that the current sanitary sewage tank is being used as an emergency backup for waste; the possibility of using this tank to comply with NPC 5 requirements that will be enforced by 2030 will be reviewed.

Wastewater from the campus is conveyed via public sewer lines that are owned by the city of Los Angeles. These local sewer lines connect to the city's North Hollywood Interceptor System (NHIS), North Outfall System (NOS), and/or DCTWRP. From there, sewage and wastewater is either conveyed via the La Cienega San Fernando Valley Relief Sewer (LCSFVRS) or via the East Interceptor Sewer (NEIS), a 10-mile sewer tunnel ranging in diameter from 6 to 8 feet. NEIS connects to other major interceptor and outfall sewers, including the LCSFVRS, that ultimately convey flows to the HTP, located in Playa del Rey. The HTP is part of the Hyperion System, which is the largest of the city's three sanitary sewer systems. Currently, an average of nearly 300 mgd is generated in the system. Approximately 60 mgd is treated upstream at the DCTWRP and Los Angles–Glendale Water Reclamation Plant. All other flow in the Hyperion System, as well as the biosolids from these reclamation plants, which are returned to the collection system, are treated at the HTP (City of Los Angeles Sewer System Management Plan 2014). The HTP provides full secondary treatment and has

an average dry weather capacity of 450 mgd. Treated effluent is discharged from the HTP into Santa Monica Bay via a 5-mile ocean outfall.

According to the city's Sewer System Management Plan (2014), the city's sewer system has sufficient capacity to handle peak dry-weather flows and has not experienced any wet weather overflows since major relief sewers were completed in 2006. Additionally, the city has virtually eliminated dry-weather overflows from power outages or equipment failures at its pump stations.

Wastewater flows include residential, employment, industrial, and groundwater infiltration sources. The most recent city estimates for wastewater flows use Southern California Association of Governments 2008 adjusted data, which was used for population assumptions, the city of Los Angeles Water Integrated Resources Plan projects the 2010 population to be approximately 4,485,054 residents, with approximately 4,641,928 residents in 2015 and approximately 4,854,483 residents in 2020. At the time the IRP was adopted, its projected average dry weather flow was estimated to be approximately 477.3 mgd in 2010, approximately 492.3 mgd in 2015, and approximately 511.5 mgd in 2020, with each amount falling within the system-wide treatment capacity of 550 mgd. The wastewater flow projections account for planned levels of water conservation and assumed levels of collection system maintenance and rehabilitation (City of Los Angeles Bureau of Sanitation and LADWP 2012).

The Olive View–UCLA Medical Center generated approximately 205,075 gallons per day of wastewater or 74,852,434 gallons per year over the last year (FY 2015–2016) (San Francisco Water Power Sewer 2013)[3]. This wastewater generated on the campus is eventually conveyed to and treated at the HTP.

3.17.3.3 Stormwater

The Olive View–UCLA Medical Center Campus is served by the city of Los Angeles and Los Angeles County Flood Control District (LACFCD). The existing site does not include water quality or stormwater controls, such as stormwater best management practices (BMPs), low impact development (LID) features, or hydromodification management facilities. Additionally, stormwater detention and other flood control features are not present onsite. Instead, the existing site manages rainfall and stormwater runoff by overland sheet flow toward Wilson Canyon, primarily toward a series of onsite catch basins, and discharges into the city of Los Angeles storm drain line at Olive View Drive. Two large storm drain systems operated by LACFCD, the Wilson Canyon Channel and Mansfield Channel, run north to south near the east and west borders of the campus, respectively. These existing drains eventually join together offsite near the northeast corner of Sylmar High School, approximately 1 mile south of the campus. The existing stormwater management system utilizes a system of storm drain lines, vertical roof drains, underground reinforced concrete pipe, overland sheet flow, curbs, gutters, catch basins, and driveways to convey stormwater runoff to the existing public system owned and operated by LACFCD.

Historically, urban development and storm drain system design have consisted of streets, driveways, sidewalks, and structures constructed out of impervious materials that directly convey runoff to curb and gutter systems, the storm drain system, and downstream receiving waters. Until recently, conventional storm drainage and flood control systems were designed to convey

[3] Wastewater consumption was calculated based on the assumption(s) that wastewater generation is equal to 90 percent of water consumption .

stormwater away from developed areas as quickly as possible, but without thoroughly addressing stormwater quality and/or groundwater discharge. As of January 2009, LACFCD has developed standards to address these issues. Current LACFCD LID standards for stormwater management require limiting storm runoff from redeveloped sites to the predevelopment condition. Various measures used to achieve this may include infiltration, store and reuse (rainwater collection cisterns), bio-retention basins, and filtration systems. To the extent it is technically feasible, a developed site is required to capture, infiltrate, or reuse the difference in volume generated during a 0.75-inch storm event on the developed site versus that generated by the same event on the undeveloped site. In addition, to remove urban stormwater pollution, a developed site may be required to treat the entire 0.75-inch rainfall.

3.17.3.4 Solid Waste

Solid waste generated by facilities on the Olive View–UCLA Medical Center Campus is collected by franchise waste haulers for eventual disposal at one of the designated landfills in the city and County of Los Angeles.

Landfills in California are categorized as one of three classes:

- Class I landfills accept hazardous and nonhazardous wastes;
- Class II landfills accept nonhazardous and designated wastes, as defined by the State Department of Resources Recycling and Recovery; and
- Class III landfills accept municipal and other nonhazardous, household waste.

Unclassified landfills are defined as facilities that accept inert materials only, such as soil, concrete, asphalt, and other construction and demolition debris. Nonhazardous municipal solid waste is disposed in Class III landfills, while construction waste, yard trimmings, and earth-like waste are disposed in unclassified (inert) landfills.

In 2016, Los Angeles County generated 9.9 million tons of solid waste for disposal (Los Angeles County Integrated Waste Management Plan 2016). Of those 10.3 million tons, 5.2 million tons went to in-county Class III landfills, 0.53 million tons went to transformation facilities, and 4.2 million were exported to out-of-county landfills (Los Angeles County Integrated Waste Management Plan 2017). The amount of inert waste disposed at permitted inert waste landfills totaled 369,083 tons (Los Angeles County Integrated Waste Management Plan 2017). On average, the solid waste disposed for 2016 was 33,026 tons per day (tpd). The city produced 3.9 million tons of solid waste that same year for disposal. Assuming a diversion rate of 65 percent, the County generated a total 28.05 million tons (89,900 tpd) and the city generated a total of 11.1 million tons (30,520 tpd) of solid waste.

There are several major landfills in the Los Angeles metropolitan area that may serve the project site, including Sunshine Canyon Landfill, located 5 miles from the project site. These landfills are classified as *major landfills*, which are defined as those facilities that receive more than 250,000 tons of solid waste per year. Additionally, these landfills are classified as Class III landfills since they are permitted to accept nonhazardous wastes only.

A list of the existing available Class III solid waste disposal facilities that can serve the project site and their remaining capacity is provided in Table 3.17-3. Demand for landfill capacity is continually

evaluated by Los Angeles County through preparation of the Los Angeles County Integrated Waste Management Plan (CIWMP) Annual Reports.

Table 3.17-3. Existing (2012) Available Class III Solid Waste Disposal Facilities

Landfill	Remaining Capacity (millions of tons)	Remaining Life (years)
Sunshine Canyon	62.11	21.0
Antelope Valley	12.89	23.0
Lancaster	10.45	25.0
Calabasas	5.95	13.0
Savage Canyon	4.89	39.0
Scholl Canyon	4.08	12.0
Burbank	2.71	37.0
Chiquita Canyon*	60.00	29.5
Pebbly Beach	0.07	12.0
San Clemente	0.04	16.0

Notes:
Landfill remaining life based on 2016 average daily disposal rates, maximum permitted capacity, and/or facility restrictions as of September 2017.
*Chiquita Canyon's remaining capacity was based on the Chiquita Canyon Landfill Master Plan Revision EIR 2014.
Source: Los Angeles County Integrated Waste Management Plan Report 2017.

Using waste generation rates for hospital facilities provided by the California Department of Resources Recycling and Recovery, the 285-bed hospital facility on the Olive View–UCLA Medical Center Campus currently generates an estimated 4,560 pounds per day of solid waste (CalRecycle 2013).[4] The waste generated by campus facilities for disposal includes both medical and biohazardous waste; existing hazardous waste is disposed of at designated Class I facilities. The state of California currently operates three designated Class I landfills (State Water Resources Control Board 2013): the Buttonwillow Hazardous Waste Facility in Kern County, the Kettleman Hills Hazardous Waste Facility in Kings County, and the Imperial (Westmorland) Hazardous Waste Facility in Imperial County. The Buttonwillow facility is 320 acres and operates a permitted drum handling and storage area that can store up to 1,500 drums (Clean Harbors Buttonwillow, LLC 2018). Their current constructed landfill capacity is 950,000 cubic yards, whereas the permitted landfill capacity is 10 million cubic yards (Clean Harbors Buttonwillow, LLC 2018). The Imperial facility is 640 acres, with a drum capacity of 1,000 drums (50,000 gallons) and a bulk storage capacity of 195 cubic yards (Westmorland et al. 2013). The Kettleman Hills facility is a 1,600-acre property that is permitted to receive a maximum of 2,000 tpd of municipal solid waste, but typically receive an average of about 1,350 tpd (Waste Management 2019).

[4] Based on a solid waste generation factor of 16 pounds/bed/day.

3.17.3.5 Natural Gas

The Southern California Gas Company (SoCalGas), Pacific Region, is the principal distributor of natural gas in Southern California, providing retail and wholesale customers with transportation, exchange, and storage services, as well as procurement services to most retail core customers. As the nation's largest natural gas distribution utility, SoCalGas is responsible for providing energy to 21.8 million consumers over a 24,000-square-mile service area throughout central and southern California (SoCalGas 2019), maintaining 5.9 million meters in more than 500 communities (SoCalGas 2019). SoCalGas is a gas-only utility and, in addition to serving the residential, commercial, and industrial markets, provides gas for enhanced oil recovery (EOR) and electricity generation (EG) customers in Southern California. As a public utility, the SoCalGas is under the jurisdiction of federal and state regulatory agencies.

Aliso Canyon, California's largest underground natural gas storage facility, has a total working capacity of 86 billion cubic feet (Bcf) of natural gas, or about 64 percent of the SoCalGas total storage capacity. On October 23, 2015, a natural gas leak in well SS25 was detected at the Aliso Canyon natural gas storage facility owned by SoCalGas. The leak was stopped on February 11, 2016, and SS25 was permanently sealed on February 18, 2016. Following the leak, the facility's maximum working gas storage level is limited to 23.6 Bcf, about 28 percent of the facility's maximum capacity. Because of the limited maximum storage of Aliso Canyon, the natural gas supply has dropped significantly. That being said, a study commissioned by Los Angeles County stated that the storage facility was not necessary to maintain electricity reliability in the area, as demand response, energy storage, and energy efficiency could alleviate market supply issues. SoCalGas regularly assesses and upgrades its systems to meet current and future needs to accommodate future expansion in residential, commercial, and industrial uses.

The 2018 California Gas Report estimates the total annual gas supply taken by SoCalGas was approximately 2,534 million cubic feet per day (MMcf/day) in 2017. SoCalGas projects total gas demand to decline at an annual rate of 0.5 percent from 2018 to 2035 (SoCalGas 2018). The decline in throughput demand is due to modest economic growth, CPUC-mandated energy efficiency (EE) standards and programs, renewable electricity goals, the decline in commercial and industrial demand, and conservation savings linked to Advanced Metering Infrastructure (AMI). A summary table of the projected annual gas requirements in Southern California through year 2035 is provided in Table 3.17-4.

Table 3.17-4. Southern California Projected Annual Gas Requirements through Year 2035

Year			
2020	**2025**	**2030**	**2035**
2,566 MMcf/day	2,442 MMcf/day	2,310 MMcf/da	2,313 MMcf/day
Note: Assumes average temperature and normal hydro year. Source: SoCalGas 2018 .			

SoCalGas expects it will be able meet their forecasted demand with a combination of in- and out-of-state gas sources (SoCalGas 2018). The Olive View–UCLA Medical Center currently consumes an

estimated 3,492,117 cf per year of natural gas (County of Los Angeles 2016) (See Appendix C of this EIR for natural gas consumption assumptions and calculations). [5]

3.17.3.6 Electricity

Existing power and electrical services to the Olive View–UCLA Medical Center Campus are provided by LADWP. LADWP supplies more than 26 million megawatt hours (MWh) of electricity per year for its 1.5 million residential and business customers (LADWP 2019) and are responsible for the maintenance of 10,000 miles of overhead distribution lines and underground distribution cables and 15,452 transmission towers (LADWP 2019). They also maintain 160 distributing stations, 21 receiving stations, and over 50,000 substructures (LADWP 2019). Of LADWP's total power resources, about 29 percent are from renewable sources, 34 percent from natural gas, 19 percent from coal, and 9 percent from nuclear (LADWP 2019). About 70 percent of the electricity in the city of Los Angeles is consumed by business and industry, with the remaining 30 percent of residents averaging about 5,900 kilowatt hours (5.9 MWh) of usage per year (LADWP 2019).

LADWP also prepares energy forecasts as a part of their Power Integrated Resource Plan (PIRP). LADWP's load forecast incorporates updates to reflect the latest load forecast, fuel price, projected renewable price forecasts, and numerous other modeling assumptions. The most recent PIRP from 2016 makes projections out to Fiscal Year 2039–2040. A summary table of the projected net energy demand for the service area through 2040 is shown in Table 3.17-5.

Table 3.17-5. LADWP Projected Energy Demand through Year 2040

Year		
2020	**2030**	**2040**
26,859 GWh	31,395 GWh	35,749 GWh
Source: LADWP Power Integrated Resource Plan 2016.		

The Olive View–UCLA Medical Center currently consumes an estimated 5,503,577 kwh per year of electricity (County of Los Angeles 2016) (see Appendix C for electricity consumption assumptions and calculations).

3.17.3.7 Transportation Fuels

The CEQA Guidelines, Appendix F, Energy Conservation, state that EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. California is the most populous state in the nation, with a total energy demand second only to Texas (U.S. Energy Information Administration 2012).

Driven by high demand from California's many motorists, major airports, and military bases, the transportation sector is the state's largest energy-consumer (Luna Glushon 2009). The majority of transportation energy is currently derived from a wide variety of petroleum products. Automobiles and trucks consume gasoline and diesel fuel. The transportation sector consumes relatively minor amounts of natural gas or electricity, but, propelled mainly by air quality laws and regulations,

[5] Conversion from Kbtu to cubic feet uses U.S. EIA Energy Calculator(s).

technological innovations in transportation are expected to increasingly rely on compressed natural gas and electricity as energy sources. Energy consumption by on-road motor vehicles reflects the types and numbers of vehicles, the extent of their use (often described in terms of vehicle miles traveled [VMT]), and their fuel economy (typically described in terms of miles per gallon [mpg]).

Data from the Department of Motor Vehicles show that gasoline demand is largely driven by Light Duty Vehicles (LDVs), which represent more than 90 percent of all gasoline consumption in California (California Energy Commission 2017). Gasoline vehicles made up 92 percent of California LDVs in 2015. Gasoline also fuels hybrid vehicles and accounts for more than 95 percent of the fuel used by flexible-fuel vehicles in California. Corporate Average Fuel Economy (CAFE) standards provide for significantly improved fuel economy, a trend that NHTSA estimates will continue through 2025. Most of the demand for gasoline in California can be attributed to LDVs in the residential sector. The slow growth in population, coupled with improvements in fuel economy, explains the overall decline in demand for gasoline. All three demand forecast cases show reductions of up to 3.7 percent per year due to improved fuel economy, driven by CAFE standards and displacement by alternative fuels, primarily driven by the Zero Emission Vehicle (ZEV) regulations. Overall, in the low-demand, mid-demand, and high-demand cases, the California on-road gasoline consumption would decrease from approximately 14 billion gallons to between 10–11 billion gallons (California Energy Commission 2017).

3.17.3.8 Communication Service (Telephone, Internet)

The telecommunications fiber network around the campus was repaired in 2013. The trailers to the west end of the campus all have new conduits provisioned for network connectivity. Currently, telecommunication services are provided by utilities that operate independently of the County and include landline and wireless services for telephone, radio, television, and internet devices. The project site is located in Verizon California's incumbent local exchange carrier territory and is a carrier of last resort (CPUC 2014, 2017). Spectrum and Frontier provide cable internet and phone service for much of Los Angeles County and are available to the project site (Cable Coverage and Availability Maps 2018).

3.17.4 Environmental Impact Analysis

This section presents a discussion of the potential impacts on utilities services that could result from implementation of the proposed Master Plan.

3.17.4.1 Thresholds of Significance

For the purposes of this EIR, and in accordance Appendix G of the State CEQA Guidelines, the proposed project would have a significant environmental impact on utilities and service systems if it would:

UTL-1 Require or result in the relocation or construction of new or expanded water, waste water treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

UTL-2 Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

UTL-3 Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

UTL-4 Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or that would otherwise impair the attainment of solid waste reduction goals.

UTL-5 Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.17.4.2 Impacts and Mitigation Measures

Impact UTL-1: Would the Proposed Project Require or Result in the Relocation or Construction of New or Expanded Water, Wastewater Treatment or Stormwater Drainage, Electric Power, Natural Gas, or Telecommunications Facilities, the Construction or Relocation of which Could Cause Significant Environmental Effects?

Construction Impacts

Tier I

Water

Under Tier I of the Master Plan, an estimated 156,900 square feet of development on the campus would be demolished, and 640,491 square feet of new buildings and facilities would be constructed. Generally, construction activities would include demolition work, site preparation and grading, and construction of new and renovated facilities. During construction of individual projects implemented under the Master Plan, water would be consumed by construction workers and activities (e.g., cement mixing and dust suppression). However, the incremental increase in water consumption during construction would not be permanent, and it is not expected that new water conveyance or treatment facilities would be required to meet this incremental increase in demand. Therefore, impacts would be less than significant.

Construction of new development and facilities under Tier I would also require new on-campus infrastructure to accommodate that development, including new water lines. The construction of those new lines is generally not expected to result in significant environmental impacts given they would be confined within the existing campus, largely in areas previously disturbed by construction activities. However, if construction of new water lines occurs at depths where undisturbed native soils would be encountered, the potential exists that unknown buried archaeological or paleontological resources could be encountered and damaged or destroyed, a potentially significant impact (see Section 3.4, *Cultural Resources*, and Section 3.5, *Geology/Soils,* of this EIR for a more detailed discussion of impacts to archaeological resources and paleontological resources, respectively). However, proposed mitigation measures (see Sections 3.4 and 3.5 of this EIR) would reduce potential impacts to archaeological and paleontological resources to a less-than-significant level.

Wastewater

During construction of individual projects implemented under the Master Plan, minor, incremental amounts of wastewater would be generated by construction workers. These incremental amounts would not require new or expanded wastewater conveyance or treatment facilities. Therefore,

impacts due to increased wastewater consumption during construction would be less than significant.

Construction of Tier I projects would require the construction of new on-campus sewer lines to serve proposed new buildings. Similar to the discussion above for new water lines, if construction of new sewer lines (or other underground utilities) occurs at depths where undisturbed native soils would be encountered, the potential exists that unknown buried archaeological or paleontological resources could be encountered and damaged or destroyed, a potentially significant impact. However, mitigation measures (see Sections 3.4 and 3.5 of this EIR) would reduce potential impacts to archaeological and paleontological resources to a less-than-significant level.

Stormwater

Minor alterations of the existing drainage patterns on the project site may occur as a result of the construction of new facilities and campus improvements. However, campus construction activities would not substantially alter the overall topography and drainage patterns. Additionally, the proposed project would be required to obtain and comply with the Construction General Permit from the SWRCB. This permit and associated NPDES requirements include development and implementation of a SWPPP, with associated monitoring and reporting. Stormwater BMPs are required to limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. Therefore, new offsite drainage facilities would not be required as a result of Tier I construction activities and construction impacts would be less than significant.

Development under the Master Plan would include on-campus drainage improvements including LID features, such as bioretention, and permeable pavement LID features. These features would meet the requirements found in the city of Los Angeles Department of Sanitation's *Development Best Management Practices Handbook*. Given these improvements are designed to be low impact and development would not substantially alter on-campus drainage patterns, it is not expected that the construction of on-campus drainage improvements would result in significant impacts.

Electricity and Natural Gas

Construction of individual projects under Tier I would require the use of energy resources including electricity and natural gas and transportation fuels for construction worker vehicles and trucks hauling construction materials or debris. The additional energy consumption from construction activities would be limited in duration and finite. Construction activities would not result in a permanent increase in demand for energy resources and, thus, no relocation or construction of new electric power or natural gas facilities is anticipated, and impacts would be less than significant.

Telecommunications

Given the minimal demands that would be placed on telecommunications facilities by construction workers and activities and the fact those demands would be temporary, it is not expected that new or expanded offsite telecommunications facilities would be required to meet those demands. Therefore, impacts due to use of telecommunications infrastructure during construction would be less than significant.

Under the proposed project, a new on-campus wireless antenna would be installed on the hospital roof to create a redundant wireless carrier link to provide continued network services in the event of a carrier network breach. The activities required to construct and install this antenna would be minor. Similarly, construction activities associated with other telecommunications infrastructure improvements that may be required under the Master Plan are not expected to be extensive or cause

substantial disruption to the campus or environment. Therefore, impacts would be less than significant.

Tier II

Under Tier II of the Master Plan, an estimated 137,000 square feet of existing development on the campus would be demolished and 992,000 square feet of new buildings and facilities would be constructed. Because of the increase in proposed new development under Tier II, more construction workers would be employed than would occur under Tier I. However, the amount of water consumed, wastewater generated, and energy consumed by Tier II construction workers and activities would still be relatively insignificant and would not require the construction of new or expanded offsite water, wastewater treatment stormwater drainage, electric power, natural gas, or telecommunications facilities to meet demand. Therefore, construction impacts would be less than significant.

Similar to Tier I above, if construction of new on-campus infrastructure, e.g., new water or sewer lines, occurs at depths where native soils would be encountered, unknown archaeological or paleontological resources that may be present could be disturbed or damaged, a potentially significant impact. However, proposed mitigation measures (see 3.4, *Cultural Resources* and 3. 6, *Geology and Soils,* of this EIR) would reduce construction impacts to a less-than-significant level.

Mitigation Measures

Please see Sections 3.4, *Cultural Resources,* and 3.6, *Geology and Soils,* of this EIR for measures to mitigate impacts to archaeological and paleontological resources during construction.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

Water

Future development under Tier I would result in increased water consumption. Based on the proposed future uses and demolition of existing facilities that could occur under the Master Plan, the proposed project could result in a net increase in water consumption of 138,640 gpd. Projections for on campus water consumption under Tier I are shown below in Table 3.17-6.

Table 3.17-6a. Calculated Total Additional Water Demand–Existing Use

Existing Use[1]	Quantity (sq. ft.)	Water Use Factor[2] (gpd/unit)	Existing Water Use to be Removed	
			(gpd)	(af/y)
Tier I				
Administration Office	52,300	0.15	7,845	8.79
Materials Management	32,500	0.15	4,875	5.46
Central Utility Plant Maintenance	34,500	0.08	2,760	3.09
Central Utility Plant Office	16,500	0.15	2,475	2.77
Landscaping[3]	50,000	–	2,404	2.69
Tier I Existing to be Removed Total			**20,359**	**22.80**

Existing Use[1]	Quantity (sq. ft.)	Water Use Factor[2] (gpd/unit)	Existing Water Use to be Removed	
			(gpd)	(af/y)
Tier II				
Inpatient Hospital: Clinical & General Support	68,196	0.25	17,049	19.10
Inpatient Hospital: Cafeteria (5,000 sq.ft.)	150 seats	30.00	4,500	5.04
Inpatient Hospital: Inpatient Care (355 beds)	119,554	0.25	29,889	33.48
Inpatient Hospital: Diagnostic & Treatment	124,887	0.25	31,222	34.98
Inpatient Hospital: Administrative Services	70,328	0.15	10,549	11.82
Inpatient Hospital: Department Office	24,573	0.25	6,143	6.88
Inpatient Hospital: Hospital/Campus Support	85,331	0.15	12,800	14.34
Inpatient Hospital: Vacant Buildings	36,431	–	–	–
Administration Office	55,700	0.15	8,355	9.36
Mental Health Office	11,000	0.25	2,750	3.08
Support Service Building	16,800	0.15	2,520	2.82
Storage Trailers	61,000	0.02	1,220	1.37
Cooling Tower	–	–	52,367	58.66
Tier II Existing to be Removed Total			**179,364**	**200.93**
Total Existing Water Use to be Removed			**199,723**	**223.73**

Notes:

1 Provided by the County of Los Angeles in the 2016 Request for Water Supply Assessment letter and Scope Confirmation e-mail. See Appendix K. Calculations in this table were based on the 2018 updated Project Description.

2 Existing indoor water uses are based on 1996 City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table available in Exhibit M.2-12 at http://www.environmentla.org/programs/Thresholds/M-Public%20Utilities.pdf.

3 Landscaping water use is estimated per California Code of Regulations Title 23. Division 2. Chapter 2.7. Model Water Efficient Landscape Ordinance.

Source: LADWP 2017.

Table 3.17-6b. Calculated Total Additional Water Demand–Proposed Use

Proposed Use[1]	Quantity	Unit	Water Use Factor[3] (gpd/unit)	Base Demand (gpd)	Required Ordinances Water Savings[4] (gpd)	Proposed Water Demand (gpd)	Proposed Water Demand (af/y)
Tier I							
Ambulatory Care Center Outpatient Facility	296,000	sq. ft.	0.25	74,000	–	–	–
Community Center Child Care	400	child	9.00	3,600	–	–	–
Recuperative Care Center	16,356	sq. ft.	0.25	4,089	–	–	–
Residential Treatment Program Facility	47,035	sq. ft.	0.25	11,759	–	–	–
Mental Health Wellness Center	10,000	sq. ft.	0.25	2,500	–	–	–
Mental Health Urgent Care Center	10,000	sq. ft.	0.25	2,500	–	–	–
Administration Office	96,000	sq. ft.	0.12	11,520	–	–	–
Materials Management	68,100	sq. ft.	0.12	8,172	–	–	–
Central Utility Plant Maintenance	52,000	sq. ft.	0.05	2,600	–	–	–
Central Utility Plant Office	25,000	sq. ft.	0.12	3,000	–	–	–
Base Demand Adjustment[7]	–	–	–	591	–	–	–
Indoor Total				**121,331**	2,655	**118,676**	**132.934**
Structure Parking[5]	380,000	sq. ft.	0.02	**250**	–	**250**	**0.28**
Landscaping[2]	864,400	sq. ft.		**89,052**	48,979	**40,073**	**44.89**
Tier I Proposed Total				**210,633**	**51,634**	**158,999**	**178.10**
Tier II							
New Inpatient Hospital: Inpatient Care (355 beds)	176,000	sq. ft.	0.225	39,600	–	–	–
New Inpatient Hospital: Diagnostic & Treatment	119,000	sq. ft.	0.25	29,750	–	–	–
New Inpatient Hospital: Clinical & General Support	49,100	sq. ft.	0.25	12,275	–	–	–
New Inpatient Hospital: Cafeteria (5,000 sf)	150	seat	30.00	4,500	–	–	–
New Inpatient Hospital: Administration Office	35,900	sq. ft.	0.12	4,308	–	–	–
New Inpatient Hospital: Department Office	215,000	sq. ft.	0.12	25,800	–	–	–
Research and Development	120,000	sq. ft.	0.25	30,000	–	–	–
Retail	40,000	sq. ft.	0.05	2,000	–	–	–

Proposed Use[1]	Quantity	Unit	Water Use Factor[3] (gpd/unit)	Base Demand (gpd)	Required Ordinances Water Savings[4] (gpd)	Proposed Water Demand (gpd)	Proposed Water Demand (af/y)
Long Term Care Facility[l]	135,000	sq. ft.	0.25	33,750	–	–	–
Community Center	20,000	sq. ft.	0.12	2,400	–	–	–
Central Utility Plant Maintenance	52,000	sq. ft.	0.05	2,600	–	–	–
Central Utility Plant Office	25,000	sq. ft.	0.12	3,000	–	–	–
Base Demand Adjustment[6]	–	–	–	2,565	–	–	–
Indoor Total				**192,548**	11,900	**180,648**	**202.35**
Landscaping[3]	605,600	sq. ft.		**62,390**	34,315	**28,075**	**31.45**
Cooling Tower - 24 hours/day, 365 days/year	3,793	ton	35.64	135,175	27,035	108,140	121.14
Cooling Tower - 12 hours/day, 365 days/year	7,267	ton	21.06	153,050	30,610	122,440	137.16
Cooling Tower Total[7]				**288,225**	57,645	**230,580**	**258.30**
Tier II Proposed Total				**480,773**	103,860	**376,913**	**422.10**
			Proposed Sub Total	**691,406**	**155,494**	**535,912**	**600.30**
					Less Existing to be Removed Total	-199,723	-223.73
					Less Additional Conservation[8]	-1,929	-2.16
					Net Additional Water Demand	**334,260**	**374.42**

1 Provided by the County of Los Angeles in the 2016 Request for Water Supply Assessment letter and Scope Confirmation e-mail. See Appendix K. Calculations in this table were based on the 2018 updated Project Description..

2 Landscaping water use is estimated per California Code of Regulations Title 23. Division 2. Chapter 2.7. Model Water Efficient Landscape Ordinance.

3 Proposed indoor water uses are based on 2012 City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table available at http://www.lacitysan.org/fmd/pdf/sfcfeerates.pdf.

4 The proposed development land uses will conform to City of Los Angeles Ordinance No. 184248, 2013 California Plumbing Code, 2013 CALGreen, 2014 Los Angeles Plumbing Code, and 2014 Los Angeles Green Building Code.

5 Auto parking water uses are based on City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table, and 12 times/year cleaning assumption.

6 Base Demand Adjustment is the estimated savings due to Ordinance No. 180822 accounted for in the Bureau of Sanitation Sewer Generation Rates.

7 Cooling tower hours of operation are assumed to be 24 hours/day, 365 days/year for Inpatient Hospital and Long Term Care Residential and 12 hours/day, 365 days/year for the rest of the proposed indoor scope.

8 Water conservation due to additional conservation commitments agreed by the Applicant. See Table II.

Source: LADWP 2017.

LADWP provides water services to the Medical Center. The California Urban Water Management Planning Act requires LADWP to prepare an Urban Water Management Plan (UWMP) to forecast future water demands based on anticipated population growth and ensure a reliable water supply to its service areas. The Integrated Water Resources Plan (IWRP) for the city of Los Angeles was developed to maintain the sustainability of the city's natural resource systems. Pursuant to California Water Code Sections 10910–10915, the LADWP prepared a Water Supply Assessment (WSA) for the proposed project. The WSA concluded that projected water supply during normal, single-dry, and multiple-dry water years, as included in the 25-year projection contained in the UWMP, can accommodate the projected maximum water demand associated with Tier I and Tier II development. Additionally, development projects under Tier I would include the installation of low-flush toilets, showerheads, faucets, and urinals, in compliance with Administrative and Municipal Code. Compliance with this code, as well as Title 24's energy conservation standards for new construction and the Green Building Standards Code relating to water and energy efficiency, would reduce potential increases in water consumption as a result of the new development that could occur under Tier I. Therefore, it is not anticipated that new water sources or new or expanded offsite water conveyance, storage, and treatment facilities would be required to serve proposed Master Plan development. Impacts would be less than significant.

Wastewater

The BOS conducted a preliminary evaluation of the project's potential impacts on the existing wastewater system. They concluded that, based on the current approximate flow levels, it appears the sewer system may be able to accommodate the total flow that could occur due to development under the Master Plan (Tiers I and II). However, further detailed gauging and evaluation will be needed as part of the permit process to identify a specific sewer connection point. If public sewer lines serving the campus have insufficient capacity, then the County will be required to build sewer lines to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit will be made at that time. If BOS determines that there is insufficient capacity in the local sewer lines that would serve an individual future project, then the impact would be considered to be significant. To ensure that local city sewer lines have sufficient capacity to accommodate future individual development projects, mitigation measure **MM-UTL-O1** is discussed in the mitigations section, below.

Sewage flow from the campus would be conveyed to the Hyperion Water Reclamation Plant, which has sufficient capacity to accommodate proposed Master Plan development.

Stormwater

Minor alterations of the existing drainage patterns on the project site may occur as a result of the implementation of the campus-wide stormwater management system and construction of new campus facilities and buildings under Tier I.

The existing stormwater management system utilizes a system of vertical roof drains, underground reinforced concrete pipe, overland sheet flow, curb, gutters, catch basins, and driveways to convey stormwater runoff to the existing public system owned and operated by LACFCD. The LID Ordinance, which became effective in November 2011, amends and expands on the existing Standard Urban Stormwater Mitigation Plan requirements (which have been in effect since 2002) by incorporating LID practices and principles and expanding the applicable development categories. To ensure that proposed Master Plan development projects mitigate runoff in a manner that captures rainwater at its source, various landscaping elements have been included in Tier I development,

such as gardens, a green amphitheater, an active recreation area, riparian zones, and woodland preserves, which would be located throughout the campus. The landscaping treatments would serve as a stormwater treatment strategy and would be designed to be an accessible open space enhancement. As a result of the project and the incorporation of LID features, the amount of impervious cover, currently 67 percent in Tier I, would decrease, and landscaped areas would increase. Thus, the proposed project would not require or result in the construction of new off-campus stormwater drainage facilities or the expansion of existing facilities to serve proposed new Master Plan facilities. Therefore, impacts would be less than significant.

Electricity and Natural Gas

New and renovated buildings and facilities that would be constructed under Tier I of the Master Plan could result in long-term increases in energy consumption. As part of their Power IRP, LADWP prepares energy forecasts to ensure its ability to accommodate the future energy needs of its service areas. The anticipated electrical consumption that could occur under the current Master Plan is not expected to require new or expanded offsite electrical infrastructure to meet that increased demand, the construction of which could result in significant environmental effects (please see Section 3.5, *Energy*, for more details regarding potential energy impacts and increased electricity consumption). However, future individual development projects would be required to submit a load schedule to LADWP to more accurately determine the electrical demand associated with site-specific development and the ability for LADWP to serve the electrical demand.

SoCalGas, who projects its gas supply through year 2035, predicts that the total available capacity for these same years will remain constant at 3,875 MMcf/day (California Gas Report 2018). In the year 2035, it is estimated that the available capacity will exceed the projected demand by 46 percent, a total difference of 1,228 MMcf/day. Therefore, potential development under the proposed Master Plan is not expected to have a significant impact on natural gas supplies or infrastructure.

The proposed Master Plan also includes more energy efficient project elements, such as solar electric power, solar thermal and hot water, and ground source heating energy for various facilities. These efforts, combined with compliance with Title 24's energy conservation standards for new construction, would help to offset any additional energy consumption as a result of the proposed project. As a consequence, and because no new offsite electric power or natural gas facilities to meet increased demand are anticipated, the impacts would be less than significant.

Telecommunications

Given that the proposed project is located in a developed urban/suburban area that is adequately served by existing telecommunications facilities and infrastructure, it is not anticipated that proposed Tier I development would require new or expanded offsite telecommunications facilities to serve the proposed project, the construction of which would result in significant impact. Therefore, impacts would be less than significant.

Tier II

Water

Under Tier II of the Master Plan, an estimated 137,700 square feet of existing development on the campus would be demolished, and 992,000 square feet of new buildings and facilities would be constructed. As noted above, the WSA prepared by LADWP for the proposed project concluded that projected water supply during normal, single-dry, and multiple-dry water years, as included in the 25-year projection contained in the UWMP, can accommodate the projected maximum water

demand associated with Tier I and Tier II development. Therefore, it is not anticipated that new water sources or new or expanded offsite water conveyance, storage, and treatment facilities would be required to maintain sufficient water supplies to the campus through 2040. As in Tier I, development projects under Tier II would include the installation of low-flush toilets, showerheads, faucets, and urinals in compliance with Administrative and Municipal Code. Compliance with this code, as well as Title 24's energy conservation standards for new construction and the Green Building Standards Code relating to water and energy efficiency, would minimize potential increases in water consumption as a result of the new development that could occur during this phase of development. Impacts would be less than significant. However, it should be noted that the UWMP projections end in 2040, while the Master Plan is intended to provide a framework and vision for development on the campus that could occur beyond 2040. Therefore, water supply impacts for projects constructed far in the future (i.e., beyond 2040) potentially could be significant. Accordingly, when future projects (i.e., Tier II development projects that would occur beyond the year 2040) are proposed and building plans developed, LACDPW will be required to coordinate with the water provider, LADWP, to confirm that adequate water supplies exist to serve these future Master Plan projects. If it is determined the water supplies are insufficient, and new offsite water infrastructure is required, the impact could potentially be significant.

Wastewater

As discussed above under Tier I, the city of Los Angeles BOS conducted a preliminary evaluation of the project's potential impacts on the existing wastewater system (see Appendix K of this EIR) and concluded that, based on the current approximate flow levels, it appears the sewer system may be able to accommodate the total flow that could occur due to development under the Master Plan (Tiers I and II). However, further detailed gauging and evaluation will be needed as part of the permit process to identify a specific sewer connection point. If public sewer lines serving the campus have insufficient capacity, then the County will be required to build sewer lines to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permits will be made at that time. If BOS determines that there is insufficient capacity in the local sewer lines to serve an individual future project, then the impact would be considered to be significant. To ensure local city sewer lines have sufficient capacity to accommodate future individual development projects, **MM-UTL-1** is proposed, below.

Sewage flow from the campus would be conveyed to the Hyperion Water Reclamation Plant, which has sufficient capacity to accommodate proposed Master Plan development.

Stormwater

A discussed above under Tier I, to ensure that proposed Master Plan development projects mitigate runoff in a manner that captures rainwater at its source, additional landscaping elements are proposed under Tier II. Tier II also proposes multiple gardens and wetlands, which, along with other landscaping improvements throughout campus, would serve as a stormwater treatment strategy. As a result of the project and the incorporation of LID features, the amount of impervious cover would decrease, and landscaped areas would increase. Thus, the proposed project would not require or result in the construction of new off-campus stormwater drainage facilities or the expansion of existing facilities. Therefore, impacts would be less than significant.

Electricity and Natural Gas

New and renovated buildings and facilities that may occur under Tier II could also result in long-term increases in energy consumption. Given projected energy, gas, and transportation fuel supply

and consumption trends, it is likely that there will be sufficient supply. However, LADWP and SoCalGas have not made projections beyond the year 2040. Therefore, for the purposes of this EIR, the impacts on energy consumption due to Master Plan projects constructed after 2040 under Tier II are considered to be potentially significant. Accordingly, in the future (i.e., 2040 and beyond), when individual development projects under the Master Plan are proposed and building plans are developed, LACDPW will be required, prior to the issuance of building permits, to conduct additional analyses to confirm that adequate capacity exists to serve these future Master Plan projects.

Telecommunications

Tier II does not propose any telecommunication facilities, therefore impacts would be similar to Tier I impacts and would be less than significant.

Mitigation Measures

The following measure is proposed to ensure adequate local city sewer line capacity exists to accommodate future development projects:

MM-UTL-1: Prior to issuance of a building permit for any future development project under the Master Plan that could result in an increase in wastewater generation, the County shall coordinate with the BOS to conduct further detailed gauging and evaluation to identify a specific sewer connection point with sufficient capacity. If the public sewer has insufficient capacity, then the County shall be required to build a sewer line to a point in the sewer system with sufficient capacity.

MM-UTL-2: In conjunction with preparation of a subsequent CEQA environmental document for any future individual development project under the Master Plan that is proposed in the year 2040 or beyond that is defined as a *water-demand project* in Section 15155 of the CEQA Guidelines, the County shall request, pursuant to Section 15155, that the water provider determine whether the projected water demand associated with the project was included in the most recently adopted urban water management plan. If required pursuant to Section 15155 and SB 610, the County shall request that LADWP prepare a water assessment for the proposed project. The County shall determine, pursuant to Section 15155, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

Level of Significance after Mitigation

Water: Significant if it is determined that water supplies will not be sufficient to meet future (i.e., 2040 and beyond) Master Plan project water demands.

Wastewater: Less than significant if BOS conducts further gauging and evaluation and identifies a sewer connection point with sufficient capacity to accommodate Master Plan project wastewater flows. Since the County cannot compel another public entity, in this case BOS, to conduct further gauging and evaluation, for the purposes of this EIR, the impacts on local sewer lines are considered to be potentially significant and unavoidable.

Other Utilities: Less than significant.

Impact UTL-2: Would the Proposed Project Have Sufficient Water Supplies Available to Serve the Project and Reasonably Foreseeable Future Development during Normal, Dry, and Multiple Dry Years?

Construction Impacts

Tier I

As discussed above, the proposed project would use water during construction for various purposes, such as mixing and pouring concrete, and other construction-related activities under Tier I. However, the incremental increase in water use as a result of construction activities would be temporary and not substantial, thus existing water supplies would be sufficient to meet this demand. Although construction of individual projects could extend over a period of years (up to 2035 for the purposes of the analyses in this EIR), water use during construction would be a relatively small contribution to the current on-campus water consumption of 227,861 gallons per day and would not result in a permanent long-term increase in water demand. Therefore, construction impacts on water supplies would be less than significant.

Tier II

As in Tier I, the proposed project would use water during construction for various purposes, such as mixing and pouring concrete, and other construction-related activities under Tier II. Because of the increase in both demolition and proposed new development under Tier II, more water could be used during construction under Tier II than under Tier I. However, similar to Tier I, the incremental increase in water use as a result of construction activities would be temporary and not substantial, resulting in a relatively small contribution to the current on-campus water consumption of 227,861 gallons per day. As a consequence, the combined effect of Tier I and Tier II construction activities would not result in an increase in permanent long-term water demand and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

Future development under Tier I would result in a net increase in water consumption compared with the existing baseline condition of 138,640 gpd. As noted in the discussions above, the proposed project's projected total water demand is consistent with the UWMP and IWRP, and the WSA prepared for the proposed project by LADWP (see Appendix K of this EIR) concluded that projected water supply during normal, single-dry, and multiple-dry water years, as included in the 25-year projection contained in the UWMP, can accommodate the projected maximum water demand associated with the proposed project. Additionally, development projects under Tier I would include the installation of low-flush toilets, showerheads, faucets, and urinals in compliance with Administrative and Municipal Code. Compliance with this code, as well as Title 24's energy conservation standards for new construction and the Green Building Standards Code relating to

water and energy efficiency, would minimize potential increases in water consumption as a result of the new development that could occur under Tier I. Impacts would be less than significant.

Tier II

Proposed development under Tier II would also be consistent with the UWMP and IWRP. Therefore, the potential increase in water consumption is not expected to require new or expanded entitlements to maintain sufficient water supplies through 2040. As in Tier I, development projects under Tier II would include the installation of low-flush toilets, showerheads, faucets, and urinals in compliance with Administrative and Municipal Code. Compliance with this code, as well as Title 24's energy conservation standards for new construction and the Green Building Standards Code relating to water and energy efficiency, would minimize potential increases in water consumption as a result of the new development that could occur during this phase of development. Impacts would be less than significant. However, it should be noted that although the UWMP projections end in 2040, the Master Plan is intended to provide a framework and vision for development on the campus that could occur beyond 2040. Therefore, water supply impacts for projects constructed far in the future (i.e., beyond 2040) could be potentially significant. Accordingly, when future projects (i.e., Tier II development projects that would occur beyond the year 2040) are proposed and building plans are developed, LACDPW will be required to coordinate with the water provider, LADWP, to confirm that adequate water supplies exist to serve these future Master Plan projects. If it is determined the water supplies are insufficient, the impact would be significant.

Mitigation Measures

No mitigation measures are required for Tier I development projects. For projects proposed in the future, beyond the year 2040, additional analyses or studies will be required to determine whether adequate water supplies are available to serve those future, Tier II Master Plan projects (please see **MM-UTL-2**, above). If available water supplies are determined to be inadequate to meet project demands, then project changes will need to be made or measures will need to be identified to further reduce water consumption and mitigate water supply impacts.

Level of Significance after Mitigation

Significant if it is determined that water supplies will not be sufficient to meet future (i.e., 2040 and beyond) Master Plan project water demands.

Impact UTL-3: Would the Proposed Project Require or Result in a Determination by the Wastewater Treatment Provider which Serves or May Serve the Project that it Does Not Have Adequate Capacity to Serve the Project's Projected Demand in Addition to the Provider's Existing Commitments?

Construction Impacts

Tier I & II

Construction workers on the project site could generate a minor incremental increase in wastewater flows to the city's wastewater system. This increase would be insignificant and, as mentioned, could readily be accommodated by the city's existing wastewater treatment system.

Operational Impacts

Tier I & II

The city of Los Angeles BOS has conducted a preliminary evaluation of the potential impacts of future development under the Master Plan on the city's wastewater system. The city's estimates of the net increase in wastewater discharges with implementation of the preliminary list of potential projects that could occur under Tiers I and II can be extrapolated from data provided above, using the assumption that wastewater generation is approximately 90 percent of water consumption. As shown in table 3.17-6b, implementation of the Master Plan could result in a net increase of 334,260 gpd of water, which would result in 300,834 gpd of wastewater. The amount of wastewater generated by Tiers I and II combined represents less than 0.1 percent of the average daily flows in the Hyperion Sewer System.

The sewer infrastructure in the vicinity of the proposed project includes four discharge routes, for which the BOS has obtained approximate flow levels and design capacities. Based on the estimated flows, BOS has concluded the sewer system might be able to accommodate the total flow for the proposed project, but that further detail gauging and evaluation may be needed as part of the permit process for individual projects to identify a specific sewer connection point. A final approval for sewer capacity and connection permit shall be made at that time. If BOS determines that there is insufficient capacity in the local sewer lines that would serve an individual future project, then the impact would be considered to be significant. To ensure local city sewer lines have sufficient capacity to accommodate future individual development projects, **MM-UTL-1** is proposed above.

All wastewater generated on the campus would ultimately be conveyed to the HTP, which has sufficient capacity to accommodate the project as well as existing commitments (Poosti pers comm. 2014). Consequently, significant impacts on the city's wastewater treatment system are not anticipated.

Mitigation Measures

MM-UTL-1, above, is proposed to ensure adequate local city sewer line capacity exists to accommodate future development projects

Level of Significance after Mitigation

Less than significant if BOS conducts further gauging and evaluation and identifies a sewer connection point with sufficient capacity. Since the County cannot compel another public entity, in this case BOS, to conduct further gauging and evaluation, for the purposes of this EIR, the impacts on local sewer lines are considered to be potentially significant and unavoidable.

Impact UTL-4: Would the Proposed Project 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 Impacts

Tier I

Construction activities would include demolition of some onsite buildings and structures, site preparation, grading, and trenching, as well as construction of new and renovated facilities. Construction and demolition activities would generate solid waste, requiring disposal at local landfills. There are several major landfills in the Los Angeles metropolitan area that serve the

project site. *Major landfills* are defined as those facilities that receive more than 250,000 tons of solid waste per year. As required by City Ordinance 181519 (Waste Hauler Permit Program), project construction waste would be hauled by permitted haulers and taken only to city certified construction and demolition processing facilities that are monitored for compliance with recycling regulations. The inert solid waste and soil would require disposal at the County's only operating inert landfill (Azusa Land Reclamation) or at any of a number of state-permitted Inert Debris Engineered Fill Operations in the County, such as the Arcadia Reclamation Facility. Given that demolition debris and solid waste generated by construction activities would be finite and limited to the construction periods, the proposed project would not generate waste in excess of state or local standards or in excess of capacity of local infrastructure. As a result, construction impacts on solid waste facilities, regulations, and capacity under Tier I would be less than significant.

Tier II

Tier II development includes those projects that would occur beyond 2035, which could include the construction of a new inpatient hospital, research and development buildings, retail space, a central utility plant, and County department buildings, as well as the renovation and reuse of the existing inpatient hospital for other purposes. Tier II would require similar construction activities as those outlined above under Tier I, which would generate solid waste. Though Tier II includes increases in both demolition and proposed new development when compared to Tier I, and would thus generate more waste, as mentioned, there are several major landfills in the Los Angeles metropolitan area that serve the project site. As mentioned above, project construction waste would be hauled by permitted haulers and taken only to City certified construction and demolition processing facilities that are monitored for compliance with recycling regulations. Given that waste generation would be finite and limited to the construction periods, existing landfills have sufficient long-term permitted capacity to accommodate construction generated solid waste (See Table 3.17-3, above). As a result, construction impacts on solid waste facilities, compliance with local and state standards, and capacity would be less than significant.

Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

The new development that may occur under the Master Plan would result in the increased generation of solid waste. Based on waste generation factors provided on the California Department of Resources Recycling and Recovery website, it is estimated that the proposed Master Plan could generate a net increase of 2,764 pounds of solid waste per day (see Table 3.17-7, below).

Table 3.17-3 shows the available Class III solid waste disposal facilities in Los Angeles County. Of those, Sunshine Canyon has the largest remaining capacity, at 62.11 millions of tons. It was estimated in 2012 that Sunshine Canyon had a remaining life of 21 years. Sunshine Canyon is the closest landfill to the Olive View–UCLA Medical Campus. Additionally, demand for landfill capacity is continually evaluated by Los Angeles County through preparation of the Los Angeles CIWMP Annual Reports. Therefore, it is expected that the project site would be served by a landfill that has

sufficient permitted capacity to accommodate the project's solid waste disposal needs. Impacts would be less than significant.

New and renovated medical/research facilities that may be developed under Tier I could result in increases in biomedical or other hazardous wastes. All hazardous waste, including biomedical waste, would be used, transported, and disposed of at designated Class I landfills in accordance with applicable local and regional regulations. Such activities already take place at the Olive View–UCLA Medical Center Campus, and facilities for the proper handling of these materials are already present on the site. Consequently, no significant impacts to hazardous waste disposal facilities is anticipated as a result of future development under Tier I.

Table 3.17-7. Projected Solid Waste Generation

Type Description	Solid Waste Generation Factor	Building Capacity	Pounds per Day
Existing Uses to be Demolished			
Hospital	16 lbs./bed/day	53 beds	(848)
Administrative Offices	6 lbs./1000 sq. ft./day	52,300 sq. ft.	(314)
Maintenance Facilities	6 lbs./1000 sq. ft./day	32,500 sq. ft.	(195)
Utility Plant & Cooling Tower	6 lbs./1000 sq. ft./day	51,000 sq. ft.	(306)
		Total	**(1,663)**
Proposed Uses			
Medical Offices (Ambulatory Care Center)	6 lbs./1000 sq. ft./day	296,000 sq. ft.	1,776
Offices (Community Center)	6 lbs./1000 sq. ft./day	20,000 sq. ft.	120
Residential Treatment Program Facility	16 lbs./bed/day	48	768
Psychiatric Urgent Care	16 lbs./bed/day	16	256
Mental Health Wellness Center	6 lbs./1000 sq. ft./day	10,000	60
Administrative Offices	6 lbs./1000 sq. ft./day	96,000 sq. ft.	576
Materials Management	6 lbs./1000 sq. ft./day	68,100 sq. ft.	409
Utility Plant & Cooling Tower	6 lbs./1000 sq. ft./day	77,000 sq. ft.	462
		Total	**4,427**
		Net Increase	**2,764**
Source: CalRecyle 2019.			

Tier II

The new development that may occur under Tier II would also result in increased generation of solid waste. As discussed above, Sunshine Canyon, the closest landfill to the campus, has a remaining capacity of 62.11 millions of tons and an estimated remaining life of 21 years. Since Tier II development would include those projects proposed far in the future, beyond the year 2035, it is not possible to determine whether landfills serving the project site would have sufficient remaining capacity that far in the future. Therefore, solid waste impacts for Tier II projects could be potentially significant. Accordingly, when individual Tier II development projects under the Master Plan are proposed and building plans are developed, LACDPW will conduct, prior to the issuance of building

permits, further analyses to confirm whether adequate landfill capacity exists to serve the Tier II Master Plan projects.

New and renovated medical/research facilities that may be developed under Tier II could result in increases in biomedical or other hazardous wastes. All hazardous waste, including biomedical waste, would be used, transported, and disposed of at designated Class I landfills, in accordance with applicable local and regional regulations. Such activities already take place at the Olive View–UCLA Medical Center Campus, and facilities for the proper handling of these materials are already present on the site. Consequently, no significant impacts to hazardous waste disposal facilities is anticipated as a result of future development under Tier II.

Mitigation Measures

No measures are required to mitigate the solid waste impacts of Tier I projects. For Tier II projects that could occur beyond the year 2035, the County will be required to conduct additional analyses to determine whether adequate landfill capacity remains to accommodate the waste that would be generated by Tier II development. If the analyses determine that there is inadequate capacity, then changes to the Tier II projects will need to be made or measures will need to be identified by the County to reduce solid waste generation and mitigate impacts to landfill capacity.

Level of Significance after Mitigation

Less than significant for Tier I projects. For the purposes of this EIR, the impacts on solid waste due to Tier II projects are considered to be potentially significant and unavoidable.

Impact UTL-5: Would the Proposed Project Comply with Federal, State, and Local Management and Reduction Statutes and Regulations Related to Solid Waste?

Construction and Operational Impacts

Tiers I and II

Under AB 939, the city of Los Angeles adopted the Construction and Demolition Waste Recycling Ordinance (Ordinance 181,519), which requires that solid waste haulers and contractors obtain a permit prior to transporting construction and demolition waste and stipulates that such waste may only be processed at city-certified construction and demolition waste-processing facilities. The proposed project would comply with this ordinance.

AB 939 also mandates that jurisdictions meet a diversion goal of 50 percent by the year 2000 and thereafter. The city of Los Angeles initiated a SWIRP in 2007 and is moving toward zero waste by 2030. Similarly, AB 75 requires all state agencies and large state facilities to divert at least 50 percent of solid waste from landfills. The proposed project would comply with both.

Development under Olive View–UCLA Medical Center Campus Master Plan would also be subject to other solid waste regulations, such as the Industrial Waste Control Ordinance of the Los Angeles Municipal Code, the City of Los Angeles Sewer Allocation (Ordinance No. 166060), and the California Solid Waste Reuse and Recycling Access Act, which governs building permits that oversee the transfer, receipt, storage, and loading of recyclable materials. The proposed project would comply with all three regulations. Thus, the Master Plan would comply with federal, state, and local statutes and regulations related to solid waste, and its construction and operational impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

3.17.1 Cumulative Impacts

Table 2-2 of Chapter 2, *Project Description*, of this EIR lists the related projects that were considered in the cumulative impact analyses. The locations of the related projects are depicted in Figure 2-6, Related Projects Map, also in Chapter 2 of this EIR. The study areas for cumulative impacts to utilities includes the service areas of the individual utility providers that serve the project site to reflect cumulative regional demand on these providers' utility supplies and infrastructures, as well as the immediate area in the vicinity of the project site, to take into account cumulative impacts on local utility infrastructure due to the proposed project and nearby related projects (e.g., cumulative impacts on local sewer lines that serve the campus and other development in the immediate area).

The cumulative increases in regional and local study area populations would increase the demand for utilities services. Because the service areas for the various utility providers (water, sewer and wastewater, stormwater, solid waste, natural gas, and electricity) varies widely, and, in some cases, covers large geographic areas (e.g. SoCalGas or LADWP), it is possible that increased demand due to future cumulative development within the service areas could require additional utility capacity and supplies to meet projected future demand and maintain adequate levels of service, notwithstanding future savings resulting from increased energy efficiencies. Although the regional utility providers have planned for long-term increases in demand, new supply and delivery infrastructure facilities could be required to meet increased regional demands, the construction of which could result in impacts to the environment. Where the utility providers have identified specific individual projects that are required to meet future projected regional cumulative demands and determined that construction or operation of those projects would result in significant impacts to the environment, the cumulative impact of the proposed Master Plan and other projects in the services areas would be considered significant. Because the planning horizon for the Master Plan extends well into the future (beyond year 2040), it is possible that yet unidentified improvements to the regional providers utility infrastructure may also be required over the life of the Master Plan. Therefore, for the purposes of this EIR, it is anticipated that the proposed project and other regional development would result in significant cumulative impacts on utilities and energy.

With regards to localized cumulative utility impacts, a list of related projects in the area is provided in Table 2-2 (see Chapter 2, *Project Description*, of this EIR). There are 14 related projects in the surrounding area at various stages of conceptual planning and development. The list includes several housing and commercial development projects that would increase the residential and daytime employee populations in the study area. The cumulative utility demands of the related and proposed projects may require improvements to local utility infrastructure (e.g., new local sewer or water lines or connections, power substations, etc.), the construction of which could result in impacts to the environment. The details and extent of future local utility infrastructure improvements are not known; therefore, the significance of potential cumulative impacts on local infrastructure cannot be definitively determined. Nonetheless, for the purposes of this EIR, the cumulative local utility infrastructure impacts are considered to be potentially significant.

3.18 Wildfire Hazards

3.18.1 Introduction

This section addresses potential wildfire impacts that may result from implementation of the Olive View–UCLA Medical Center Campus Master Plan. The following discussion addresses existing wildfire hazard conditions of the project site and surroundings, considers applicable goals and policies, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from project implementation, as applicable.

3.18.2 Regulatory Setting

3.18.2.1 Federal

Federal Wildland Fire Management Policy

The 1995 Federal Wildland Fire Management Report produced the first single comprehensive federal fire policy for the Departments of the Interior and Agriculture. That review was stimulated not only by the 1994 fire season, with its 34 fatalities, but also by growing recognition of fire problems caused by fuel accumulation. The resulting 1995 Federal Fire Policy recognized, for the first time, the essential role of fire in maintaining natural systems. In the aftermath of the escape of the Cerro Grande Prescribed Fire in May of 2000, the Secretaries of the Interior and Agriculture requested a review of the 1995 Federal Fire Policy and its implementation. The subsequent 2001 Federal Fire Policy and its implementation are founded on the following guiding principles:

- Firefighter and public safety is the first priority in every fire management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.
- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Fire management plans and activities are based upon the best available science.
- Fire management plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal agencies is an ongoing objective.

3.18.2.2 State

California Department of Forestry and Fire Protection (CAL FIRE)

The California Department of Forestry and Fire Protection (CAL FIRE) protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values, providing social, economic, and environmental benefits to rural and urban citizens. CAL FIRE's firefighters, fire engines, and aircraft respond to an average of more than 5,600 wildland fires each year (CAL FIRE 2012).

The Office of the State Fire Marshal supports CAL FIRE's mission by focusing on fire prevention, providing support through a wide variety of fire-safety responsibilities, including:

- Regulating buildings in which people live, congregate, or are confined;
- Controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death, and destruction by fire;
- Providing statewide direction for fire prevention in wildland areas;
- Regulating hazardous liquid pipelines;
- Reviewing regulations and building standards; and
- Providing training and education in fire protection methods and responsibilities.

2018 Strategic Fire Plan for California

2018 Strategic Fire Plan for California (CAL FIRE 2018) is a cooperative effort between CAL FIRE and the Board of Forestry and Fire Protection (the Board). The Board has adopted fire plans since the 1930s and periodically updates them to reflect current and anticipated needs. Over time, as the environmental, social, and economic landscape of California's wildlands has changed, the Board has evolved the Strategic Fire Plan to better respond to these changes and to provide the CAL FIRE with appropriate guidance "…for adequate statewide fire protection of state responsibility areas" (Public Resources Code [PRC] 4130). In 2018, the Board adopted a strategic fire plan to update and address fire concerns in California.

Reflecting a society that must be more aware of and responsive to the benefits and threats of wildland fire, the 2018 Plan calls for a more fire-resistant natural environment, with buildings and infrastructure that are also more fire resistant, all achieved through local, state, federal, tribal, and private partnerships. The goals that are critical to achieving the 2018 Plan's vision revolve around fire prevention, natural resource management, and fire suppression efforts, as broadly construed. Major components include:

- Improving the availability and use of consistent, shared information about hazard and risk assessment;
- Promoting the role of local planning processes, including general plans, new development, and existing developments, and recognizing individual landowner/homeowner responsibilities;
- Fostering a shared vision among communities and multiple fire protection jurisdictions, including county-based and community-based plans, such as Community Wildfire Protection Plans (CWPP);

- Increasing awareness and actions to improve fire resistance of man-made assets at risk and fire resilience of wildland environments through natural resource management;
- Integrating implementation of fire and vegetative fuels management practices consistent with the priorities of landowners or managers;
- Determining and seeking the needed level of resources for fire prevention, natural resource management, fire suppression, and related services; and
- Implementing needed assessments and actions for post-fire protection and recovery.

Fire Hazard Severity Zones: PRC Sections 4201–4204

In 1965, PRC Sections 4201–4204 and Government Code Sections 51175–89 directed CAL FIRE to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as fire hazard severity zones (FHSZ), define the application of various mitigation strategies to reduce risk associated with wildland fires (State of California 1965).

Senate Bill 1241

In 2012, Senate Bill (SB) 1241 added Section 66474.02 to Title 7, Division 2, of the California Government Code, commonly known as the Subdivision Map Act. The statute prohibits subdivision of parcels that are designated as very high fire hazard severity zones or located in a State Responsibility Area (SRA), unless certain findings are made prior to approval of the tentative map. The statute requires that a city or county planning commission make three new findings regarding fire hazard safety before approving a subdivision proposal. In brief, the three findings require that: (1) the design and location of the subdivision and its lots are consistent with defensible space regulations found in PRC Section 4290–91, (2) structural fire protection services will be available for the subdivision through a publicly funded entity, and (3) ingress and egress road standards for fire equipment are met per any applicable local ordinance and PRC Section 4290.

Fire Safe Development Regulations

The Fire Safe Development Regulations section of the 2018 Plan implements PRC Section 4290 and stipulates minimum requirements for building construction in SRAs. These regulations address ingress and egress (e.g., road widths, turnouts, etc.), building and street sign visibility, emergency water standards, and fuel modification. In June 2012, the Board and CAL FIRE formed a workgroup to revise the Fire Safe Development Regulations. The workgroup made the first significant changes to the regulations since they were initially effective in 1991 and identified future areas of study. Changes to the regulations were effective January 1, 2016. This workgroup was re-engaged in 2017 to align the update timeline for the Fire Safe Regulations with the triennial California Fire Code cycle. The workgroup has been reviewing the existing regulations, based on feedback received from the 2016 updates, to reduce inconsistencies and improve clarity. These changes are anticipated to be effective with the 2020 California Fire Code on January 1, 2020.

California Building Code and Fire Code

The California Code of Regulations (CCR), Title 24, 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 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. Specific California Fire Code regulations have been incorporated by reference, with amendments, in the Los Angeles Building Code, Fire Safety Regulations.

3.18.2.3 Local

Los Angeles County Fire Department Strategic Plan 2017–2021

The Los Angeles County Fire Department (LACFD) is responsible for providing fire protection and life safety services to over four million residents residing in 59 cities and all unincorporated areas of Los Angeles County. The LACFD Strategic Plan 2017–2021 identifies goals for continuing improvements in the areas of service delivery, operational effectiveness, the welfare of the workforce, emergency preparedness, fostering a culture of inclusivity, and fiscal solvency.

Los Angeles County Fire Department Fire Prevention Service Fees

LACFD Fire Prevention works with developers, architects, and engineers to ensure that all fire protection requirements are met for building improvements, new developments, and structural modifications. Plans are reviewed to ensure the proposed systems meet the California Fire Code and County of Los Angeles codes and standards. LACFD, in conjunction with the Los Angeles County Board of Supervisors, implemented fees for fire prevention/life safety services. As of November 1, 2018, LACFD updated and added new fees, including engineering, field permit, film unit, forestry, high rise, land development unit, petroleum/chemical, and regional service fees (LACFD 2019).

Los Angeles County Hillside Management Areas Ordinance

The policies of the Los Angeles County General Plan, and area and community plans where applicable, seek to preserve significant natural features in hillside areas. The Hillside Management Areas Ordinance and the Hillside Design Guidelines implement those policies by ensuring that hillside development projects use sensitive and creative engineering, architectural, and landscaping site design techniques. Hillside management areas (HMAs) are defined as areas with 25 percent or greater natural slopes. Adherence to Hillside Design Guidelines is required for development in HMAs, unless exempted under the Ordinance's provisions. In hillside areas with less than 25 percent slope, use of the Guidelines is optional but encouraged. The Guidelines include specific and measurable design techniques that can be applied to residential, commercial, industrial, and other types of projects. Some design techniques may be more appropriate or feasible than others, depending on the type of project, location, size, complexity, site constraints, and other design techniques incorporated into the project.

Los Angeles County Code of Ordinances Title 32 Fire Code

The Los Angeles County Fire Code establishes guidelines and requirements for fuel modification and clearance of brush and vegetative growth. Specifically, Fire Code Section 1117.2.1 requires the submittal of a fuel modification plan, a landscape plan, and an irrigation plan for the area within a proposed project's boundaries designated a Very High Fire Hazard Severity Zone (VHFHSZ). The

plan must be prepared by a registered landscape architect, landscape designer, landscape contractor, or other individual with expertise acceptable to the forestry division of the fire department prior to any new construction. The Weed Abatement Division of the Los Angeles County Department of Agricultural Commissioner has been given authority to create defensible space for unimproved properties. In accordance with Los Angeles County Fire Code Section 317 et seq., the Agricultural Commissioner may notify all owners of property affected that they must clear all flammable vegetation and other combustible growth or reduce the amount of fuel content for a distance greater than 30 feet, but not to exceed 200 feet.

Los Angeles County General Plan

The Los Angeles County General Plan provides the policy framework for how and where the unincorporated areas will grow through 2035 and establishes goals, policies, and programs to foster healthy, livable, and sustainable communities (County of Los Angeles 2014). As a County-run facility operated on County-owned land, the UCLA–Olive View Medical Center Campus is subject to elements of the Los Angeles County General Plan.

Chapter 12, the Safety Element, identifies the goals and policies that serve to reduce the potential risk of death, injuries, and economic damage resulting from natural and man-made hazards. Also, CAL FIRE and the Board have drafted a comprehensive document for wildland fire protection in California. The Forestry Division's Fire Plan Unit is in charge of implementing the California Fire Plan in Los Angeles County. Chapter 13, the Public Services and Facilities Element, provides a summary of some of the major public services and facilities that serve the unincorporated areas.

City of Los Angeles Brush Clearance Requirements

California has seen an increase in frequency and size of wild fires, including historic brushfires in the city of Los Angeles, such as the La Tuna, Creek, and Skirball fires. Additionally, smaller brushfires have been accidentally started by well-intentioned residents performing brush clearance. Therefore, the Los Angeles City Council approved on October 17, 2018, an ordinance to increase requirements for brush clearance and fire safety in the VHFHSZ. This ordinance establishes appropriate safety measures necessary to mitigate the occurrence of such fires. Highlights of the new ordinance include requirements that:

- Use of metal cutting blades for grass or brush clearance will be limited to those which are non-ferrous/non-sparking.
- Brush clearance cannot be done on red flag days, when fire weather conditions are at their peak.
- Individuals engaged in brush clearance operations will not engage in any other activities during their actual clearance of grass or brush.
- An approved fire extinguisher, or a pressurized garden hose with attached nozzle will be within 10 feet of any grass or brush clearance operation to quickly extinguish a small fire before it burns out of control.
- A cell phone capable of dialing 9-1-1 will be charged and readily accessible to the grass or brush clearance operation.

City of Los Angeles Municipal Code

The city of Los Angeles Municipal Code (LAMC) contains 18 chapters, including Chapter 5, *Public Safety and Protection* (City of Los Angeles 2013). In that document, Article 2, *Police and Special Officers*, contains regulations governing administrative issues, such as requirements for police badges and uniforms, and Article 7, *Fire Protection and Prevention*, contains the fire code for the City. The city of Los Angeles Fire Code (Fire Code) prescribes laws that may be enforced by the city of Los Angeles Fire Department (LAFD) to help safeguard life and property from fire, explosion, panic, or other hazardous conditions that may arise in the City. The Fire Code includes information pertaining to administrative issues, such as the requirements for filling out and submitting Hazardous Materials Release Response Plans and Inventory Statements, and technical requirements associated with the storage, management, and disposal of hazardous materials, such as underground chemical storage tanks, asbestos-containing materials/building material, and various other combustible and flammable materials. The Fire Code also includes mandates from the state of California's Fire Code.

City of Los Angeles General Plan Framework Element

The city of Los Angeles General Plan Framework Element (Framework), adopted in December 1996 and readopted in August 2001, provides a comprehensive, long-range strategy for accommodating long-term growth in the City. The Infrastructure and Public Services chapter of the Framework sets forth goals, objectives, and policies for fire protection and emergency medical services (EMS) in the City. The objectives and policies in the Infrastructure and Public Services chapter ensure that every neighborhood has the necessary level of fire protection service, EMS, and infrastructure. Under the Framework, the City standard for response distance from the fire station to the destination location is 1.5 miles (City of Los Angeles 1995), which is consistent with the specifications for response distances in LAMC.

City of Los Angeles General Plan Safety Element

The city of Los Angeles General Plan Safety Element recognizes that most jurisdictions rely on emergency personnel (i.e., police, fire, gas, and water) to respond to and handle emergencies. The Safety Element of the city of Los Angeles General Plan sets forth specific policies and objectives related to safety. These policies and objectives emphasize hazard mitigation, emergency response, and disaster recovery. The Safety Element serves as a guide for the construction, maintenance, and operation of fire protection facilities in the City. It sets forth policies and standards for fire station distribution and location, fire suppression water flow (or "fire flow"), firefighting equipment access, emergency ambulance services, and fire prevention activities. Population density, nature of on-site land uses, and traffic flow are also considered by LAFD in evaluating the adequacy of fire protection services throughout the City.

City of Los Angeles Emergency Operations Organization and Hazard Mitigation Plan

The Emergency Operations Organization (EOO) within the City is responsible for the City's emergency preparations (i.e., planning, training and mitigation), response and recovery operations. The EOO is composed of all agencies of the City's government and centralizes command and information coordination to enable its unified chain-of-command to operate efficiently and effectively in managing the City's resources.

The city of Los Angeles 2018 Hazard Mitigation Plan (HMP) was prepared to lessen the City's vulnerability to disasters and to reduce risks from natural hazards. An HMP serves as a guide for decision makers as they commit City resources to minimize the effects of natural hazards. The HMP integrates with existing planning mechanisms, such as building and zoning regulations, long-range planning mechanisms, and environmental planning. The planning process includes conducting a thorough hazard vulnerability analysis, creating community disaster mitigation priorities, and developing subsequent mitigation strategies and projects.

Los Angeles Fire Department Strategic Plan 2018–2020

The LAFD's Strategic Plan 2018–2020, A Safer City 2.0, is the next generation of the first-ever LAFD Strategic Plan. A Safer City 2.0[1] focuses on five goals to guide the LAFD in the next three years:

1. Provide exceptional public safety and emergency service;
2. Embrace a healthy, safe and productive work environment;
3. Capitalize on advanced technology;
4. Enhance LAFD sustainability & community resiliency; and
5. Increase opportunities for personal growth and professional development.

3.18.3 Environmental Setting

A *wildfire* is a nonstructural fire that occurs in vegetative fuels, excluding prescribed fire. Wildfires can occur in undeveloped areas and spread to urban areas where the landscape and structures are not designed and maintained to be ignition resistant. A wildland-urban interface is an area where urban development is located in proximity to open space or *wildland* areas. The potential for wildland fires represents a hazard where development is adjacent to open space or within close proximity to wildland fuels or designated fire severity zones. The hot, arid climate of the City and County of Los Angeles, especially during the summer and fall, can dry out vegetation and cause dry brush to be prone to fires caused by lightning strikes and spontaneous combustion. Steep hillsides and varied topography within portions of the County also contribute to the risk of wildland fires. Fires that occur in wildland-urban interface areas may affect natural resources, life, and property.

CAL FIRE has mapped areas of significant fire hazards in the state through its Fire and Resources Assessment Program (FRAP). These maps place areas of the state into different FHSZs, based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban conflagration could result in catastrophic losses. As part of this mapping system, land where CAL FIRE is responsible for wildland fire protection and generally located in unincorporated areas is classified as an SRA. Where local fire protection agencies, such as the LAFD, are responsible for wildfire protection, the land is classified as a Local Responsibility Area (LRA). Due to the campus's location abutting the foothills of the San Gabriel Mountains and with Angeles National Forest immediately to the north, the campus is subject to wildland fire hazards and is therefore designated as a VHFHSZ within an LRA on CAL FIRE maps (CAL FIRE 2011). The area immediately north of the campus is within a designated VHFHSZ in an SRA (CAL FIRE 2007).

The most recent wildland fire that resulted in damage to campus buildings was the Sayre Fire in November of 2009, which damaged or destroyed a total of 48 structures on the campus. Other recent fires that have occurred in the vicinity of the campus include the Creek Fire, which started on December 5, 2017, and resulted in the destruction of 60 residential and 63 outbuildings and, as of December 11, 2017, damaged another 55 residential and 26 outbuildings (CAL FIRE 2017). The fire encompassed 15,619 acres and was located approximately 2 miles east/southeast of the campus.

3.18.3.1 County of Los Angeles Fire Department

The County of Los Angeles Fire Department (LACFD) provides fire, safety, and emergency medical services to the unincorporated areas of Los Angeles County. Additionally, many cities within Los Angeles County contract with the LACFD for fire protection services. There are three major geographic regions serviced by the LACFD, which are divided into nine divisions and 22 battalions. Division 3 covers the unincorporated area to the north and east of the project site, as well as the cities of Santa Clarita and La Cañada Flintridge. Three battalions with 22 stations are located within this service area. The nearest battalions to the project site are Battalion 6 and Battalion 4. The southern border of Battalion 6 lies immediately north of the project site and has five fire stations, one Division headquarters, and one Battalion and regional headquarters. The LACFD station nearest to the project area in Battalion 6 is County Fire Station #150, located at 19190 Golden Valley Road in Santa Clarita, approximately 4.5 miles north of the project site. Battalion 4 covers the unincorporated area east of the project site, including the City of La Cañada Flintridge, and has six fire stations and one Battalion headquarters. The LACFD station nearest to the project area in Battalion 4 is County Fire Station #74, located at 12587 Dexter Park Road in San Fernando, approximately 5.25 miles to the east of the project site. It should be noted that while the LACFD would be the first responder to a brush fire in the unincorporated areas to the north and east of the project site, the LAFD would be the first responder to an emergency on the project site.

Emergency Planning

The LACFD is responsible for emergency medical services and fire protection in the project area. In the event of an emergency, LACFD implements all appropriate emergency procedures outlined in the Los Angeles County Operational Area Emergency Response Plan, approved on February 17, 1998, by the County Chief Executive Office. The plan was implemented to provide effective life safety measures and reduce property loss, provide for the rapid resumption of affected business and community services, and provide accurate documentation and records for cost recovery.

3.18.3.2 City of Los Angeles Fire Department

A full-spectrum, life-safety agency that serves people who live and work in the city of Los Angeles, the LAFD provides fire protection and prevention and emergency services to and around the project site. Its 3,246 uniformed fire personnel and 353 professional support personnel are responsible for fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education, and community service (Los Angeles Fire Department 2017). The LAFD maintains 106 fire stations across the department's 471-square-mile jurisdiction and has continued to see rises in emergency responses, both pertaining to fire and EMS (Los Angeles Fire Department 2017). The LAFD has a breadth of command, fire rescue, and EMS resources, enabling the department to serve a complex region.

Fire stations with proximity to the Olive View–UCLA Medical Center Campus are listed in Table 3.18-1. For the purposes of this analysis, fire stations serving the project site and surrounding communities (Sylmar, Granada Hills, Mission Hills, and San Fernando) were identified. The primary responding fire station for the proposed project site would be LAFD Fire Station 91, located at 14430 Polk Street, approximately 1.5 miles south of the project site. The station maintains one engine, one ambulance, four engine crew members, and two ambulance crew members (Duff pers. comm.). According to LAFD's FireStatLA[2], Station 91's response metrics from January to December 2018 averaged 52 seconds for turnout[3] and five minutes and 27 seconds for travel time for 5,477 EMS incidents. Non-EMS response metrics were 50 seconds for turnout and five minutes 37 seconds for travel time for 940 incidents (Los Angeles Fire Department 2018).

Table 3.18-1. Fire Stations in the Vicinity of the Proposed Project

Map ID	Facility Name	Address	Distance from Project Site
1	Fire Station 91	14430 Polk Street, Sylmar, CA 91342	1.5 mi
2	Fire Station 18	12050 Balboa Boulevard, Granada Hills, CA 91344	5.5 mi
3	Fire Station 75	15345 San Fernando Mission Boulevard, Mission Hills, CA 91345	7.1 mi
Note: The Distance from Site metric in the table represents the driving distance between facilities rather than the actual distance. Source: LAFD 2018.			

3.18.4 Environmental Impact Analysis

3.18.4.1 Approach

Analysis of potential impacts related to wildfire was based on the ability of fire personnel to adequately serve the existing and future population of the project site, as well as federal, state, and local regulations regarding wildfire.

3.18.4.2 Thresholds of Significance

Fort the purposes of this EIR, and in accordance with Appendix G of the State CEQA Guidelines, the proposed project would result in a significant impact if it would:

WF-1 Substantially impair an adopted emergency response plan or emergency evacuation plan.

WF-2 Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

[2] https://www.lafd.org/fsla/stations-map
[3] *Turnout* is the time from when the station acknowledges notification of the emergency until the time the response apparatus leaves the station.

WF-3 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 on the environment.

WF-4 Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

3.18.4.3 Impacts and Mitigation Measures

Impact WF-1: Would the Proposed Project Substantially Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan?

Construction Impacts

Tier I

Tier I development would include the construction of a Restorative Care Village (composed of a Recuperative Care Center, Residential Treatment Program facility, Psychiatric Urgent Care Center, and Mental Health Wellness Center), a new outpatient facility, administration building, central utility plant, a materials management building, a community center, parking facilities, and the renovation of the existing hospital. Construction activities would include demolition of some on-site buildings and structures, site preparation and grading, and building new and renovated facilities.

Construction of the proposed Tier I facilities is not expected to result in any substantial traffic queuing on off-site roadways, including along Olive View Drive, and construction vehicles or equipment would not be allowed to park or remain stationary within off-site roadways. Tier I projects would also not require temporary or permanent closure of off-site roadways or block access to off-site uses that would physically impair or otherwise interfere with emergency response or evacuation in the project vicinity. All large construction vehicles entering and exiting the site would be guided by the use of personnel using signs and flags to direct traffic. The nearest County designated emergency/disaster routes to the project site are the SR 210 freeway and Glenoaks Boulevard, which are both located south of the campus (County of Los Angeles 2012).

Emergency access to facilities within the campus, however, could be temporarily affected by construction. Temporary lane closures and construction-related traffic within the campus could delay or obstruct the movement of emergency vehicles, which is considered to be a potentially significant impact for the purposes of this EIR. In order to ensure emergency access, traffic flow, and the LAFD's ability to maintain an adequate response time between four and six minutes, the County would implement mitigation measure **MM-PS-1**, which requires the Los Angeles County project manager and construction contractor to regularly notify and coordinate with the LAFD, LASD, and LAPD on project construction design, activities, and scheduling, including any street or lane closures related to proposed development projects before construction begins. Furthermore, Tier I facilities would comply with applicable requirements set forth by the Los Angeles County Operational Area Emergency Response Plan during an emergency.

Tier II

Impacts under Tier II would be similar to those described under Tier I. Impacts would be less than significant after incorporation of **MM-PS-1**.

Mitigation Measures

The following measure is proposed to mitigate the construction impacts described in Impact **WF-1**.

> **MM-PS-1:** The Los Angeles County project manager and construction contractor will regularly notify and coordinate with the LAFD, LASD, and LAPD on project construction design, activities, and scheduling, including any street or lane closures related to proposed development projects before construction begins.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I and Tier II

Although proposed development under the Master Plan would increase building square footage (see Table 2-1) and the number of campus employees and visitors, it would not result in structures or activities that would substantially obstruct or interfere with emergency vehicles or impair emergency response or evacuation plans. New development would be constructed in accordance with current building and fire/life/safety ordinance and codes, including all applicable County code requirements related to access, water mains, fire flows, and hydrants. Therefore, impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Impact WF-2: Would the Proposed Project, due to Slope, Prevailing Winds, and other Factors, exacerbate Wildfire Risks of, and thereby Expose Project Occupants to, Pollutant Concentrations from a Wildfire or the Uncontrolled Spread of a Wildfire?

Construction Impacts

Construction equipment would require the use of flammable fuels and solvents and operation of construction equipment, e.g., bulldozers and excavators, that could result in sparks, thereby increasing fire risks. However, implementation of best management practices during construction and adherence to County and City regulations and requirements would reduce potential risks. Therefore, construction impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Level of Significance after Mitigation

Less than significant.

Operational Impacts

Tier I

The proposed project abuts the foothills of the San Gabriel Mountains and Angeles National Forest immediately to the north and is designated as a VHFHSZ within an LRA on CAL FIRE maps. The area immediately north of the campus is within a designated VHFHSZ in an SRA. Wildfires may potentially occur in wildland areas adjacent to the project site, or in on-site undeveloped open space or recreational areas. Under existing conditions, the project site includes numerous potential fire issues, including unmaintained, fire-prone vegetation. However, proposed Tier I development would result in conversion of existing ignitable fuels to maintained landscapes and new development that is ignition-resistant. As seen in Table 2-1, the proposed project would increase building square footage, and therefore, would function as a fuel reduction project by helping create context-sensitive development. Adherence to current building codes and standards, which require defensible space to be provided around all structures located within a VHFHSZ, would ultimately reduce the potential flammability of the landscape. In addition, the proposed project would provide improved access throughout the site, which would improve firefighters' access for wildland firefighting efforts. With adherence to these fire suppression design requirements, and the conversion of open space to developed land, the potential impacts related to wildfires would be less than significant.

Tier II

Impacts under Tier II would be similar to those described under Tier I. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

Less than significant.

Impact WF-3: Would the Proposed Project 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 on the Environment?

Construction and Operational Impacts

Tier I

Under Tier I, approximately 519,900 square feet of new buildings and facilities would be constructed and improvements to existing utility infrastructure would occur. However, all construction and development would be limited to the confines of the existing campus. No off-site improvements would be required that would exacerbate fire risks. Additionally, as discussed under impact **WF-2** above, the proposed project would reduce the potential flammability of the existing campus landscape by converting existing undeveloped vacant spaces containing ignitable fuels to maintained landscapes and replacing older buildings with new buildings constructed to current codes. Impacts would be less than significant.

Tier II

Impacts under Tier II would be similar to those described under Tier I. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

Less than significant.

Impact WF-4: Would the Proposed Project Expose People or Structures to Significant Risks, Including Downslope or Downstream Flooding or Landslides, as a Result of Runoff, Post-fire Slope Instability, or Drainage Changes?

Construction and Operational Impacts

Tiers I and II

The proposed project abuts the foothills of the San Gabriel Mountains and Angeles National Forest immediately to the north and is designated as a VHFHSZ within an LRA on CAL FIRE maps. However, as discussed above under impacts **WF-1** through **WF-3**, the proposed project would not substantially exacerbate wildfire risks or hazards and could reduce the risk of on-campus fires by converting existing undeveloped vacant spaces containing ignitable fuels to maintained landscapes and replacing older buildings with new buildings constructed to current codes. Therefore, the proposed project would not result in significant new risks due to post-fire downstream flooding, landslides, slope instability, or drainage changes.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

Less than significant.

3.18.5 Cumulative Impacts

Table 2-2 of Chapter 2, *Project Description,* of this EIR lists the related projects that were considered in the cumulative impact analyses. The locations of the related projects are depicted in Figure 2-9, Related Projects Map, also in Chapter 2 of this EIR. As noted in the discussion of impact **WF -1** above, during construction activities, the proposed project would be required to comply with applicable requirements set forth by the Los Angeles County Operational Area Emergency Response Plan, LACFD, LASD, LAPD, and adherence to County and City regulations. Project features such as not allowing construction vehicles and equipment to park or stop along Olive View Drive, the use of flag personnel to ensure the continued flow of traffic, compliance with the aforementioned Plan and facilitating agencies' requirements would reduce the potential impact on wildfire hazards to less than significant. No off-site improvements would be required that would exacerbate fire risks. Additionally, as discussed under impact **WF-2**, the proposed project would reduce the potential

flammability of the existing campus landscape by converting existing undeveloped vacant spaces containing ignitable fuels to maintained landscapes and replacing older buildings with new buildings constructed to current codes. As a consequence, the proposed project is not expected to contribute to any cumulative impacts on wildfire hazards.

Chapter 4
Other Analyses Required by CEQA

4.1 Significant Unavoidable Adverse Environmental Impacts

Significant unavoidable impacts would occur as a result of the proposed Olive View–UCLA Medical Center Campus Master Plan Project in the following resource areas:

- Air Quality
- Greenhouse Gas Emissions (cumulative impact)
- Noise
- Utilities

4.1.1 Air Quality

Tier II would result in the generation of air pollutant emissions from heavy-duty construction equipment, construction worker vehicle trips, material deliveries, trips by heavy-duty haul trucks, earthwork activities, and other construction activities. Such emissions could exceed construction thresholds for regional and localized pollutant emissions depending on the schedules, equipment used, and material movement required. Mitigation measures **MM-AQ-1** and **MM-AQ-2** would reduce emissions, however, emissions from Tier II construction activities may still exceed South Coast Air Quality Management District (SCAQMD) thresholds. Therefore, this impact would be considered significant and unavoidable for Tier II development only.

4.1.2 Greenhouse Gas Emissions

Greenhouse gas emissions generated by construction and operational activities under both Tiers I and II could result in significant cumulative impacts. While implementation of mitigation measure **MM-GHG-O1** would reduce the project's GHG emissions, it cannot be stated with certainty that emissions would be reduced to a level that would comply with the long-term GHG reduction targets and goals of applicable regulatory programs. As such, impacts would be significant and unavoidable.

4.1.3 Noise

Construction activities could generate noise levels at nearby noise-sensitive uses that would exceed the applicable significance thresholds. While mitigation measure **MM-NOI-1** would reduce construction noise levels, it may not eliminate the predicted noise impacts entirely; therefore, construction noise impacts are considered significant and unavoidable for both Tier I and Tier II development. Construction vibration impacts could significantly affect nearby sensitive uses. While mitigation measure **MM-NOI-C2** would reduce construction vibration levels, it may not eliminate the predicted significant impacts entirely; therefore, for the purposes of this EIR, construction vibration impacts are considered significant and unavoidable.

4.1.4 Utilities

The additional development that could occur on the campus with implementation of the proposed Master Plan would result in increased water consumption. The Water Supply Assessment prepared for the proposed project concluded that projected water supply during normal, single-dry, and multiple-dry water years, as included in the 25-year projection contained in the city of Los Angeles's *Urban Water Management Plan*, can accommodate the projected maximum water demand associated with Tier I and Tier II development. However, it should be noted that the UWMP projections end in 2040, while the Master Plan is intended to provide a framework and vision for development on the campus that could occur beyond 2040. Therefore, water supply impacts for projects constructed far in the future (i.e., beyond 2040) potentially could be significant. Accordingly, when future projects (i.e., Tier II development projects that would occur beyond the year 2040) are proposed and building plans developed, the Los Angeles County Department of Public Works (LACDPW) will be required to coordinate with the water provider, the Los Angeles Department of Water and Power (LADWP), to confirm that adequate water supplies exist to serve these future Master Plan projects. If it is determined the water supplies are insufficient, and new offsite water infrastructure is required, the impact could potentially be significant and unavoidable under Tier II of the Master Plan.

Master Plan development under would also increase wastewater flows from the campus that would be conveyed to local sewer lines. The city of Los Angeles Bureau of Sanitation (BOS) conducted a preliminary evaluation of the project's potential impacts on the existing wastewater system, which concluded that, based on the current approximate flow levels, it appears the sewer system may be able to accommodate the total flow that could occur due to development under the Master Plan (Tiers I and II). However, further detailed gauging and evaluation will be needed as part of the permit process to identify a specific sewer connection point. If public sewer lines serving the campus have insufficient capacity, then the County will be required to build sewer lines to a point in the sewer system with sufficient capacity. If BOS determines that there is insufficient capacity in the local sewer lines that would serve an individual future project, then the impact would be considered to be significant. Since the County cannot compel another public entity, in this case BOS, to conduct further gauging and evaluation, for the purposes of this EIR, the impacts on local sewer lines are considered to be potentially significant and unavoidable.

4.2 Impacts Found to Be Less than Significant

The environmental analyses presented in Chapter 3, *CEQA Environmental Impact Assessment*, of this EIR concluded that the proposed project would result in no impacts in the following areas:

- Biological Resources
  - Conservation Plan
    - Tiers I and II (construction and operational)
- Cultural Resources
  - Historical Resources
    - Tiers I and II (construction and operational)
  - Archaeological Resources
    - Tiers I and II (operational)
  - Human Remains Disturbance

        - Tiers I and II (operational)
- Hazards and Hazardous Materials
    - Routine Transport, Use, or Disposal of Hazardous Materials
        - Tiers I and II (construction and operational)
    - Release of Hazardous Materials
        - Tiers I and II (operational)
- Geology and Soils
    - Septic Tanks or Alternative Waste Disposal Systems
        - Tiers I and II (construction and operational)
    - Paleontological Resource
        - Tiers I and II (operational)
- Hazards and Hazardous Material
    - Hazards to Schools
        - Tiers I and II (operational)
- Hydrology
    - Seiche, Tsunami
        - Tiers I and II (construction and operational)
- Land Use
    - Conflicts with Applicable Plans and Policies
        - Tiers I and II (construction and operational)
- Noise
    - Groundborne Vibration or Groundborne Noise Levels
        - Tiers I and II (operational)
    - Airstrip
        - Tiers I and II (operational)
- Population and Housing
    - Displacement of Housing and People
        - Tiers I and II (construction and operational)

Additionally, Los Angeles County, as the CEQA lead agency, determined in the Notice of Project/Initial Study (NOP/IS) (see Appendix A) that the proposed project would not result in impacts in the following areas and no further environmental review of those resource areas was conducted as part of this EIR.

- Agricultural and Forestry Resources
- Mineral Resources

The analyses presented in Chapter 3, *CEQA Environmental Impact Assessment*, of this EIR, concluded that the proposed project would result in less than significant impacts in the following categories, and therefore, no mitigation measures are required.

- Aesthetics
    - Scenic Resources
        - Tiers I and II (construction and operational)
    - Visual Character
        - Tiers I and II (construction and operational)
    - Light and Glare
        - Tiers I and II (construction and operational)
- Air Quality

    - Obstruct Implementation of the Applicable Air Quality Plan
        - Tiers I and II (construction and operational)
    - Violate Air Quality Standard
        - Tiers I and II (operational)
    - Expose Sensitive Receptors to Substantial Pollutant Concentrations
        - Tier I (construction and operational)
    - Objectionable Odors (construction and operation)
        - Tiers I and II (construction and operational)
- Biological Resources
    - Policies
        - Tiers I and II (operational)
    - Habitat Modification
        - Tiers I and II (construction and operational)
    - Species
        - Tiers I and II (operational)
    - Local Polices or Ordinances
        - Tiers I and II (operational)
    - Sensitive Natural Community
        - Tiers I and II (operational)
- Energy
    - Consumption of Energy
        - Tiers I and II (construction and operational)
    - Local Plans
        - Tiers I and II (construction and operational)
- Geology and Soils
    - Soil Erosion or Loss of Top Soil
        - Tiers I and II (operational)
    - Use of Septic Tanks or Alternative Waste Disposal Systems
        - Tier I and II (construction and operational)
- Greenhouse Gas Emissions
    - Policies
        - Tiers I and II (construction and operational)
- Hazards and Hazardous Materials
    - Routine Transport
        - Tiers I and II (construction and operational)
    - Upset and Accident conditions
        - Tiers I and II (operational)
    - Hazardous Materials Sites
        - Tiers I and II (operational)
    - Emergency response
        - Tier I (construction)
        - Tier II (construction and operational)
- Hydrology and Water Quality
    - Water Quality Standards
        - Tiers I and II (operational)
    - Groundwater Supplies
        - Tiers I and II (operational)

    - Drainage and Flooding
        - Tiers I and II (construction and operational)
    - Stormwater Runoff
        - Tiers I and II (construction and operational)
- Noise
    - Airstrip
        - Tiers I and II (construction and operational)
- Population and Housing
    - Population Growth
        - Tiers I and II (construction and operational)
    - Displace Substantial Numbers of Existing Housing Units
        - Tiers I and II (construction and operational)
- Public Services
    - Police and Fire services
        - Tiers I and II (operational)
    - Schools
        - Tiers I and II (operational)
    - Parks
        - Tiers I and II (operational)
- Recreation
    - Increased Use of Existing Parks
        - Tiers I and II (construction and operational)
    - Require Construction of Recreational Facilities
        - Tiers I and II (construction and operational)
- Transportation/Traffic
    - Conflict with Congestion Management Program
        - Tiers I and II (construction and operational)
    - CEQA Guidelines Section 15064.3 subdivision (b)
        - Tiers I and II (construction and operational)
    - Increase Hazards due to Geometric Design Feature
        - Tiers I and II (operational)
    - Inadequate Emergency Access
        - Tiers I and II (operational)
- Tribal Cultural Resources
    - Tribal Cultural Resources
        - Tiers I and II (operational)
- Utilities
    - Exceed Water or Wastewater Treatment Stormwater Drainage, Electric Power, Natural Gas, or Telecommunications Facilities
        - Tiers I and II (construction)
    - Water Supplies
        - Tiers I and II (construction)
    - Adequate Capacity for Wastewater Treatment Provider
        - Tiers I and II (construction)
    - Generation of Waste
        - Tiers I and II (construction)
    - Compliance with Solid Waste Regulations

        - Tiers I and II (construction and operational)
- Wildfire Hazards
    - Emergency Response Plan
        - Tiers I and II (operational)

The following impacts were identified as potentially significant but would be reduced to less than significant with incorporation of proposed mitigation measures.

- Air Quality
    - Violate Air Quality Standard
        - Tier I (construction)
- Biological Resources
    - Species
        - Tiers I and II (construction)
    - Local Policies
        - Tiers I and II (construction)
- Cultural Resources
    - Archaeological Resources
        - Tiers I and II (construction)
    - Human Remains Disturbance
        - Tiers I and II (construction)
- Geology and Soils
    - Earthquake Fault Rupture, Seismic Shaking, Ground Failure, or Landslides
        - Tiers I and II (construction and operational)
    - Soil Erosion or the Loss of Topsoil
        - Tiers I and II (construction)
    - Liquefaction
        - Tiers I and II (construction and operational)
    - Expansive Soil
        - Tiers I and II (construction and operational)
    - Paleontological Resource
        - Tiers I and II (construction)
- Hazards and Hazardous Materials
    - Upset and Accident Conditions
        - Tiers I and II (construction)
    - Hazardous Materials Sites
        - Tiers I and II (construction)
- Hydrology
    - Water Quality Standards
        - Tiers I and II (construction)
    - Groundwater Supplies
        - Tiers I and II (operational)
    - Drainage
        - Tiers I and II (construction)
    - Degrade Water Quality
        - Tiers I and II (construction)
- Noise
    - Operational Noise

        - Tiers I and II (operational)
    - Traffic Noise and Other Operational Sources
        - Tiers I and II (construction)
- Public Services
    - Police and fire services
        - Tiers I and II (construction)
- Transportation/Traffic
    - Inadequate Emergency Access
        - Tiers I and II (construction)
- Utilities
    - Water Supplies
        - Tiers I and II (construction)
    - Adequate Capacity for Wastewater Treatment Provider
        - Tiers I and II (operational)

4.3 Growth-Inducement and Indirect Impacts

According to Section 15126.2 (d) of the CEQA Guidelines, growth-inducing impacts of the proposed project shall be discussed in the EIR. Growth-inducing impacts are those effects of the proposed project that might foster economic or population growth or the construction of new housing, either directly or indirectly, in the surrounding environment. According to CEQA, increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects.

Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place without implementation of the proposed project. Typically, the growth-inducing potential of a project would be considered significant if it results in growth or population concentration that exceeds those assumptions included in pertinent master plans, land use plans, or projections made by regional planning authorities. However, the creation of growth-inducing potential does not automatically lead to growth, whether it would be below or in exceedance of the projected level. Under CEQA, it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

One of the guiding principles of the proposed Master Plan is to expand medical services at the Olive View–UCLA Medical Center to serve the increased needs of the community and County by providing new and expanded facilities and programs. Accordingly, the project would increase the employee population on the campus and is likely to attract additional visitors and consequently may indirectly increase growth in the surrounding area. However, the proposed project would not include the extension of roads or other infrastructure improvements outside the boundaries of the campus that would indirectly induce substantial population growth in the surrounding area. The proposed project would not include new permanent housing (Tier II could include a long-term care facility) or displace any existing populations.

Additionally, as stated in Chapter 3.12, *Population and Housing*, of this EIR, the proposed project would fall within SCAG projections, which anticipates a citywide population growth of 19.9 percent between the 2012 baseline estimate and 2040. The increases in the on-campus employee and residential populations that could occur with buildout of the Master Plan would not contribute

substantially to any population growth in the area beyond what SCAG has projected in its regional and city forecasts.

Therefore, while the proposed project may indirectly induce population growth, impacts would be considered minor. Consequently, the proposed project is not expected to result in significant growth-inducing impacts on the environment.

4.4 Irreversible Environmental Changes

CEQA Guidelines Section 15126.2(c) requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project, and states:

> 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 a 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.

Implementation of the proposed project would occur on the existing Olive View–UCLA Medical Center Campus. Proposed development would include the irreversible commitment of natural resources (water and raw materials required during construction and operation), energy, land, and human resources. Ongoing maintenance and operation of the new development on the campus would entail a further irreversible commitment of energy resources in the form of petroleum products (diesel fuel and gasoline), natural gas, and electricity generated by burning fossil fuels. Long-term impacts would also result from an increase in vehicular traffic, and the associated air pollutant and noise emissions.

4.5 Mandatory Findings of Significance

Provided below are mandatory findings of significance for the proposed project, which are based on the data and analyses conducted for and summarized in this Draft EIR (see Chapter 3, *CEQA Environmental Impact Assessment*, of this EIR, for a more detailed discussion of project impacts).

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

As discussed in Chapter 3, *CEQA Environmental Impact Assessment*, of this EIR, the proposed project (Tiers I and I) have the potential to result in significant impacts to nesting birds and roosting bats, protected oak trees, and archaeological resources, including tribal cultural resources. These impacts can be reduced to less than significant with implementation of proposed mitigation measures.

b) Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Tier II of the Master Plan could generate pollutant emissions that exceed applicable thresholds. These emissions combined with emissions from other related projects and cumulative development in the air basin could be cumulatively considerable. Additionally, greenhouse gas emissions generated by construction and operational activities under both Tiers I and II of the proposed Master Plan could result in cumulatively considerable impacts. Traffic generated by proposed Master Plan development (Tiers I and II) and other related projects would cumulatively increase congestion in the study area and result in unacceptable levels of service at local intersections, freeway mainline segments, and freeway ramps. The proposed project and other anticipated growth in the utility providers' services areas could require new utility infrastructure or facilities to meet increased demand, the construction of which could result in significant impacts to the environment.

c) Does the project have environmental effects that could cause substantial adverse effects on human beings, either directly or indirectly?

Construction activities associated with Tier I and Tier II development could result in noise levels at nearby noise-sensitive uses that exceed applicable significance thresholds. Implementation of proposed noise mitigation measures would reduce potential noise levels, but the resulting noise impacts may still be significant after mitigation. Construction activities would generate pollutant emissions that could exceed SCAQMD localized significance thresholds under Tier II of the Master Plan and consequently could adversely affect nearby sensitive uses. Although, measures are proposed to mitigate potential air quality impacts, the impacts may still be significant after mitigation.

Chapter 5
Alternatives Analysis

5.1 Introduction

State California Environmental Quality Act (CEQA) Guidelines Section 15126.6 requires that an Environmental Impact Report (EIR) describe a range of reasonable alternatives to a project or its location that could feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant environmental impacts. According to the State CEQA Guidelines, the EIR should compare the merits of the alternatives and determine an environmentally superior alternative. The range of alternatives discussed in an EIR is governed by the *rule of reason*, which requires the identification of only those alternatives necessary to permit a reasonable choice between the alternatives and the proposed project. An EIR need not consider an alternative that would be infeasible. State CEQA Guidelines Section 15126.6(f)(1) explains that the evaluation of project alternative feasibility can consider a number of factors, including site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, and jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise access the alternative site. The EIR is also not required to evaluate an alternative that 1) has an effect that cannot be reasonably identified or that has remote or speculative implementation, and/or 2) would not achieve the basic project objectives.

5.2 CEQA Alternatives

Pursuant to the CEQA requirements identified in Section 5.1, above, the County considered the following project objectives (see Chapter 2, *Project Description*, of this EIR) with respect to developing alternatives to the proposed project at the Olive View–UCLA Medical Center Campus:

1. Provide for development opportunities that are consistent with the goals and policies of the County's General Plan.
2. Reorganize, expand, and integrate outpatient services with the specific goal of meeting the community's health needs, providing patient-centered care, and improving the operational throughput to meet increasing demands.
3. Locate inpatient and outpatient services into dedicated buildings to optimize the quality of care and improve operational effectiveness, while reducing administrative, operational, and maintenance costs.
4. Comply with the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983 (Senate Bill [SB] 1953) required by the Office of Statewide Health Planning and Development in order to ensure that the hospital can maintain its license as an inpatient care facility beyond the year 2030.
5. Identify feasible opportunities to exceed state energy requirements and pursue green building sustainable design to the maximum extent possible.
6. Develop resources that are consistent with the needs of the 2035 planning horizon.

7. Provide new medical facilities, including a new replacement hospital, to meet state standards and code requirements.
8. Provide integrated direct and coordinated care, including physical health, behavioral health, social, and other supportive services to the County's most vulnerable populations, such as those suffering from mental illness, addiction, or physical disabilities, in facilities located in a welcoming campus setting with green spaces to:
    a. ensure a seamless transition upon discharge to home or other housing options, and help patients avoid cycling in and out of emergency interventions and establish a sustainable functional life;
    b. reduce morbidity and costs, while restoring function and dignity; and
    c. improve the quality of life for the people and communities of Los Angeles County.

The County also considered and evaluated the feasibility of alternatives that had the potential to avoid or substantially lessen the following unavoidable significant adverse environmental impacts of the proposed Master Plan:

- Air Quality (construction and operational impacts under Tier II)
- Greenhouse Gas Emissions (cumulative impact under Tiers I and II)
- Noise (construction impacts under Tiers I and II)
- Traffic (operational impacts under Tier II)
- Utilities and Service Systems (operational water and solid waste impacts under Tier II)

Based on the above, the following alternative to the proposed project has been identified:

- Alternative B: Reduced Development Alternative (Modified Tier I and Tier II Development)

Additionally, Section 15126(e)(1) of the State CEQA Guidelines requires that the alternatives analysis include a discussion of a no-project alternative so that decision-makers can compare the impacts of approving a proposed project (i.e., the Master Plan) with the impacts of not approving the proposed project. Two no-project scenarios have been developed, which are identified below and discussed in further detail in the following section:

- Alternative A: No Project Alternative
    - No Project/No Build
    - No Project/Limited Development

5.3 Environmental Evaluation of CEQA Alternatives

The proposed CEQA alternatives and an analysis of their impacts in comparison to those of the proposed Master Plan are described below. As permitted by the State CEQA Guidelines, the impacts of the alternatives are discussed in less detail than the effects of the proposed Master Plan. A table summarizing and comparing the impacts of the proposed project and alternatives follows the discussions below.

5.3.1 Alternative A–No Project

As required by CEQA Guidelines Section 15126.6 (e), a No Project Alternative:

> shall be evaluated along with its impact. The purpose of describing a No Project Alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The No Project Alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline.

For the purposes of this EIR, two No-Project scenarios have been defined. Under both scenarios, the Master Plan would not be implemented. However, the first scenario, No Project/No Build, assumes that no new development would occur on the campus in the future (other than projects currently approved, but not yet constructed: see Chapter 2, *Project Description*, of this EIR, for a list of other related campus projects), and, consequently, that environmental conditions on the Olive View–UCLA Medical Center Campus would remain largely unchanged. The second No Project scenario considers what is more likely and could reasonably occur in the future if the proposed Master Plan is not approved: individual projects would be proposed, approved, and then implemented on an ad hoc basis similar to how development has occurred on the campus in the past. As a consequence, development on the campus under this scenario would be greater than the No Project/No Build scenario, but more limited in scope and extent than the development that could occur under the proposed Master Plan or Reduced Development Alternative (Alternative B, below). Under either No Project scenario, a comprehensive and coordinated program of campus-wide new and renovated facilities, open space, and infrastructure improvements, guided by the goals, policies, and principles of the proposed Master Plan, would not occur.

5.3.1.1 No Project/No Build Scenario

Under this No Project scenario, since no new development would occur other than those campus projects already approved, but not yet constructed, none, or very few, of the proposed Master Plan's adverse environmental impacts would occur. Therefore, this No Project scenario is not expected to result in the following unavoidable significant adverse impacts of the proposed Master Plan:

- Construction air quality impacts (Tier II),
- Construction noise impacts (Tiers I and II),
- Operational traffic impacts (Tier II), and
- Long-term (Tier II) operational water and wastewater impacts.

Additionally, this No Project/No Build scenario would not result in the cumulatively considerable greenhouse gas emissions impacts that could occur under the proposed Master Plan.

It is also anticipated that the No Project/No Build scenario would result in none, or very few, of the following less-than-significant impacts (before or after mitigation) that would occur under the proposed Master Plan, including impacts to:

- Aesthetics
- Air Quality (operational impacts)
- Biological Resources
- Cultural Resources

- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Noise (operational impacts)
- Population and Housing
- Public Services
- Recreation
- Utilities (construction)
- Wildfire Hazards

Although this No Project scenario would result in no or few adverse impacts, likewise it would not provide new and upgraded Olive View–UCLA Medical Center Campus facilities, improved wayfinding, better access/circulation, and open space for visitors, employees, and area residents to the extent or in the manner that could occur under the proposed Master Plan. Therefore, this No Project scenario would not meet any of the Master Plan project objectives.

5.3.1.2 No Project/Limited Development

If the Master Plan is not approved, it is reasonable to assume that in the future, individual projects would be proposed and implemented to meet specific medical center and County needs, subject to securing the necessary approvals and funding. Although it is not known exactly what projects would be constructed over the next 20+ years, it is possible that one or more of the Master Plan development projects could proceed separately and independently of the Master Plan; however, the schedule or scope of those projects could change from what is contemplated under the Master Plan. Nonetheless, it is assumed that the amount of development that would occur under this No Project scenario would be substantially less than the development that could occur under the proposed Master Plan. Given those assumptions, it is likely this No Project scenario would not result in the unavoidable significant adverse impacts that would occur under the Master Plan. Although some changes and impacts to the environment (e.g., construction, noise, and air quality impacts, impacts to archaeological and paleontological resources) could occur under this scenario that may not occur under the No Project/No Build scenario, the scope and extent of the impacts would still likely be substantially less than what could occur with implementation of the proposed Master Plan. However, the No Project/Limited Development Alternative would not provide the benefits to the community that could occur under the proposed Master Plan, nor would it provide a framework to guide development on the campus in a comprehensive and coordinated manner to meet the Olive View–UCLA Medical Center's and County's needs. None or few of the Master Plan objectives would be met with this alternative.

5.3.2 Alternative B–Reduced Development (Modified Tier I and Tier II Development)

Olive View–UCLA Medical Center and County staff conducted a review to identify opportunities to consolidate functions to optimize efficiency of space utilization, thereby reducing the project's footprint and potential environmental impacts. As a consequence of this review, a number of Tier I

and Tier II buildings proposed under the Master Plan would be modified, reduced in size, or eliminated as described below.

Tier I Changes

Tier I changes would include:

1. **Reduction in Size of Administrative Services Building.** This component of the proposed Master Plan would be reduced in size from the 96,000-square-foot facility under the Master Plan to approximately 38,600 square feet. The reduction in the size of this building could be achieved by relocating several offices or departments that would be located in this building under the proposed Master Plan to other existing or proposed new buildings.
2. **Consolidation of East and West Central Utility Plants.** Under this alternative, one large consolidated central utility plant would be constructed in place of the two proposed under the Master Plan (Central Utility Plant East under Tier I and Central Utility Plant West under Tier II). This consolidated central utility plant would also contain materials management/supply services operations eliminating the need for the separate 68,100-square-foot building proposed under Tier I of the Master Plan.
3. **Elimination of the New Materials Management/Supply Services Building.** The new 68,100-square-foot Materials Management/Supply Services Building under the proposed Master Plan would be eliminated under this alternative, and instead materials management functions would be co-located with and share large delivery truck tarmac and dock facilities with the consolidated central plant.

Other projects proposed under Tier I, including the Restorative Care Village, Ambulatory Care Center, existing inpatient hospital, and Community Center would be similar to those under the proposed Master Plan. This alternative would also include other Tier I improvements proposed under the Master Plan, including new community open space and landscaping, parking, vehicular circulation, and pedestrian circulation improvements, and utility infrastructure improvements.

Tier II Changes

Tier II changes include constructing a new hospital and repurposing the existing hospital building for other uses defined under the proposed Master Plan, providing an opportunity to use the existing hospital to accommodate several proposed Tier II facilities, rather than constructing new buildings in the western half of the campus, as would occur under the proposed Master Plan. These facilities would include the Long Term Care facility, UCLA medical office and research and development buildings, child care center, fitness center, and retail uses. Accommodating these facilities and uses in the repurposed existing hospital would reduce the Tier II building square footage by approximately 315,000 square feet. Other Tier II Master Plan improvements, including new community open space and landscaping, parking, vehicular circulation, and pedestrian circulation improvements, and utility infrastructure improvements on the western half of the campus would also be implemented under this alternative, but potentially to a lesser extent than would occur under the proposed Master Plan.

5.3.2.1 Environmental Evaluation of Alternative B

Aesthetics

The proposed Master Plan (see section 3.1, *Aesthetics*, of this EIR) would result in less-than-significant visual impacts during construction under Tiers I and II, due to the presence of construction equipment and materials in staging areas, removal of trees and vegetation, and the unfinished appearance of buildings during construction. Alternative B would result in slightly less development under Tier I and substantially less under Tier II, reducing the overall construction impacts outlined in the proposed Master Plan so that they become less than significant. Additionally, since new and renovated buildings, landscaping, lighting, and open space areas would be completed in accordance with proposed design guidelines, both this alternative and the proposed Master Plan would improve the appearance of the campus and would result in beneficial visual effects.

Neither this alternative nor the proposed Master Plan would result in a cumulatively considerable contribution to a significant cumulative impact on aesthetics.

Air Quality

Under Alternative B, there would be slightly less Tier I construction activity than would occur under the proposed Master Plan. Consequently, Tier I peak day construction emissions would be similar to, or slightly less than, those under the proposed Master Plan. As described in Section 3.2, *Air Quality*, of this EIR, the Tier I construction emissions under the Master Plan could exceed the South Coast Air Quality Management District (SCAQMD)'s significance threshold for volatile organic compounds (VOCs) emissions. Therefore, both Alternative B and the proposed Master Plan could result in significant construction air quality impacts under Tier I. However, proposed mitigation measures under the Master Plan would also be implemented for this alternative, which would reduce impacts to less than significant.

Under Tier II, Alternative B would result in substantially less construction than the proposed Master Plan. As a consequence, pollutant emissions during construction would be substantially less under this alternative than the proposed Master Plan, and it is likely that this alternative would result in Tier II construction air quality impacts that would be less than significant or mitigated to less than significant. Therefore, this alternative could avoid the potentially significant and unavoidable peak day construction air quality impacts that could occur under the proposed Master Plan.

Operational air quality impacts under Tier I would be similar and less than significant under this alternative and the proposed Master Plan. Under Alternative B, Tier II, building square footage would be substantially reduced compare to the proposed Master Plan. Therefore, this alternative may avoid the potentially significant and unavoidable Tier II operational air quality impacts of the proposed Master Plan.

With respect to cumulative impacts, the Master Plan's long-term contribution to regional cumulative air quality impacts would be cumulatively considerable. However, the cumulative impacts of Alternative B, because of the substantial reduction in Tier II building square footage, would be less than cumulatively considerable.

Biological Resources

Under Alternative B, there would be slightly less development under Tier I than the proposed Master Plan, which could result in the potential removal of slightly fewer trees, including protected

coast live oak trees, and leave in place more vegetation used by nesting migratory birds or roosting bats. Therefore, this alternative could have slightly less of an impact to biological resources than the proposed Master Plan, although both have the potential to result in significant impacts to nesting birds, roosting bats, and oak trees under Tier I. However, proposed mitigation measures would reduce impacts to biological resources to less than significant for this alternative, as well as the proposed Master Plan.

Under Tier II, because of the significant reduction in building square footage compared to the proposed Master Plan, this alternative could result in substantially less extensive biological impacts than the proposed Master Plan, The Tier II impacts of both are considered potentially significant, but can be reduced to less than significant with implementation of proposed mitigation measures.

With implementation of proposed biological resources mitigation measures (see Section 3.3, *Biological Resources*, of this EIR), the proposed Master Plan and Alternative B would not contribute to significant cumulative impacts.

Cultural Resources

The proposed Master Plan has the potential to result in significant impacts to archaeological resources during construction under both Tiers I and II, but those impacts can be reduced to less than significant with implementation of proposed mitigation measures. Alternative B could also result in significant impacts that can be mitigated to less than significant under both Tiers I and II. However, it should be noted that the sizeable reduction in the amount of construction under Tier II could substantially lessen, but not necessarily eliminate, the potential for encountering and disturbing archaeological resources. No impacts to historical resources are anticipated under this alternative or the proposed Master Plan.

As noted above, implementation of proposed mitigation measures (see mitigation measures **MM-CR-1** through **MM-CR-6** in Section 3.4, *Cultural Resources*, of this EIR) would reduce potential archaeological resources related impacts of the proposed Master Plan and this alternative to a less-than-significant level. Therefore, with mitigation, both the proposed Master Plan's and Alternative B's contribution to significant cumulative impacts would be rendered less than cumulatively considerable.

Energy

Because of the slight decrease in building square footage (see Section 3.5, *Energy*, of this EIR), Alternative B would result in slightly less energy consumption than the proposed Master Plan under Tier I and a more substantial reduction under Tier II because of the substantial reduction (315,000 square feet) in Tier II building square footage. However, neither this alternative nor the proposed Master Plan would result in significant energy impacts during construction or operation, nor would implementation of either result in a cumulatively considerable contribution to significant cumulative energy impacts.

Geology/Soils

Tier I of Alternative B would result in similar or slightly fewer geology/soils impacts than the proposed Master Plan because of the slight reduction in Tier I development. New development and proposed facilities under this alternative would be exposed to similar geologic and soil hazards, (i.e., proximity of Santa Susana fault and liquefaction hazards), as would the proposed Master Plan. The

geologic/soils hazards and impacts of both Alternative B and the proposed Master Plan are considered to be potentially significant. However, the implementation of proposed mitigation measures would reduce potential hazards to proposed project structures and building occupants to less than significant under both Alternative B and the proposed Master Plan for both Tiers I and II during construction and operation. Neither this alternative nor the proposed Master Plan would exacerbate existing geologic hazards or risks in the project area.

The slight decrease in building square footage and number of buildings proposed under this alternative could also slightly reduce the potentially significant impacts to paleontological resources during construction under Tier I, compared to what could occur under the proposed Master Plan. Under Tier II, this alternative would result in substantially less development than under the proposed Master Plan, which would substantially lessen, but not necessarily eliminate, the potential for Tier II impacts to paleontological resources. However, proposed mitigation measures would reduce the potentially significant construction impacts of this alternative and the proposed Master Plan to less than significant under both Tiers I and II.

With implementation of proposed mitigation measures (see Section 3.6, *Geology/Soils*, of this EIR), the contribution of the proposed Master Plan and Alternative B to potentially significant cumulative impacts would be rendered less than cumulatively considerable.

Greenhouse Gas Emissions

Under Tier I of Alternative B, the slight decrease in development and vehicle trips due to a smaller project footprint, as compared to the proposed Master Plan, would result in a slight reduction in greenhouse gas emissions. Under Tier II, this alternative could result in substantially less greenhouse gas emissions because of the significant reduction in building square footage. However, Tier I and Tier II development on the campus under Alternative B and the proposed Master Plan would result in potentially significant cumulative greenhouse gas emissions impacts, although the Tier II impacts of this alternative would be substantially less than the proposed Master Plan. Although the mitigation measures proposed in Section 3.7, *Greenhouse Gas Emissions*, of this EIR would be implemented for both the proposed Master Plan and Alternative B, the impacts after mitigation are expected to be cumulatively considerable.

Hazards and Hazardous Materials

Construction of the proposed Master Plan facilities could yield hazardous materials requiring treatment and disposal, a potentially significant impact that can be reduced to less than significant with implementation of mitigation measures **MM-HAZ-1** through **MM-HAZ-5** proposed under the Master Plan (see Section 3.8, *Hazards and Hazardous Materials*, of this EIR). Under Tier I of Alternative B, there would be slightly less construction than under the proposed Master Plan; therefore, the potential for encountering contaminated soil or materials would be slightly reduced, but still potentially significant. Implementation of mitigation measures would reduce Tier I impacts of Alternative B to less than significant.

Because of the substantial reduction in building square footage Under Tier II of Alternative B, the potential for encountering hazardous materials could be substantially reduced, but not necessarily eliminated, as compared to the proposed Master Plan. Therefore, Tier II construction impacts of this alternative and the proposed Master Plan are potentially significant, but can be reduced to less than significant with implementation of the proposed mitigation measures. Operational impacts would be less than significant under Alternative B and the proposed Master Plan (before mitigation).

With implementation of the aforementioned mitigation measures under the proposed Master Plan and Alternative B, the contributions to a cumulatively hazardous materials impact would be rendered less than cumulatively considerable.

Hydrology/Water Quality

Under the proposed Master Plan, the impacts to water quality and stormwater/drainage due to construction and operational activities would be less than significant under both Tiers I and II (see Section 3.9, *Hydrology/Water Quality*, of this EIR). Under Tier I of Alternative B, there would be a slight reduction in the amount of impervious surfaces compared to the proposed Master Plan, and the main hydrologic and water filtration improvement features of the campus would still be built. Therefore, Tier I impacts to hydrology and water quality under Alternative B would be similar or slightly less than those that would occur under the proposed Master Plan. Under Tier II of this alternative, the substantial reduction in building square footage and new impervious surfaces would greatly lessen the potential for adverse water quality and hydrology impacts. However, both Alternative B and the proposed Master Plan are already expected to result in less-than-significant water quality and hydrology impacts as a result of Tier II development.

Given that the proposed development under the Master Plan and Alternative B, as well as many of the cumulative development projects within the study area, would be required to implement Best Management Practices (BMPs), Low Impact Design (LID) features, and other measures to comply with regulatory and permit requirements, it is likely that cumulative hydrology and water quality impacts would be less than significant. Therefore, it is anticipated that neither the proposed Master Plan nor Alternative B would result in cumulatively considerable contributions to significant cumulative hydrology and water quality impacts.

Land Use/Planning

Neither Alternative B nor the Master Plan contain development proposals that would conflict with applicable land use plans, policies, or regulations adopted for the purposes of avoiding or mitigating environmental impacts. Because no land use impacts would occur under Alternative B or the proposed Master Plan (see Section 3.10, *Land Use/Planning*, of this EIR), neither would contribute to cumulative land use impacts.

Noise

The proposed Master Plan could result in potentially significant and unavoidable construction and operational (i.e., mechanical equipment) noise impacts depending on the location and extent of construction activities, types of mechanical equipment that would be installed in new buildings, and proximity of noise-sensitive uses on- and off-campus (see Section 3.11, *Noise*, of this EIR). Alternative B could slightly reduce the potential for significant noise impacts under Tier I because of the slight reduction in building square footage. Under Tier II, the substantial reduction in building square footage and number of new buildings could substantially lessen the potential for significant adverse construction and operational noise impacts; however, given that Tier II development under Alternative B still includes the construction of a large new building (i.e., the new hospital), the potential exists for significant and unavoidable Tier II impacts.

Neither this alternative nor the proposed Master Plan are expected to result in a cumulatively considerable contribution to significant cumulative noise impacts.

Population/Housing

The proposed Master Plan would not displace any existing housing, and the increase in development and the campus's employee population would be consistent with growth projections in local plans; therefore, the proposed Master Plan would result in less-than-significant population and housing impacts (See Section, 3.12, *Population/Housing*, of this EIR). The growth-inducement impacts due to on-campus development under the proposed Master Plan also would be less than significant. As is the case with the Master Plan, Alternative B would not displace any existing housing. Additionally, Tier I development would be slightly less under Tier I and substantially less under Tier II; therefore, the population and growth inducement impacts would be less than would occur under the proposed Master Plan, making the impacts of Alternative B and the proposed Master Plan less than significant.

In conjunction with related projects, neither the Master Plan nor Alternative B would result in substantial induced growth beyond that anticipated and accommodated by local plans. Consequently, neither the Master Plan nor Alternative B would result in a cumulatively considerable contribution to a significant cumulative induced-growth impact in the immediate project area.

Public Services

Under Alternative B and the proposed Master Plan, construction activities have the potential to affect emergency access within the campus, a potentially significant impact that can be reduced to less than significant with implementation of proposed mitigation measure **MM-PS-1** (See Section 3.13, *Public Services*, of this EIR). The potential for significant impacts would be slightly less under Tier I of Alternative B because there would be slightly less extensive construction. Tier II development under Alternative B could result in a further reduction in impacts due to the substantial reduction in the amount of construction that could occur, as compared to the proposed Master Plan. Nonetheless, the potential construction impacts of this alternative and the proposed Master Plan under Tiers I and II would remain potentially significant, but can be reduced to less than significant with **MM-PS-1**.

New development under both Alternative B and the Master Plan is not expected to substantially increase the demand for public services or require construction of new or altered facilities to maintain acceptable service ratios. Therefore, neither Alternative B nor the Master Plan are expected to result in a cumulatively considerable contribution to significant cumulative public services impacts.

Recreation

The proposed Master Plan is unlikely to substantially increase the use of local parks and recreational facilities. The slight reduction in Tier I development and substantial reduction in Tier II development under Alternative B, as compared to the proposed Master Plan (see Section 3.14, *Recreation*, of this EIR) would further reduce the demand for and use of recreational facilities. Impacts would be less than significant.

Neither the proposed Master Plan nor Alternative B, when considered in conjunction with the related projects identified in Chapter 2, *Project Description*, of this EIR, would result in significant cumulative impacts on local recreational and park resources due to the increased use and resulting physical deterioration of these facilities.

Transportation/Traffic

The additional development proposed under the Master Plan would increase the number of vehicle trips to, from, and within the Olive View–UCLA Medical Center Campus, which could adversely affect local intersections, freeway ramps, and freeway mainline sections. Under Tier I of the Master Plan (see Section 3.15, *Transportation/Traffic*, of this EIR) the impacts are expected to be less than significant; however, Tier II could result in significant impacts. Under Alternative B, Tier I development would generate slightly fewer vehicle trips than the proposed Master Plan, and consequently would result in less than significant traffic impacts. Since Tier II development under Alternative B would be substantially reduced, as compared to the proposed Master Plan, it would substantially lessen the Tier II traffic impacts. However, because the impacts of Alternative B and Tier II development have not been quantified, the significance of potential impacts cannot be conclusively determined at this time. Thus, for the purposes of this EIR, and although Tier II development under Alternative B would likely generate substantially fewer vehicle trips than the proposed Master Plan, it may still result in unavoidable significant adverse traffic impacts.

Tier I development under this alternative and the proposed Master Plan, in conjunction with other cumulative development in the project area, could result in significant cumulative traffic impacts on local intersections and freeway mainline segments and ramps. Tier II development under this alternative and the proposed Master Plan could also result in a cumulatively considerable contribution to significant cumulative traffic impacts, although Tier II under Alternative B would result in less of a contribution than the proposed Master Plan.

Tribal Cultural Resources

Tier I and Tier II development under the proposed Master Plan has the potential, during construction grading and excavation, to disturb, damage, or destroy tribal cultural resources, if present within soils on the campus, which would be a significant impact that can be reduced to less than significant with implementation of proposed mitigation measures. Since Tier I of Alternative B would result in slightly less development than the proposed Master Plan, the potential for encountering tribal cultural resources would be slightly reduced but potential impacts would still be considered to be significant before mitigation and less than significant after implementation of proposed mitigation measures. Under Tier II of Alternative B, the substantial reduction in building square footage and the number of new buildings would substantially lessen, but not eliminate, the potential for encountering tribal cultural resources during construction. Consequently, the Tier II impacts of this alternative, similar to the proposed Master Plan, would be potentially significant before mitigation but can be reduced to less than significant with implementation of proposed mitigation measures.

Implementation of mitigation measures **MM-CR-1** through **MM-CR-6**, identified in Section 3.4, *Cultural Resources*, of this EIR, would also mitigate any impacts to tribal cultural resources (see Section 3.16, *Tribal Cultural Resources*, of this EIR). Consequently, neither the proposed Master Plan nor Alternative B would contribute to significant cumulative impacts that are less than cumulatively considerable.

Utilities/Service Systems

Under Tiers I and II of the proposed Master Plan, construction of new on-campus underground utility lines to serve proposed new buildings could result in impacts to archaeological or paleontological resources, if present, a potentially significant impact that can be reduced to less than

significant with implementation of proposed mitigation measures **MM-UTL-1** and **MM-UTL-2** (see Section 3.17, *Utilities/Service Systems*, of this EIR). Under Alternative B, Tier I would result in slightly less development; as consequence, the potential for construction to affect archaeological or paleontological resources would be slightly reduced, but the impact would still be potentially significant before mitigation and less than significant after the implementation of proposed mitigation measures. Under Tier II, the potential for encountering these resources would be substantially reduced because of the markedly lower level of development, but not eliminated; therefore, the potential impacts would remain significant, but can be reduced to less than significant with implementation of **MM-UTL-1** and **MM-UTL-2**.

The increased consumption of utilities, including water consumption and the generation of solid waste and wastewater, due to operation of new Tier I development that could occur on the campus under the Master Plan is not expected to result in significant environmental impacts. Similarly, Tier I development under Alternative B, which proposes slightly less development and would therefore result in a slighter decrease in the consumption of utilities than would occur under Tier I of the Master Plan, would also result in less-than-significant impacts to utilities and service systems.

Under Tier II of the Master Plan, the increasing long-term demand for water is considered a potentially significant impact because the Tier II development could extend beyond the Los Angeles Department of Water and Power's Urban Water Management Plan (UWMP) projections, which extend through 2040. Although the city has determined that, based on UWMP projections, adequate supplies of water are available to serve Tier I development, it has not yet been determined that water supplies would be adequate to serve any Tier II development beyond the year 2040. Therefore, water supply impacts for projects constructed beyond the year 2040 could be potentially significant. Although Tier II development and the resulting water consumption under Alternative B would be substantially less than what could occur under the proposed Master Plan, the impacts are nonetheless considered to be potentially significant for development that occurs beyond the year 2040.

With regards to wastewater, the city of Los Angeles Bureau of Sanitation (BOS) has concluded that the sewer system might be able to accommodate the total flow for the proposed project, but that further detailed gauging and evaluation may be needed as part of the permit process for individual projects so that a specific sewer connection point can be identified. If BOS determines that there is insufficient capacity in the local sewer lines to serve an individual future project, then the impact would be considered to be significant. Therefore, Tiers I and II of the proposed Master Plan could result in potentially significant impacts on wastewater conveyance capacity. Since Tier I and II development combined under Alternative B would result in substantially less building square footage than in the proposed Master Plan, the potential of local sewer lines having inadequate capacity to accommodate project flows would be reduced, but the impact is still considered potentially significant.

Because the planning horizon for the Master Plan and Alternative B extends well into the future (beyond year 2040), it is possible that yet-unidentified improvements to the regional provision of utility infrastructure may be required over the life of the project. Therefore, it is anticipated that the proposed Master Plan and Alternative B, in conjunction with other regional development, could result in significant cumulative impacts on utilities.

Wildfire Hazards

Construction equipment utilizes flammable fuels and solvents, and the operation of construction equipment (e.g., bulldozers and excavators) could result in sparks, thereby increasing fire risks under Alternative B, as well as the proposed Master Plan. However, implementation of BMPs during

construction and adherence to County and city regulations and requirements would reduce potential risks (see Section 3.18, *Wildfire Hazards*, of this EIR). Therefore, construction impacts would be less than significant.

The Master Plan and Alternative B would both increase building square footage, but also result in the conversion from the existing uses of ignitable fuels to maintained landscapes and new development that is ignition-resistant. Therefore, the proposed Master Plan and Alternative B would function as a fuel-reduction project. Adherence to current building codes and standards, which require defensible space to be provided around the perimeter of all structures located within Very High Fire Hazard Severity Zones (VHFHSZ), would also ultimately reduce the potential flammability of the landscape. In addition, the Master Plan and Alternative B both would provide improved access throughout the campus, which would improve firefighters' access for wildland firefighting efforts. Therefore, with adherence to these fire suppression design requirements, and the conversion of open space to developed land, the potential impacts related to wildfires would be less than significant under both this alternative and the proposed Master Plan.

With implementation of BMPs and the reduction in fire hazards on the campus that would occur due to the new development under the Master Plan and Alternative B, neither plan would result in a cumulatively considerable contribution to significant cumulative wildfire hazards impacts.

Project Objectives Met

Alternative B would result in a slight reduction in Tier I building square footage and a more substantial reduction under Tier II by consolidating functions and repurposing existing buildings. As a consequence, most, but not necessarily all, of the services and uses that would be provided on the campus under the proposed Master Plan would also be provided under Alternative B. Additionally, most, but not necessarily all, of the related ancillary Master Plan improvements, including new landscaping, open space, utility infrastructure, and pedestrian improvements, would occur under Alternative B. Nonetheless, it is anticipated Alternative B, similar to the proposed Master Plan, would fulfill all of the project objectives, as detailed in Table 5-1. Summary of Impacts of the Proposed Project and Alternatives to the Proposed Project, to follow.

5.4 Environmental Comparison of CEQA Alternatives

Table 5-1 identifies the level of significance of each impact under each of the alternatives to enable the reader to compare the impacts of the proposed Master Plan to the No Project and Reduced Development alternatives.

Table 5-1. Summary of Impacts of the Proposed Project and Alternatives to the Proposed Project

Environmental Topic	Proposed Project	Alternative A–No Project		Alternative B–Reduced Development
		No Build	Limited Development	
Aesthetics	LTS (Tiers I and II)	NI or LTS	NI or LTS	LTS (Tiers I and II)
Air Quality	LTSM (Tier I) SIG (Tier II)	NI or LTS	NI or LTS	LTSM (Tiers I and II)
Biological Resources	LTSM (Tiers I and II)	NI or LTS	NI or LTS	LTSM (Tiers I and II)
Cultural Resources	LTSM (Tiers I and II)	NI or LTS	NI or LTS	LTSM (Tiers I and II)

Environmental Topic	Proposed Project	Alternative A–No Project		Alternative B–
		No Build	Limited Development	Reduced Development
Energy	LTS	NI or LTS	NI or LTS	LTS
Geology/Soils	LTSM (Tiers I and II)	NI or LTS	NI or LTS	LTSM (Tiers I and II)
Greenhouse Gas Emissions	SIG (Tiers I and II)	NI or LTS	NI or LTS	SIG (Tiers I and II)[1]
Hazards and Hazardous Materials	LTSM (Tiers I and II)	NI or LTS	NI or LTS	LTSM (Tiers I and II)
Hydrology/ Water Quality	LTSM (Tiers I and II)	NI or LTS	NI or LTS	LTSM (Tiers I and II)
Land Use/Planning	LTS (Tiers I and II)	NI or LTS	NI or LTS	LTS (Tiers I and II)
Noise	SIG (Tiers I and II)	NI or LTS	NI or LTS	SIG (Tiers I and II)[1]
Population/Housing	LTS (Tiers I and II)	NI or LTS	NI or LTS	LTS (Tiers I and II)
Public Services	LTSM (Tiers I and II)	NI or LTS	NI or LTS	LTSM (Tiers I and II)
Recreation	LTS (Tiers I and II)	NI or LTS	NI or LTS	LTS (Tiers I and II)
Transportation/ Traffic	LTS (Tier I) SIG (Tier II)	NI or LTS	NI or LTS	LTS (Tier I) SIG (Tier II)[1]
Tribal Cultural Resources	LTSM (Tiers I and II)	NI or LTS	NI or LTS	LTSM (Tiers I and II)
Utilities and Service Systems	LSTS (Tier I) SIG (Tier II)	NI or LTS	NI or LTS	LSTS (Tier I) SIG (Tier II)[1]
Number of Project Objectives Met	**8 of 8**	**None**	**None or few**	**8 of 8**

Notes:
NI = No impact; LTS = Less-than-significant impact; LTSM = Less-than-significant impact with mitigation; SIG = Unavoidable significant or potentially significant adverse impact

[1] Impacts would remain significant or potentially significant, but may be substantially lessened compared to the proposed Master Plan due to substantial reductions in Tier II building square footage.

Source: ICF 2019.

5.5 Alternatives Eliminated from Detailed Consideration

Five Master Plan options, including the preferred Master Plan, were developed based upon the Master Plan team's evaluation of the existing site, understanding of proposed program development, input from community residents and County stakeholders, and vision for the site. The four options to the preferred Master Plan, which are described below, propose different solutions to the inherent challenges of the campus. The pros and cons of each of the Master Plan options below were taken into account, along with community and stakeholder input. The planning process led to Nature's Edge being chosen as the preferred Master Plan, which is described in detail in Chapter 2, *Project Description*, of this EIR, because it best met the objectives of the Master Plan, the community, and County's needs, and would result in fewer impacts to the environment and community.

All of the Master Plan options described below would result in similar levels of development to what could occur under the proposed Master Plan in order to meet the medical center and County's needs.

The differences between these options and the proposed Master Plan consist primarily of where new development would occur on the campus and how that development would be configured. As a consequence, site-specific impacts may vary among the options but because they would result in similar overall levels of development to the proposed Master Plan, it is anticipated that these alternatives would not avoid the significant impacts of the proposed Master Plan. Therefore, pursuant to Section 15126.6(c) of the State CEQA Guidelines, these options were eliminated from detailed consideration in this EIR.

During the preparation of this EIR, the County considered another alternative that included the same Tier I development as under Alternative B and the same Tier II development as the proposed Master Plan. However, because this alternative would only result in a marginal decrease in the total amount of development on the campus compared to what could occur under the proposed Master Plan, it would not avoid or substantially lessen the Master Plan's significant impacts. For that reason, this alternative was eliminated from detailed consideration in this EIR.

5.5.1 Boulevard Site Plan Option

The Boulevard concept would focus development of the medical center around the existing Hospital Tower. Buildings under this planning option would be located around a central spine that would run east-west through the campus. Similar building functions would be further defined within zones or blocks, with dedicated entry plazas at each for patients and visitors to be directed to their destination. Building placement would create an urbanized environment and allow for land in the west and east of campus to be used for other development (Figure 5-1). Because this option would result in more dense development within the center of the campus and allow for additional development at the west and east ends of the campus, it could conceivably result in greater construction and operational impacts than the proposed Master Plan.

Figure 5-1. Boulevard Site Plan Option Zoning

5.01 Boulevard - Site Plan

5.02 Boulevard - Buildings and Open Space Diagram

5.03 Boulevard - Circulation Diagram

Source: The Smith Group 2015.

5.5.2 Compact Site Plan Option

The Compact concept is the most dense and most urban design approach. Outpatient and inpatient services would be focused around the existing Hospital Tower. Similar to the Boulevard concept, remaining land would be available to use for other development opportunities. By concentrating the buildings in close proximity to one another, the height of the building becomes an issue, as tall structures are constructed in an otherwise suburban context (Figure 5-2). The taller height of the buildings could obstruct panoramic views of the San Fernando Valley from the recreational trails north of the campus of the San Fernando Valley and views from residents to the south of the hills north of the campus. Additionally, similar to the Boulevard option, remaining land could be developed in the future, potentially resulting in more development and greater impacts than could occur under the proposed Master Plan.

Figure 5-2. Compact Site Plan Option Zoning

5.07 Compact - Site Plan

5.08 Compact - Buildings and Open Space Diagram

5.09 Compact - Circulation Diagram

Source: The Smith Group 2015.

5.5.3 Terrace Site Plan Option

The Terrace concept is similar to that of Nature's Edge in the Master Plan, with a utilization of the natural slope of the site to create an arrangement of landscape areas. Under this concept, the distinction between the landscape and building is blurred. The new Ambulatory Care Center would be placed directly in front of the west façade of the existing hospital to give it prominence and provide a new front door and entry point for the campus (Figure 5-3, below). This option would likely result in similar impacts to the proposed Master Plan.

Figure 5-3. Terrace Site Plan Option Zoning

5.10 Terrace - Site Plan

5.11 Terrace - Buildings and Open Space Diagram

5.12 Terrace - Circulation Diagram

Source: The Smith Group 2015.

5.5.4 Wilson Canyon Site Plan Option

The Wilson Canyon concept proposed to locate the future hospital to the east of the existing facility. The advantage to this scheme is that the future hospital zone would be located outside of the Alquist-Priolo earthquake fault zones. The Ambulatory Care Center would be located along Olive View Drive and directly connected to the existing hospital. Other campus uses, such as the UCLA Medical office buildings, mental health, and Long-Term Care facility would be located to the west end of the campus (Figure 5-4). This option would likely result in greater biological resources impacts than the proposed Master Plan because it would place the new hospital in an area of the campus containing California sagebrush scrub habitat, which is potential habitat for the coastal California gnatcatcher (a California Species of Special Concern and a federal threatened species). Other impacts would likely be similar to the proposed Master Plan.

Figure 5-4. Wilson Canyon Site Plan Option Zoning

5.13 Wilson Canyon - Site Plan

5.14 Wilson Canyon - Buildings and Open Space Diagram

5.15 Wilson Canyon - Circulation Diagram

Source: The Smith Group 2015.

5.5.5 Summary

These options were presented for discussion and review at three Master Plan community outreach meeting held at the Olive View–UCLA Medical Center Auditorium in June, November, and May of 2015. The objective of obtaining community input was to better understand their expectations and learn from, reflect on, and respond to their needs when developing the Master Plan. Each option was presented to the attendees at that meeting, and specific discussion was focused for each option. Community residents provided their critical comments and views for each of the options, and their ideas and comments were recorded.

Similarly, in meetings with the County and consultant team, the options were evaluated and reviewed to understand the benefits and disadvantages of each. The following criteria were considered:

- Improved land use flexibility
- Sustainability
- Enhanced circulation and wayfinding
- Accommodation of phased development
- Optimized future inpatient zone
- Proximity to other program components
- Optimized key program adjacencies
- Engagement with community
- Opportunities for development partnerships
- Maximized greenspace
- Supportive of development partnerships with UCLA
- Minimized travel distance to parking

The Master Plan team provided feedback and comments on each proposed concept, with the review focused on traffic and wayfinding, utility routing, demolition and retention of existing buildings and infrastructure, stormwater management, parking demand and projections, site lighting, structural design, grading, logistics and material management, and cost impacts. This information was then used by the Master Plan team to refine the options into what is now the proposed Master Plan that is described in Chapter 2, *Project Description*, and evaluated in Chapter 3, *CEQA Environmental Impact Analysis,* of this EIR.

5.6 Environmentally Preferred and Superior Alternative

In compliance with CEQA, an EIR must identify an *environmentally superior* alternative. The No Project Alternative (No Project/No Build and No Project/Limited Development scenarios) would be the environmentally superior alternative because it would likely result in few or none of the adverse environmental impacts of the proposed Master Plan. However, it should also be recognized that there could be adverse health, community, and environmental consequences from making no or limited improvements to the existing campus, and none or few of the medical, employment,

recreational, and other community benefits that could occur under the proposed Master Plan would occur under the two No Project Alternative scenarios.

Pursuant to CEQA regulations (see CEQA Guidelines Section 15126.6(e)(2)), when the No Project Alternative is identified as the environmentally superior alternative, the EIR will also identify an environmentally superior alternative from among the other alternatives. Alternative B, in particular Tier II development, could result in a reduction in the severity and extent of impacts compared to the proposed Master Plan prior to implementation of proposed mitigation measures. This alternative would also likely avoid the potentially significant (after mitigation) Tier II construction air quality impacts of the proposed Master Plan and may also avoid the potentially significant traffic impacts under Tier II of the Master Plan. Therefore, Alternative B would be the environmentally superior build alternative.

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Chapter 7
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