1242 20th Street Wellness Center Project

Draft Environmental Impact Report

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AA	Administrative Approval
AB	Assembly Bill
ACM	Asbestos Containing Materials
ADA	Americans with Disabilities Act
AERMOD	American Meteorological Society/EPA Regulatory Model
APN	Assessor Parcel Numbers
AQMP	Air Quality Management Plan
ARB	Architectural Review Board
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
AVR	Average Vehicle Ridership
BAU	Business as Usual
BBB	Big Blue Bus
BMPs	Best Management Practices
BPD	Beach Parking District
BSCD	Bayside Commercial District
CAAP	Climate Action and Adaptation Plan
CAAQS	California Ambient Air Quality Standards
CalOSHA	California Division of Occupational Safety and Health
CARB	California Air Resources Board
CAT	Climate Action Team
CC	Civic Center
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDPH	California Department of Public Health
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	California Environmental Response, Compensation, and Liability Act
CFC	chlorofluorocarbon
CGP	Construction General Permit
CH4	methane
CHL	California Historical Landmarks
CHRIS	California Historical Resources Information System
CMAQ	Community Multiscale Air Quality
CNEL	community noise equivalent level
CO	carbon monoxide
CO2	California's carbon dioxide
COPD	chronic obstructive pulmonary disease
CPHI	California Points of Historical Interest
CPUC	California Public Utilities Commission
CR	California Register
CUPA	Certified Unified Program Agencies

Acronym/Abbreviation	Definition
DPM	Diesel particulate matter
DRS	Disposal Reporting System
DTSC	Department of Toxic Substances Control
ECM	Electronically Communicated Motors
EDR	Environmental Database Resources, Inc.
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
EV	electric vehicle
EVAP	Electric Vehicle Action Plan
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GHG	greenhouse gas
GKGM	Gates, Kingsley, & Gates Funeral Home
GPCD	gallons per capita per day
GPD	gallons per day
GWP	global warming potential
HABS	Historic American Buildings Survey
HAP	hazardous air pollutant
HASP	Health and Safety Plan
HCFC	hydrochlorofluorocarbon
HFC	hydrofluorocarbon
HIAs	health impact assessments
HMBP	hazardous materials business plan
HMU	Healthcare Mixed Use
HQTA	High Quality Transit Area
HRA	health risk assessment
HRI	Historic Resources Inventory
HSR	Historic Structures Report
HTP	Hyperion Wastewater Treatment Plant
HVAC	heating, ventilation, and air conditioning
I	Interstate
IESNA	Illuminating Engineering Society of North America
IPCC	Intergovernmental Panel on Climate Change
JPA	Joint Powers Authority
LACM	Natural History Museum of Los Angeles County
LCM	Lead Containing Materials
LCP	Local Coastal Program
LED	Light-emitting diode
LMSD	Light Manufacturing and Studio District
LNG/CNG	liquefied and compressed natural gas
LST	localized significance threshold
LUCE	Land Use and Circulation Element

Acronym/Abbreviation	Definition
MLD	Most Likely Descendant
MM	Mitigation Measure
MMT	million metric tons
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MT	metric ton
MWMP	medical waste management plan
N2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NF3	nitrogen trifluoride
NO	nitric oxide
NO2	nitrogen dioxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NR	National Register
NRHP	National Register of Historic Places
O2	molecular oxygen
O3	ozone
OHP	Office of Historic Preservation
OP1	Family Residential District
OP2	Multiple Residential District
OP3	Multiple Residential District
OP4	Multiple Residential District
OSHA	Occupational Safety and Health Administration
PCH	Pacific Coast Highway
PDF	Project Design Feature
PDWF	Peak Dry Weather Flow
PFCs	perfluorocarbons
PGM	photochemical grid model
PM	particulate matter
PM10	10 microns in diameter
PM2.5	2.5 microns in diameter
PPV	peak particle velocity
PRC	Public Resources Code
PSJHC	Providence Saint John’s Health Center
PV	photovoltaic
R2B	Residential Beach District
R3R	Coastal Residential District
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RECs	recognized environmental conditions”
RHNA	Regional Housing Needs Assessment
RMS	root mean square
RNG	renewable natural gas

Acronym/Abbreviation	Definition
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCI	Service Corporation International
SCP	Sustainable City Plan
SCRAM	Support Center for Regulatory Atmospheric Modeling
SCS	Sustainable Communities Strategy
SF6	sulfur hexafluoride
SHMP	Seismic Hazard Mitigation Program
SIP	state implementation plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	short lived climate pollutant
SLF	Sacred Lands File
SMBC	Santa Monica Building Code
SMFD	Santa Monica Fire Department
SMHRI	Santa Monica Historic Resources Inventory
SMMC	Santa Monica Municipal Code
SMP	Soils Management Plan
SM-UCLA	Santa Monica-UCLA Medical Center
SO2	sulfur dioxide
SOI	Secretary of the Interior
SPCC	spill prevention, control, and countermeasure
SRA	Source receptor area
SSSMP	Sanitary Sewer System Master Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TDFM	Travel Demand Forecast Model
TDM	Transportation Demand Management
TDR	Transfer of Development Rights
TIS	Transportation Impact Study
TMO	Transportation Management Organizations
TNCs	Transportation Network Companies
TNM	Traffic Noise Model
TODs	Transit-oriented developments
TPA	Transit Priority Area

Acronym/Abbreviation	Definition
UFMP	Urban Forest Master Plan
USA	Underground Service Alert
UST	underground storage tank
UWMP	Urban Water Management Plan
VHFHSZ	very high fire hazard severity zone
VMT	vehicle miles traveled
VOC	volatile organic compounds
WBHL	West Beverly Hills lineament
WMP	waste management plan
ZEV	Zero Emissions Vehicle
ZNE	zero net energy

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CHAPTER 1
EXECUTIVE SUMMARY

1.1 INTRODUCTION

This chapter of the Environmental Impact Report (EIR) is prepared pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15123, which requires that an EIR contain a summary of the project and the project actions; an identification of potential significant environmental impacts and proposed mitigation measures or alternatives that would reduce or avoid those impacts; a description of the areas of controversy known to the lead agency; and issues to be resolved.

This EIR was prepared to provide the public, the lead agency, decision-makers, and responsible agencies information about the potential environmental impacts of the 1242 20th Street Wellness Center Project (proposed project), in the City of Santa Monica (City).

1.2 PROJECT SITE

The project site is located in the City of Santa Monica, in the western portion of Los Angeles County. The City of Santa Monica is a fully urbanized community and is bounded by the City of Los Angeles on the north, south, and east with the Pacific Ocean on the west. Specifically, the project site is bordered by 20th Street on the east, Arizona Avenue to the south, the 19th Court alley to the west, and the Lighthouse Church and School to the north.[1]

The project site is located in Mid-City, north of Santa Monica Boulevard within the Healthcare Mixed Use (HMU) District. The approximately 45,009-square-foot (1.03-acre) project site includes two parcels addressed as 1925 Arizona Avenue and 1242 20th Street. The Assessor Parcel Numbers (APN) associated with these two parcels are 4276-013-033 and 4276-013-032, respectively.

1.3 PROJECT OVERVIEW

The project applicant proposes the development of approximately 72,812 square feet (sf) of medical research and development (R&D) and clinical/medical office space within a “Wellness Center” located at 1925 Arizona Avenue and 1242 20th Street in the City of Santa Monica. The proposed project would include the construction of a new 3-story building adjacent to an existing historic Tudor-style building, which would be partially preserved in its current condition, and partially renovated/adaptively reused as part of the Wellness Center. The proposed Wellness Center would provide medical-related R&D uses and clinical/medical office space in the City’s HMU District.

[1] Although the City is at an angle (i.e., streets are northwest or southwest), directions will be referred to as north, south, east, and west. 20th Street will be referred to as east, Arizona Avenue will be referred to as south, and so forth.

It is anticipated that the following approvals and actions would be required for the proposed project:

- Certification of the Final EIR (Planning Commission)
- Approval of Development Review Permit (Planning Commission)
- Approval of Building Design, Materials, and Colors (Architectural Review Board and/or Landmarks Commission)
- Any other incidental discretionary or administrative approvals needed for the construction and operation of the proposed project.

1.4 PROJECT OBJECTIVES

Section 15124(b) of the State CEQA Guidelines requires a project description to contain a statement of a project's objectives and Section 15124(b) requires that the statement of objectives includes the underlying purpose of the project. The applicant's objectives for the proposed project include:

- **Historic Resource Preservation:** Implement a project that will preserve the historic character of the existing Gates, Kingsley, & Gates Funeral Home (GKGM) Building by adaptively reusing a significant portion of the structure for new uses on-site in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.
- **Medical Research Advancement and Community Wellbeing:** Develop a state-of-the-art modern facility for medical research and related uses that would advance medical research/knowledge and promote the health and wellbeing of the community.
- **LUCE Consistency and Implementation**: Develop a transit-oriented and pedestrian-oriented medical wellbeing project that is consistent with the HMU district and implements the City's LUCE, including high-quality architectural design, sustainable building design, pedestrian orientation, publicly accessible open space and green space, vehicle trip reductions through transportation demand management, and other community benefits.
- **Pedestrian Oriented Design**: Enhance the pedestrian realm of the neighborhood and create a pedestrian-oriented design along the 20th Street frontage. Provide design elements such as large, transparent windows, publicly accessible open space, and thoughtful landscaping improvements to create a continuous and pleasant pedestrian experience between Wilshire Boulevard and Santa Monica Boulevard.
- **Mobility and Circulation**: Provide an access plan that would promote safe and efficient circulation of vehicles to and around the site with sufficient on-site parking to accommodate the peak needs of the complementary combination of uses. Minimize the number of vehicle trips to the site by encouraging use of public transportation, carpools, alternative mobility options, bicycles, and walking. Provide ample on-site bicycle storage facilities for employees, patrons, and visitors.

- **Architectural Design**: Ensure high-quality architectural design that is compatible with the existing GKGM Building and the site's surroundings by incorporating design features such as setbacks, varied massing elements, and complementary materials.
- **Sustainability**: Build new and modern energy-efficient construction that meets the latest building and energy codes and eliminate contaminated urban runoff into the City's drainage system from the existing paved surface parking lot.
- **Employment, Economic, and Fiscal Benefits**: Provide an economically viable project that would contribute to the economic health of the City by attracting future medical and healthcare businesses that will generate local tax revenue, provide new construction jobs, and house new residents to support local businesses, including dining, shopping, and entertainment venues.
- **Community and Project Benefits**: Provide substantial and meaningful community and project benefits that are aligned with the LUCE, including publicly accessible ground floor open space, enhanced open space opportunities for employees and visitors, transportation demand management, high-quality architectural design, sustainability, payment of a transportation infrastructure fee, encouraged use of public transportation, bicycling and walking, enhanced pedestrian-oriented design features including widened walkways, outdoor seating and public use areas, pedestrian-oriented uses along street frontages, and local hiring.

1.5 PUBLIC REVIEW PROCESS

In 2018, the City circulated a Notice of Preparation (NOP) prepared in accordance with the requirements of State CEQA Guidelines Section 15082. The purpose of the NOP was to inform the public that the City was preparing an EIR for the proposed project, and to solicit input regarding the scope and content of the EIR (see Appendix A to this EIR). The NOP, dated January 3, 2018, was sent to a distribution list composed of local property owners/occupants within 750 feet of the project site and to neighborhood groups, relevant state/local agencies, and interested organizations. Additionally, the NOP was published online on the City's Planning Department website, published in the Santa Monica Daily Press, and sent to the State Clearinghouse at the California Governor's Office of Planning and Research. The State Clearinghouse number assigned to this EIR is SCH No. 2018011001.

The initial NOP was distributed for a public review period beginning on January 3, 2018 and running through February 3, 2018. However, there was an inadvertent error on the notice regarding the applicant of the project. A Recirculated NOP which noted that the applicant is 1925 Arizona, LLC. was distributed that extended the comment period for the NOP to February 9, 2018. A public scoping meeting was held on January 18, 2018, at McKinley Elementary School, Auditorium. The comments received during the public review period were considered during the preparation of this EIR.

Environmental Baseline

Generally, the environmental baseline for an EIR consists of the physical environmental conditions that exist at the time the NOP is published (CEQA Guidelines Section 15125). At the time of the NOP (in 2018), the existing structures on the project site were vacant. The funeral home business that formerly occupied the GKGM Building ceased operation in 2016, and the residential uses were also vacated in 2016. Subsequent to issuance of the NOP, portions of the GKGM Building were modified within the interior (particularly the chapel area) for occupation by a restaurant (i.e. Tartine Restaurant) that opened in March 2020. Additionally, the two former residential buildings are partially occupied with office uses. These new uses (the restaurant and the office) are permitted by right (i.e., no discretionary approvals or CEQA review was required.) As such, the environmental conditions on the project site have changed subsequent to release of the NOP.

Due to these changes in on-site conditions, in combination with the time that has elapsed since release of the NOP, the City as lead agency has prepared this EIR to reflect the current existing conditions (i.e. partially occupied buildings) as the environmental baseline of the project site. Pursuant to CEQA Guidelines Section 15125, a lead agency can select a baseline other than what existed at the time of the NOP if substantial evidence exists that an alternate baseline is appropriate and "where necessary to provide the most accurate picture practically possible of the project's impacts." In this case, new uses have become operational on the project site since the publication of the NOP; as such, it is appropriate to consider these uses as part of the baseline to provide an accurate picture of the project site and the effects that the project would have on the site and its surroundings.

Draft EIR Review Period

Pursuant to CEQA Section 15105(a), the Draft EIR for the proposed project is subject to a minimum 45-day public review period by responsible agencies and interested parties; however, an extended 60-day review period will be provided. Agency and public comments on the adequacy of the Draft EIR and the lead agency's compliance with CEQA may be submitted to the City, as lead agency, in writing, prior to the end of the public review period. Publication of the Draft EIR marks the beginning of the 60-day public review period, during which written comments may be submitted to the following:

Rachel Kwok, Environmental Planner
City of Santa Monica, City Planning Division
Rachel.Kwok@smgov.net
1685 Main Street, Mail Stop 28
Santa Monica, California 90401

Following the public review period, the City will prepare a Final EIR, which will include responses to all written comments received during the Draft EIR public review period. Written responses will be made available prior to the public hearing before the City of Santa Monica's Planning Commission during which the Final EIR will be considered for certification.

1.6 AREAS OF CONTROVERSY

Section 15123(b)(2) of the State CEQA Guidelines requires the executive summary of an EIR to disclose areas of controversy known to the lead agency that have been raised by the agencies and the public. The City circulated an NOP to solicit agency and public comments on the scope and environmental analysis to be included in this EIR. A total of 34 individual comments and 1 agency comment were received during the NOP public review period. A copy of the NOP and the NOP comment letters received are included in Appendix A of this EIR. The following issues were raised in the comments on the NOP:

- Access of the underground parking structure coming through the alley is a potential access conflict with the Lighthouse Church School.
- The alley is already busy and increased usage of the alley could result in increased congestion, noise, and potential for accidents.
- There is no historical or architectural significance associated with the GKGM Building, and project access should be provided via 20th Street or Arizona Avenue through this property.

The NOP comments were considered and information addressing these comments has been incorporated into Section 4.4, Cultural Resources, 4.9, Noise, and Chapter 6.0, Alternatives to the Proposed Project.

1.7 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

CEQA Guidelines Section 15126.2(b) requires that an EIR describe any significant impacts that cannot be avoided, even with implementation of feasible mitigation measures. Where there are significant impacts, their implications and the reason why the project is being proposed, notwithstanding their effect, should be described. As indicated in Chapter 4, Environmental Impact Analysis, of this EIR, the proposed project would not result in significant and unavoidable impacts.

1.8 ANALYSIS OF ALTERNATIVES

The State CEQA Guidelines require an analysis of alternatives to proposed projects. According to CEQA Guidelines Section 15126.6(a), the purpose of analyzing project alternatives is to identify alternatives that "would avoid or substantially lessen any of the significant effects of the project." According to Section 15126.6(e), an EIR alternatives analysis should include the analysis of a No Project Alternative to allow decision makers to compare the impacts of approving a proposed project with the impacts and foreseeable future of not approving that project.

As indicated in Chapter 4, Environmental Analysis, of this EIR, the proposed project would not result in significant and unavoidable impacts. While no significant and unavoidable impacts have been identified in association with the proposed project, the alternatives selected for analysis in this EIR would avoid or substantially lessen at least one of the less-than-significant impacts of the proposed project and/or have been selected to inform the decision-making process.

The No Project Alternative is a required element of an EIR pursuant to Section 15126.6(e) of the CEQA Guidelines to examine the environmental effects that would occur if the project were not to proceed. The other alternatives are discussed as part of the "range of reasonable alternatives" selected by the City. The alternatives addressed in Chapter 6 are listed below:

1. No Project/No Build Alternative
2. No Project/Reasonably Foreseeable Development Alternative
3. Administrative Approval (AA) Project Alternative
4. Tier 1 (Reduced Project) Alternative
5. Tier 2 (2.5 FAR) Project Alternative
6. 20th Street Access Alternative

Environmentally Superior Alternative

Section 15126.6(e)(2) of the State CEQA Guidelines indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR and that if the "no project" alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives.

With respect to identifying an Environmentally Superior Alternative among those analyzed in this EIR, the range of feasible Alternatives includes: Alternative 1 – No Project/No Build Alternative; Alternative 2 – No Project/Reasonably Foreseeable Development Alternative; Alternative 3 – Administrative Approval Project Alternative; Alternative 4 – Tier 1 (Reduced Project) Alternative; Alternative 5 – Tier 2 (2.5 FAR) Project Alternative, and Alternative 6 – 20th Street Access Alternative. A comparative summary of the environmental impacts estimated for each alternative to the environmental impacts associated with the proposed project is provided in Table 6-13 (see Chapter 6, Alternatives to the Proposed Project).

As indicated in Table 6-13, Alternative 1 would have less impact than the proposed project or other alternatives. However, this is considered a "no project" alternative and thus, another alternative must be selected. Similarly, Alternative 2 would have fewer impacts than the proposed project and other alternatives but is also considered a "no project" alternative.

The remaining alternatives were reviewed in accordance with the State CEQA Guidelines requirement to identify an environmentally superior alternative other than the no project alternatives (Alternative 1 and Alternative 2). Of the remaining alternatives, Alternative 3 would be the environmentally superior alternative. Alternative 3 would lessen the impacts of the proposed project. While Alternative 4 would also lessen impacts, it would do so to a lesser degree than Alternative 3. Alternative 5 would have similar and/or greater impacts to the proposed project. Alternative 6 would have similar impacts to the proposed project. However, Alternative 3 would not meet the project objectives.

1.9 SUMMARY OF IMPACTS

Table 1-1 presents a summary of the environmental impacts that could result from the proposed project, the proposed mitigation measures, and the level of significance of the impact after the implementation of mitigation measures, as analyzed throughout this EIR.

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Aesthetics			
In non-urbanized areas, would the 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, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less than significant	None	Less than significant
Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than significant	None	Less than significant
Would the project have a produce extensive shadows affecting adjacent uses or property?	Less than significant	None	Less than significant
Would the project have a cumulative effect related to aesthetic resources?	Less than significant	None	Less than significant
Air Quality			
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than significant	None	Less than significant
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality?	Less than significant	None	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially significant	**MM-AQ-1:** To reduce the potential for criteria air pollutants, specifically particulate matter (PM), as a result of construction of the project, the applicant shall: • Prior to the start of construction activities, the project applicant, or its designee, shall ensure that all 75 horsepower or greater diesel-powered equipment are powered with California Air Resources Board (CARB)-certified Tier 4 Interim engines, except where the project applicant establishes to the satisfaction of the City of Santa Monica (City) that Tier 4 Interim equipment is not available. • In the case where the applicant is unable to secure a piece of equipment that meets the Tier 4 Interim requirement, the applicant may upgrade another piece of equipment to compensate, such as equipping CARB-certified Tier 3 engines with the most effective Verified Diesel Emission Control Strategies available for the engine type, such as Level 3 Diesel Particulate Filters (Tier 4 engines automatically meet this requirement) or upgrading Tier 4 interim to Tier 4 Final.	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than significant	None	Less than significant
Would the project have a cumulative effect related to air quality?	Less than significant	None	Less than significant
Construction Effects			
Would the project have considerable construction-period impacts due to the scope, or location of construction activities?	Potentially significant	**MM-AQ-1** (see Air Quality section of this table) **MM-HAZ-1 through MM-HAZ-6** (see Hazards and Hazardous Materials section of this table) **MM-NOI-1 and MM-NOI-2** (see Noise section of this table) **MM-TRA-1:** The applicant shall prepare, implement, and maintain a Construction Impact Mitigation Plan for review and approval prior to issuance of a building permit to address and manage traffic during construction and shall be designed to: • Prevent traffic impacts on the surrounding street network • Ensure safety for both those constructing the proposed project and the surrounding community. • Prevent substantial truck traffic through residential neighborhoods • Provide coordination with adjacent or nearby construction projects	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		The Construction Impact Mitigation Plan shall be subject to review and approval by the following City departments: Public Works, Fire, Planning and Community Development, and Police to ensure that the Plan has been designed in accordance with this mitigation measure and meets City standards. This review shall occur prior to issuance of grading or building permits. It shall, at a minimum, include the following: • Ongoing Requirements throughout the Duration of Construction • A detailed Construction Impact Mitigation Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, and parking lanes. The plan shall include specific information regarding the project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such plans shall be reviewed and approved by the Strategic and Transportation Planning Division prior to commencement of construction and implemented in accordance with this approval.	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		• Work within the public right-of-way shall be performed between 9:00 a.m. and *4:00 P.M.* This work includes dirt and demolition material hauling and construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed after the issuance of an after-hours construction permit. • Streets and equipment shall be cleaned in accordance with established Public Works Department requirements. • Trucks shall only travel on a City-approved construction route. Truck queuing/staging shall not be allowed on Santa Monica streets. Limited queuing may occur on the construction site itself. • Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be onsite, with a minimum amount of materials within a work area in the public right-of-way, subject to a current Use of Public Property Permit. • Any requests for work before or after normal construction hours within the public right-of-way shall be subject to review and approval through the After Hours Permit	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		process administered by the Building and Safety Division. • Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City of Santa Monica. Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction: • The Applicant shall advise the traveling public of impending construction activities (e.g., information signs, portable message signs, media listing/notification, and implementation of an approved Construction Impact Mitigation Plan). • The Applicant shall provide timely notification of construction schedules to all affected agencies (e.g., MTA, Big Blue Bus, Police Department, Fire Department, Public Works Department, and Planning and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 500 feet. • The Applicant shall coordinate construction work with affected	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		agencies in advance of start of work. Approvals may take up to two weeks per each submittal.	
Would the project have a cumulative effect related to construction effects?	Potentially significant	**MM-HAZ-1 through MM-HAZ-6** **MM-NOI-1 and MM-NOI-2** **MM-TRA-1**	Less than significant
Cultural Resources			
Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	Potentially significant	**MM-CUL-1: Archival Recordation Documentation.** Prior to any alteration of the GKGM Building or removal of its character-defining features or other building components for the implementation of the proposed project, a recordation document similar in format and content to an Historic American Buildings Survey (HABS) Level II recordation document shall be prepared by the Applicant. The work shall be completed by a qualified historic preservation professional with at least five (5) years of relevant experience who meets the requirements of the U.S. Secretary of the Interior's Professional Qualifications for history, architectural history, and/or historic architecture (pursuant to 36 CFR 61). The HABS-like document shall record the history of the property and its contextual relationship to the overall history of the community. Its physical condition, both	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		historic and current, should also be described in the document through the use of site plans; original as-built drawings, as available; historical and current graphics and photographs; and written data and text. Field photos and notes may also be included as supporting exhibit material. All document components should be completed in accordance with the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation (HABS standards). This recordation document shall include at a minimum: • A written historic and descriptive report completed in narrative format. The report shall be stored onto an electronic medium (such as a USB drive) for safekeeping . • A sketch floor plan for each section of the GKGM Building, including floor levels shall accompany the recordation document. A sketch plan of the entire site of the property is also required. Such illustrations shall be stored onto a labeled CD for safekeeping. • High-resolution digital photographs in accordance with Historic American Buildings Survey (HABS) guidelines and standards shall be	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		included in the report. Views shall include contextual views, all exterior elevations, details views of significant exterior architectural features of the property (site, grounds, Administration, Chapel), and interior views of significant historical architectural features or spaces (Chapel only). Such photographs shall be logged, tagged, and collected onto a media storage device for safe archiving and copies provided to those repositories receiving the HABS finished document. A site plan coordinated with the photo log should also be included. Such photographs shall be stored onto an electronic medium (such as a USB drive) for safekeeping. • Available historic photographs and, as available, historic and/or current as-built plans or other historic illustrations of the GKGM Building shall be reproduced digitally or photographically and included in the recordation document. Such digital material shall also be stored onto an electronic medium (such as USB drive) for safekeeping . The HABS documentation shall be submitted to the City (Planning &	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Community Development, City Planning Division). In addition, one original photographic copy of the documentation reproduced on archival paper as specified above shall be assembled and offered to each of the following entities: • One set shall be offered to and, if accepted, deposited in the archives of the Santa Monica Conservancy. • One set shall be offered to and, if accepted, deposited in the archives of the Santa Monica History Museum. • One set shall be offered to and, if accepted, deposited in the archives of the City of Santa Monica Public Library (Main Branch, local history collection). **MM-CUL-2: Preservation Protection Plan.** Prior to the submittal of project plans for plan check review by the City, the Project Applicant shall prepare a "Preservation-Protection Plan" to ensure that implementation of the site improvements would be conducted in conformance with applicable SOI Standards. At a minimum, a Preservation-Protection Plan shall be prepared for the entire historic GKGM site, including the administration wing,	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Little Chapel of the Dawn wing, and all associated landscape-hardscape features on the property. Such a document shall include the following, at a minimum, and shall be submitted to the City for review and approval upon draft completion and final completion. • Architectural recordation of existing conditions, features, spaces, and materials prior to the commencement of proposed project construction related activities, including demolition, excavation, grading, and development. • Materials analysis, conservation, and treatment programs identified to assist in the compliant rehabilitation of the GKGM Building. • Preparation of a Historic Structures Report (HSR) for the GKGM Building (administration building [exterior]; chapel [interior and exterior]; site grounds, including landscape/hardscape features). • SOI Standards compliant plan reviews, guidance and oversight, and demolition/construction monitoring by a qualified historic preservation consultant with a minimum of seven (7) years of relevant experience.	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		• An interpretive program to convey the historical and architectural history and associations of the historic property. As part of the Preservation Protection Plan, an HSR shall be prepared that would include the architectural recordation and assessment of the site, features, materials, finishes, spaces, forms, textures, etc. The HSR would provide documentary, graphic, and physical information about the property's history, character-defining features, and its existing conditions. The report shall also include appropriate methods for treatment of the existing exterior features, materials, finishes, spaces, landscape/hardscape elements, and circulation patterns of the overall GKGM Building, as well as the interior features, materials, finishes, spaces, and configuration of the chapel; a recommended scope of work as part of the rehabilitation of the historic property; and provided information and recommendations for further treatment and maintenance. The treatment program for the historic property would involve conditions investigations, testing, research, and the identification of necessary repairs	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		by a team of qualified historic architects, architectural historians, and conservators. As necessary, a materials conservation assessment should also be included in the HSR. This report shall be prepared according to the National Park Service publication Preservation Brief 43: The Preparation and Use of Historic Structures Reports. A copy of this report shall be submitted to the City's Planning Division for review and approval prior to the submittal of 25% completion plans (demolition, architectural, structural, landscape, etc.) to the City for design review and plan check. Final digital copies of this report shall also be donated to the Santa Monica Public Library, Santa Monica Conservancy, and Santa Monica History Museum, at a minimum. The Preservation Protection Plan shall also stipulate that the Applicant retain a qualified historic preservation professional with at least seven (7) years of relevant experience who satisfies the Secretary of the Interior's Professional Qualification Standards for History, Architectural History, and/or Historic Architecture pursuant to 36 CFR 61. This preservation professional shall provide guidance and oversight	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		for the preservation and rehabilitation of the historic GKGM property; review and comment on rehabilitation design plans (initial, 25%, 50%, 75% completion plans at a minimum) for compliance with the SOI Standards, review and comment on final construction plans (including demolition, structural, architectural, mechanical, electrical, and landscape plans) for compliance with the SOI Standards; and conduct periodic monitoring during demolition, excavation, grading and construction work for the purposes of protecting and preserving character-defining features and those qualities of the property that justify its local City of Santa Monica landmark eligibility. In addition, the preservation professional shall prepare the necessary written and illustrated documentation for the associated monitoring efforts in a series of construction monitoring reports/memos. A final sign-off of the project completion is also required by the consulting preservation professional in coordination with the project general contractor/design team and City prior to the issuance of a certificate of occupancy. Any plans prepared for the project and submitted	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		to the City for review shall be also assessed for SOI Standards compliance by City staff. In addition, the Preservation-Protection Plan shall address the applicable use of the California Historical Building Code and the relevant guidelines specific in the SOI Standards and NPS briefs, bulletins, references and guidelines, for any code compliant work associated with issues such as egress, fire safety, railing heights, door widths, accessibility, etc. The Preservation-Protection Plan, including information drawn from the HSR, shall also guide the development of a publicly accessible interpretive program on the history and architecture of the GKGM property. The historic interpretive exhibit(s) should include or interpret information specific to the history and architecture of the site, the important individuals associated with the former Gates, Kingsley & Gates Mortuary, and its historical association with the mortuary history of the community. This creative/educational component shall be developed with the assistance of a qualified architectural historian or historic preservation professional with at least five (5) years of relevant experience who satisfies the	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		applicable Secretary of the Interior's Professional Qualifications Standards pursuant to 36 CFR 61. The historic interpretive program (exhibits) may be located within the publicly accessible interior spaces of the historic property and/or as an outdoor interpretive program within the GKGM property grounds. The program/exhibit(s) will not be housed in (or on) the adjacent new construction improvement appended to the north side of the administration wing.	
Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	Potentially significant	**MM-CUL-3: Unknown Archaeological Resources.** In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f); California PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		significant under CEQA, additional work—such as preparation of an archaeological treatment plan, testing, or data recovery—may be warranted.	
Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	Less than significant	None	Less than significant
Would the project have a cumulative effect related to cultural resources?	Potentially significant	**MM-CUL-3**	Less than significant
Geology and Soils			
Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of as known fault (Refer to Division of Mines and Geology Special Publication 42); strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?			
i. Fault rupture	No impact	None	No impact
ii. Strong seismic ground shaking	Less than significant	None	Less than significant
iii. Seismic related ground failure including liquefaction	Less than significant	None	Less than significant
Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than significant	None	Less than significant
Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	Less than significant	None	Less than significant
Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially significant	**MM-GEO-1:** Prior to the commencement of any grading activity, the applicant shall retain a qualified	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		paleontologist to ensure the implementation of a paleontological monitoring program. The Society of Vertebrate Paleontology (SVP 2010) defines a qualified paleontologist as having: "1. A graduate degree in paleontology or geology, and/or a publication record in peer reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience. 2. At least two full years professional experience as assistant to a Project Paleontologist with administration and project management experience; supported by a list of projects and referral contacts. 3. Proficiency in recognizing fossils in the field and determining significance. 4. Expertise in local geology, stratigraphy, and biostratigraphy. 5. Experience collecting vertebrate fossils in the field."	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		The qualified paleontologist shall attend any preconstruction meetings and manage the paleontological monitor(s) if he or she is not doing the monitoring. A paleontological monitor should be onsite during all excavations below the depth of previously disturbed sediments. The SVP (2010) defines a qualified paleontological monitor as having: "1. Bachelor of Science or Bachelor of Arts degree in geology or paleontology and one year experience monitoring in the state or geologic province of the specific project. An associate degree and/or demonstrated experience showing ability to recognize fossils in a biostratigraphic context and recover vertebrate fossils in the field may be substituted for a degree. An undergraduate degree in geology or paleontology is preferable, but is less important than documented experience performing paleontological monitoring, or 2. Associate in Applied Science or Associate in Arts degree in geology, paleontology, or biology and demonstrated two years' experience collecting and salvaging fossil	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		materials in the state or geologic province of the specific project, or 3. Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in the state or geologic province of the specific project. 4. Monitors must demonstrate proficiency in recognizing various types of fossils, in collection methods, and in other paleontological field techniques." The paleontological monitor shall monitor construction excavations below a depth of five feet below ground surface and be equipped with necessary tools for the collection of fossils and associated geological and paleontological data. The monitor shall complete daily logs detailing the day's excavation activities and pertinent geological and paleontological data. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed,	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		the monitor will remove the rope and allow grading to recommence in the area of the find. Following the paleontological monitoring program for discovered resources, a final monitoring report shall be submitted to the City for approval. The report should summarize the monitoring program and include geological observations and any paleontological resources recovered during paleontological monitoring for the proposed project.	
Would the project have a cumulative effect related to geology and/or soils?	Potentially significant	**MM-GEO-1**	Less than significant
Greenhouse Gas Emissions			
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than significant	None	Less than significant
Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than significant	None	Less than significant
Would the project have a cumulative effect related to greenhouse gases?	Less than significant	None	Less than significant
Hazards and Hazardous Materials			
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially significant	**MM-HAZ-1: Asbestos Containing Materials (ACM).** Pursuant to South Coast Air Quality Management District (SCAQMD) requirements, testing for the presence of ACM shall be	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		conducted in the portions of the former Gates, Kingsley, & Gates Funeral Home Building to be demolished or rehabilitated prior to demolition or rehabilitation. Any ACM found in this building and the existing on-site 7-unit building and 3-unit building shall be removed by a licensed and certified asbestos abatement contractor prior to demolition of these buildings pursuant to SCAQMD Rule 1403 and California Division of Occupational Safety and Health (CalOSHA) Asbestos Regulations. **MM-HAZ-2: Lead Containing Materials (LCM).** Testing for the presence of LCM shall be conducted prior to demolition or rehabilitation of structures. Any LCM found shall be removed by lead-certified personnel following the California Division of Occupational Safety and Health (CalOSHA) lead standards contained in CCR Title 8, Section 1532.1 and lead-safe work practices prior to demolition of these buildings. An environmental contractor with California Department of Public Health certified workers shall be retained to carry out the work in compliance with the regulations that govern LCM.	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-HAZ-3: Potential Underground Storage Tank. Prior to construction, the applicant will conduct a Ground Penetrating Radar survey to determine the presence or absence of an underground storage tank on the project site, associated with the former automobile service bay. In the event that an underground storage tank is discovered, the removal of the underground storage tank shall be permitted and completed in accordance with the Santa Monica Fire Department requirements and any other agencies with oversight (e.g., Department of Toxic Substances Control). **MM-HAZ-4: Subsurface Investigation**. Prior to construction, the applicant will conduct a vapor, soil vapor, and groundwater investigation at the project site. Sampling shall be conducted in accordance with guidance documents from the California Department of Toxic Substances Control. **MM-HAZ-5: Soils Management Plan (SMP).** Should the investigation required under MM-HAZ-4 above reveal chemicals of concern above applicable California Human Health Screening Levels, the project applicant	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		shall retain a qualified environmental consultant to prepare a SMP, which will be submitted to the California Department of Toxic Substances Control (DTSC), the Los Angeles Regional Water Quality Control Board (RWQCB), and/or City of Santa Monica Fire Department for review and approval prior to the commencement of excavation and grading activities. The recommendations of the applicable oversight agency shall be incorporated in the SMP. A qualified environmental consultant shall be present on the project site during grading and excavation activities in the known or suspected locations of contaminated soils or the UST, and shall be on call at other times as necessary, to monitor compliance with the SMP and to actively monitor the soils and excavations for evidence of contamination. The SMP shall be implemented during excavation and grading activities on the project site to ensure that any contaminated soils are properly identified, excavated, and disposed of off-site, as follows: • *Soil Testing/Segregation*: The SMP shall be prepared and executed in accordance with South Coast Air Quality Management District	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		(SCAQMD) Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil. The SMP shall require the timely testing and sampling of soils so that contaminated soils can be separated from inert soils for proper disposal. The SMP shall specify the testing parameters and sampling frequency. During excavation, Rule 1166 requires that soils identified as contaminated shall be sprayed with water or another approved vapor suppressant, or covered with sheeting during periods of inactivity of greater than an hour, to prevent contaminated soils from becoming airborne. Under Rule 1166, contaminated soils shall be transported from the project site by a licensed transporter and disposed of at a licensed storage/treatment facility to prevent contaminated soils from becoming airborne or otherwise released into the environment. • *Stockpile Management*: During the project's excavation phase, the applicant shall remove and properly dispose of contaminated materials in accordance with the provisions of the SMP. If soil is stockpiled prior to	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		disposal, it will be managed in accordance with the project's Storm Water Pollution Prevention Plan, prior to its transfer for treatment and/or disposal. All impacted soils would be properly treated and disposed of in accordance with SCAQMD Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil, as well as applicable requirements of DTSC and LARWQCB. **MM-HAZ-6: Health and Safety Plan (HASP).** Should the assessment required under MM-HAZ-4 reveal chemicals of concern above applicable California Human Health Screening Levels, the applicant shall commission a HASP to be prepared in compliance with Occupational Safety and Health Administration (OSHA) Safety and Health Standards (29 Code of Federal Regulations 1910.120) and California Division of Occupational Safety and Health (CalOSHA) requirements (CCR Title 8, General Industry Safety Orders and California Labor Code, Division 5, Part 1, Sections 6300-6719) and submitted for review by the City of Santa Monica Department of Building and Safety. The HASP would address, as appropriate, safety requirements	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		that would serve to avoid significant impacts or risks to workers or the public in the event that elevated levels of subsurface gases are encountered during grading and excavation. Site workers shall be familiar with the health and safety plan and soil management plan and shall be trained on how to identify suspected contaminated soil. The HASP shall include, at a minimum, the following: • Procedures for restricting access to the contaminated area except for properly trained personnel • Procedures for notification and reporting, including internal management and local agencies (e.g., Santa Monica Fire Department, County of Los Angeles Fire Department), as needed • Health and safety measures for removal and excavation of contaminated soil • Regulatory considerations • Worker health and safety plan for management of contaminated materials	
Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions	Potentially significant	**MM-HAZ-1** **MM-HAZ-2**	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
involving the release of hazardous materials into the environment?		**MM-HAZ-3** **MM-HAZ-4** **MM-HAZ-5** **MM-HAZ-6**	
Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Potentially significant	**MM-HAZ-1** **MM-HAZ-2** **MM-HAZ-3** **MM-HAZ-4** **MM-HAZ-5** **MM-HAZ-6**	Less than significant
Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would is create a significant hazard to the public or the environment?	Potentially significant	**MM-HAZ-3** **MM-HAZ-4** **MM-HAZ-5** **MM-HAZ-6**	Less than significant
Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than significant	None	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project have a cumulative effect related to hazards or hazardous materials?	Potentially significant	**MM-HAZ-1** **MM-HAZ-2** **MM-HAZ-3** **MM-HAZ-4** **MM-HAZ-5** **MM-HAZ-6**	Less than significant
Land Use and Planning			
Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	Less than significant	None	Less than significant
Would the project have a cumulative effect on land use?	Less than significant	None	Less than significant
Noise			
Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially significant	**MM-NOI-1:** The applicant and its contractor(s) shall adhere to the following measures for all phases of the proposed project as a condition of approving the grading permit: i. The project contractor shall, to the extent feasible, schedule construction activities to avoid the simultaneous operation of construction equipment so as to minimize noise levels resulting from	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		operating several pieces of high-noise-level-emitting equipment. ii. All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers. Enforcement shall be accomplished by random field inspections by City personnel during construction activities. iii. A temporary construction noise barrier shall be erected at the southeasterly project boundary between the adjacent residences and the project site. The construction noise barrier shall be a minimum of 10 feet in height, have a surface density of at least 4 pounds per square foot, and be free of gaps or openings. iv. Construction noise reduction methods such as shutting off idling equipment, maximizing the distance between construction equipment staging areas and adjacent residences, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible. v. During construction, stationary construction equipment shall be placed such that emitted noise is	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		directed away from or shielded from sensitive receptors. vi. As specified in Section 4.12.120 of the City's Municipal Code, signage shall be posted at the project site entrance with permitted construction work hours, telephone numbers where violations can be reported, the location of the job site, and the permit number issued authorizing the work.	
Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Potentially significant	**MM-NOI-1** **MM-NOI-2:** The applicant and its contractor(s) shall implement the following vibration-reduction measures: i. In order to protect the character defining features of the on-site Tudor Revival building, the following mitigation measure shall be implemented at the project site: To avoid or minimize potential construction vibration damage, a pre-construction condition survey report and post-construction damage assessment survey report shall be prepared by a qualified independent structural engineer with qualifications in completed historic preservation projects that conformed to the U.S. Secretary of the Interior (SOI) Standards. These	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		reports shall be submitted to the City for review and approval prior to initiating any type of construction work activity on site (pre-construction vibration survey report) and upon completion of such work (post-construction damage assessment survey report). Specifically, the structural engineer shall investigate the existing condition of the foundation and the structure along the north elevation (i.e., the side facing the proposed project construction). Any required test excavations shall be performed only in the presence of the structural engineer. If protective barriers, underpinning and/or shoring is determined to be necessary, appropriate designs shall be prepared. The structural engineer shall prepare a report of findings, recommendations and any related design modifications necessary to retain the structural integrity of the Tudor Revival building. ii. The qualified structural engineer shall perform the following vibration mitigation: Prior to commencement of construction activities, measure	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		and document the existing ground vibration environment in the vicinity of the Tudor Revival style building, to establish baseline vibration conditions. The vibration measurements shall be performed during hours of the day consistent with the project's construction hours. At each site, ground vibration levels shall be measured in the vertical direction for a period of a minimum of 15 minutes. The vibration measurement equipment shall be capable of recording vibration velocity levels in PPV (Peak Particle Velocity) and RMS (Root-Mean-Square) values in the unit of inch/ second, over the frequency range of 1 Hz to 100 Hz. Measured vibration data shall be submitted to the City and shall include; description of measurement location, measurement time and recorded values (maximum, minimum and mean levels during the measurement period). After establishing the baseline vibration conditions of the project site, develop and implement a vibration monitoring program capable of documenting the construction-	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		related groundbourne vibration levels in the vicinity of the Tudor Revival style building. iii. During construction, the contractor shall install and maintain at least two continuously operational automated vibrational monitors on the Tudor Revival style building. The monitors must be capable of being programmed with two predetermined vibratory velocities levels: a first-level alarm equivalent to a 0.15 inches per second at the face of the building and a regulatory alarm level equivalent to 0.2 inches per second at the face of the building . The monitoring system must produce real-time specific alarms (via text message and/or email to on-site personnel) when velocities exceed either of the predetermined levels. In the event of a first-level alarm, feasible steps to reduce vibratory levels shall be undertaken, including but not limited to halting/staggering concurrent activities and utilizing lower-vibratory techniques. In the event of an exceedance of the regulatory level, work in the vicinity shall be halted and the	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		building visually inspected for damage. Results of the inspection must be logged. If in the opinion of the structural engineer, in consultation with the historic preservation architect, substantial adverse impacts to historic resources related to construction activities are found during construction, the monitoring team shall so inform the project sponsor or sponsor's designated representative responsible for construction activities. iv. The project applicant shall adhere to the monitoring team's recommendations for corrective measures, including halting construction in situations where construction activities would imminently endanger historic resources. The historic preservation officer shall establish the frequency of monitoring and reporting. The project applicant shall respond to any claims of damage by inspecting the affected property promptly, but in no case more than five working days after the claim was filed and received by the project sponsor's designated representative. Any	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		new cracks or other changes in the former funeral home and chapel shall be compared to pre-construction conditions and a determination made as to whether the proposed project could have caused such damage. In the event that the proposed project is demonstrated to have caused any damage, such damage shall be repaired to the pre-existing condition. Site visit reports and documents associated with claims processing shall be provided to the City of Santa Monica's Historic Preservation Officer.	
Would the project have a cumulative effect related to noise?	Potentially significant	**MM-NOI-1** **MM-NOI-2**	Less than significant
Transportation			
Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than significant	None	Less than significant
Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Less than significant	None	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than significant	None	Less than significant
Would the project result in inadequate emergency access?	Less than significant	None	Less than significant
Would the project have a cumulative effect related to transportation?	Less than significant	None	Less than significant
Tribal Cultural Resources			
Would the 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:			
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	Less than significant	None	Less than significant
A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Potentially significant	**MM-TCR-1:** While no tribal cultural resources have been identified that may be affected by the project, the following approach for the unanticipated discovery of tribal cultural resources has been prepared to reduce potential impacts to unanticipated resources. Should a potential tribal cultural resource be unanticipatedly encountered, construction activities near the potential tribal cultural resource shall be temporarily halted within 50 feet of the potential tribal cultural resource and the City notified. The City will notify Native American	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		tribes that have been identified by the Native American Heritage Commission (NAHC) to be traditionally and culturally affiliated with the geographic area of the project. If the unanticipated resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in mitigation measure MM-CUL-3 (see Section 4.4.7). If the County determines that the potential resource is a tribal cultural resource (as defined by Public Resources Code, Section 21074), tribes consulting under AB 52 would be provided a reasonable period of time, typically five days from the date a new discovery is made, to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered tribal cultural resources. A qualified archaeologist shall implement a plan for the treatment and disposition of any discovered tribal cultural resources based on the nature of the resource and considering the recommendations of the tribe(s). All activities shall be conducted in accordance with regulatory requirements. If human remains are found within the project site, remains would be handled	

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		pursuant to applicable regulatory requirements.	
Would the project have a cumulative effect related to tribal cultural resources?	Potentially significant	**MM-TCR-1**	Less than significant
Utilities and Service Systems			
Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Potentially significant	**MM-UT-1:** Prior to the issuance of the building permit, the applicant will be required to submit a water study and a sewer study to the City of Santa Monica Public Works Department that demonstrate the City's water and sewer system can accommodate the proposed project's water demand and wastewater flows based on current flows. The applicant will be responsible for upgrading any downstream deficiencies, to the satisfaction of the Public Works Department, if calculations show that the project will cause such mains to receive greater demand than can be accommodated. Improvement plans will be submitted to and approved by the City's Engineering Division.	Less than significant
Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than significant	None	Less than significant

Table 1-1
Summary of Project Impacts

Environmental Topic	Impact without Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project have a cumulative effect related to utilities infrastructure?	Potentially significant	**MM-UT-1**	Less than significant
Utilities and Service Systems – Solid Waste			
Would the 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?	Less than significant	None	Less than significant
Would the project not comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than significant	None	Less than significant
Would the project have a cumulative effect related to solid waste?	Less than significant	None	Less than significant
Energy			
Would the project result in wasteful, inefficient, or unnecessary consumption of energy?	Less than significant	None	Less than significant
Would the project conflict with existing energy standards and regulations?	Less than significant	None	Less than significant
Would the project have a cumulative effect related to energy consumption?	Less than significant	None	Less than significant

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CHAPTER 2
INTRODUCTION

2.1 OVERVIEW

This Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts of the 1242 20th Street Wellness Center Project (project or proposed project) in the City of Santa Monica (City). The project applicant proposes the development of approximately 72,812 square feet[1] (sf) of medical research and development (R&D) and clinical/medical office space within a "Wellness Center" located at 1925 Arizona Avenue and 1242 20th Street in the City.

The project site is currently occupied with a restaurant housed in the former Gates, Kingsley, & Gates Funeral Home (referred to as the GKGM Building), which is a 2-story Tudor Revival-style structure with a connected 4-car garage. The project site is also occupied with two 2-story structures currently leased as office space (formerly used as residential) and a surface parking lot. The proposed project would demolish the 4-car garage attached to the GKGM Building and both of the 2-story structures and the surface parking lot. The proposed project would include the construction of a new 3-story Wellness Center building adjacent to the existing GKGM Building. The restaurant within the GKGM Building would remain in place, and the currently unoccupied administrative space within the GKGM Building would be adaptively reused as part of the Wellness Center. The proposed Wellness Center would provide medical-related R&D uses and clinic/medical office space in the City's Health Care Mixed Use (HMU) District.

2.2 ENVIRONMENTAL PROCEDURES

2.2.1 California Environmental Quality Act Compliance

CEQA (California Public Resources Code, Section 21000 et seq.) requires the preparation and certification of an EIR for any project that a lead agency determines may have a significant effect on the environment. This EIR has been prepared in compliance with the criteria, standards, and procedures of the CEQA Guidelines (14 CCR 15000 et seq.). This document represents the independent judgment of the City as the lead agency (14 CCR 15050).

The purpose of this EIR is to inform decision-makers and the general public of the environmental impacts resulting from the proposed project. The City is the lead agency under CEQA and is thus responsible for preparing this EIR. This EIR has been prepared in conformance with CEQA (California Public Resources Code Section 21000 et seq.), and the State CEQA Guidelines – California Code of Regulations, Title 14, Section 15000 et seq. The City is designated as the lead agency pursuant to Sections 15050 through 15053 and 15367 of the CEQA Guidelines. The principal sections governing content of this document are Sections 15120 through 15151 (Contents of an EIR), and Section 15161 (Project EIR).

[1] The 72,812 sf consists of the proposed above grade and below grade occupiable floor area: approximately 58,931 sf of new above grade construction; approximately 9,398 sf of new below grade construction; and approximately 4,483 sf of adaptive reuse of an existing on-site building. This square footage excludes the proposed support areas (e.g., terraces, utility support/elevator spaces) and the proposed subterranean parking garage.

The City is responsible for processing and approving the proposed project pursuant to CEQA Statute Section 20167. The City will consider the information in the EIR, along with other information that may be presented during the CEQA process. The EIR will be used in connection with all other permits and all other approvals necessary for the construction and operation of the proposed project. The EIR will be used by the City and other responsible public agencies that must approve activities undertaken with respect to the proposed project.

In accordance with Section 15121 of the State CEQA Guidelines, an EIR is intended to serve as an informational document that enables public agencies to evaluate a project in terms of its significant environmental effects, to examine and implement mitigation measures for eliminating or reducing any potentially adverse impacts, and to consider reasonable and feasible alternatives to the project. Section 15382 of CEQA Guidelines defines "significant effect on the environment" as a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." While CEQA Section 15021(a) and Section 15091 requires that major consideration be given to avoiding environmental damage, the lead agency and other responsible public agencies must balance adverse environmental effects against other public objectives, taking into account economic, legal, social, and technological factors.

Section 15091 of the State CEQA Guidelines states that if a public agency approves a project that has significant impacts that are not substantially mitigated (i.e., significant unavoidable impacts where impacts cannot be mitigated to less than significant levels), the agency must state in writing the specific reasons for approving the project, based on the Final EIR and any other information in the public record for the project. This is known as a "statement of overriding considerations."

This document analyzes the environmental effects of the proposed project to the degree of specificity appropriate to the project, as required under Section 15146 of the State CEQA Guidelines. This analysis considers the construction and operational activities associated with the proposed project to determine the short-term and long-term effects. This EIR discusses both the direct and indirect impacts of this proposed project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects.

2.2.2 Notice of Preparation and Scoping Process

CEQA establishes mechanisms whereby the public and decision makers can be informed about the nature of a project being proposed and the extent and types of impacts that the proposed project and its alternatives would have on the environment should the project or alternatives be implemented.

On January 3, 2018, the City circulated a Notice of Preparation (NOP) prepared in accordance with the requirements of CEQA Guidelines Section 15082. The purpose of the NOP was to inform the public that the City was preparing an EIR for the proposed project, and to solicit input regarding the scope and content of the EIR (see Appendix A to this EIR). The NOP was sent to a distribution list composed of local property owners/occupants within 750 feet of the project site and to neighborhood groups, relevant state/local agencies, and interested organizations. Additionally, the NOP was published online on the City's Planning and Community Development Department website, published in the Santa Monica Daily Press, and sent to the State Clearinghouse at the California Governor's Office of Planning and Research. The State Clearinghouse number assigned to this EIR is SCH No. 2018011001.

The initial NOP was distributed for a public review period beginning on January 3, 2018 and running through February 3, 2018. However, there was an inadvertent error on the notice regarding the applicant of the project. A Recirculated NOP which noted that the applicant is 1925 Arizona, LLC. was distributed on January 9, 2018 that extended the comment period for the NOP to February 9, 2018. Additionally, a public scoping meeting to receive public comments was held on January 18, 2018, at McKinley Elementary School, Auditorium. The comments received during the public review period are found in Appendix A of this EIR and were considered during the preparation of this EIR. Table 2-1 summarizes the comments received and lists the EIR chapter where each comment has been addressed.

Table 2-1
Summary of Comments Received in Response to the NOP

Commenting Agency or Property Owner	Date Received	Summary of Comment	EIR Chapter Where Comment Is Addressed
NOP Comment Letters			
Agencies			
Native American Heritage Commission	January 9, 2018	The comment letter states that CEQA was amended significantly in 2014 to include a separate category of cultural resources, "tribal cultural resources," and provides that a project that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. Assembly Bill (AB) 52 applies to any project for which a notice of preparation is filed after July 1, 2015. AB 52 has tribal consultation requirements and certain timing requirements for notification that are outlined in the letter. Requested an appropriate records search to determine known traditional cultural resource, and preparation of an archaeological inventory survey if required. A list of appropriate Native American contacts for consultation concerning the project site should be contacted. Mitigation should be included in the EIR to identify and evaluate accidentally discovered archaeological resources pursuant to California Health and Safety Code Section 7050.5 and CEQA Section 15064.5(f).	Cultural Resources
Individuals			
Alana Brazis	February 8, 2018	The commenter asks the proposed project consider removing the alley as access to the structure. The other comment is refers the GKGM office's historical and aesthetic value.	Aesthetics, Cultural Resources, Transportation

Table 2-1
Summary of Comments Received in Response to the NOP

Commenting Agency or Property Owner	Date Received	Summary of Comment	EIR Chapter Where Comment Is Addressed
Cathy Kayne	February 8, 2018	The commenter is concerned with the access of the underground parking structure coming through the alley due to potential access conflict with the Lighthouse Church School. The commenter suggests having the entrance to the underground parking from Wilshire Boulevard or Arizona Avenue.	Transportation
Cheryl Tormey	February 8, 2018	The commenter is concerned with the access of the underground parking structure coming through the alley due to potential access conflict with the Lighthouse Church School. The commenter suggests having the entrance to the underground parking from Wilshire Boulevard or Arizona Avenue.	Transportation
Dalphina C Basile	February 8, 2018	The commenter is concerned about the underground entrance in the very busy alley. The commenter suggests driveway access from Arizona Avenue or 20th Street.	Transportation
Dawn Forman	February 7, 2018	The commenter is concerned about the underground entrance for the parking be accessible from the alley. The commenter suggests the driveway come from the adjacent property since there is no historical value to the GKGM Building.	Cultural Resources, Transportation
Debbie Young	February 7, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Diane Fernandez	February 8, 2018	The commenter is concerned the alley access will endanger pedestrians from an increase in traffic. The commenter also suggests removing the adjacent GKGM Building.	Cultural Resources, Transportation
Dianna Ashcraft	February 8, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation

Table 2-1
Summary of Comments Received in Response to the NOP

Commenting Agency or Property Owner	Date Received	Summary of Comment	EIR Chapter Where Comment Is Addressed
Erik Photenhauer	February 7, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Esther Alarcon	February 7, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Hilary Scribner	February 8, 2018	The commenter is concerned the proposed entrance from the alley will create an impact to apartment tenants and school drop-off/pick-up.	Transportation
Holly Photenhauer	February 8, 2018	The commenter is concerned about the underground entrance for the parking be accessible from the alley. The commenter suggests the driveway come from the adjacent property since there is no historical value to the GKGM Building.	Cultural Resources, Transportation
Isaias Campos	February 8, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Joe Peterson	February 7, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Joel Lahood	February 8, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the	Cultural Resources, Transportation

Table 2-1
Summary of Comments Received in Response to the NOP

Commenting Agency or Property Owner	Date Received	Summary of Comment	EIR Chapter Where Comment Is Addressed
		adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	
Josh Young	February 8, 2018	The commenter is concerned with the entrance of the underground structure being the alley as it is used for school drop-off/pick-up and is utilized by residents to access nearby shops. The commenter suggests utilizing a driveway from the existing property on Arizona Avenue or 20th Street, as the existing chapel office building is not of historical significance.	Cultural Resources, Transportation
Judy Mershon	February 8, 2018	The commenter suggests removing the GKGM Building office and use this location to construct a driveway, instead of utilizing the same alley as the adjacent school.	Transportation
Kari Czer	February 8, 2018	The commenter is concerned with the design of the proposed project regarding traffic and congestion resulting from access from the alley.	Transportation
Karina Lahood	February 8, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Louis Hyland	February 7, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Maritza Alarcon	February 8, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation

Table 2-1
Summary of Comments Received in Response to the NOP

Commenting Agency or Property Owner	Date Received	Summary of Comment	EIR Chapter Where Comment Is Addressed
Pamela Somer	February 8, 2018	The commenter is concerned with the proposed entrance to the underground parking from the alley causing safety hazards for school drop-off. The commenter is also concerned with the increased usage of the alley resulting in increased congestion, noise, and potential of accidents.	Noise, Transportation
Patricia Neos	February 8, 2018	The commenter is concerned the proposed entrance from the alley will create an impact to school pick-up/drop-off. The commenter suggests the access point be moved to the GKGM driveway from 20th Street or Arizona Avenue as there is no historical value.	Cultural Resources, Transportation
Patricia Peterson	February 7, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Paul Catalano	February 8, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Peter Czer	February 8, 2018	The commenter is concerned the proposed parking entrance in the alley will impact safety of the children ad the adjacent school. The commenter also suggests utilizing the former GKGM offices and GKGM Building for access instead.	Transportation
Ralph Bowen	February 7, 2018	The commenter is concerned with the access of the underground parking impacting the community, hospital staff parking lot to the northern, and private garage rentals. The commenter also suggests utilizing the former GKGM offices and GKGM Building for access instead.	Cultural Resources,

Table 2-1
Summary of Comments Received in Response to the NOP

Commenting Agency or Property Owner	Date Received	Summary of Comment	EIR Chapter Where Comment Is Addressed
Brenda Bowen	February 8, 2018	The commenter is concerned the proposed entrance from the alley will create an impact to school drop-off/pick-up. The commenter suggests utilizing the GKGM Building as an entrance from 20th Street or Arizona Avenue.	Transportation
Raymond Kayne	February 8, 2018	The commenter is concerned the proposed entrance from the alley will create an impact to adjacent residents and the school.	Transportation
Rebekah McNamara	February 8, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Robert Scribner	February 7, 2018	The commenter is concerned with the proposed access from the alley as the alley is already busy. The commenter proposes access from Arizona Avenue to increase safety and reduce accidents.	Transportation
Al and Sharon Montez	N/A	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Antonio Marino	February 8, 2018	The commenter is concerned with the entrance of the underground parking structure being from the alley and instead suggests a driveway entrance from the adjacent property. The commenter indicates there is no historical or architectural significance to the adjacent GKGM Building.	Cultural Resources, Transportation
Zachary Scribner	February 8, 2018	The commenter is concerned the proposed entrance from the alley will create an impact to school drop-off. The commenter suggests utilizing the GKGM Building as an entrance from 20th Street or Arizona Avenue.	Transportation

Notes:
N/A = not applicable.

Environmental Baseline

Generally, the environmental baseline for an EIR consists of the physical environmental conditions that exist at the time the NOP is published (CEQA Guidelines Section 15125). At the time of the NOP (in 2018), the existing structures on the project site were vacant. The funeral home business that formerly occupied the GKGM Building ceased operation in 2016, and the residential uses were also vacated in 2016. Subsequent to issuance of the NOP, portions of the GKGM Building have become occupied by a restaurant (i.e., Tartine Restaurant) that opened in March 2020, and the two former residential buildings are partially occupied with office uses. These new uses (the restaurant and the office) are permitted by right (i.e., no discretionary approvals or CEQA review was required.) As such, the environmental conditions on the project site have changed subsequent to release of the NOP.

Due to these changes in on-site conditions, in combination with the time that has elapsed since release of the NOP, the City as lead agency has prepared this EIR to reflect the current existing conditions (i.e., partially occupied buildings) as the environmental baseline of the project site. Pursuant to CEQA Guidelines Section 15125, a lead agency can select a baseline other than what existed at the time of the NOP if substantial evidence exists that an alternate baseline is appropriate and "where necessary to provide the most accurate picture practically possible of the project's impacts." In this case, new uses have become operational on the project site since the publication of the NOP; as such, it is appropriate to consider these uses as part of the baseline to provide an accurate picture of the project site and the effects that the project would have on the site and its surroundings.

2.3 SCOPE OF THE EIR

This EIR assesses the potential environmental impacts that could occur with implementation of the proposed project. Section 15064 of the CEQA Guidelines states that in evaluating the significance of the environmental effect of a project, the lead agency shall consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the proposed project.

Based on the City's review of the proposed project and the results of the EIR scoping process, this EIR addresses environmental effects for the following topics:

- Aesthetics
- Air Quality
- Construction Effects
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Land Use and Planning
- Noise and Vibration

- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Energy

This EIR addresses the issues referenced above and identifies potentially significant direct and indirect environmental impacts resulting from construction and operation of the proposed project. Additionally, the EIR provides feasible mitigation measures (where necessary) to reduce or avoid adverse environmental effects.

Chapter 5, Other CEQA Considerations, of this EIR addresses environmental topics required by CEQA that are not covered within the other chapters of the EIR, including: (1) significant unavoidable impacts, (2) irreversible environmental changes, (3) growth inducing impacts, (4) potential secondary effects, and (5) environmental effects found not to be significant.

Consistent with CEQA Guidelines (Section 15126.6[d]), this EIR includes the assessment of a reasonable range of alternatives to the proposed project that could feasibly attain most of the project objectives while avoiding or substantially lessening the environmental effects of the proposed project. This analysis is included in Chapter 6, Alternatives.

2.3 CONTENTS AND ORGANIZATION OF THE EIR

The EIR is organized as described in the paragraphs below. Note that a list of documents consulted during preparation of the EIR is presented in a "References" section at the end of each chapter and at the end of Sections 4.1 through 4.14.

Chapter 1, Executive Summary, presents a brief summary of the proposed Wellness Center and objectives, and a description of the proposed project. The section also includes a table summarizing (1) the level of significance for each potential impact in each resource category analyzed in the EIR, (2) the mitigation measures proposed to reduce or avoid significant impacts, and (3) the level of impact significance following implementation of mitigation measures.

Chapter 2, Introduction, serves as a foreword to the EIR, providing an overview of the proposed project, a brief summary of CEQA, the purpose and steps undertaken in the EIR process, including a discussion of the preparation and distribution of the NOP. This chapter also presents the contents and organization of the EIR.

Chapter 3, Project Description, provides a thorough description of the location, objectives, and characteristics of the proposed project and of the federal, state, and local agencies that the City may need to coordinate with or receive authorization from to implement the proposed project.

Chapter 4, Environmental Analysis, includes a summary of the overall approach to the analysis of each environmental issue and the identification of potentially significant environmental impacts, as well as an

overview of the organization of each of the environmental issue sections. Chapter 4 also includes a table listing the cumulative projects in the project area.

Sections 4.1 through 4.14 provide analysis of the potentially significant environmental impacts identified for the proposed project, as well as proposed mitigation measures to reduce or avoid any potentially significant impacts for each of the resource categories listed below. For each resource category, the general context for the proposed project, existing conditions, regulatory framework, thresholds of significance, and methodology are included within each section in Chapter 4, preceding the analysis of potential impacts from the proposed project and any mitigation measures necessary to reduce potentially significant impacts. Each section also includes the level of significance after mitigation and a discussion of cumulative impacts.

The following resource categories are discussed in the EIR:

- Section 4.1, Aesthetics
- Section 4.2, Air Quality
- Section 4.3, Construction Effects
- Section 4.4, Cultural Resources
- Section 4.5, Geology and Soils
- Section 4.6, Greenhouse Gas Emissions
- Section 4.7, Hazards and Hazardous Materials
- Section 4.8, Land Use and Planning
- Section 4.9, Noise
- Section 4.10, Transportation
- Section 4.11, Tribal Cultural Resources
- Section 4.12, Utilities and Service Systems
- Section 4.13, Utilities and Service Systems – Solid Waste
- Section 4.14, Energy

Based on the analysis in the Initial Study (provided in Appendix A), impacts for all significance thresholds were determined to be less than significant for the resource categories of agriculture and forestry resources, biological resources, hydrology and water quality, mineral resources, neighborhood effects, population and housing, public services, and recreation. The impact analyses for these resources are included in the Initial Study, and these topics are not further addressed in this EIR.

Chapter 5, Other CEQA Considerations, includes a discussion of issues required by CEQA that are not covered in other sections. This includes significant environmental impacts that cannot be avoided and significant irreversible environmental changes that would result from implementation of the proposed program, impacts found not to be significant, and growth-inducing impacts associated with the proposed project.

Chapter 6, Alternatives to the Proposed Project, includes a description of a No Project/No Build Alternative (the "no project" alternative), No Project/Reasonably Foreseeable Development Alternative, Administrative Approval Project Alternative, Reduced Project Alternative, Tier 2 (2.5 FAR) Project Alternative, and 20th Street Access Alternative. The chapter provides a brief analysis of impacts associated with each alternative compared to the proposed project, as well as a determination of the environmentally superior alternative.

Chapter 7, List of Preparers, lists the personnel and organizations involved in preparation of the EIR.

Appendices include various technical studies and other related documents prepared for the proposed project, as listed below:

- Appendix A – Initial Study, NOP, and NOP Comment Letters
- Appendix B – Air Quality and Greenhouse Gas Emissions Calculations and Health Risk Assessment
- Appendix C – Cultural Resources Reports
- Appendix D – Geotechnical Investigation
- Appendix E - Phase I Environmental Site Assessment and Environmentally-Regulated Materials Survey Report
- Appendix F – Noise Calculations
- Appendix G – Transportation Impact Study
- Appendix H – Water Use Memorandum
- Appendix I – Alternative 6 Ingress-Egress Assessment

2.4 REFERENCES

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

California Public Resources Code, Section 21000–21177. California Environmental Quality Act (CEQA), as amended.

CHAPTER 3
PROJECT DESCRIPTION

3.1 INTRODUCTION

The proposed 1242 20th Street Wellness Center Project (proposed project) would involve the development of approximately 72,812 square feet[1] (sf) of medical research and development (R&D) and clinical/medical office space within a "Wellness Center" located at 1925 Arizona Avenue and 1242 20th Street in the City of Santa Monica. The proposed project would include the construction of a new 3-story bPDuilding adjacent to an existing historic Tudor-style building, which would be partially preserved in its current condition, and partially renovated/adaptively reused as part of the Wellness Center. The proposed Wellness Center would provide medical-related R&D uses and clinical/medical office space in the City of Santa Monica's Healthcare Mixed Use (HMU) District.

3.2 EXISTING PROJECT SITE CHARACTERISTICS

3.2.1 Project Location

The project site is located in the City of Santa Monica (City), in the western portion of Los Angeles County (see Figure 3-1, Regional Map and Figure 3-2, Project Site Location). The City of Santa Monica is a fully urbanized community and is bounded by the City of Los Angeles on the north, south, and east with the Pacific Ocean on the west. Specifically, the project site is bordered by 20th Street on the east, Arizona Avenue to the south, the 19th Court alley to the west, and the Lighthouse Church and School to the north.[2]

The project site is located in Mid-City, north of Santa Monica Boulevard within the HMU District. The approximately 45,009 sf (1.03 acre) project site includes two parcels addressed as 1925 Arizona Avenue and 1242 20th Street. The Assessor Parcel Numbers (APN) associated with these two parcels are 4276-013-033 and 4276-013-032, respectively.

The project site is accessible to the regional transportation network. The site is located approximately 0.65-mile north of the Santa Monica Freeway (Interstate 10) ramps at Cloverfield Boulevard and 20th Street, and approximately 0.5-mile northeast of the 17th Street/Santa Monica College Station (at 17th Street and Colorado Avenue) for the Metro E Line (formerly Expo Line).[3] There are also six fixed-route bus routes with stops within ¼-mile of the project site, including the Big Blue Bus Line1, Line 2, Rapid 10, and Lines 41 and 42, and Metro Line 4 and Line 20.

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1 The 72,812 sf consists of the proposed above grade and below grade occupiable floor area: approximately 58,931 sf of new above grade construction; approximately 9,398 sf of new below grade construction; and approximately 4,483 sf of adaptive reuse of an existing on-site building. This square footage excludes the proposed support areas (e.g., terraces, utility support/elevator spaces) and the proposed subterranean parking garage.

2 Although the City is at an angle (i.e., streets are northwest or southwest), directions will be referred to as north, south, east, and west. 20th Street will be referred to as east, Arizona Avenue will be referred to as south, and so forth.

3 Distance to station represents distance as the crow flies; walking distance is approximately 0.7 mile.

Due to the availability and frequency of transit service nearby, the project site is located within a Transit Priority Area (TPA) and a High Quality Transit Area (HQTA) per the Southern California Association of Governments (SCAG) region for both the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the Connect SoCal, the 2020-2045 RTP/SCS, updated as of June 2019. A HQTA is within one-half mile from major transit stops and from high quality transit corridors and developed based on the language in Senate Bill 375. Major transit stop is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (CA Public Resource Code Section 21064.3). As previously stated, the project site is approximately 0.5-mile northeast of Metro's 17th Street/Santa Monica College Station (i.e., light rail) and is well-served by bus transit service, including Big Blue Bus and Metro buses. The bus stops closest to the project site are on 20th Street southbound and at the Wilshire Boulevard/20th Street intersection.

3.2.2 Existing Setting

Surrounding Land Uses

The HMU District includes the City's two major hospitals: Santa Monica-UCLA Medical Center and the Providence Saint John's Health Center (PSJHC), and encompasses a mix of medical-related, healthcare, residential, and commercial land uses (see Figure 3-2, Project Site Location and Figure 3-3, Surrounding Zoning). The immediate vicinity of the project site includes the following uses:

- **North**: The Lighthouse Church and School is located immediately to the north of the project site along 20th Street, and provides faith-based education for grades Kindergarten through 8 (K-8). Adjacent further to the north of the Lighthouse Church and School is the retail pharmacy Walgreen's, located at the southwest corner of 20th Street and Wilshire Boulevard. Additional commercial uses are located along Wilshire Boulevard, which is served by a range of commercial services and neighborhood shopping nodes.
- **East**: A mix of multi-family residential uses and commercial uses are located east of 20th Street. Immediately across 20th Street (at the northeast corner of 20th Street and Arizona Avenue) is the four-story Ambrose Hotel. Two- to four-story multi-family residential developments are to the north of this hotel. A commercial building with a mix of restaurant, florist, and neighborhood pharmacy is located at the southeast corner of 20th Street and Wilshire Boulevard.
- **South**: Existing development located south of the project site along 20th Street generally consists of two- to three-story residential buildings and medical/healthcare related buildings. Directly south across the project site is an existing two-story multi-family residential building located immediately across Arizona Avenue at the southwest corner of 20th Street and Arizona Avenue. Further south along the west side of 20th Street are multi-family residential buildings and healthcare and medical buildings, including convalescent homes and rehabilitation centers. Medical office buildings as well as the PSJHC campus are located southeast of the project site, across Arizona Avenue. The PSJHC campus is expansive and extends from 20th Street to 23rd Street to the east and from Arizona Avenue to Santa Monica Boulevard to the south. The campus consists of multi-story medical buildings, a four-story parking structure, several surface level parking lots, and limited commercial uses along 20th Street. To the southeast of the project site

(diagonally across 20th Street) is a 5-story medical office building. Further south along the east side of 20th Street are the PSJHC Child and Family Development Center, a parking structure, and a 12-story medical office building.

- **West**: Single-family and multi-family residential uses are located adjacent to the project site across 19th Court alley. Further west across 19th Street is a church and Fire Station No. 3.

Existing Project Site

The project site consists of an approximately 45,009 sf lot comprised of two parcels addressed as 1925 Arizona Avenue and 1242 20th Street. Figure 3-4, Existing On-Site Structures, depicts the locations of the existing structures on the property.

- The 1925 Arizona Avenue parcel (APN 4276-013-033) is currently occupied with a restaurant (the "Tartine") housed in the former Gates, Kingsley, & Gates Funeral Home Building (referred to as the GKGM Building), which is a 2-story Tudor Revival-style structure with a connected 4-car garage, and a surface parking lot. On-site landscaping includes the grassy lawn encircled by the driveway, planted shrubs, planters, and a few trees.
- The 1234-1242 20th Street parcel (APN 4276-013-032) is developed with two 2-story structures (one 7-unit building and one 3-unit building) currently leased as office space (formerly used as residential), as well as surface parking spaces adjacent to the buildings.

Under the proposed project, no work is anticipated for the chapel wing of the GKGM Building. This portion of the building was recently rehabilitated in-kind for adaptive use as a full-service restaurant. The scope of work for the recent adaptive reuse of the chapel wing included the minor reconfiguration of the interior space for use as a restaurant with kitchen, service counter, and dining area as well as the upgrading of electrical, plumbing, and mechanical systems, fire sprinkler and fire alarm systems, restrooms facilities, and interior and exterior accessibility upgrades necessary to meet the requirements of the new use. In-kind stucco repair, replacement of window frames and front entry door, and complementary painting of the mortuary building was also part of the rehabilitation work conducted under prior tenant improvement permits.

Within the GKGM property grounds, the grassy lawn at the corner of the property contains a large fountain that is considered a character-defining feature of the historic GKGM property. This fountain was converted into a planter as part of the 2019-2020 tenant improvement work associated with the new restaurant.

Figure 3-5a, Site Photograph Locations, and Figure 3-5b, Site Photographs, provide photographs of the project site from various surrounding locations.[4] On-site landscaping includes ornamental trees near the 7-unit and 3-unit buildings, shrubs and plants near the GKGM Building, and a grassy area near the corner of 20th Street and Arizona Avenue. Off-site street trees are located along 20th Street and Arizona Avenue. Table 3-1 provides a summary of the existing site facilities.

Table 3-1
Existing Site Facilities

Existing Use	Size/Amount	Year Built	Address	Parcel No.
Restaurant and vacant Administrative Offices within GKGM Building (former Funeral Home/Chapel)	Approximately 3,356 sf of ground floor restaurant Remaining 4,483 sf of ground floor and 2nd floor vacant	1933	1925 Arizona Avenue	4276-013-033
Enclosed 4-car Garage	Approximately 1,416 sf	1959	1925 Arizona Avenue	4276-013-033
Surface Parking Lot	13 parking stalls plus 6 parking lanes	Undetermined	1925 Arizona Avenue	4276-013-033; 4276-013-032
Commercial Office Space (formerly vacant 7-unit and 3-unit residential buildings)	Approximately 2,584 sf/ 3 units Approximately 5,754 sf/ 7 units	1956 1965	1234 20th Street 1242 20th Street	4276-013-032

1925 Arizona Avenue

The parcel addressed as 1925 Arizona Avenue currently contains a Tudor Revival style building that was constructed in 1933. The existing 2-story building currently houses a new restaurant (Tartine) and currently vacant administrative office space, which was formerly used as a funeral home and chapel (GKGM Building). The GKGM business ceased operation in 2016 and the building remained vacant until early 2019, when renovations took place inside the chapel and a portion of the ground floor of the administrative portion of the building for the current restaurant. The 3,356-sf restaurant opened in March 2020. The remaining

[4] The Notice of Preparation (NOP) and Initial Study for the proposed project was circulated for public review from January 9, 2018 through February 8, 2018. The Tartine Restaurant was not an occupant of the GKGM Building at that time; however, in order to appropriately reflect existing conditions on the project site for the purposes of the analysis within this Draft EIR, the occupied restaurant is accounted for throughout the analyses. Therefore, the project site conditions reflect the occupied and operational restaurant on the project site.

rear portions of the building, including the second story of the GKGM Building and one-story, four-car garage, are not utilized.

The GKGM Building is L-shaped with the administrative offices in the recessed western wing adjacent to Arizona Avenue. The front yard includes a grassy lawn with a half-circle driveway that contains a large fountain that has been converted into a planter. This driveway has two curb cuts, one on Arizona Avenue and one on 20th Street. The driveway and grassy lawn are currently utilized as outdoor seating for the restaurant with a landscaped shaded canopy. A small, three-space surface parking area (currently utilized for outdoor dining) is located off the driveway near Arizona Avenue. Attached to the GKGM Building is an enclosed 4-car garage along 19th Court.

The rear (north) portion of the 1925 Arizona Avenue site is occupied by a paved surface parking lot, which abuts the sidewalk along 20th Street and the backside (east) of 1242 20th Street. Two driveways on 20th Street provide for entry and exit to the parking lot. The paved surface parking lot currently serves as parking for the restaurant.

The GKGM Building has been previously identified as a potential historic resource in the City's Historic Resources Inventory.

1242 20th Street

The parcel addressed as 1242 20th Street contains two 2-story buildings: one 3-unit building that was built in 1956 and one 7-unit building built in 1965. The buildings are currently leased for office space, but the buildings were used as residential units until 2016 (when they became vacant). Pursuant to the Ellis Act, the project applicant filed a Notice of Intent to Withdraw the rental units from the market in November 2015. Subsequently, in 2016, the residential units were withdrawn from the market. The building is currently partially occupied with office uses.

3.2.3 Existing Land Use Designations and Zoning

General Plan Designation

The Land Use and Circulation Element (LUCE) of the City's General Plan is the land use and transportation planning document governing existing and future land uses in the City. The LUCE encompasses the community's vision for Santa Monica's future and establishes goals, policies, and development criteria for land uses and circulation in the City. The project site is designated Healthcare Mixed-Use in the City's LUCE. The Healthcare Mixed-Use designation addresses the changing healthcare needs of the community and supports the continued viability of the two hospitals in the City: 1) Santa Monica-UCLA Medical Center; and 2) Providence Saint John's Health Center. The LUCE envisions new medical and ancillary facilities, open spaces, and additional community benefits to emerge over time within the Healthcare District. The Healthcare Mixed-Use designation allows for a variety of uses that support the City's two hospitals, and ensures continued improvement and ongoing expansion, while being sensitive to the surrounding residential neighborhoods in ways that meet the healthcare needs of the City and the sub-region. Allowed uses within this land use designation include hospital and medical office uses, pharmacies, residential care, rehabilitation and outpatient clinics, affordable, workforce and market-rate housing targeted at hospital employees, extended

stay lodging for patient families, and supporting retail uses, including both limited and full-service restaurants, which are permitted uses in the HMU per Santa Monica Municipal Code (SMMC) Section 9.13.020.

Zoning Ordinance

The Santa Monica Comprehensive Zoning Ordinance (Zoning Ordinance), Divisions 1 through 5 of Article 9 of the SMMC, provides the detailed regulations and standards for the City to implement the General Plan. The Zoning Ordinance serves as the regulatory framework that governs the physical development of land uses, consistent with the goals and policies of the General Plan. The Zoning Ordinance was comprehensively updated in 2015 to reflect the LUCE vision, goals, and policies.

The project site is zoned Healthcare Mixed-Use (HMU) District per the City's Zoning Ordinance. This zoning district is intended to provide for the future orderly expansion of the City's hospitals and related health care facilities in order to meet the needs of both the community and region while protecting the integrity of the surrounding residential neighborhoods. The HMU District fosters the evolving needs of the healthcare community with expanded medical office uses and outpatient services along with retail and non-medical services.

3.3 PROJECT OBJECTIVES

Section 15124(b) of the State CEQA Guidelines requires a project description to contain a statement of a project's objectives and Section 15124(b) requires that the statement of objectives includes the underlying purpose of the project. The applicant's objectives for the proposed project include:

- **Historic Resource Preservation:** Implement a project that will preserve the historic character of the existing GKGM Building by adaptively reusing a significant portion of the structure for new uses on-site in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.
- **Medical Research Advancement and Community Wellbeing:** Develop a state-of-the-art modern facility for medical research and related uses that would advance medical research/knowledge and promote the health and wellbeing of the community.
- **LUCE Consistency and Implementation**: Develop a transit-oriented and pedestrian-oriented medical wellbeing project that is consistent with the HMU district and implements the City's LUCE, including high-quality architectural design, sustainable building design, pedestrian orientation, publicly accessible open space and green space, vehicle trip reductions through transportation demand management, and other community benefits.
- **Pedestrian Oriented Design**: Contribute to the existing neighborhood and create a pedestrian-oriented design along the 20th Street frontage. Provide design elements such as large, transparent windows, publicly accessible open space, and thoughtful landscaping improvements to create a continuous and pleasant pedestrian experience between Wilshire Boulevard and Santa Monica Boulevard.
- **Mobility and Circulation**: Provide an access plan that would promote safe and efficient circulation of vehicles to and around the site with sufficient on-site parking to accommodate the peak needs

of the complementary combination of uses. Minimize the number of vehicle trips to the site by encouraging use of public transportation, carpools, electric and natural gas vehicles, bicycles, and walking. Provide ample on-site bicycle storage facilities for employees, patrons, and visitors.

- **Architectural Design**: Ensure high-quality architectural design that is compatible with the existing GKGM Building and the site's surroundings by incorporating design features such as setbacks, varied massing elements, and complementary materials.
- **Sustainability**: Build new and modern energy-efficient construction that meets the latest building and energy codes and eliminate contaminated urban runoff into the City's drainage system from the existing paved surface parking lot.
- **Employment, Economic, and Fiscal Benefits**: Provide an economically viable project that would contribute to the economic health of the City by attracting future medical and healthcare businesses that will generate local tax revenue, provide new construction jobs, and house new residents to support local businesses, including dining, shopping, and entertainment venues.
- **Community and Project Benefits**: Provide substantial and meaningful community and project benefits that are aligned with the LUCE, including publicly accessible ground floor open space, enhanced open space opportunities for employees and visitors, transportation demand management, high-quality architectural design, sustainability, payment of a transportation infrastructure fee, encouraged use of public transportation, bicycling and walking, enhanced pedestrian-oriented design features including widened walkways, outdoor seating and public use areas, pedestrian-oriented uses along street frontages, and local hiring.

3.4 PROJECT CHARACTERISITCS

3.4.1 Proposed Project

The proposed project would involve the demolition of three buildings (rear garage, 3-unit building, and 7-unit building), and surface parking lot, as discussed further in Section 3.6, Construction Activities.

The proposed project would include the construction of a new 3-story building located adjacent to the north of the existing GKGM Building. The new 3-story building would be up to 45 feet tall, not including parapets and roof appurtenances. The new building would include approximately 40,119 sf of new research and development (R&D) within the first two floors; approximately 9,398 sf of R&D within the subterranean garage; and approximately 18,812 sf of new clinic/medical office uses within the third floor. The adaptive reuse of a portion of the GKGM Building would result in approximately 4,483 sf of R&D within the existing two-story building. In total, the proposed project would include 72,812 square feet of R&D and clinic/medical

office uses.[5] Under the proposed project, the 3,356 square feet of recently opened full-service restaurant located within the GKGM Building would remain and would not be altered by project activities. The proposed project's conceptual site plan is shown in Figure 3-6a, Conceptual Site Plan. Figures 3-6b through 3-6f show the conceptual floor plans for each level of the proposed project.

Figure 3-6b, Conceptual Parking Level P-1, depicts the first level of the subterranean parking garage. This is the only subterranean level with occupiable space, including 9,398 square feet of data and technology, research support, research space, and lobby areas, in addition to non-occupiable support areas, such as electrical and water utility rooms, long-term bicycle parking, and associated shower/locker space. Subterranean parking levels P-2 through P-5 contain building support spaces (e.g., stairs and elevator shafts), but do not contain any office/occupiable spaces.

Figure 3-6c, Conceptual Ground Floor Plan, depicts the footprint of the existing restaurant use within the GKGM Building, the new construction portion of the Wellness Center, and the adaptive re-use of the administrative portion of the GKGM Building. Exterior work associated with the adaptive reuse of the GKGM Building would include the removal of the stone veneer and in-kind replacement of any damaged windows with new wooden casement windows along the Arizona Avenue-facing side of the building in order provide architectural details more appropriate to the original construction period. As shown, ingress/egress into the parking garage as well as the loading zone would be located off of the 19th Court alleyway at the northwest corner of the project site. The first floor would include research offices, research labs, circulation/lobby space, administrative offices, and other support spaces. An outdoor public courtyard, which would serve as the primary entrance into the Wellness Center, would be angled to face the existing restaurant and 20th Street.

Figure 3-6d, Conceptual Second Floor Plan, depicts the footprint of the second level, which includes research offices within the administrative portion of the GKGM Building, as well as research lab, research open-work areas, offices, and support spaces within the new building. An exterior terrace would overlook the public courtyard.

Figure 3-6e, Conceptual Third Floor Plan, depicts the footprint of the third level, which includes new clinic space, including open work areas, medical offices and nursing station, clinic multi-function space, exam rooms, chemotherapy and lab areas, and infusion clinic. The third level also includes terrace space overlooking the public courtyard and along the 19th Court alleyway.

Figure 3-6f, Conceptual Roof Plan, depicts the various accessories to be located on the roof, including elevator/stair core areas, air conditioning and mechanical equipment, garage exhaust fan, and approximately 53 kW of photovoltaic (PV) panels.

[5] The floor area ratio (FAR) is calculated based on the floor area within the above-ground portions of the buildings only and includes the existing restaurant floor area. The FAR is calculated to include utility support areas on all above-ground levels. The following square footages are used in the FAR calculation: 20,181 sf on Level 1; 20,681 sf on Level 2; and 18,812 sf on Level 3, for a subtotal 59,674 sf of new building area, combined with 7,839 sf of GKGM Building (including existing restaurant), for a total of 67,513 sf of building area on a 45,009 sf project site. (67,513 / 45,009 = 1.50 FAR)

The existing and proposed operations on the project site are summarized in Table 3-2.

Table 3-2
Summary of Project Site Characteristics

Land Uses	Status	Usable Square Feet (sf)
Research and Development	(Proposed Use)	54,000 (including 9,398 sf below grade)
Clinical/ Medical Office	(Proposed Use)	18,812
	Total New Uses	**72,812[a]**
Restaurant	(Existing Use)	3,356
	Total Post-Project Uses	**76,168**

[a] This number includes above ground and below ground occupiable space in the proposed new building, as well as 4,483 sf within a portion of the existing GKGM Building to be adaptively reused for research and development use. This number excludes support areas (e.g., terraces, parking garage, utility support/elevator spaces).

The Wellness Center is envisioned to accommodate a range of traditional to cutting edge medical research activities, providing spaces for laboratory modules, specialized equipment, medical archives, and both private and collaborative office spaces for staff. Medical clinic and office functions such as outpatient care are also anticipated, and would require flexible spaces for patient treatment and administration. To accommodate educational and community-oriented programming on topics of healthcare and wellness, there would also be flexible meeting and gathering spaces throughout. The aggregate vision is to build a versatile medical facility of the future, to adapt to tomorrow's healthcare and wellness needs.

3.4.2 Project Design

The proposed project would rehabilitate exterior portions of the historic GKGM property located at 1925 Arizona Avenue in a manner consistent with the Secretary of the Interior (SOI) Standards for the Rehabilitation of Historic Properties.

Exterior work associated with the adaptive reuse of the GKGM Building would include the removal of the stone veneer along the Arizona Avenue-facing side of the building in order to provide architectural details more appropriate to the original construction period. Additionally, the exterior door along the interior driveway side of the administrative portion of GKGM Building would be replaced. Curb cuts that allow vehicular access to the L-shaped driveway would be removed and vehicular use of the driveway would be eliminated, allowing for the continued use of outdoor seating for the existing restaurant. Lastly, a portion of the existing walkway near the chapel portion of the GKGM Building would be removed and replaced with bicycle parking. Specific colors and exterior materials have not yet been finalized, but would be subject to review and approval by the City's Architectural Review Board and/or Landmarks Commission (if appropriate). Under the proposed project, no work is anticipated for the chapel wing of the GKGM Building (which would continue to be occupied by the existing onsite restaurant).

The proposed new 3-story building addition would incorporate a contemporary design with three stories and a maximum height of 45 feet, not including parapets and roof appurtenances. As shown in Figure 3-

7a, Project Design Rendering Looking West, the new construction is designed as an irregular-shaped building with a carve-out of the massing at the southeastern orientation, where the building interacts most with both the existing GKGM Building and the street level pedestrian activity along 20th Street. As shown in Figure 3-7b, Project Design Rendering Looking Southwest, the public courtyard area clearly identifies the entrance to the Wellness Center, in which the two overlooking terraces provide for more pedestrian-scale activity in that area of the site. The proposed project includes a series of stepped semi-public terraces, which would serve to further set back the perceived height of the upper stories, as well as activate the 20th Street frontage with human activity at every level. At the ground level, the setback opening would be experienced as a secondary plaza and gathering place between the two buildings; the first being the original open space area fronting the GKGM Building at the corner of Arizona and 20th Street. Overall, the design intent of the new building addition is to ensure compatibility of the proposed structure to the existing GKGM Building and its surrounding context, both on-site as well as a from the block's perspective.

The design includes the removal of oblique 'slices' of building mass, from both the ground level on 20th Street and the third level facing northeast. The resulting outdoor spaces and landscaped planters would further soften the rectangular massing.

The new construction is currently proposed with a façade consisting of limestone panels and glazed windows with metal panel surround, to be compatible with, but differentiated from, the existing funeral home structure. The expansive glazed window wall system along with landscaped planters proposed along the 20th Street frontage would be applied to only the ground level, allowing the upper levels to have more relatable dimensions of glazing. The final architectural design and materials of the new building are still under review and would be subject to final review and approval by the City's Architectural Review Board and/or Landmarks Commission, as appropriate.

3.4.3 Access, Parking, and Circulation

The main entrance and primary pedestrian access to the new building is proposed to be through an entry public courtyard located along 20th Street in close proximity to the existing GKGM Building. As shown on Figure 3-6c, vehicular access for the project is proposed from 19th Court alley on the west side of the project site. Vehicles would turn into the alley from either Arizona Avenue and/or Wilshire Boulevard. The existing 24-foot wide access drive aisle would provide vehicular ingress and egress into the subterranean parking garage. The existing unused curb cuts located along 20th Street would be removed.

The proposed on-site parking garage would consist of five subterranean parking levels and would provide approximately 275 vehicular parking spaces. The upper two subterranean levels, P-1 and P-2, would provide both self-park and valet services for patrons and visitors, as well as a mix of operational and storage spaces for the R&D uses, trash and recycling rooms, bicycle parking and storage, EV charging spaces, employee locker and shower facilities, and maintenance functions. The lower three parking levels, P-3, P-4, and P-5, would provide additional visitor and employee parking spaces.

Commercial deliveries, including medical and office supplies, would also occur from the alley side (19th Court), from a separate 18-foot 10-inch wide access area. In addition, a minimum of one 30-foot by 12-foot loading area would be provided off 19th Court. Any medical waste hauling operations would be accommodated through specialized, licensed operators.

3.4.4 Utilities/Services

Electrical service would be provided by Southern California Edison (SCE) and the transformer would be located in a vault and within electrical storage rooms on subterranean level P-1. Natural gas service would be provided by Southern California Gas Company. Water, sewer, solid waste disposal, and police/fire services would be provided by the City. Trash and recycling collection facilities would be provided within enclosures along 19th Court, as required by the SMMC. Medical-related waste, in the event it is generated, would be stored on-site per regulatory and industry procedures and transported off-site by qualified vendors in accordance with applicable regulations.

3.4.5 Landscaping

There are on-site trees and off-site street trees along the adjacent sidewalks bordering the project site. The off-site public street trees are part of the City's Urban Forest and not native originating (natural to the location). There are nine existing City street trees, including six on 20th Street and three on Arizona Avenue. In coordination with the City's Urban Forestry manual, all of the street trees would be evaluated to either remain or be substituted during project implementation. Pursuant to SMMC Chapter 7.40, Tree Code, no street trees shall be removed without having first obtained a City permit authorizing such work.

The on-site trees are ornamental and would be updated for the proposed project under a new landscaping plan. Significant changes to the existing landscaping are not anticipated. The specifics of the proposed plan, including planting species, quantities and placement on-site, would be proposed and reviewed under the formal City design review process.

3.4.6 Sustainability

The proposed project would, at a minimum, comply with the sustainability requirements included in the State and City Codes. The proposed sustainable design features include the following:

- Energy efficient heating, ventilation, and air conditioning (HVAC) system that meets or exceeds the SMMC requirements
- Installation of PV systems in accordance with the City's Green Building Standards
- Light-emitting diode (LED) lighting
- Low-flow, water efficiency plumbing fixtures (including waterless urinals, two flush toilets, and automated restroom faucets)
- Energy Management System to control lighting and HVAC
- Occupancy Sensors to control lighting and HVAC
- Lighting and HVAC systems capable of demand response
- Electronically Communicated Motors (ECM) for small HVAC units
- Waste recycling
- Use of low volatile organic compounds (VOC) paints and stains, fixtures, and equipment
- Electric vehicle parking in accordance with the City's minimum requirement

Additionally, a Transportation Demand Management (TDM) plan that satisfies the City's TDM Ordinance (Zoning Ordinance Chapter 9.53) is a requirement for project approval. The TDM plan for the proposed project would include trip reduction strategies paid for and implemented by the applicant. A preliminary TDM proposal was submitted to the City during application and would be reviewed for final adoption during project approval. Specific strategies required in the TDM plan would be determined by the City during the project approval process and may include transit pass subsidy, parking cash out, ridesharing, bicycle facilities, priority carpool parking, etc. The Applicant would be required to achieve the Average Vehicle Ridership (AVR) targets as established in the City's TDM Ordinance.

3.5 OPERATIONAL CHARACTERISTICS

3.5.1 Hours of Operation

Typical operating hours for the medical-related uses, including research and clinical functions and following industry common standards, would be between 7:00 a.m. and 6:00 p.m. approximately five days a week. Visitors would be seen by appointment only and accommodated during daytime operating hours. During evening and weekends and non-typical operating hours, the new wellness center building can expect to be open only to employees holding a key card. For the restaurant, typical operating hours would continue to be between 7:00 a.m. and 10:00 p.m. approximately seven days a week.

3.5.2 Employment

The number of employees for the proposed project would vary depending on the tenant(s) and is to be determined, at time of occupancy, based on permissible building code occupancy loads and final interior space planning. As described in the Transportation Impact Study, based on the anticipated vehicle miles traveled (VMT) generated by the proposed project, an estimated 206 employees would be employed by the Project.

3.5.3 Security

The proposed project would implement a state of the art security/alarm system and would include closed circuit surveillance cameras both inside and outside the building. Entry into the building, if during hours not manned by front desk security, would be by key card access only for employees. Additional safety measures would be evaluated and implemented by the tenant user(s).

3.6 CONSTRUCTION ACTIVITIES

3.6.1 Construction Grading and Schedule

Construction of the proposed project is anticipated to be conducted in one phase. The estimated duration for construction is an estimated 23 months beginning in March 2021 and ending in January 2023. Project construction would include approximately 1 month for demolition, 8 to 9 months for excavation and shoring, approximately 13 to 14 months for building construction, and approximately 2 months for finishing.

An estimated 4 to 39 construction workers would be on-site at any one time. All required equipment and material staging would be provided on-site or as approved off-site through valid permits, and all work shall be subject to a Construction Impact Mitigation Plan (see mitigation measure [MM]-TRA-1 in Section 4.3, Construction Effects, of this Draft EIR) to be approved by the City. Construction worker parking would be provided via the use of agreements with neighboring structures, and if required, a shuttle service would be employed to deliver construction workers from parking areas to the project site. Following the construction of the substructure including foundation and underground levels, estimated at approximate month 14, on-site parking for workers would be accommodated. The Construction Impact Mitigation Plan would address street and sidewalk closures, truck hauling routes, construction hours, etc.

3.6.2 Demolition

Implementation of the proposed project would require demolition of the following:

- 1-story rear parking garage (adjacent to 19th Court) of the GKGM Building
- 2-story, 7-unit building
- 2-story, 3-unit building
- surface parking lot, subterranean utilities, and four driveway curb cuts adjacent to 20th Street and one driveway curb cut adjacent to Arizona Avenue
- removal of stone veneer along the Arizona Avenue-facing side of the administrative portion of GKGM Building
- removal of exterior door along the interior driveway side of the administrative portion of GKGM Building
- a portion of the internal walkway adjacent to the former chapel of the GKGM building

Demolition of these structures would generate waste (e.g., concrete, stucco, sheetwall) of which at least 70% would be recycled in accordance with SMMC Chapter 8.108. Demolition. Demolition would occur over approximately 1 month and would require the use of typical construction equipment, such as backhoes to break up and remove existing asphalt, concrete, and building materials; heavy equipment, such as bulldozers, and excavators; and heavy trucks to haul away large amounts of debris.

3.6.3 Excavation/Shoring

Excavation and shoring would occur for 8 to 9 months. The proposed project would involve excavation to a depth of up to 65 feet below existing grade. An estimated 58,000 cubic yards of soil would be excavated with shoring of sidewalls inside the property line. The construction technique for installing the piles for shoring would be by drill and pour. This would occur over approximately a period of 8 to 9 months.

Excavation and shoring would be completed by a grader, tractor/loader/backhoe, and bore/drill rig. Excavation is anticipated to generate approximately 58,000 cubic yards of soil that would be exported via haul truck trips. Trucking and removal would be dictated by the rate of shoring installation. In addition to haul truck trips, additional heavy truck traffic during this period would include cement trucks, material and equipment delivery trucks, and worker vehicles.

The construction haul route would be proposed and formalized in a Haul Route program as part of the City's permitting process. As part of coordination with City staff, residential streets would be avoided to the extent practicable.

3.7 INTENDED USE OF THIS EIR

In compliance with CEQA, this EIR has been prepared to analyze the potential environmental impacts that may result from implementation of the proposed Wellness Center. This EIR also identifies feasible mitigation measures and/or alternatives that would minimize or eliminate the potential significant impacts associated with the proposed project. Lead agencies, such as the City, are charged with the duty to substantially lessen or avoid significant environmental effects where feasible (State CEQA Guidelines Sections 15002[a][3] and 15021[a][2]). Where a lead agency identifies unavoidable adverse environmental effects of a proposed project, State CEQA Guidelines Section 15093 authorizes the agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable adverse environmental effects when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits outweigh the unavoidable adverse environmental effects, these effects may be deemed acceptable by the agency as substantiated in a statement of overriding considerations.

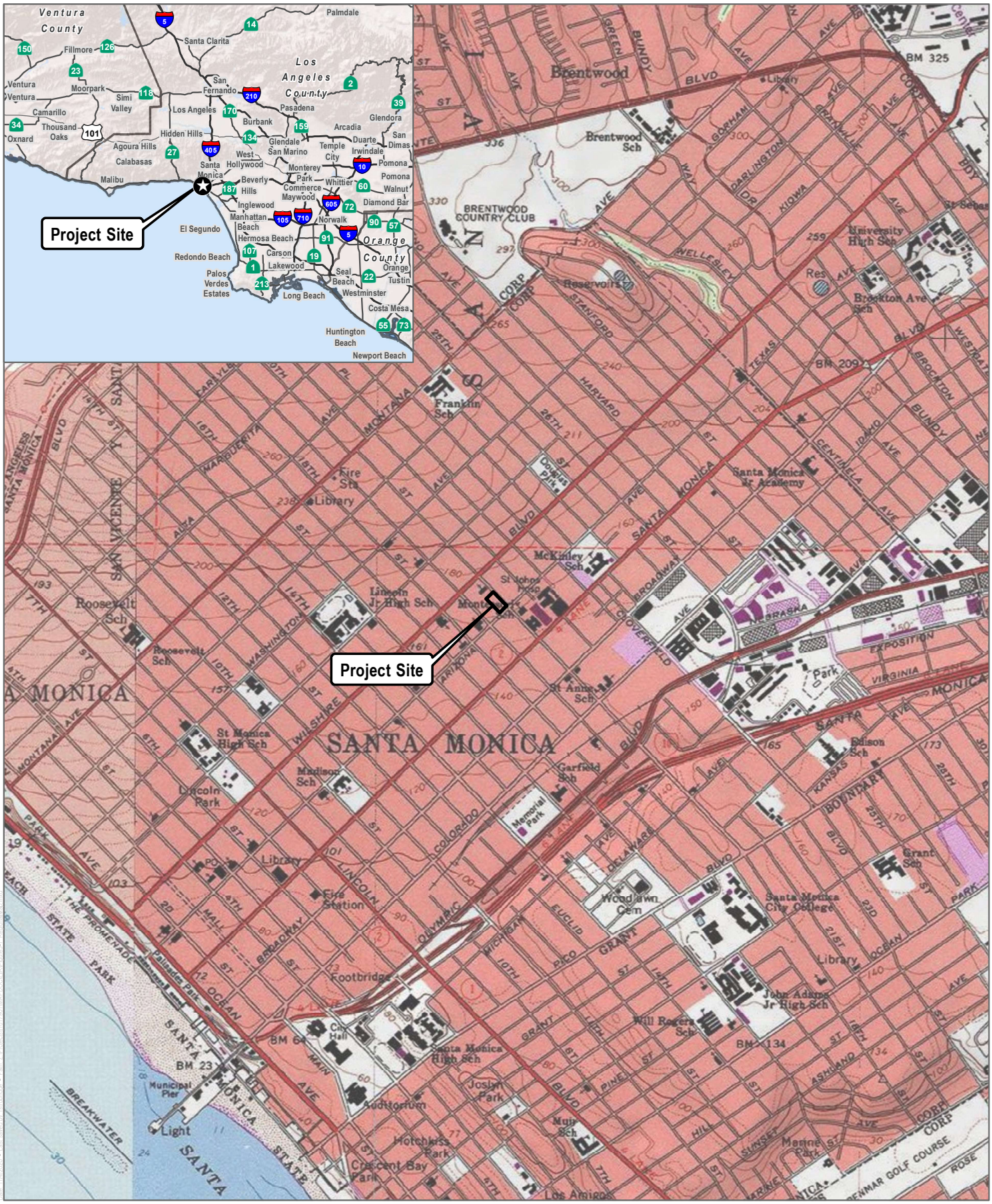
The proposed project would require the discretionary approval of the Santa Monica Planning Commission (or City Council, if appealed). This document evaluates potential environmental impacts associated with implementation of the proposed project and provides information regarding environmental effects of the proposed project. The EIR shall also serve to inform the public, decision-makers, elected officials, and other stakeholders regarding the proposed project, and to solicit input on the nature and scope of potential environmental effects. The EIR provides the City of Santa Monica decision-makers with a technically and legally adequate source of information to be used in the decision-making process in considering the proposed project.

3.8 REQUIRED APPROVALS

Consistent with State CEQA Guidelines Section 15065 (b), the City of Santa Monica is the lead agency for the proposed project. As such, this EIR will be used by the City to both evaluate the environmental impacts created by implementation of the proposed project, and develop conditions of approval, which would address those impacts for which mitigation measures are proposed in the EIR.

The proposed project would require discretionary approval from the City of Santa Monica Planning Commission (or City Council, if appealed). The Planning Commission will consider approval of the project as part of the City's development review process and would certify the project's Final EIR concurrently with project approval. In order to construct and implement the proposed project, the applicant is requesting the following approvals from the City:

- Certification of the Final EIR (Planning Commission)
- Approval of Development Review Permit (Planning Commission)
- Approval of Building Design, Materials, and Colors (Architectural Review Board and/or Landmarks Commission)
- Any other incidental administrative approvals needed for the construction and operation of the proposed project.



SOURCE: USGS 7.5-Minute Series Beverly Hills Quadrangle
Township 2S; Range 15W; Section 5

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0 1,000 2,000 Feet

FIGURE 3-1

Regional Map

20th Street Wellness Center Project EIR

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SOURCE: Bing Maps 2018; Los Angeles County 2017

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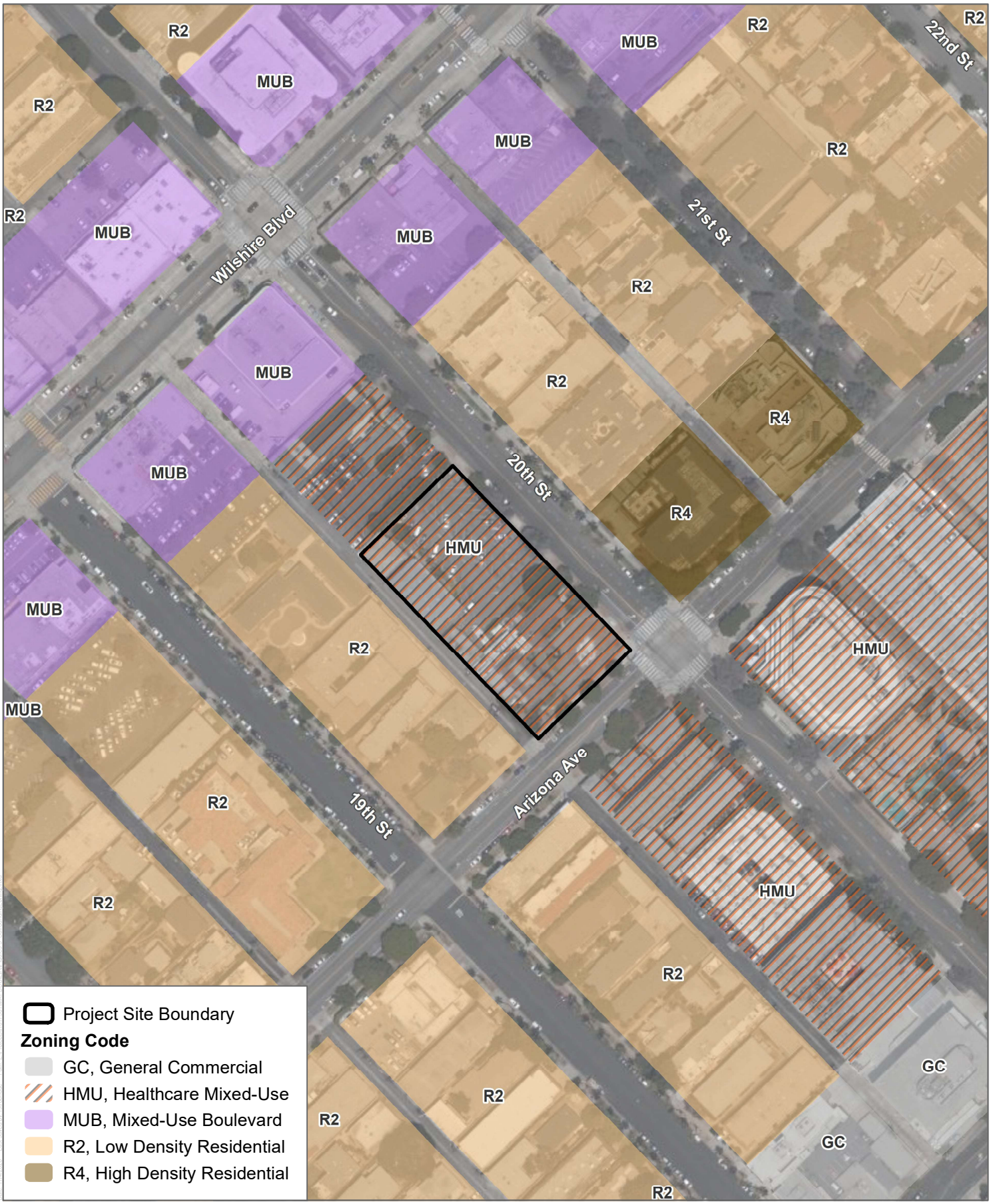
0 150 300 Feet

FIGURE 3-2

Project Site Location

20th Street Wellness Center Project EIR

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SOURCE: Bing Maps 2018, Los Angeles County 2017

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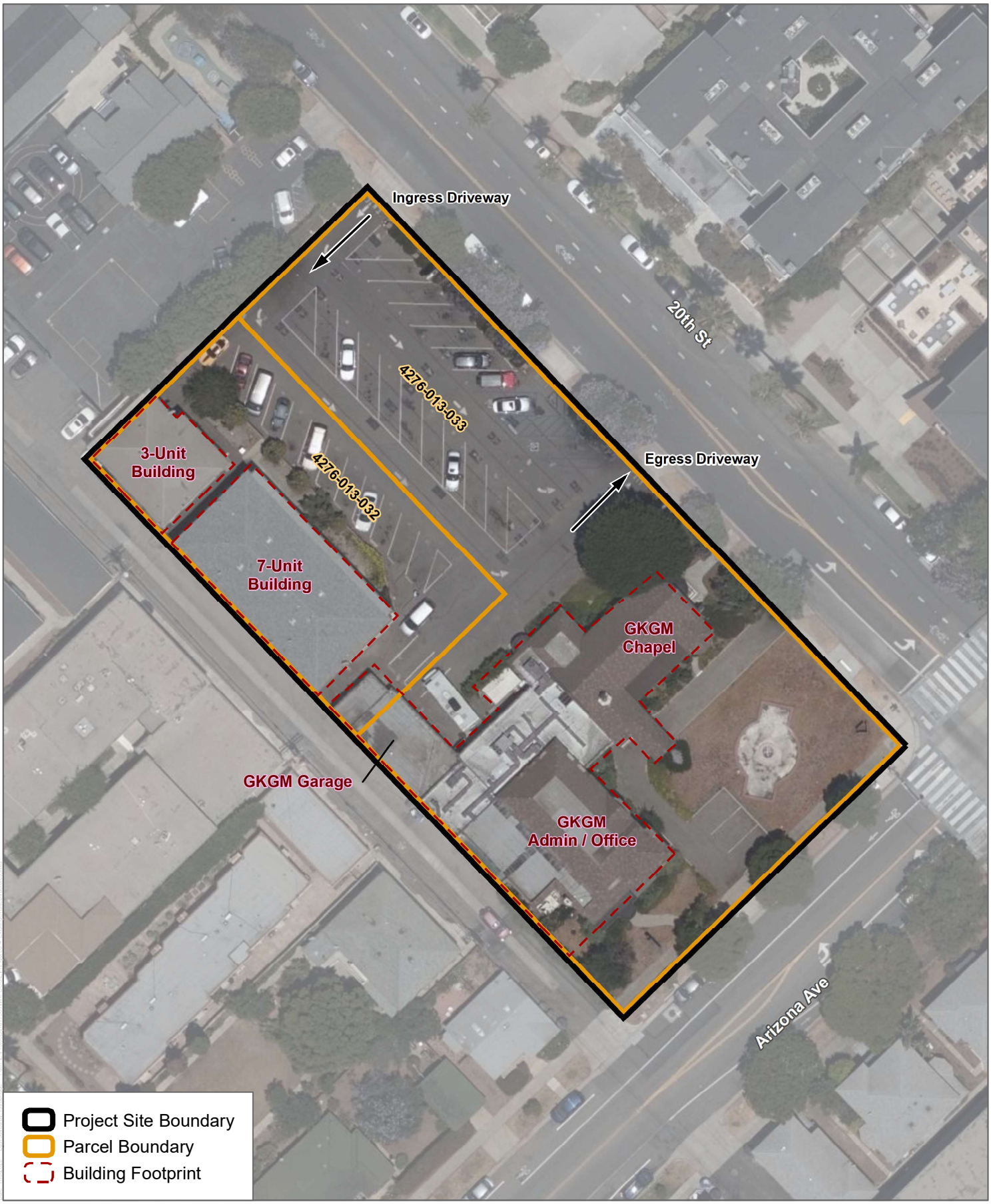
0 75 150 Feet

FIGURE 3-3

Surrounding Zoning

20th Street Wellness Center Project EIR

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SOURCE: Bing Maps 2019, Los Angeles County 2017

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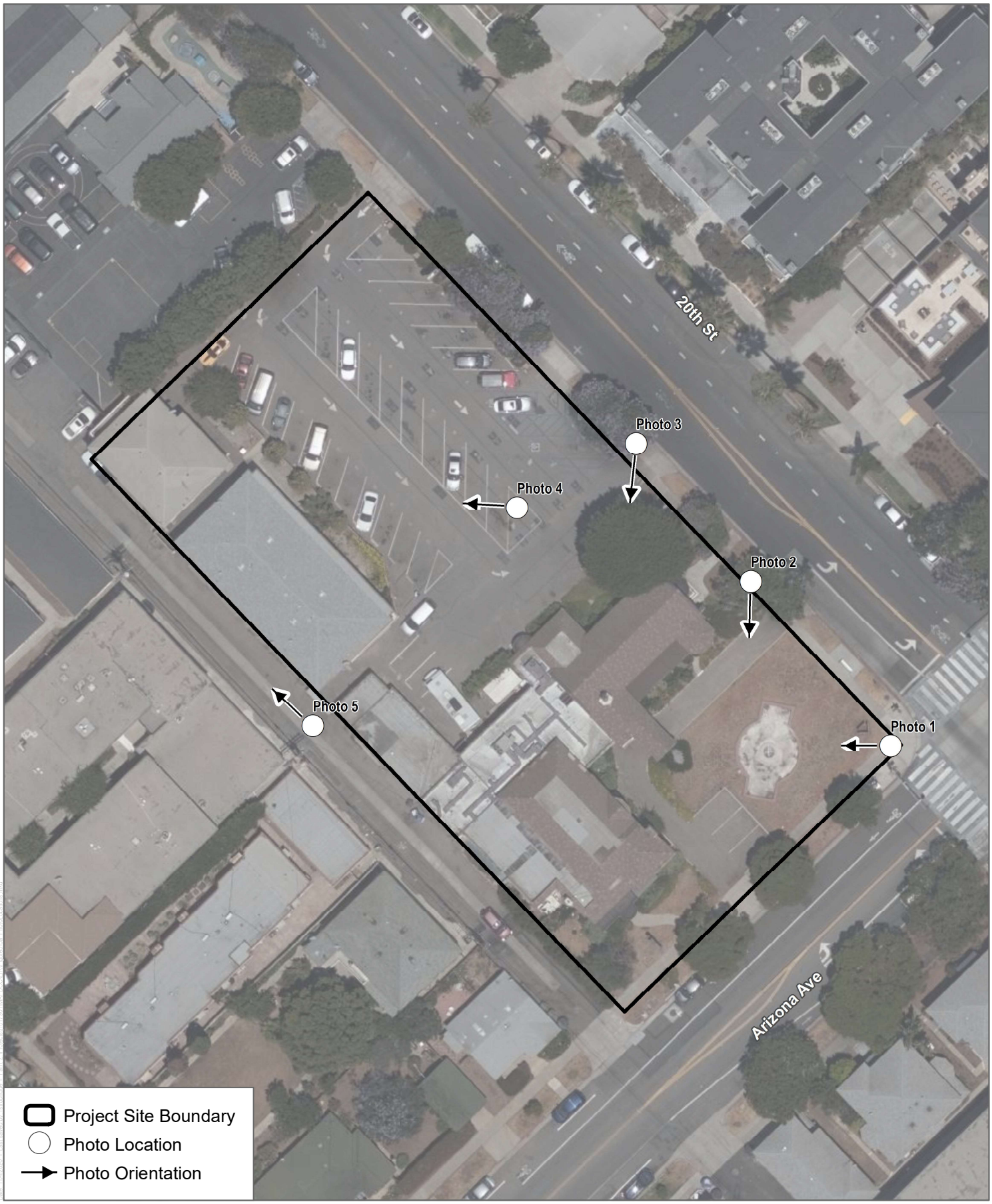
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FIGURE 3-4

Existing On-Site Structures

20th Street Wellness Center Project EIR

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SOURCE: Bing Maps 2018, Los Angeles County 2017

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0 25 50 Feet

FIGURE 3-5A

Site Photograph Locations

20th Street Wellness Center Project EIR

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Photo 1



Photo 2



Photo 3



Photo 5



Photo 4

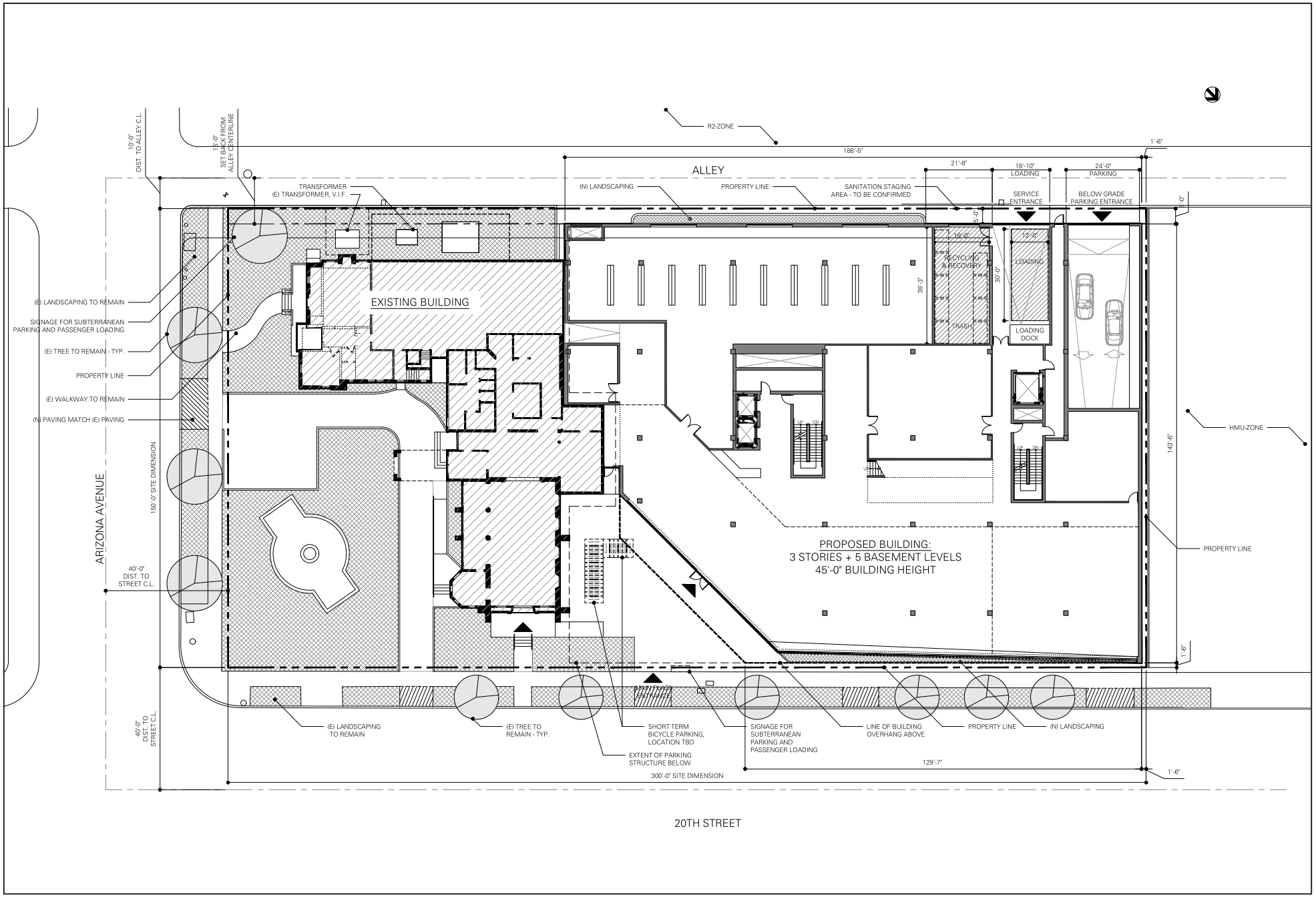
FIGURE 3-5b

Existing Site Photographs

20th Street Wellness Center Project EIR

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SOURCE: NMD Architects, Inc. 2020

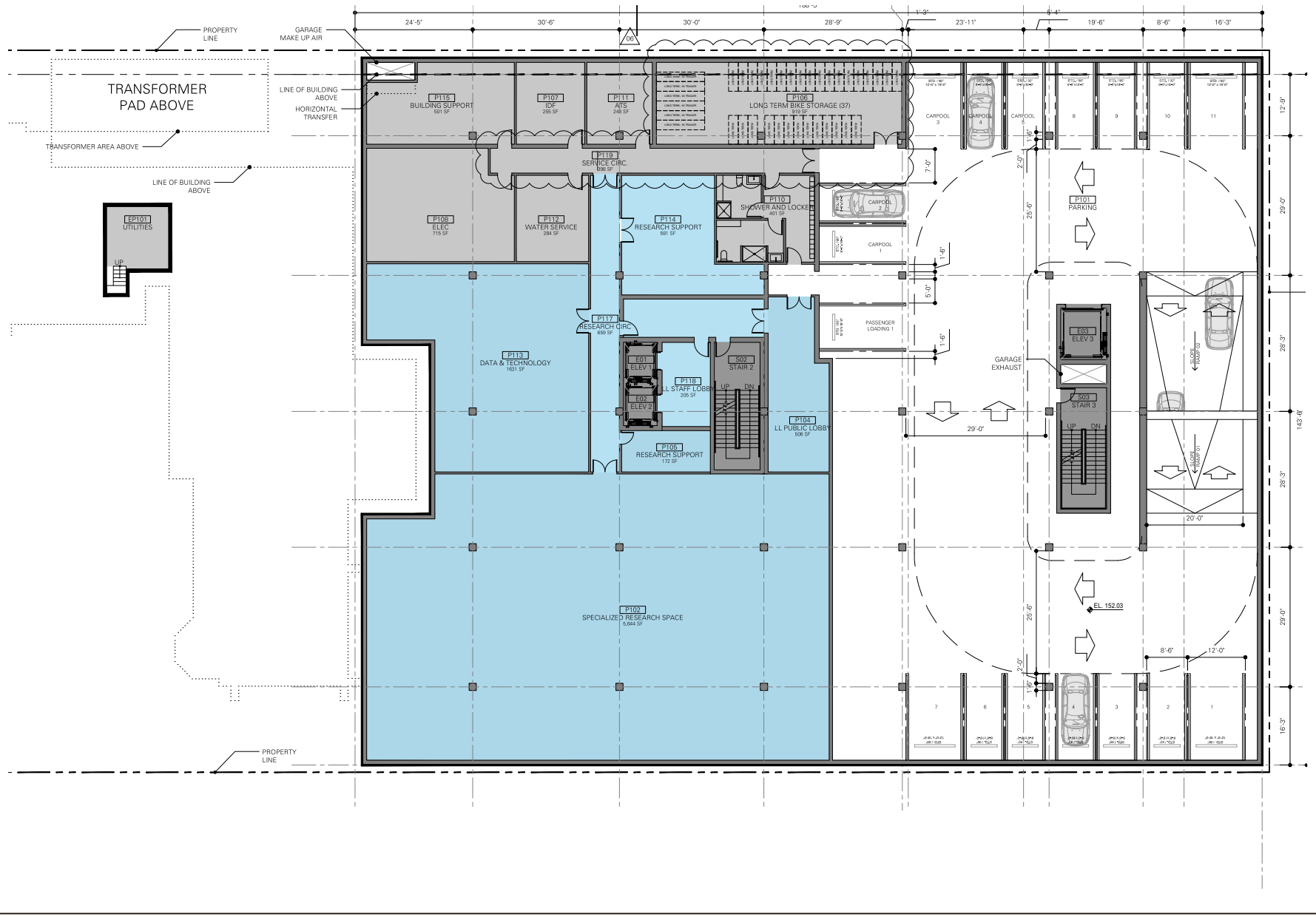
FIGURE 3-6a

Conceptual Site Plan

20th Street Wellness Center Project EIR

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SOURCE: NMD Architects, Inc. 2020

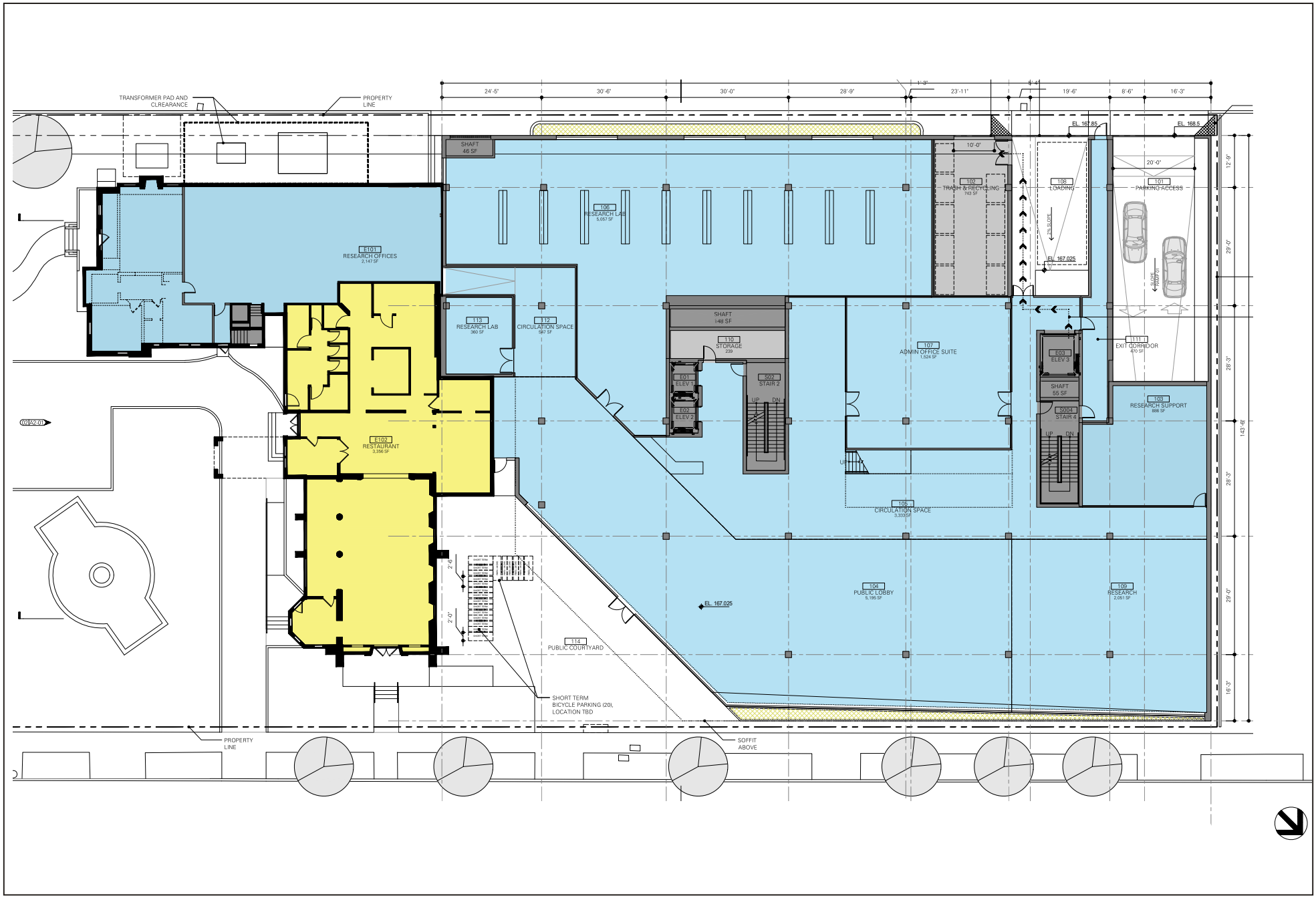
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FIGURE 3-6b

Conceptual Parking Level P-1

20th Street Wellness Center Project EIR

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SOURCE: NMD Architects, Inc. 2020

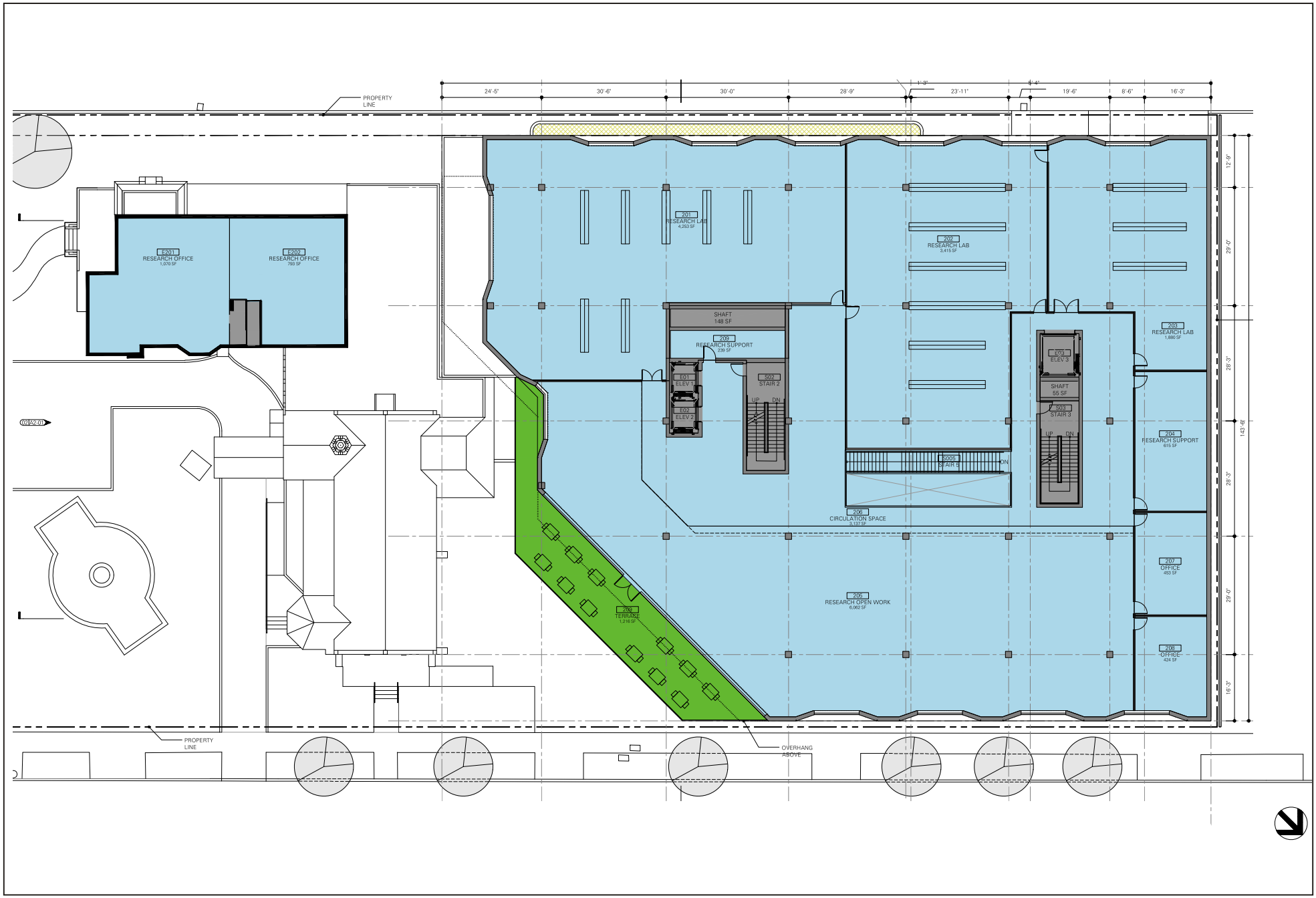
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FIGURE 3-6c

Conceptual Ground Floor Plan

20th Street Wellness Center Project EIR

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SOURCE: NMD Architects, Inc. 2020

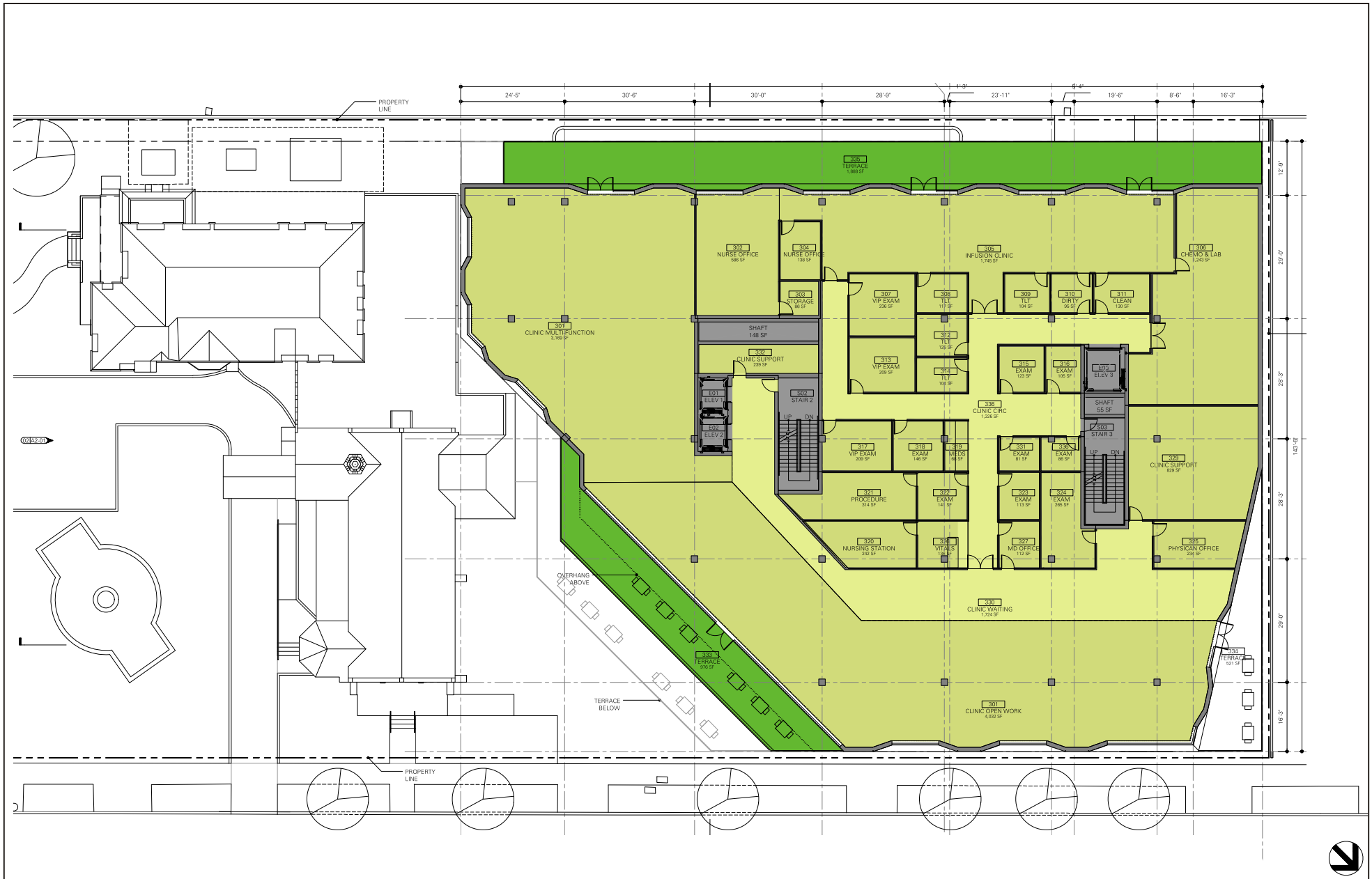
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FIGURE 3-6d

Conceptual Second Floor Plan

20th Street Wellness Center Project EIR

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SOURCE: NMD Architects, Inc. 2020

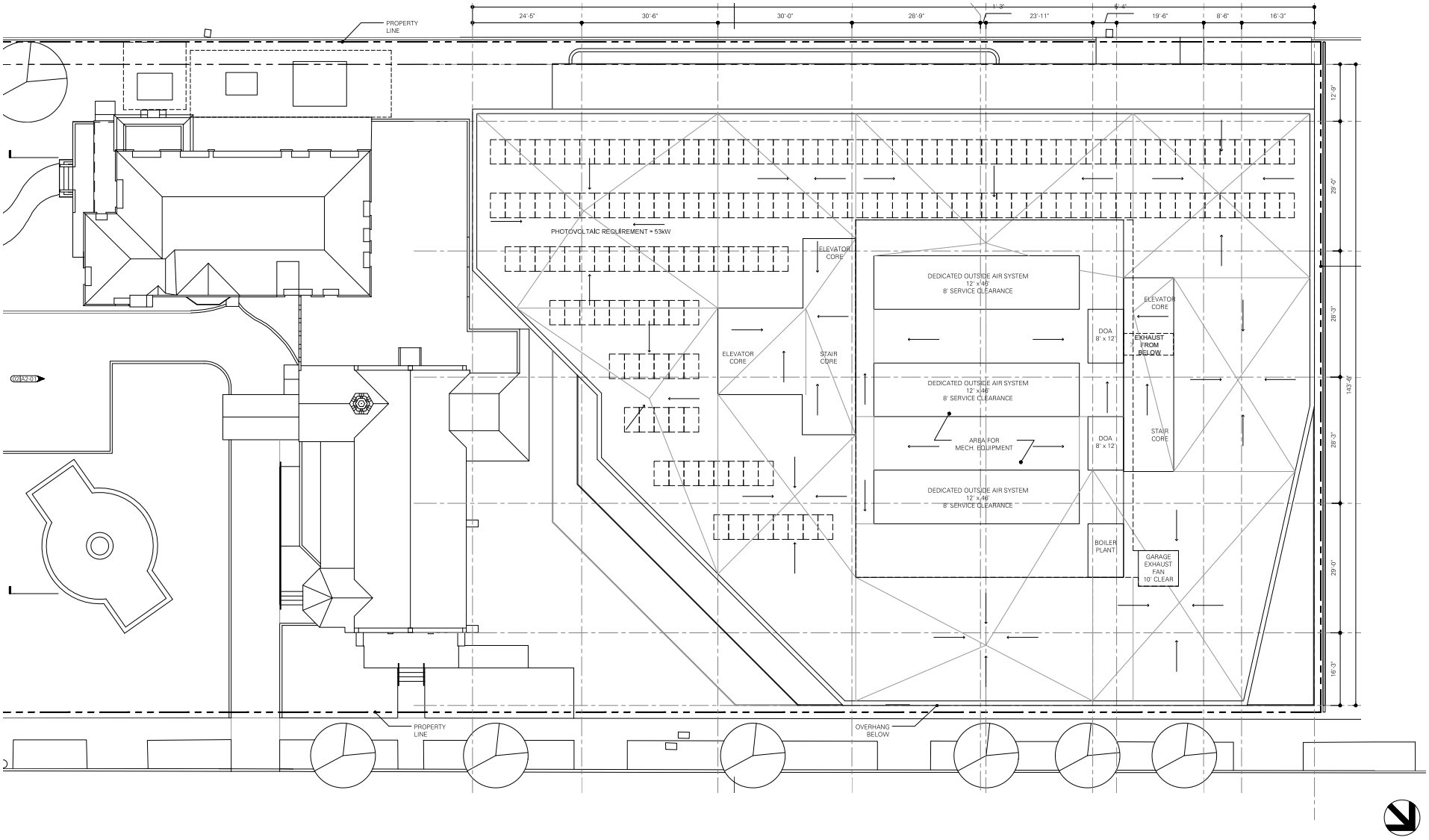
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FIGURE 3-6e

Conceptual Third Floor Plan

20th Street Wellness Center Project EIR

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SOURCE: NMD Architects, Inc. 2020

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FIGURE 3-6f

Conceptual Roof Plan

20th Street Wellness Center Project EIR

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SOURCE: NMD Architects, Inc. 2020

FIGURE 3-7a

Project Design Rendering Looking West

20th Street Wellness Center Project EIR

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SOURCE: NMD Architects, Inc. 2020

FIGURE 3-7b

Project Design Rendering Looking Southwest

20th Street Wellness Center Project EIR

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CHAPTER 4
ENVIRONMENTAL ANALYSIS

The following environmental analyses provide information relative to 14 environmental topics as they pertain to the 1242 20th Street Wellness Center Project (proposed project). This chapter includes a separate section for each of the following environmental topic areas:

- Section 4.1, Aesthetics
- Section 4.2, Air Quality
- Section 4.3, Construction Effects
- Section 4.4, Cultural Resources
- Section 4.5, Geology and Soils
- Section 4.6, Greenhouse Gas Emissions
- Section 4.7, Hazards and Hazardous Materials
- Section 4.8, Land Use and Planning
- Section 4.9, Noise
- Section 4.10, Transportation
- Section 4.11, Tribal Cultural Resources
- Section 4.12, Utilities and Service Systems
- Section 4.13, Utilities and Service Systems – Solid Waste
- Section 4.14, Energy

Issues for which impacts were found not to be significant are agriculture and forestry resources, biological resources, hydrology and water quality, mineral resources, neighborhood effects, population and housing, public services, recreation, and wildfire. These environmental topics are discussed in Section 5.4, Effects Found Not to Be Significant (see Chapter 5, Other CEQA Considerations), of this Environmental Impact Report (EIR), and are not discussed in further detail pursuant to the California Environmental Quality Act (CEQA) Guidelines, Section 15128 (14 CCR 15000 et seq.).

Each section of this chapter describes existing environmental and regulatory conditions, presents the criteria used to determine whether an impact would be significant, discusses the methodology used to determine significance, analyzes the impacts due to construction and operation of the project (individually and cumulatively), identifies feasible mitigation measures (if necessary) for each significant impact, and discusses the significance of impacts after mitigation has been applied. Section 15382 of CEQA Guidelines defines “significant effect on the environment” as a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”

Analysis Format

This EIR assesses how the proposed project would impact the issue areas listed above. Each environmental issue addressed in this EIR is presented in terms of the following subsections:

- **Existing Environmental Conditions.** Describes the existing physical setting on or surrounding the project site that may be subject to change as a result of implementation of the proposed project.
- **Relevant Plans, Policies, and Regulations.** Describes relevant federal, state, and local plans, policies, and regulations pertaining to the particular issue area.
- **Thresholds of Significance.** Provides criteria for determining the significance of project impacts for each environmental issue.
- **Methodology.** Describes the methodology used for the analysis, including any modeling, surveys, and documentation reviewed to conduct the analysis of existing conditions and potential impacts.
- **Impacts Analysis.** Provides a discussion of the characteristics of the proposed project that may have an impact on the environment, analyzes the nature and extent to which the proposed project is expected to change the existing environment, and indicates whether the project's impacts meet or exceed the levels of significance thresholds.
- **Mitigation Measures.** Identifies any mitigation measures needed to reduce significant adverse impacts to the extent feasible.
- **Level of Significance After Mitigation.** Identifies significant adverse environmental impacts that cannot be feasibly mitigated or avoided (if any) and significant adverse environmental impacts that can be feasibly mitigated or avoided.
- **Cumulative Impacts.** Provides a discussion of the past, present, and reasonably foreseeable projects relevant to the analysis and documents cumulatively considerable environmental impacts that cannot be feasibly mitigated or avoided (if any); cumulatively considerable environmental impacts that can be feasibly mitigated or avoided; and environmental impacts that are not cumulatively considerable. Table 4-1 below provides the list of cumulative projects utilized in the analysis. Mitigation measures to reduce cumulative impacts are included where necessary.
- **References**. Lists the sources cited during preparation of the EIR.

Cumulative Projects Analysis

Section 15130(b)(1)(A) of the State CEQA Guidelines (14 CCR 15000 et seq.) allows for the preparation of a list of past, present, and reasonably anticipated future projects as a viable method of determining cumulative impacts. Table 4-1 presents the cumulative projects accounted for in this EIR.

Table 4-1
Cumulative Projects List

Project	Location	Use	Status[a]
Residential	1012 2nd Street	Residential	Under construction

Table 4-1
Cumulative Projects List

Project	Location	Use	Status[a]
Residential	954 5th Street	Residential	Under construction
5-unit condominium	1211 9th Street	Residential	Under construction
Senior Housing (affordable)	1514 7th Street	Affordable housing	Approved
Residential	1827 9th Street	Residential	Approved
5-unit condominium	1518 11th Street	Residential	Under construction
5-unit condominium	1533 11th Street	Residential	Approved
Condominium	1433 14th Street	Residential	Under construction
6-unit condominium	1434 14th Street	Residential	Approved
Residential (5 condominiums/ 1 low income)	1807 17th Street	Residential	Approved
6-unit condominium	1949 17th Street	Residential	Approved
3-unit condominium	1136 18th Street	Residential	Under construction
Residential	1433 18th Street	Residential	Under construction
Mixed Artist Studio and Office	1347 19th Street	Residential/Creative office	Under construction
Residential	1959 20th Street	Residential	Under construction
8-unit condominium	2323 28th Street	Residential	Approved
Village Trailer Park-Mixed-Use	2930 Colorado Avenue	Affordable housing/Retail/ Creative office	Under construction
5-unit condominium	1750 10th Street	Residential	Under construction
Apartments	1541 Franklin Street	Residential	Approved
2-story commercial	3204 Lincoln Boulevard	Residential	Approved
Residential	2438 Ocean Park Boulevard	Residential	Under construction
Creative Office Addition	2041 Colorado Avenue	Creative office	Pending
423 Ocean Avenue	423 Ocean Avenue	Adaptive reuse of residential	Approved
Civic Center Specific Plan – Early Childhood and Education Center	1749 Ocean Avenue	Government Office	Under construction
4th Street/Arizona Avenue – Plaza at Santa Monica Project	1301 4th Street	Office/Retail/Hotel/Museum Affordable Housing	Pending
Mixed-Use	1423 5th Street	Residential/Affordable housing/Retail	Approved

Table 4-1
Cumulative Projects List

Project	Location	Use	Status[a]
Mixed-Use Affordable Housing	1437 5th Street	Affordable housing	Approved
1235 5th Street	1235 5th Street	Residential/Affordable housing/Retail	Pending
15-unit condominium (Turtle Villas)	1211 12th Street	Residential	Approved
21-unit condominium/ 2020 Virginia	2002 21st Street	Residential/Affordable housing	Approved
Mixed-use (63 hotel rooms)	603 Arizona Ave	Hotel/Restaurant	Pending
500 Broadway	500 Broadway	Residential/Affordable Housing/ Retail	Under Construction
Mixed-use	501 Broadway	Residential/Retail	Pending
Mixed-Use	2225 Broadway	Residential/Retail	Approved
Wyndham Hotel (211 rooms)	120 Colorado Avenue	Hotel/Residential/Affordable housing/Meeting space/ Retail/ Restaurants	Pending
Mixed-use	525 Colorado Avenue	Residential/Affordable housing/ Retail	Pending
Mixed-Use	1431 Colorado Avenue	Residential/Affordable housing/ Retail	Pending
Mixed-Use (Fritto misto)	609 Colorado Avenue	Residential/Affordable housing/Retail	Pending
Mixed Use	1450 Cloverfield	Residential/retail	Approved
6-unit condominium	1134 Euclid Street	Residential	Pending
Mixed-Use	1318 Lincoln Boulevard	Residential/Affordable Housing/Retail	Pending
Medical Office	1419 19th Street	Medical office	Pending
1550 Euclid Mixed-Use Retail/Office	1550 Euclid Street	Office/Restaurant	Approved
Mixed-use DA (Denny's site)	1560 Lincoln Boulevard	Residential/Affordable housing/Retail/Restaurant	Under Construction
Mixed-Use DA (Norm's site)	1601 Lincoln Boulevard	Residential/Affordable housing/Retail/Restaurant	Under Construction
Mixed-Use (Wertz Bro site)	1613 Lincoln Boulevard	Residential/Affordable housing/Retail/Restaurant	Under Construction
Mixed-Use (Aarons brothers)	1641 Lincoln Boulevard	Residential/Affordable housing/ Retail/Restaurant	Under Construction
Mixed-Use (Joann's Fabric site)	1637 Lincoln Boulevard	Residential/Affordable housing/Retail/Restaurant	Under Construction
Mixed-Use	1650 Lincoln Boulevard	Residential/Affordable housing/Retail/Restaurant	Approved
Mixed-Use	1660 Lincoln Boulevard	Residential/Affordable housing/Retail/Restaurant	Approved

Table 4-1
Cumulative Projects List

Project	Location	Use	Status[a]
2919 Lincoln Boulevard/802 Ashland Avenue	2919 Lincoln Boulevard	Residential	Under construction
Miramar Hotel Revitalization Plan DA	1133 Ocean	Hotel/Residential	Approved
Mixed-use	234 Pico Boulevard	Residential/Affordable housing/Retail	Approved
Mixed-Use	1122 Pico Boulevard	Residential/Affordable housing	Approved
Providence Saint John's Phase II Master Plan	North and South of Santa Monica Boulevard between 20th and 23rd	Hospital, visitor-housing, conference space, medical office	Pending
Hotel/Mixed-Use (Ocean Avenue Project)	101 Santa Monica Boulevard	Residential/Affordable housing/ Retail/Hotel/Museum	Pending
Mixed-Use	1802 Santa Monica Boulevard	Auto dealership/Retail	Pending
Mixed-Use	3008 Santa Monica Boulevard	Residential/Affordable housing/ Retail	Under construction
Mixed-Use	3032 Wilshire Boulevard	Residential/Affordable housing/ Retail	Pending
Santa Monica Post Office adaptive reuse	1248 5th Street	Creative office	Approved
Mixed-Use	1665 Appian Way	Residential	Pending
Mixed-Use	1323 5th Street	Residential/Retail	Pending
Mixed-Use	1342 5th Street	Residential/Retail	Pending
Mixed-Use	1437 7th Street	Residential/Retail	Pending
Affordable Housing	1543 7th Street	Affordable Housing	Pending
Mixed-Use	2903 Lincoln Boulevard	Residential/Affordable housing/ Retail	Pending
Mixed-Use	3280 Lincoln Boulevard	Retail	Pending
Mixed-Use	3030 Nebraska Avenue	Residential/Creative office	Approved
1828 Ocean Avenue	1828 Ocean Avenue	Residential	Approved
1921 Ocean Front Walk	1921 Ocean Front Walk	Residential/Retail	Approved
Fire Station #1	1337 7th Street	Fire Station	Final

Source: City of Santa Monica 2020
Notes:
[a] approved = project has been approved by the City but has not yet began construction; pending = project is pending approvals by the City; under construction = project has obtained building permits and is under construction; final = project is complete and has been given final inspection.

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4.1 AESTHETICS

Based on Section 21099(d)(1) of the Public Resources Code (PRC) enacted under Senate Bill 743 (SB 743), a project's aesthetic impacts shall not be considered a significant unavoidable impact on the environment if:

1. The project is a residential, mixed-use residential or employment center project.
2. The project is located on an infill site within a transit priority area.

The proposed project meets the criteria set forth in Section 21099(d)(1) because it: (1) is a high-employment project on an infill site (i.e., within an urban area where the project boundaries either abut existing urban development or are separated by urban development only by an improved public right-of-way); and (2) the project site is within a transit priority area, which is defined as 0.5-mile of a major transit stop. Major transit stop is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (California Public Resource Code Section 21064.3). Four Santa Monica Big Blue Bus routes and two Los Angeles County Metro route, with bus stops along Santa Monica Boulevard and 20th Street, are located within one and two blocks of the project site. Additionally, the project site is located approximately 0.5-mile northeast of the 17th Street/Santa Monica College Metro E (formerly Expo) Station (i.e., light rail).

Therefore, because the proposed project meets the applicable criteria in Section 21099(d)(1), aesthetic impacts of the proposed project are considered less than significant and analysis of such impacts is not required by CEQA. An analysis of aesthetics is included herein in response to community interest in the appearance of the proposed project and to provide decision-makers and the general public a comprehensive review of the aesthetic changes that could occur with implementation of the project.

For informational purposes, this section analyzes the aesthetics effects of the proposed project, including the effects of project development on scenic vistas and resources, the proposed project's consistency with applicable standards addressing scenic quality, and the addition of light and glare sources. The analysis also discusses shading effects of the project on sensitive receptors. This section describes the existing visual setting of the project site and vicinity, identifies associated regulatory requirements, and evaluates the proposed project's effects on aesthetics for informational purposes.

Aesthetic and scenic view impacts related to nearby historical resources are also addressed further in Section 4.4 Cultural Resources – Historical Resources. The Historical Resources section discussion addresses impacts to the setting in which nearby historical resources subject to indirect impacts are located.

4.1.1 Existing Environmental Conditions

Photographs of existing structures and features on the project site were taken by the City and Dudek during a May 2020 site visit; see Figure 3-5a, Site Photograph Locations, and Figure 3-5b, Site Photographs.

4.1.1.1 Scenic Vistas

The City of Santa Monica is largely urbanized and features a variety of unique natural and man-made scenic resources. For example, the Santa Monica Mountains, Santa Monica Bay, and natural bluffs that overlook the ocean are identified as major natural resources unique to the City. Further, Palisades Park is acknowledged by the City as offering visitors scenic views to Santa Monica Bay (City of Santa Monica 2017). Although the City's General Plan does not identify scenic vistas, the City's Local Coastal Program (LCP) Land Use Plan describes public vistas and scenic corridors located in the City. Specifically, scenic vistas have been identified from Colorado Esplanade, Main Street Bridge, Tongva Park Overlooks, Wilshire & 3rd Street Promenade, and Ocean Park Boulevard & 4th Street (City of Santa Monica 2018).

The project site is not located near any designated scenic resources. Due to the urbanized character of the project area and relatively flat topography, there are no scenic vistas available on or near the project site.

4.1.1.2 Scenic Highways

There are no designated state scenic highways in the City of Santa Monica. The nearest eligible state scenic highway, State Route 1 (SR-1; also referred to as Pacific Coast Highway) is located approximately 1.2 miles west of the project site, as measured at the highway crossing of the I-10 freeway. In Los Angeles County, SR-1 is an eligible state scenic highway from SR-187 near Santa Monica to SR-101 near El Rio (Caltrans 2018).

4.1.1.3 Visual Character

The City of Santa Monica offers a variety of unique natural and man-made visual resources that are visible to those walking, cycling, or driving through the City. These resources include well-known places such as the beachfront, historic areas, tree-lined neighborhoods, and vital commercial districts, such as the Third Street Promenade. The major natural resources unique to the City are the Santa Monica Bay, including the beachfront and coastal area, as well as the natural Palisades bluffs which overlook the coastline. The City is rich in architectural and cultural heritage, and contains a variety of building types and designs, representing a range of time periods and architectural styles and urban character.

The City is urbanized and built on a consistent street grid, creating generally 600-by-320-foot blocks. The consistent street grid allows many streets to have clear view corridors that allow distant views of tall buildings, the Pacific Ocean, and other landmarks. The Santa Monica Mountains, located to the north and northeast, are visible from many locations when looking north along existing roadways. Many of the streets

in the City are tree-lined. The scale of the City can be generally described as compact development, with low-moderate building heights except for the Downtown area which has medium-high rise buildings. The City is characterized by steep elevation changes along the Palisades Bluff and relatively flat areas throughout the remainder. The project site is located in a flat portion of the City.

Project Site

The project site is located at the northwest corner of Arizona Avenue and 20th Street, and addressed as 1925 Arizona Avenue, 1234 20th Street, and 1242 20th Street in the Healthcare Mixed Use District of the City of Santa Monica (Figure 3-2, Project Site Location). The Healthcare Mixed-Use District includes the City's two hospitals (Providence Saint John's Health Center and UCLA Medical Center, Santa Monica), as well as a variety of uses including residential, medical office, healthcare, and commercial uses.

The project site is relatively flat (with gentle slopes towards the south-southeast) and is entirely developed. Existing on-site development consists of the Gates, Kingsley, & Gates Funeral Home Building (referred to as the GKGM Building), which is a Tudor Revival two-story structure that formerly housed a funeral home and an attached one story chapel currently used as a restaurant (see Photo1 in Figure 3-5b, Site Photographs). The GKGM Building also includes an attached 4-car garage in the rear, along the 19th Court alley side of the site. In addition, on-site development includes two 2-story former residential buildings that are currently partially occupied and being leased as office and an asphalt-paved surface parking lot. The two-story GKGM Building is located on the southern portion of the project site and the remaining uses are located on the northern portion of the project site.

Both the southern and northern portions of the project site include landscaping. Existing landscaping on the southern portion of the site consists of a grassy lawn encircled by a driveway, planted shrubs, planters, and a few trees. Additionally, the grassy lawn contains a large fountain that is considered a character-defining feature of the historic GKGM property. This fountain was converted into a planter as part of the 2019-2020 tenant improvement work associated with the new restaurant (see Photo 1 in Figure 3-5b, Site Photographs). On the northern portion of the site, there are ornamental trees near the former residential structures. The on-site trees are ornamental in nature. Additionally, off-site street trees are located along 20th Street and Arizona Avenue. The off-site trees are public street trees and are part of the City's Urban Forest. These trees are not native originating (natural to the location). There are nine existing City street trees, including six on 20th Street and three on Arizona Avenue.

The existing GKGM Building located on the southern portion of the project site, near the northwestern corner of the 20th Street/Arizona Avenue intersection, is an overall wood-frame building with an "L" shape plan. The building is comprised of two parts: a two-story administration section that is connected to a small one-story chapel originally called the Little Chapel of the Dawn. The chapel is currently occupied by a restaurant (Tartine), and the administration section is currently vacant. The front-facing gabled administration portion of the building is set within the recessed western wing of the "L" shape structure.

Decorative half-timbering and multi-pane windows enhance the stuccoed exterior walls of the building. In the void created by the building's "L" shape plan, a landscaped lawn accented by a fountain (currently converted into a planter, as described above) is circled by a paved driveway that is spanned by a decorative porte-cochere stemming from the south elevation of the attached chapel to the east. The driveway and grassy lawn is currently occupied with outdoor seating for the existing restaurant. The GKGM building is capped with a variety of roof forms, including hip, flat with parapets, shed, gable, and flat roof wall dormers. The roof is currently covered by slate-like tile shingles (see Photo 1 in Figure 3-5b, Site Photographs). A small, three-space surface parking area (currently utilized for outdoor dining) is located off the driveway near Arizona Avenue. Additionally, a one-story, four-car garage is connected to the GKGM Building. The garage structure is constructed of concrete block painted in a white/light yellow color and features brown wooden doors and a flat roof. Downward directed flood lights are installed along the west and north elevation of the garage structure. Access to the garage structure is provided off the alley located immediately west of the project site.

Existing development on the northern portion of the project site consists of two (2) two-story former residential structures currently partially occupied with office uses. The existing two-story structures are long, rectangular buildings (see Photos 4 and 5 in Figure 3-5b, Site Photographs). The buildings feature painted blue-green stucco exteriors and greyish-shingled roofs. Low, black iron railing is installed along the east elevation of the second floor of the former residential structures and a block wall is constructed along the east elevation of the first floor (the wall separates building entrances from the adjacent approximately 30-space surface parking lot). Lighting fixtures are installed along the south and east elevation of the former residential buildings.

Surrounding Area

Existing uses and development in the surrounding area are depicted on Figure 4.1-1, Surrounding Land Uses. Labels applied to Figure 4.1-1 convey the scale and use of surrounding development. The approximately 1.03-acre project site is bounded generally by the Lighthouse Church and School to the north; 20th Street, the four-story Ambrose Hotel and multi-family residential developments to the east; Arizona Avenue, two to three story multi-family residential development and medical/healthcare related buildings to the south; and single- and multi-family residences across 19th Court alley to the west.

The project site is located in the City's Healthcare Mixed Use (HMU) District, which includes the City's two major hospitals (Providence Saint John's Health Center and UCLA Hospital), medical office and healthcare related uses, and commercial uses intermixed with multi-family residential and a few single- family uses. As a result, the HMU district possesses an eclectic assemblage of structures. Although the existing structures near the project site vary in architectural styles, height, and building materials, the buildings generally do not exceed six stories and have rectangular, multi-level, stucco exteriors as common features. The existing nearby medical office and healthcare facilities vary from three to eight stories, and generally consist of concrete, brick, and glass exteriors and rectangular forms. Sidewalks, approximately 4.5 feet

wide, are located on both sides of 20th Street and Arizona Avenue, and are buffered from the street with landscaped areas and street trees, including Jacaranda trees.

The following discussion describes the existing uses and visual setting located north, east, south, and west of the project site.

North

Immediately adjacent to the project site to the north is the Lighthouse Church and School which includes two American Colonial buildings with a white painted wood exterior, pitched roof with several planes, and a low, white post and rail fence installed along the building's frontage of 20th Street. Further north of this church/school is a boxy two-story commercial structure currently occupied by a Walgreens store/pharmacy. A large commercial office building, currently occupied on the ground floor by Union Bank is located approximately 425 feet northeast of the project site at the intersection of 20th Street and Wilshire Boulevard (see Figure 4.1-1, Surrounding Land Uses). The building is approximately seven stories high and rectangular in shape, with the exception of rounded edges at the corners, and features a primarily glass exterior.

East

Existing uses east of the project site and 20th Street include a four-story hotel and several two- to four-story multi-family residential buildings. The four-story Ambrose Hotel is located east of the project site, on the northeast corner of Arizona Avenue and 20th Street. The hotel features off-white tile elements on the ground level and off-white to brown/tan stucco façades with brown, wood paneled accents around the windows and railing on the upper floors. The hotel property is landscaped with a variety of palm, bottlebrush, and other trees along the Arizona Avenue and 20th Street frontages and street trees are located along narrow parkways adjacent to these roads. A three-story, H-frame multi-family residential building featuring a greyish wood slat exterior and angular rooflines is located immediately north of the Ambrose Hotel and project site. Thin, rectangular chimneys extrude from the top floors of this residential building. A small two-story residential structure is located north of the multi-family residential building and is bordered by three- and four-story apartment buildings with flat, off-white stucco exteriors to the north. A single-story, rectangular, and brick commercial building is located at the southeast corner of the 20th Street/Wilshire Boulevard intersection and houses a restaurant, florist, and neighborhood pharmacy. Wide arched openings are features on the north elevation of the building and the restaurant has installed dark blue and metallic awnings over windows facing 20th Street and Wilshire Boulevard.

South

Existing development located south of the project site along 20th Street generally consists of two- to three-story residential buildings and medical/healthcare related buildings. Directly south across the project site at the southwest corner of 20th Street/Arizona Avenue) is an existing two-story residential building located southeast of the project site features a peach-colored stucco exterior, white doors and building trim, and light

blue, metallic patio fencing. Further south along the west side of 20th Street are multifamily residential buildings that are rectangular in plan and most feature off-white stucco exteriors, pitched to flat rooflines, and small rectangular windows. Street trees are located along Arizona Avenue and partially obscure the project site from views of residents in these buildings. Healthcare and medical buildings, including convalescent homes and rehabilitation centers, are further south of the residential uses on the west side of 20th Street.

Medical office buildings as well as the Providence Saint John's Health Center (PSJHC) campus are located southeast of the project site, across Arizona Avenue. The healthcare campus is expansive and extends from 20th Street to 23rd Street to the east and from Arizona Avenue to Santa Monica Boulevard to the south, and includes other medical office buildings and parking structures not associated with the PSJHC. The campus consists of multi-story medical buildings, a four-story parking structure, several surface level parking lots, and limited commercial uses along 20th Street. Located approximately 120 feet from the project site at the southeastern corner of Arizona Avenue and 20th Street is a medical office building. The five-story, geometric structure incorporates glass and concrete building materials and features strips of windows and paneled concrete sections along the west, south, and north elevations. South of the five-story medical office building, is the PSJHC Child and Family Development Center as well as a twelve-story medical building (2001 Santa Monica Boulevard) and a seven-story medical building (2021 Santa Monica Boulevard). A four-story, primarily concrete and rectangular parking structure is located immediately east of these buildings. The parking structure is approximately 500 feet long and nearly stretches from Arizona Avenue to Santa Monica Boulevard.

West

A narrow paved alley (19th Court) parallels the project site on the west and separates the project site from single- and multi-family residential development. These structures are generally rectangular in plan and feature wood or stucco exteriors painted in off-white, beige, and brown colors. Single-story, single-family residences tend to be located along Arizona Avenue and uses to the north generally consist of two-story apartment buildings (see Figure 4.1-1). Tall palm trees, as well as other mature and small trees, are located along 19th Street. Residential properties are moderately landscaped with hedges, shrubs, and occasionally, tall Norfolk Island Pines (*Araucaria heterophylla*), pear, and Italian cypress (*Cupressus sempervirens).*

4.1.1.4 Light and Glare

The project site is located in an urbanized area and features a mix of residential, commercial, and healthcare uses, parking garages and structures and surface parking lots. Interior lighting emanating from existing structures, security lighting, hooded lighting or ornamental lighting fixtures are common sources of nighttime lighting in the project area. Pole-mounted overhead streetlights are installed along 20th Street, Arizona Avenue, and other local roads traversing the area and contribute lighting to the local nighttime environment. Other sources of lighting in the area include light from traffic signals, pedestrian safety and

security lighting installed at or near building entrances, signage, vehicle headlights, parking lot lights and lighting from parking garages.

In addition to the lighting sources described above, building materials are a potential source of glare in the project area during daytime hours. Specifically, glass windows and exposed metal features in local area healthcare and commercial office buildings are sources of potential daytime glare in the project area.

Some land uses are considered "light-sensitive receptors," including residences, hotels, and convalescent homes, since these uses are typically occupied by persons who have expectations for privacy during evening hours and are subject to disturbance by bright sources of light. Light sensitive uses near the project site include the residential uses located immediately west, south, and east, and convalescent homes/rehabilitation centers to the south along 20th Street.

4.1.1.5 Shade/Shadow Conditions

The project site is located in an urban area surrounded by mid-rise and high rise medical office, low-rise commercial, and one- to four-story residential buildings that creates a varying pattern of shadows that rotate in a sweeping arc toward the west, north, and east, according to the movement of the sun.

On-site structures are primarily one to two stories in height and do not generally cast long shadows. In addition, existing structures are set back from the eastern and southern boundaries of the project site and are buffered from hotel and residential uses to the east and residential development to the south by 40- to 50-foot wide roadways. Further, street trees located along 20th Street and Arizona Avenue may intercept shadows generated by existing structures from extending to hotel and residential uses located to the east and south. However, due to the height of the existing two-story structure on the southern portion of the project site and the proximity of residential development to the west across the alley, the existing structure may cast shadows onto one- and two-story residential development to the west.

Facilities and operations considered sensitive to the effects of shading include solar collectors; nurseries; residential uses; primarily outdoor-oriented retail uses (e.g., certain restaurants); or routinely useable outdoor spaces associated with recreational, institutional (e.g., schools), or residential land uses. These uses are considered sensitive because sunlight is important to function, physical comfort, or commerce. Shadow sensitive uses near the project site include the residential uses located immediately west, south, and east. In addition, the Lighthouse Church School with its outdoor playground is located immediately north of the project site and is considered a shade sensitive use.

4.1.2 Relevant Plans, Policies, and Regulations

State

State Scenic Highway System

State scenic highways are segments of interstates and highways included in the California Scenic Highway Program. Maintained and operated by Caltrans (which has full control of all state highways), the state program's goal is to protect and enhance California's scenic beauty by identifying those portions of state highways that, together with adjacent scenic corridors, require special conservation treatment (Caltrans 2008). The scenic highway program includes both eligible and officially designated state scenic highways. Once a state route is included on the list of highways eligible for scenic highway designation in the California Streets and Highways Code Section 263, it may be nominated for official designation by the local governing board with jurisdiction over the lands adjacent to the proposed scenic highway. The application to nominate eligible scenic highways for official designation requires the preparation of a visual assessment and scenic highway proposal that must be reviewed and approved by the district and state scenic highway coordinators at Caltrans.

There are no designated state scenic highways in the City of Santa Monica. The nearest eligible state scenic highway, SR-1 (also referred to as Pacific Coast Highway), is located approximately 1.2 miles west of the project site. In Los Angeles County, SR-1 is an eligible state scenic highway from SR-187 near Santa Monica to SR-101 near El Rio (Caltrans 2018).

Senate Bill No. 743 and Public Resources Code Section 21099

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under CEQA for several categories of development projects including the development of infill projects in transit priority areas. The bill adds to the CEQA Statute, California Public Resources Code (PRC) Chapter 2.7, Modernization of Transportation Analysis for Transit-Oriented Infill Projects, Section 21099. Pursuant to Section 21099(d) (1) "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." The provisions of PRC Section 21099 apply to projects located on a "… lot within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses….and it is located within one-half mile of a major transit stop." As discussed in the Introduction to this Section, the project would meet the criteria set forth in PRC Section 21099 because the project (1) is a high-employment project on an infill site within an established urban area where all the site boundaries either abut existing urban development or are separated by urban development only by an improved public right-of-way; and (2) the project site is within a transit priority area. Under SB 743, the project is exempt from findings of

significance related to aesthetic effects, including view, visual quality, light and glare, and shade impacts. For the purpose of this EIR, aesthetic effects are voluntarily disclosed for informational purposes only.

Local

Santa Monica Zoning Ordinance

The City's Zoning Ordinance (Section 9.01 through 9.52 of the Santa Monica Municipal Code) establishes land use regulations and standards for development in the City, including specific design guidelines, height limits, building density, building design and landscaping standards, architectural features, sign regulations, and open space and setback requirements.

Per the Zoning Ordinance, the project site is located within the HMU District. According to Table 9.13.030, the base (Tier 1) standard maximum height for uses in the HMU District is three stories (45 feet); however, up to five stories (70 feet) is permitted with the provision of community benefits (Tier 2).

As required by Chapter 9.55, Architectural Review Board design approval is required for a project's plans, elevations, and landscaping. (Some exemptions are available for building permits for minor or insignificant projects.) Plans or proposals that require a Development Review Permit (such as the proposed project) must first be considered by the Architectural Review Board for a recommendation to the Planning Commission on the appropriateness of proposed urban design elements, including, but not limited to, siting, massing, scale, circulation, and general relationship to adjacent structures and the adjacent street (City of Santa Monica, Ordinance Number 2651).

Section 9.21.080 of the Zoning Ordinance establishes standards for lighting, which are applicable to the project:

> Section 9.21.080(C): General Standards
>
> 2. **Nonresidential Buildings.** All exterior doors, during the hours of darkness, shall be illuminated with a minimum of one foot-light candle of light.
> 3. **Shielding.** All lighting fixtures shall be shielded so as not to produce obtrusive glare onto the public right-of-way or adjacent properties. All luminaries shall meet the most recently adopted criteria of the Illuminating Engineering Society of North America (IESNA) for "Cut Off" or "Full Cut Off" luminaries.
> 4. **Light Trespass.** Lighting may not illuminate other properties in excess of a measurement of 0.5 foot candles of light.
> 5. **Maximum Height.** The maximum height for exterior lighting shall be as follows:
>
>   a. Residential, Ocean Park Oceanfront Districts: 16 feet.

b. Nonresidential Districts: 26 feet.

Section 9.21.080(F): Parking Lot and Structure Lighting

1. Public parking areas designed to accommodate 10 or more vehicles shall be provided with a minimum of ½ foot-candle and a maximum of 3.0 foot candles of light over of the parking surface from ½ hour before dusk until ½ hour after dawn.
2. Lighting design shall be coordinated with the landscape plan to ensure that vegetation growth will not substantially impair the intended illumination.
3. All lighting used to illuminate a parking area for any number of automobiles in any District shall be arranged so that all direct rays from such lighting fall entirely within such parking lot and be consistent with this Section.

Section 9.21.120 also prohibits the use of highly reflective materials and limits glare effects.

(Reflective Materials): "No more than 25 percent of the surface area of any façade on any new building contain black or mirrored glass or other mirror-like material that is highly reflective, and that materials for roofing be of a non-reflective nature.

City of Santa Monica Architectural Review Board

Santa Monica Municipal Code Chapter 9.55 establishes the Architectural Review Board (ARB) design review procedures for plans, elevations, and/or landscaping associated with building permits that are issued within the City. The mission of the ARB is to "preserve existing areas of natural beauty, cultural importance and assure that buildings, structures, signs or other developments are in good taste, good design, harmonious with surrounding developments, and in general contribute to the preservation of Santa Monica's reputation as a place of beauty, spaciousness and quality…" The ARB design review process is intended to prevent or minimize degradation of visual character within the City. As stated above, plans or proposals that require a Development Review Permit (such as the proposed project) must first be considered by the Architectural Review Board for a recommendation to the Planning Commission on the appropriateness of proposed urban design elements, including, but not limited to, siting, massing, scale, circulation, and general relationship to adjacent structures and the adjacent street (City of Santa Monica, Ordinance Number 2651).

City of Santa Monica Land Use and Circulation Element

The City of Santa Monica Land Use and Circulation Element (LUCE) was adopted July 6, 2010 (last amended in 2020) and is the planning document that establishes the City's land use, urban design, and transportation vision. The updated LUCE establishes 17 land use designations that apply to every parcel in the City.

The LUCE designates the project site as lying within the Healthcare Mixed-Use District. The Healthcare Mixed-Use designation allows for a variety of uses that support the City's two hospitals (Santa Monica-UCLA Medical Center and Providence Saint John's Health Center), and ensures continued improvement and ongoing expansion, while being sensitive to the surrounding residential neighborhoods in ways that meet the healthcare needs of the City and the sub-region. Allowed uses within this land use designation include hospital and medical office uses, pharmacies, residential care, rehabilitation and outpatient clinics, affordable, workforce and market-rate housing targeted at hospital employees, extended stay lodging for patient families, and supporting retail uses.

The LUCE establishes the following goals and policies related to scenic quality and aesthetics, which are applicable to the project (City of Santa Monica 2017).

General City-wide Scenic Quality/Design Goals and Policies

Policy LU1.5: Require that new infill development be compatible with the existing scale, mass and character of the residential neighborhood. New buildings should transition in size, height and scale toward adjacent residential structures.

Policy LU1.3: Encourage and incentivize preservation of historic structures and older buildings that add to the character of residential districts through the development of programs such as Transfer of Development Rights (TDR) and conservation easements.

Goal LU15: Enhance Santa Monica's Urban Form – Encourage well-developed design that is compatible with the neighborhoods, responds to the surrounding context, and creates a comfortable pedestrian environment.

Policy LU 15.3 Context-Sensitive Design. Require site and building design that is context sensitive and contributes to the City's rich urban character.

Policy LU 15.4 Open and Inviting Development. Encourage new development to be open and inviting with visual and physical permeability, connections to the existing street and pedestrian network, and connections to the neighborhoods and the broader community.

Policy LU 15.5: Pedestrian and Bicycle Connectivity. Encourage the design of sites and buildings to facilitate easy pedestrian- and bicycle-oriented connections and to minimize the separation created by parking lots and driveways.

Policy LU 15.7: Street–Level Pedestrian-Oriented Design. Buildings in the mixed-use and commercial areas should generally be located at the back of the sidewalk or the property line (street front) and include active commercial uses on the ground floor. Where a residential use occupies the ground floor, it should be set back from the property line, be located one

half level above the street or incorporate design features to provide privacy for the unit. Front doors, porches and stoops are encouraged as part of orienting residential units to the street.

Policy LU 15.8: Building Articulation. Building façades should be well designed with appropriate articulation in the form of setbacks, offsets, projections and a mix of architectural materials and elements to establish an aesthetically pleasing pattern. Large areas of glass above the ground floor require special design consideration. Highly reflective materials are to be avoided, and dark or reflective glass is prohibited.

Policy LU 15.9: Pedestrian-Oriented Design. Buildings should incorporate pedestrian-scaled elements with durable, quality materials and detailing located on the lower stories adjacent to the pedestrian.

Policy LU15.10: Buildings should be designed with a variety of heights and shapes to create visual interest while maintaining a generally consistent overall street front. To achieve this goal, development standards should provide flexibility to encourage buildings with interesting silhouettes and skylines, and the primary building façade shall not be lower than the designated minimum street façade height.

Policy15.11: Buildings should generally conform to the minimum and maximum requirements for the street façade height established for their designated area. Portions of a building façade higher than the street frontage, 35 feet for most mixed-use areas, shall step back from the façade of the floor below in a manner that will minimize the visual bulk of the overall building as viewed from the public sidewalks and roadway and ensure maximum light, air and sense of openness for the general public. Guidelines or standards for the building mass above the streetwall shall be established in the zoning ordinance.

Policy LU15.12: Buildings should have their primary façades located at the back side of the sidewalk or on the property line. However, to encourage a well-landscaped streetscape with places for people to gather, small landscaped, people-gathering spaces are encouraged where they will attract people without interrupting the pedestrian retail experience. The intent is to have an overall ground coverage of 80 percent on each block.

Healthcare District

Goal 30: Ensure that new and remodeled buildings in the Healthcare District are compatible in scale and character with existing buildings and the surrounding residential neighborhood.

Policy D30.1. Encourage the primary facades of buildings to face the street with the building face located on the property line or back side of the sidewalk along sidewalks or pedestrian ways.

However, to encourage a lively streetscape with places for people to socialize, small landscaped gathering spaces and plazas are encouraged.

Policy D30.2 Scale buildings to the pedestrian to create an intimate sidewalk experience. Incorporate enhanced materials and detailing in ground floor facades where they will be in close proximity to passing pedestrians.

Policy D30.3: Design buildings with a variety of heights, architectural elements and shapes to create visual interest along the street. Incorporate meaningful combinations of materials and three-dimensional articulation to create shadow patterns to engage the eye.

Policy D30.4: Avoid uniformly flat roofs or cornices in order to create an interesting skyline.

Policy D30.5: Establish a prescribed building envelope with step backs designed to maintain access to light and air where new healthcare or commercial uses are located adjacent to the existing residential.

Policy D30.6: Encourage active retail and other ground floor uses with pedestrian interest to incorporate generally continuous, transparent (non-tinted) display windows facing the sidewalk.

Policy D30.7: Encourage mixed-use developments to have active ground floor uses that face the street with residential or medical office development located on the upper floors. Limit the length of entrances and lobbies to upper level uses along the length of the sidewalk.

Hospital Area Specific Plan

The HASP was adopted in 1988 and revised in 1993 and 1998. The HASP includes the PSJHC, SM-UCLA, and surrounding neighborhoods and is generally bordered by Wilshire Boulevard to the north, Euclid Avenue to the west, Broadway to the south, and Chelsea Avenue to the east.

The intent of the HASP is to address issues of neighborhood concern, address the needs of modern hospitals in a competitive health care environment, to develop basic zoning and development standards, to identify parcels for rezoning, and to identify other programs which should be implemented in the area.

The HASP includes the following objectives related to aesthetics, visual character, and visual quality that are applicable to the project:

- Objective Number 5: Establish development guidelines for the area which will serve as a transition between development standards on Wilshire and on Santa Monica Boulevards.
- Objective Number 7: Encourage the use of architectural materials and design which will be compatible with surrounding uses in the hospital area.

- Objective Number 28: Promote quality housing and neighborhoods.
- Objective Number 74: Encourage architecturally attractive structures and the liberal use of landscaping along the Arizona Avenue bikeway.

4.1.3 Thresholds of Significance

As stated in the Introduction, pursuant to PRC Section 21099(d)(1), aesthetic impacts of the proposed project are considered less than significant and analysis of such impacts is not required by CEQA. Nonetheless, this analysis of aesthetics is included for informational purposes only, in order to provide information to the public and the decision makers regarding the appearance of the project and its aesthetic effects. The analysis addresses and is organized according to the following questions included in Appendix G of the State CEQA Guidelines.:

Except as provided in Public Resources Code Section 21099, would the project:

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

In addition to these questions raised in Appendix G, the following question is also addressed:

5. Would the project produce extensive shadows adversely affecting adjacent sensitive structures or uses?

Issues Not Further Analyzed

Questions 1 and 2 were analyzed in the Initial Study (Appendix A) and impacts were determined to be less than significant. A summary of the analysis presented in the Initial Study for Questions 1 and 2 is provided below.

Question (1) Scenic Vistas: The City of Santa Monica is largely urbanized and features a variety of unique natural and man-made visual resources. The urbanized nature of the project site and the immediate surrounding area limit opportunities for views to scenic resources that have been identified by the City, including Santa Monica Bay, Pacific Ocean, Palisades Bluffs, and Palisades Park. These resources are not located near the project site and are not generally visible from the project site or from public locations in the immediate surrounding area. Lastly, implementation of the proposed project would not substantially

obstruct or interrupt existing views to the Santa Monica Mountains identified by the City due to the flat topography of the project site and intervening development. Furthermore, pursuant to Public Resources Code Section 21099, aesthetic impacts of the proposed project are considered less than significant.

Question (2) Scenic Highway: The project site is located approximately 1.2 miles from SR-1, an eligible state scenic highway. Due to intervening development within urbanized Santa Monica and its distance from SR-1, the project site is not visible from the eligible state scenic highway segment of SR-1. The closest scenic corridors identified by the LCP Land Use Plan are the western extent of the I-10 freeway, Pacific Coast Highway/Palisades Beach Road, and Ocean Avenue, all of which are located more than 1.4 miles to the west. The project site is not located adjacent to, or in the immediate vicinity of, these scenic highways or corridors, and is not visible from these facilities. Furthermore, pursuant to Public Resources Code Section 21099, aesthetic impacts of the proposed project are considered less than significant.

Therefore, Questions 1 and 2 will not be further analyzed in this section.

4.1.4 Methodology

Consistency with Zoning and Other Regulations Addressing Scenic Quality

Dudek and the City conducted a site visit and photographic inventory of existing structures and features in April 2020 and May 2020. Visibility conditions were clear. Digital photographs were taken during fieldwork to photo document the existing visual quality and character of the project site and to note existing sources of glare and nighttime lighting on the project site and surrounding area. A desktop-level review using aerial photography and Google Earth Street View images was performed following the site visit to establish and document the visual quality and character of the surrounding area.

The visual analysis presented below involves a comparison of the existing visual conditions of the project site to expected (future) conditions after project implementation. More specifically, the design characteristics (e.g., mass, height/scale, materials, colors, etc.) of existing structures and features are considered and compared to the proposed structure. Elevations and renderings developed for the proposed project are included in the analysis to support the description of the proposed project and help convey the anticipated extent of visual change. Factors considered in determining degree of contrast include distance between observers and the project site, angle of observation, view exposure, relative size or scale, spatial relationships, and visual quality. Visual changes resulting from project implementation and the design of the project are evaluated against zoning and other regulations addressing scenic quality.

Light/Glare

The analysis of light/glare takes into consideration the proposed project's anticipated compliance with applicable SMMC requirements as well as location of light-sensitive land uses. For example, all permanent

lighting installed at the project site would conform to SMMC standards regulating shielding and limiting light trespass and maximum height of light poles.

The analysis also considers the potential for sunlight to reflect off building surfaces (glare) and the extent to which such glare would adversely affect views.

Shade/Shadow

The consequences of shadows on land uses can be positive, including cooling effects during hot weather, or negative, such as loss of warmth during cooler weather and loss of natural light for landscaping, solar collection, and human activity. While some incidental shading on shadow sensitive uses is commonly acceptable, shading that occurs over extended periods of time can be considered a detriment. In determining shadow effects, several factors are considered:

- Affected land use (i.e., is it a shadow-sensitive use whereby sunlight is essential to its use);
- Duration (i.e., how many hours per day might a use be shadowed);
- Time of day (i.e., is it in shadow at a time of day when sunlight is most important);
- Season (i.e., what time of year might a particular use be in shadow);
- Extent (i.e., what percentage of a particular use may be in shadow);
- Nature of the shadows (i.e., is the shadow more solid or more dappled in nature); and
- Pre-existing conditions (i.e., are there existing buildings, landscaping or other features that currently shadow the use).

The shade/shadow analysis considers the potential for shadow-sensitive uses to be placed in shadow by the proposed project. Shade sensitive uses are those uses where sunlight is important to function, physical comfort and/or commerce such as routinely usable outdoor spaces associated with residential development, recreational or institutional uses (i.e., hospitals), commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas, nurseries, and existing solar collectors. Uses may be considered sensitive to shade and shadow effects if they require or are otherwise dependent on sunlight for regular function, comfort, or commerce.

A shade and shadow study comprised of a series of static images was conducted for the proposed project. To approximate shade and shadow conditions in the surrounding area created by implementation of the proposed project, shadows cast by the proposed project were simulated for the summer solstice (June 21), fall equinox (September 23), winter solstice (December 21), and spring equinox (March 20) at 9:00 a.m., 12:00 p.m., and 3:00 p.m. To conduct the shade and shadow analysis, existing buildings were placed at zero elevation and extruded to their building heights within the 3d Studio Max software. A 3d mass model of the proposed project structure and the maximum height of the building was used to place the proposed

structures into the 3d Studio Max scene. A 3d sun system was then added to the scene to cast projected shadows at the summer and winter solstices and at the spring and fall equinoxes.

4.1.5 Impacts Analysis

In non-urbanized areas, would the 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, would the project conflict with applicable zoning and other regulations governing scenic quality?

Project Characteristics

Elevations of the proposed project are included in Figure 4.1-2, Proposed South and East Elevations, and Figure 4.1-3, Proposed North and West Elevations. As shown in these figures, the existing GKGM Building (with the exception of the attached garage) would be retained as part of the project. The proposed project would rehabilitate exterior portions of the GKGM Building in a manner consistent with the Secretary of the Interior (SOI) Standards for the Rehabilitation of Historic Properties, as described in Chapter 3.0, Project Description.

With regard to the new building addition, the maximum height would be approximately 45 feet to top of roof and would include an approximately 12-foot high, perforated metal mechanical wall on the roof to screen heating, ventilation, and cooling equipment. Building exteriors would primarily incorporate limestone panels and glazed windows with metal panel surround. Large windows would be provided on the first, second, and third floors along the south, east, and west elevations of the structure and long terraces would be constructed on the second and third floors. Long and low landscape planters would be installed at the street level along the east and west elevations.

The project site is located in the urbanized City of Santa Monica. Scenic quality of new development is governed by the City's Zoning Ordinance and the LUCE, which includes development standards and design policies. As shown in Table 4.1-1, the proposed project will comply with the relevant Zoning Ordinance standards addressing scenic quality. Further, as shown in Table 4.1-2, the proposed project will comply with the relevant LUCE policies addressing scenic quality.

As demonstrated in Tables 4.1-1 and 4.1-2, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality and potential impacts would be **less than significant**. Regardless, this analysis is provided for informational purposes only. The aesthetics impacts of the proposed project shall not be considered significant pursuant to SB 743.

Table 4.1-1
Consistency with Zoning Ordinance

Standard	HMU	Project Design
Maximum FAR for Tier 1 projects	1.5	1.5
Maximum Building Height for Tier 1 projects	3 stories/45 feet	3 stories/45 feet
Min. Front and Corner Side Setbacks	None	N/A (there are no minimum front and corner side setbacks in the HMU District)
Min. Interior Side and Rear Setbacks Adjacent to a Residential District	15 feet	15 feet
Daylight Plane Adjacent to Residential Districts.	Buildings shall not extend above a plane starting at 25 feet in height directly above the parcel line abutting any residentially-zoned parcel, or where there is an alley, the centerline of the alley, and from that point, extending in at a 45-degree angle from vertical toward the interior of the site. The 25-foot height measurement shall be taken from the same reference grade as determined for the subject site pursuant to Section 9.04.050.	The proposed project will comply with these requirements.
Lighting	All lighting fixtures shall be shielded so as not to produce obtrusive glare onto the public right-of-way or adjacent properties. All luminaries shall meet the most recently adopted criteria of the Illuminating Engineering Society of North America (IESNA) for “Cut Off” or “Full Cut Off” luminaries. Lighting may not illuminate other properties in excess of a measurement of 0.5 foot candles of light. The maximum height for exterior lighting shall be 26 feet for the HMU district (nonresidential district).	The proposed project will comply with these requirements.

Table 4.1-1
Consistency with Zoning Ordinance

Standard	HMU	Project Design
Screening	All exterior mechanical and electrical equipment shall be screened on all vertical sides at least to the height of the equipment it is screening and incorporated into the design of buildings to the maximum extent feasible. Equipment to be screened includes, but is not limited to, all roof-mounted equipment, air conditioners, heaters, utility meters, cable equipment, telephone entry boxes, backflow preventions, irrigation control valves, electrical transformers, pull boxes, and all ducting for air conditioning, heating, and blower systems.	The proposed project will comply with these requirements.

Table 4.1-2
Consistency with LUCE Policies Addressing Scenic Quality

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)
Policy LU 1.5	Require that new infill development be compatible with the existing scale, mass and character of the residential neighborhood. New buildings should transition in size, height and scale toward adjacent residential structures.	Land uses immediately south of the project site and Arizona Avenue include one- to three-story residential buildings. As described in Section 4.1.1, multi-story (between three and twelve stories high) medical and office buildings, a four-story parking structure, several surface level parking lots, and limited commercial uses are located approximately 120 feet to the southeast, across Arizona Avenue, north of Santa Monica Boulevard, east of 20th Street and west of 23rd Street. The proposed project would be located immediately north of the existing two-story structure on the southern portion of the project site, and thus would only be partially visible to receptors located south of the project site (i.e., motorists and pedestrians on Arizona Avenue and residents located south of Arizona Avenue). While the proposed structure would contribute scale, mass, and building materials that are not currently supported on the project site, structures of greater scale and mass and similar building materials occur in the immediate vicinity of the project site. Existing structures of greater mass and scale (and similar building materials) than the project include buildings on the Providence Saint John's Health Center campus, medical office development along Santa Monica Boulevard, the four-story Ambrose Hotel, and the seven-story glass office building located at the Wilshire Boulevard/20th Street intersection. Due to project design and incorporation of a tall paneled exterior, the building would appear to include two stories along the north elevation (see Figure 4.1-2). However, the building height to the top of the roof would be approximately 45 feet (with the height to the top of the screening surrounding that HVAC equipment at 57 feet) and existing one- and two-story structures on the Lighthouse Church property are located immediately north of project site. Therefore, the height of the proposed project would be greater than that of existing structures immediately north of the project site. As proposed, the project building would be set back approximately 50 feet from the single-story building on the church property to the north, and the proposed project would be compatible with the existing structures along the 20th Street

Table 4.1-2
Consistency with LUCE Policies Addressing Scenic Quality

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)
		corridor. In addition, landscaping (i.e., trees) would be preserved along the property's frontage of 20th Street and would help break up the mass of the structure as viewed from the 20th Street corridor (see Figure 4.1-4, Rendering of Proposed Project Design – Looking South). Further, a terrace would be constructed along the second floor of the north elevation (see Figures 4.1-3 and 4.1-4), which would reduce the apparent scale and mass of the building and make the project more compatible with existing one- and two-story structures located north of the project site. As shown in Figure 4.1-5, Rendering of Proposed Project Design – Looking Southwest, the southeastern corner of the structure includes a strategic carve-out in massing and a series of recessed terraces on the second and third floors. The ground floor and the terraces would noticeably step back from the southeastern corner of the project site to create an open courtyard with several planters and reduced massing of the second and third floors. The strategic carve-out of the structure at the southeastern corner would reduce scale contrasts with the adjacent chapel building and enhance compatibility with this existing structure. Further, as shown Figure 4.1-5, the courtyard and stepped terraces (which would be semi-public) would help to activate the 20th Street pedestrian corridor with human activity envisioned at every level of the project.
Goal LU15 Enhance Santa Monica's Urban Form	Encourage well-developed design that is compatible with the neighborhoods, responds to the surrounding context, and creates a comfortable pedestrian environment.	The proposed project would be designed in accordance with development standards established for the Healthcare District. As compared to the existing site conditions, which does not positively contribute to the character of the area, the proposed project would improve the character of the existing area and create a more pedestrian friendly streetscape.
Policy LU15.3: Context-Sensitive Design	Require site and building design that is context sensitive and contributes to the City's rich urban character.	See discussion for Policy LU1.5 above.

Table 4.1-2
Consistency with LUCE Policies Addressing Scenic Quality

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)
Policy LU15.4: Open and Inviting Development	Encourage new development to be open and inviting with visual and physical permeability, connections to the existing street and pedestrian network, and connections to the neighborhoods and the broader community.	The proposed design of the Wellness Center project creates a pedestrian-oriented design along the 20th Street frontage. As such, the visual character of 20th Street would be enhanced, and would be more open and connected with Wilshire Boulevard and other surrounding uses. Enhanced pedestrian-oriented design features including widened walkways, outdoor seating and public use areas.
Policy LU 15.7: Street–Level Pedestrian-Oriented	Street–Level Pedestrian-Oriented Design. Buildings in the mixed-use and commercial areas should generally be located at the back of the sidewalk or the property line (street front) and include active commercial uses on the ground floor. Where a residential use occupies the ground floor, it should be set back from the property line, be located one half level above the street or incorporate design features to provide privacy for the unit. Front doors, porches and stoops are encouraged as part of orienting residential units to the street.	The project site is located along 20th Street, in close proximity to Wilshire Boulevard, and in the City's HMU District. While residential uses are not proposed by the project, wellness/healthcare uses would occupy the ground floor and would facilitate an active pedestrian experience along 20th Street. The proposed project would create a pedestrian-oriented design along the 20th Street frontage, which would incorporate design elements such as large, transparent windows, publicly accessible open space, and landscaping improvements to encourage pedestrian accessibility.
Policy LU15.8: Building Articulation	Buildings façades should be well designed with appropriate articulation in the form of setbacks, offsets, projections and a mix of architectural materials and elements to establish an aesthetically pleasing pattern. Large areas of glass above the	The general design and style of the proposed building is illustrated in Figures 4.1-4 through 4.1-6. As shown in these figures, the building would incorporate a contemporary architectural style, with façade articulations that incorporate varied materials and differentiated wall surfaces. The proposed building addition would incorporate a contemporary design with a maximum height of 45 feet to top of roof. There are a series of stepped semi-public terraces, which serve to further set back the perceived

Table 4.1-2
Consistency with LUCE Policies Addressing Scenic Quality

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)
	ground floor require special design consideration. Highly reflective materials are to be avoided, and dark or reflective glass is prohibited.	height of the upper stories, as well as to activate the 20th Street façade with human activity at every level. At the ground level, the opening is experienced as a secondary plaza and gathering place between the two buildings; the first being the original open space area at the corner of Arizona and 20th Street. The new construction is currently proposed with a textured stone façade material, to better complement the existing block and brick funeral home structure. The expansive window wall system proposed along 20th Street is deliberately applied to only the ground level, allowing the upper levels to have more relatable dimensions of glazing.
Policy LU15.9: Pedestrian-Oriented Design	Buildings should incorporate pedestrian-scaled elements with durable, quality materials and detailing located on the lower stories adjacent to the pedestrian.	The proposed building's frontage of 20th Street would incorporate pedestrian-scale elements. They also would provide design elements such as large, transparent windows, publicly accessible open space, and thoughtful landscaping improvements to create a continuous and pleasant pedestrian experience between Wilshire Boulevard and Santa Monica Boulevard. Further, strategic carve-outs including a stepped terrace at the southeastern corner of the building would soften the rectangular massing of the structure and would create an approachable and pedestrian-scale courtyard and entrance (see Figure 4.1-6, Rendering of Proposed Project Design – Aerial Looking West). The third floor terrace along the north elevation would also help reduce the perceived massing on the structure. The south elevation of the proposed structure would be three stories with a parapet and perforated metal screening for mechanical equipment constructed on the roof. An exterior terrace would be featured on the second floor and the exterior design of the structure would incorporate limestone panels and linear rows of rectangular windows. The west elevation of the structure would setback from the east property line and adjacent alley (see Figure 3-6a, Conceptual Site Plan).

Table 4.1-2
Consistency with LUCE Policies Addressing Scenic Quality

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)
Policy LU15.10: Roofline Variation	Buildings should be designed with a variety of heights and shapes to create visual interest while maintaining a generally consistent overall street front. To achieve this goal, development standards should provide flexibility to encourage buildings with interesting silhouettes and skylines, and the primary building façade shall not be lower than the designated minimum street façade height.	The new building construction is designed as a three-story rectangular-shaped building with a strategic carve-out of massing at the southeastern orientation, where the building interacts most with both the existing chapel structure and the street level pedestrian experience. There are a series of stepped semi-public terraces, which serve to further set back the perceived height of the upper stories. The design includes the removal of oblique 'slices' of building mass, from both the ground level on 20th Street and the third level facing northeast. The resulting outdoor spaces further soften the rectangular massing.
Policy 15.11: Building Facades and Stepbacks	Buildings should generally conform to the minimum and maximum requirements for the street façade height established for their designated area. Portions of a building façade higher than the street frontage, 35 feet for most mixed-use areas, shall step back from the façade of the floor below in a manner that will minimize the visual bulk of the overall building as viewed from the public sidewalks and roadway and ensure maximum light, air and sense of openness for the general public.	As shown in Table 4.1-1, above, the City's Zoning Ordinance does not have set minimum front and corner side setbacks for the HMU area. See discussion for Policy LU 15.8 and Policy 15.10, above, regarding building articulation and roofline variation.

Table 4.1-2
Consistency with LUCE Policies Addressing Scenic Quality

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)
	Guidelines or standards for the building mass above the streetwall shall be established in the zoning ordinance.	
Policy LU15.12: Ground Floor Gathering Spaces	Buildings should have their primary façades located at the back side of the sidewalk or on the property line. However, to encourage a well-landscaped streetscape with places for people to gather, small landscaped, people-gathering spaces are encouraged where they will attract people without interrupting the pedestrian retail experience. The intent is to have an overall ground coverage of 80 percent on each block.	See discussion for Policy LU 15.9 above. Further, at the ground level, the new building addition would include a recessed cut-out, where the building meets the existing funeral home/chapel. This opening would be experienced as a secondary plaza and gathering place between the two buildings. Landscaping improvements would also encourage pedestrian accessibility.
Policy LU19.1: Streets Integrated with Land Use	Recognize the streets as a vital component of neighborhood, district and boulevard character. Develop street design standards that consider the mobility, open space, community life and methods to engage the surrounding uses.	The new construction is designed as a three-story rectangular-shaped building with a strategic carve-out of massing at the southeastern orientation, where the building interacts most with both the existing chapel structure and the street level pedestrian experience. There are a series of stepped semi-public terraces, which serve to further set back the perceived height of the upper stories, as well as to activate the 20th Street façade with human activity at every level. At the ground level, the opening is experienced as a secondary plaza and gathering place between the two buildings; the first being the original open space area at the corner of Arizona and 20th Street.
Policy LU20.3: Maintaining an Urban Forest	Encourage properties adjacent to the public right-of-way to contribute to the urban forest environment through on-site	There are on-site trees and off-site street trees on the City sidewalk along the boundaries of the project site. The off-site public street trees are part of the City's Urban Forest and not native originating (natural to the location). There are approximately nine existing City street trees, including six on 20th Street and three on Arizona Avenue.

Table 4.1-2
Consistency with LUCE Policies Addressing Scenic Quality

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)
	plantings and street tree care and maintenance.	In coordination with the City's Urban Forestry manual, all of the street trees would be evaluated to either remain or be substituted during project implementation. Pursuant to the Santa Monica Municipal Code (SMMC) Chapter 7.40, Tree Code, no street trees shall be removed without having first obtained a City permit authorizing such work. Furthermore, in addition to landscape planters, the proposed project would incorporate trees into the site design. These trees would either be existing trees that remain in place or replacement trees that are installed in accordance with the project landscape plan.
Policy HP1.3	Ensure that that new development, alterations or remodeling on, or adjacent to, historic properties are sensitive to historic resources and are compatible with the surrounding historic context.	Conceptually, the new construction is currently proposed with limestone panels, to be compatible but distinct from the existing funeral home structure. The final architectural design and materials are still under review and will be subject to final review and approval by the City's Architectural Review Board and subject to Mitigation Measures MM-CUL-1 and MM-CUL-2 to ensure the design is compatible with the GKGM Building and consistent with the Secretary of the Interior Standards for the Treatment of Historic Properties.
Policy 29.5	Encourage the development of an enhanced pedestrian realm with improved sidewalks, landscaping and pedestrian amenities.	The new construction is designed as a three-story building with a strategic carve-out of massing at the southeastern orientation, where the building adjoins the existing funeral home/chapel structure . At the ground level, the opening is experienced as a secondary plaza providing the main pedestrian entry and gathering place between the two buildings. While it has not yet been prepared, the landscape plan will be submitted and reviewed by the City during their formal design review process. Although conceptual in nature, the general landscaping of the project site can be observed on Figures 4.1-4, 4.1-5, and 4.1-6.

Table 4.1-2
Consistency with LUCE Policies Addressing Scenic Quality

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)
Goal D30	Ensure that new and remodeled buildings in the Healthcare District are compatible in scale and character with existing buildings and the surrounding residential neighborhoods	The project site borders existing one- to two- story homes and apartment buildings to the west. As proposed, the western elevation of the building would display three stories (see Figure 4.1-3). The proposed structure would be taller and would display greater mass than existing residential building across the narrow alley to the west. This contrast in scale and mass would be noticeable, however, similar to existing on-site former residential buildings and nearby residential buildings, the proposed building would display a rectangular form and building scale would be similar to existing development along the 20th Street corridor. Further, the scale and mass of the west elevation would be largely obstructed from view by pedestrians and motorists, as the alley is infrequently traveled by the wider public. The proposed three-story building would incorporate a contemporary architectural style with façade articulations, varied building materials and differentiated wall surfaces. Planters and landscaping would be installed along the north, east, and west elevation of the proposed building to soften metal and glass elements. Strategic carve-outs and terraces would be incorporated to help reduce the perceived mass and scale of the project as experienced from adjacent properties and the nearby public realm. While the proposed building would contribute mass, scale, and building materials that are not currently supported on-site, existing development along the 20th Street corridor includes structures of similar (or greater) mass, scale, and building materials. The proposed project would be of greater scale and mass than existing residences located across the narrow alley west of the project site, however, the proposed building would be representative of the type of nearby office and healthcare-related development constructed in the immediate area. The final architectural design and materials are still under review and will be subject to final review and approval by the City's Architectural Review Board to ensure compatibility with surrounding residential areas.

Table 4.1-2
Consistency with LUCE Policies Addressing Scenic Quality

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)
Policy D30.2	Scale buildings to the pedestrian to create an intimate sidewalk experience. Incorporate enhanced materials and detailing in ground floor façades where they will be in close proximity to passing pedestrians	At the ground level, the new building addition would include a recessed cut-out, where the building meets the existing funeral home/chapel. This opening is experienced as a secondary plaza and gathering place between the two buildings; the first being the original open space area at the corner of Arizona and 20th Street fronting the existing funeral home/chapel building. Additionally, expansive window wall system proposed along 20th Street is deliberately applied to only the ground level, allowing the upper levels to have more relatable dimensions of glazing.
Policy D30.3	Design buildings with a variety of heights, architectural elements and shapes to create visual interest along the street. Incorporate meaningful combinations of materials and three-dimensional articulation to create shadow patterns to engage the eye.	The design includes the removal of oblique 'slices' of building mass, from both the ground level on 20th Street and the third level facing northeast. The resulting terraces and outdoor spaces further soften the rectangular massing.
Policy D30.4	Avoid uniformly flat roofs or cornices in order to create an interesting skyline.	See discussion for Policy LU15.10.
Policy D30.5	Establish a prescribed building envelope with step backs designed to maintain access to light and air where new healthcare or commercial uses are located adjacent to the existing residential.	Per Section 9.13.030C of the Zoning Ordinance, a daylight plane is required where adjacent to residential districts, starting at 25 feet in height directly above the abutting parcel line so as to permit daylight on adjacent residential properties. The proposed project will comply with the requirements of the Zoning Ordinance.

Table 4.1-2
Consistency with LUCE Policies Addressing Scenic Quality

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)
Policy D30.7	Encourage active retail and other ground floor uses with pedestrian interest to incorporate generally continuous, transparent (non-tinted) display windows facing the sidewalk.	The proposed project would incorporate landscaping and openings at the ground level, to serve as plazas and gathering spaces. Additionally, an expansive window wall system proposed along 20th Street is deliberately applied to only the ground level, allowing the upper levels to have more relatable dimensions of glazing.

Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Construction

As detailed in Chapter 3, Project Description, of this EIR, the proposed project would be constructed over an approximately 23-month period. Proposed project construction would occur in one phase and is analyzed in this EIR to begin as early as March 2021 and end in January 2023. Throughout the duration of construction, construction activities would typically occur during hours permitted by the Santa Monica Municipal Code (Monday through Friday, 8:00 a.m. to 6:00 p.m., and Saturday, 9:00 a.m. to 5:00 p.m.) and would not generally require the use of portable lighting sources to illuminate development areas during evening hours. Any use of portable lighting elements on the project site during construction would be temporary and of short duration (for example, during the last hour of the workday in late fall and winter months). In these instances, portable lighting would be used to illuminate the development area and concentrated onto the area of active construction. Widespread use of portable lighting across the project site during individual phases would not occur. In addition, use of portable lighting would conform to applicable shielding, light trespass, and maximum height standards established by the SMMC (see Section 9.21.080(C)(3)(4)(5)). Compliance with SMMC general standards pertaining to shielding of lighting (Section 9.21.080(C)(3)) would also minimize the potential for portable lighting elements to create obtrusive glare on adjacent properties or public rights-of-way.

Portable lighting of the project site would not typically be required during construction. However, if construction crews use lighting during specific months of the year when hours of daylight are reduced, then use of lighting would conform to SMMC requirements regulating lighting. Due to the anticipated limited need for portable lighting on the project site, the temporary and short-term duration of its use, and the proposed project's conformance with the SMMC, use of lighting on the project site during construction activities would not adversely affect nighttime views in the area. Impacts would be **less than significant**. Regardless, this analysis is provided for informational purposes only. The aesthetics impacts of the proposed project shall not be considered significant pursuant to SB 743.

Operation

As detailed in Section 4.1.1.5, Light and Glare, existing development on the project site includes interior and exterior lighting sources. Streetlights, parking garages and lots, and commercial, residential, and healthcare development in the immediate area also contribute lighting to the nighttime environment.

The project entails construction of a new 3-story building adjacent to the existing GKGM Building, which would be partially preserved in its current condition, and partially renovated/adaptively reused as part of the Wellness Center. Proposed demolition would include the removal of interior and exterior lighting sources within and affixed to the former residential structures and garage façades located on site. The project would

include the installation of new interior and exterior lighting fixtures, including at outdoor lighting entryways/driveways, along pedestrian pathways, and at/within the subterranean parking garage. Other sources of lighting would include outdoor lighting along building elevations, lighting on terraces, lighting emanating from interior workspaces and areas, and planter lighting. While the proposed project would include several lighting sources, and lighting on the project site would be greater than under existing conditions, the proposed project would comply with all applicable regulations of the SMMC related to lighting. For example, the SMMC requires that all lighting fixtures be shielded "so as not to produce obtrusive glare" onto the public right-of-way or adjacent properties and that light be primarily retained on-site ("lighting may not illuminate other properties in excess of a measurement of 0.5 foot candles of light") (Municipal Code, Section 9.21.080(C)).

Lastly, per SMCC Section 9.55, the proposed project would be subject to the City's Architectural Review, which prevents development of structures or uses likely to have a depreciating effect on the local environment or surrounding area, and eliminates conditions, structures, signs, or uses, which would degrade the health, safety, or general welfare of the community. Compliance with the Municipal Code would ensure that proposed lighting operating on the project site does not adversely affect the nighttime views of sensitive receptors in the area including residents located nearest to the project site (i.e., to the west). In addition, a row of existing mature trees along the northern border of the project site visually separates the project from the existing one-story structure to the north. This row of trees (and any trees that would be installed pursuant to the project landscape plan) would help to visually screen and cut off lighting associated with the project site from spilling onto the adjacent church property.

The proposed project would not have the potential to create glare. Consistent with SMMC requirements, low-e vision clear glass would be used for the windows to minimize the potential for glare received off-site. The proposed project would also be required to comply with SMMC Section 9.21.120 which prohibits the use of highly reflective materials. Section 9.21.120 (D)(3) states that no more than 25 percent of the surface area of any façade on any new building or addition to an existing building shall contain black or mirrored glass or other mirror-like material that is highly reflective. In addition, the SMMC requires that roofing materials be of a non-reflective nature. Furthermore, evaluations of exterior cladding and materials are required through the City's ARB design review process. Thus, particularly reflective metal would not be a prominent building material. Adherence to SMMC standards and regulations regarding lighting and reflective materials would ensure that the project would not result in adverse effects to daytime and nighttime views due to new lighting and glare. Impacts would be **less than significant.** Regardless, this analysis is provided for informational purposes only. The aesthetics impacts of the proposed project shall not be considered significant pursuant to SB 743.

Would the project produce extensive shadows adversely affecting adjacent sensitive structures or uses?

Shadow projections from the proposed project during summer, winter, fall, and spring are shown on Figures 4.1-7, Project Shade/Shadow Conditions – Summer Solstice through 4.1-10, Project Shade/Shadow Conditions – Winter Solstice.

During the winter season, the period of daylight is shortest (compared to spring, summer, and fall), and the sun is at its lowest angle compared to the earth's ground surface. Therefore, shadow lengths are the longest during the winter. In terms of daylight hours, the shortest day of the year occurs on the winter solstice, which falls on or around December 21st. Shadow lengths are the shortest during summer months when the period of daylight is the longest (more than twelve hours), and the sun is at its highest angle compared to the earth's ground surface. In terms of daylight hours, the longest day of the year occurs on the summer solstice, which falls on or around June 21. Throughout the day, the direction of shadows cast by vertical forms moves with the path of the sun, resulting in different shadow lengths and projections at different times of the day. The direction and length of shadow projections also varies throughout the seasons of the year. Shadows are projected in a westerly direction during the morning hours when the sun rises from the east; shadows move northerly during the late morning and early afternoon hours. During the late afternoon to early evening hours when the sun sets in the west, shadows are cast in an easterly direction.

Summer Solstice

Shadow lengths and projections at various times on the summer solstice are depicted on Figure 4.1-7. As shown, shadows cast by the proposed project during the summer would be shorter than those in the winter and would generally be cast onto the project site only. Therefore, the project would not produce extensive shadows affecting adjacent uses or property during the summer and **no impact** would occur. Regardless, this analysis is provided for informational purposes only. The aesthetics impacts of the proposed project shall not be considered significant pursuant to SB 743.

Fall and Spring Equinoxes

Figures 4.1-8 and 4.1-9 depict the shadows that would typically be cast by the proposed project in the fall and spring, respectively. The depictions of project-generated shadows represent the median shade/shadow that would result from implementation of the proposed project. As shown on the figures, portions of 20th Street and a portion of the adjacent parcel to the north of the project site may be shaded for a few hours during the fall and spring. However, the Lighthouse Church and School located on the property to the north would not be shaded during any time in the fall and spring equinoxes. As such, the proposed project would not produce extensive shadows affecting adjacent uses or property during the fall and spring, and impacts would be **less than significant**. Regardless, this analysis is provided for informational purposes only. The aesthetics impacts of the proposed project shall not be considered significant pursuant to SB 743.

Winter Solstice

Due to the low angle of the sun, shadows cast on December 21st would be the longest in length, and therefore, represent the worst-case scenario. As shown on Figure 4.1-10, shadows generated by the proposed structure at 9:00 a.m. would be cast to the north on the project site and would surround the existing Lighthouse Church and School. As the morning progresses, shadows cast to the north would reduce in length and would be reoriented towards the northeast. For example, by 12:00 p.m. the shadows cast by the proposed project would no longer surround the structure on the property located north of the project site. Instead, project shadows would be cast towards 20th Street to the northeast. At this time, the proposed project would not shade any other structure outside of the project site. At 3:00 p.m., shadows cast by the proposed project would continue to move and elongate to the east. As shown in Figure 4.1-10, project-generated shadows would extend across 20th Street to the westerly portion of properties supporting two-and three-story apartment buildings. However, the shadow would not be cast onto the apartment buildings at 3:00 p.m. (see Figure 4.1-10). After 3:00 p.m., project-generated shadows may continue to elongate as the sun sets but are not anticipated to be extensive such that use of structures or living spaces would be substantially affected. Further, project shadows would function in this manner for a limited duration (i.e., during the winter season). As such, the proposed project would not produce extensive shadows affecting adjacent uses or property during the winter and impacts would be **less than significant**. Regardless, this analysis is provided for informational purposes only. The aesthetics impacts of the proposed project shall not be considered significant pursuant to SB 743.

4.1.6 Cumulative Impacts

Consistency with Applicable Zoning and Other Regulations Addressing Scenic Quality

The project site, along with cumulative projects, identified in Table 4-1, and located within the City and in neighboring jurisdictions, is located in a highly developed urban environment. In general, visual resource impacts of the cumulative projects would be site-specific and would not be expected to combine with other projects in separate viewsheds to create a cumulative impact. However, other projects in close proximity to the project site would cumulatively change the scenic character of the area in combination with the proposed project.

A large portion of the cumulative projects that are being proposed and/or constructed include larger-scale mixed-use and residential infill development. As these projects are implemented, a more dense and urban character will occur within the City. However, these projects are all situated in an area that has been subject to urban development. Land use intensification at these sites would not substantially degrade the scenic quality of the viewshed. Further, these projects would be required to comply with the City's Zoning Ordinance that include setbacks and height limits. Additionally, any new multifamily and commercial construction as well as exterior modifications would be subject to design and approval by the City or Architectural Review Board.

The nearest cumulative project is the pending PSJHC Phase II Master Plan, which includes the redevelopment of the PSJHC Child and Family Development Center at 1339 20th Street to the southeast of the project site. However, this project would be subject to City Council approval for site development standards as well as ARB design review/approval. As such, the proposed project would not result in a cumulatively considerable impact related to consistency with applicable zoning and other regulations addressing scenic quality. Impacts would be **less than significant**.

Light and Glare

The urbanized project setting supports numerous nighttime lighting sources and contains buildings and facilities constructed of potentially reflective materials, including metal paneling and glass. As with the proposed project, new lighting associated with cumulative projects considered in the cumulative scenario would be subject to compliance with the SMMC standards regulating shielding, light trespass, and maximum height of light poles. As previously stated in Section 4.1.5, the SMMC requires that all lighting fixtures be shielded "so as not to produce obtrusive glare" onto the public right-of-way or adjacent properties and that light be primarily retained on-site ("lighting may not illuminate other properties in excess of a measurement of 0.5 foot candles of light") (SMMC, Section 9.21.080(C)). Compliance with general standards pertaining to shielding and light trespass on projects considered in the cumulative analysis would reduce opportunities for substantial effects to existing day and nighttime views due to new sources of lighting and glare.

Building materials and elements used in new construction would primarily incorporate limestone or flat metal panels and additional materials utilized would include curved metal panels, railings, window surrounds, aluminum reveals, and glass. As previously described in Section 4.1.5, the SMMC also requires that no more than 25 percent of the surface area of any façade on any new building or addition to an existing building contain black or mirrored glass or other mirror-like material that is highly reflective. Highly reflective building materials are not anticipated to be incorporated into the design of the new structures; therefore, potential impacts to daytime views due to new sources of glare were determined to be less than significant. Cumulative projects consist of new buildings supporting largely residential uses, with some mixed-use, retail, office, commercial, and medical uses. Most of these uses are not anticipated to include large, continuous expanses of particularly reflective building material, such as unfinished or polished metal exteriors given City regulations and design review by the ARB. Lastly, the surrounding area is largely developed in nature and located in an urban environment. Thus, the area currently includes sources of interior and exterior lighting. Therefore, projects considered in the cumulative scenario would not combine with the proposed project to create a cumulative impact to daytime and nighttime views due to the introduction of new sources of glare. Impacts would be **less than significant**.

Shade/Shadow

Increases in height and/or massing that would result at either already developed or vacant sites, relative to the structures that previously existed on the cumulative project sites, have the potential to create shade and shadow effects. However, such effects are highly localized, since they are limited to the boundaries of the shade and shadows created by each new structure. As such, the cumulative projects that could produce a cumulatively significant effect when combined with the proposed project are limited to those within the immediate vicinity of the project site. However, none of the cumulative projects are located in such close proximity to the project site that a cumulative impact from shade and shadow would occur. As previously stated, the nearest cumulative project is the pending PSJHC Phase II Master Plan, which includes the redevelopment of the PSJHC Child and Family Development Center at 1339 20th Street, which is more than 500 feet to the southeast of the project site. Therefore, due to the distance between the project site and this project, it is not expected that cumulative shade/shadow impacts would occur within the immediate vicinity of the project site. Impacts would be **less than significant**.

4.1.7 Mitigation Measures

Impacts to aesthetics would be **less than significant**. No mitigation measures are required.

4.1.8 Level of Significance After Mitigation

No mitigation measures would be required because impacts to aesthetics would be **less than significant**.

4.1.9 References

Caltrans (California Department of Transportation). 2008. “Scenic Highway Guidelines.” Caltrans Landscape Architecture Program, Division of Design. October 2008.

Caltrans. 2018. “Scenic Highways: List of eligible and officially designated State Scenic Highways.” Accessed July 6, 2018. http://www.dot.ca.gov/design/lap/livability/scenic-highways/index.html.

City of Santa Monica. 2017. *2010 Land Use and Circulation Element*. Last amended 2017. https://www.smgov.net/Departments/PCD/Plans/2010-Land-Use-and-Circulation-Element-(LUCE)/.

City of Santa Monica. 2018. *City of Santa Monica Local Coastal Program Update*. Land Use Plan. Final Draft. October 2018. https://www.smgov.net/Departments/PCD/Plans/Local-Coastal-Plan-2018-Update/.

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SOURCE: Bing Maps (Accessed 2017); County of Los Angeles GIS

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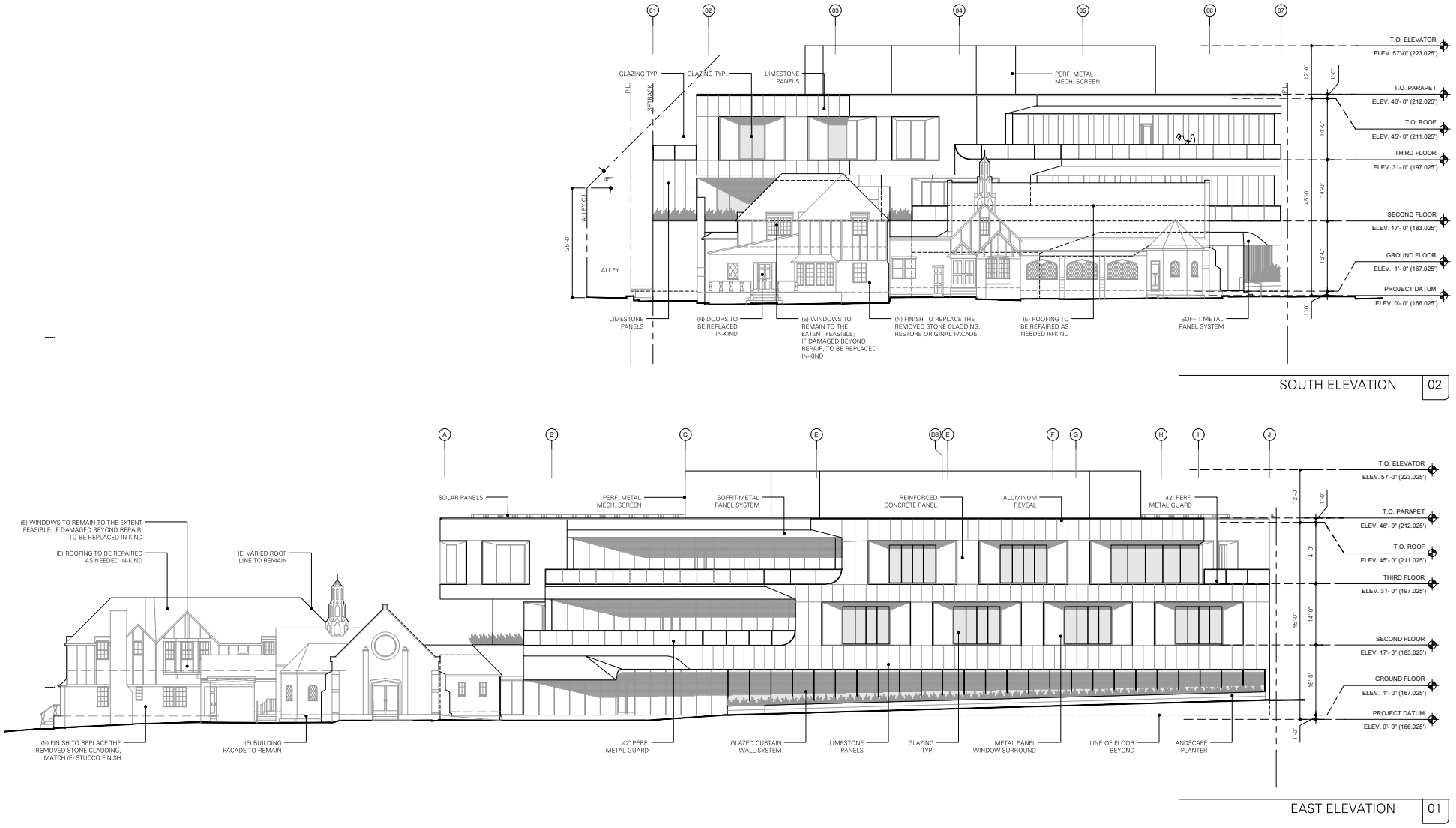
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FIGURE 4.1-1

Surrounding Land Uses

20th Street Wellness Center Project EIR

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SOURCE: NMD Architects, Inc. 2020

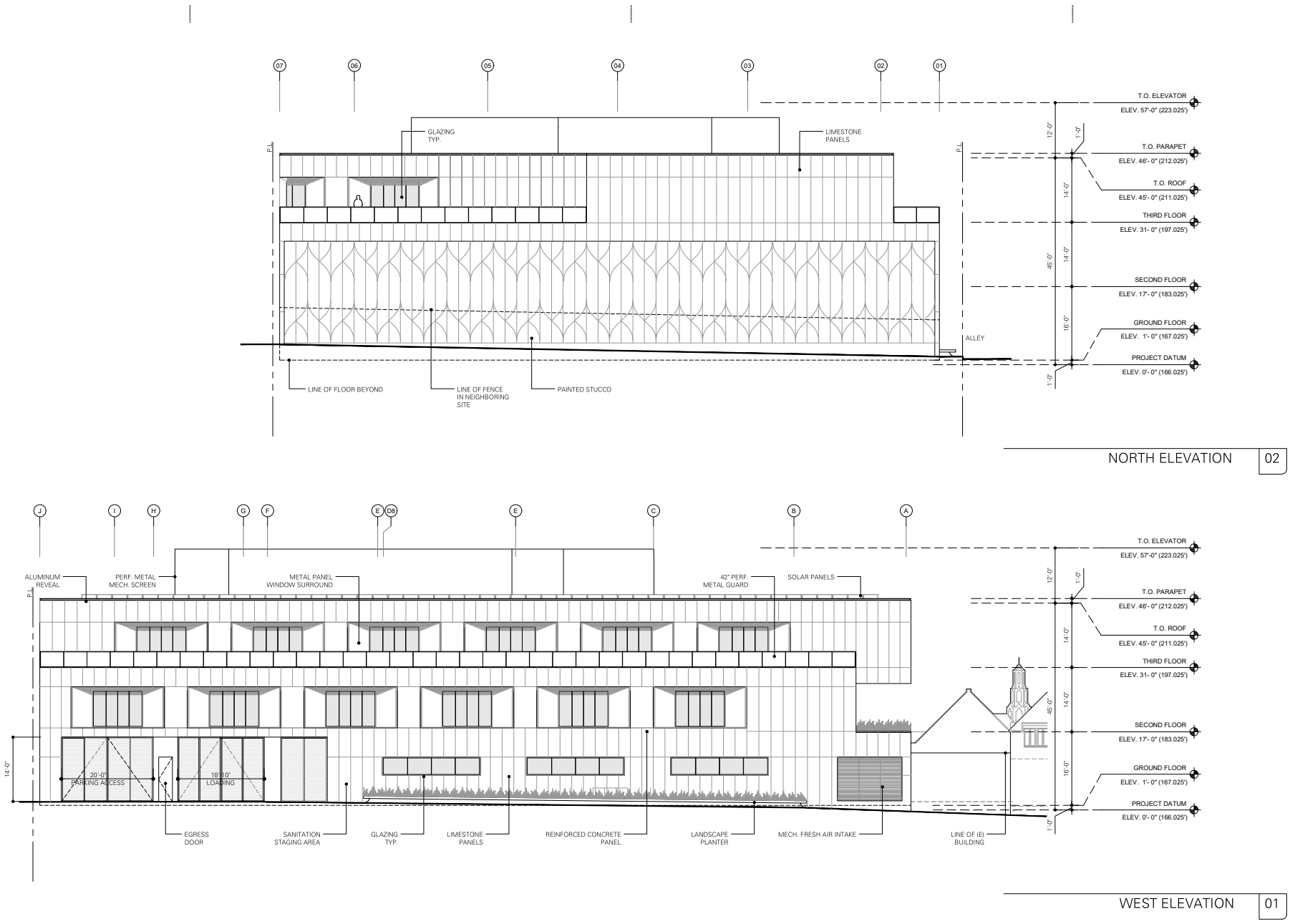
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FIGURE 4.1-2

Proposed South and East Elevations

20th Street Wellness Center Project EIR

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SOURCE: NMD Architects, Inc. 2020

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FIGURE 4.1-3

Proposed North and West Elevations

20th Street Wellness Center Project EIR

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View from 20th Street Looking South

SOURCE: NMD Architects, Inc. 2020

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FIGURE 4.1-4

Rendering of Proposed Project Design

20th Street Wellness Center Project EIR

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View from 20th Street Looking Southwest

SOURCE: NMD Architects, Inc. 2020

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FIGURE 4.1-5

Rendering of Proposed Project Design

20th Street Wellness Center Project EIR

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Aerial View Looking West

SOURCE: NMD Architects, Inc. 2020

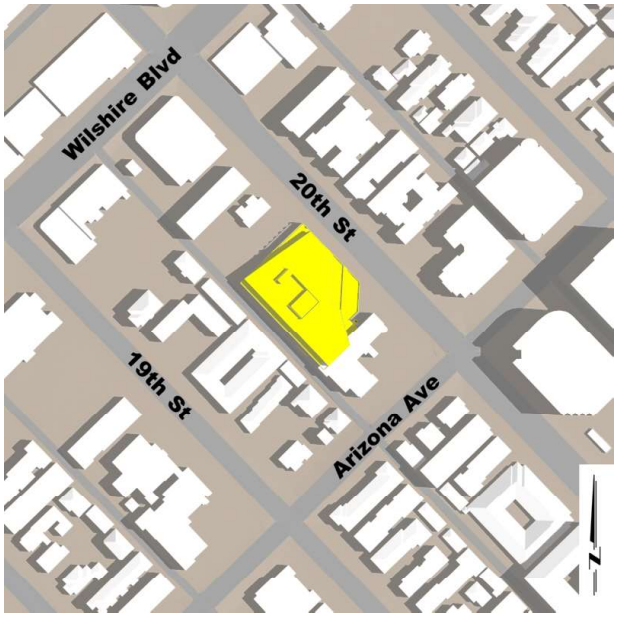
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FIGURE 4.1-6

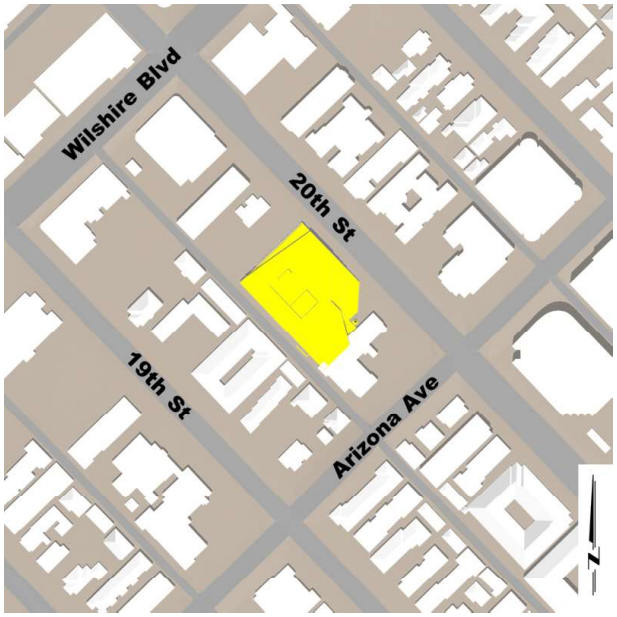
Rendering of Proposed Project Design

20th Street Wellness Center Project EIR

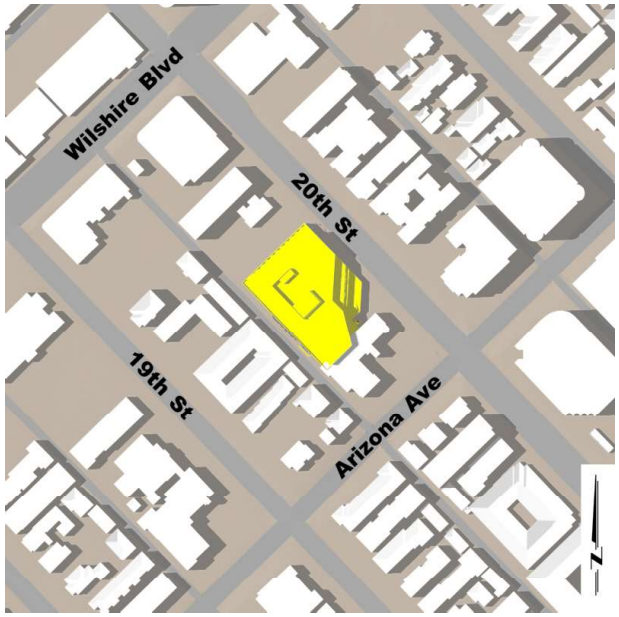
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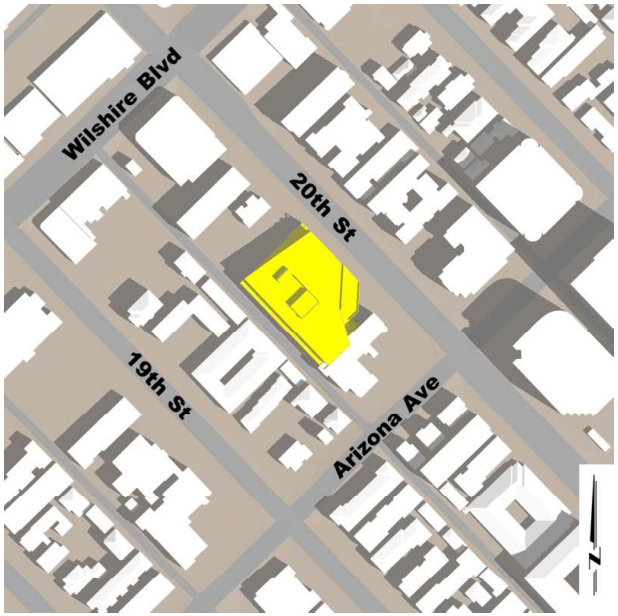


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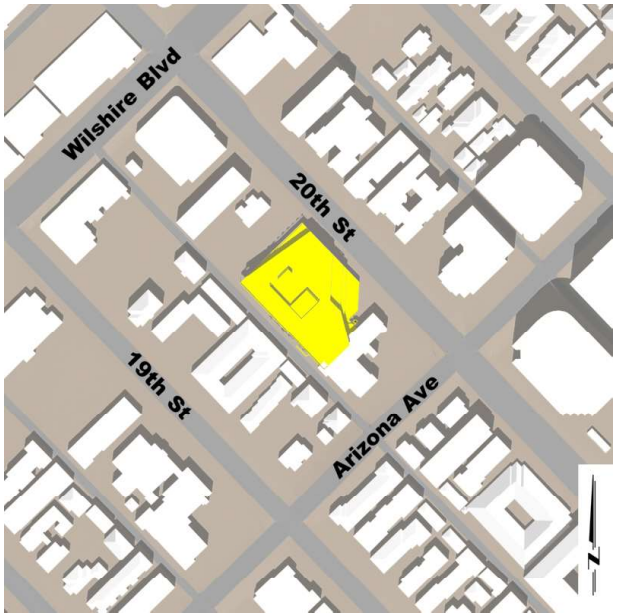
FIGURE 4.1-7

Project Shade/Shadow Conditions - Summer Solstice

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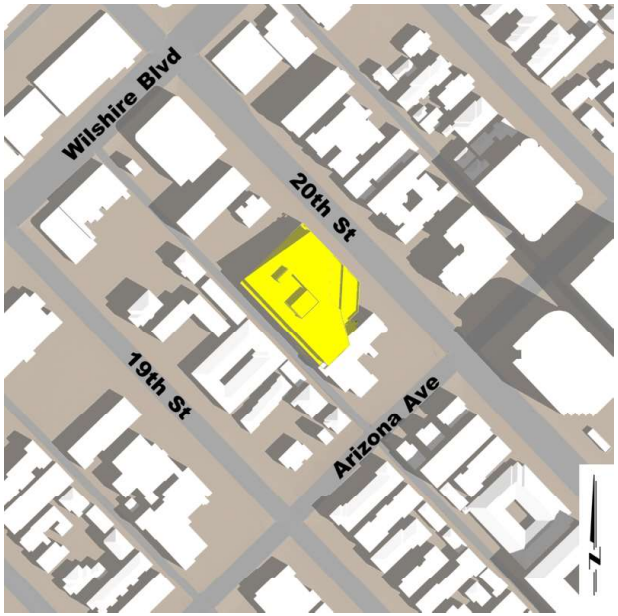


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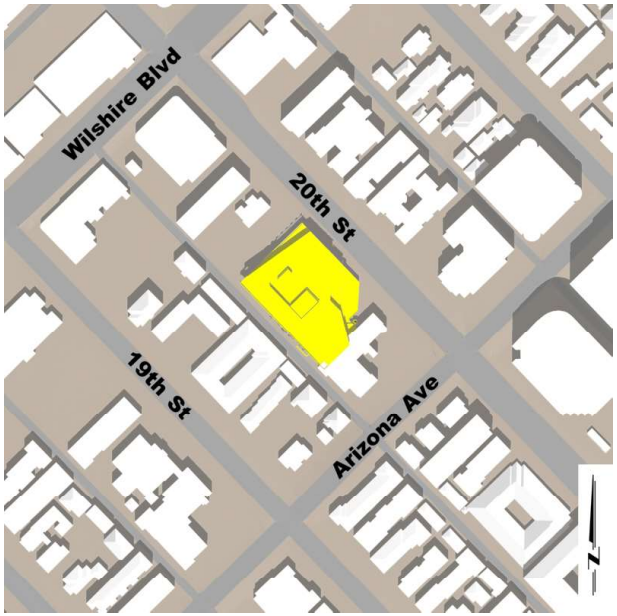
FIGURE 4.1-8

Project Shade/Shadow Conditions - Fall Equinox

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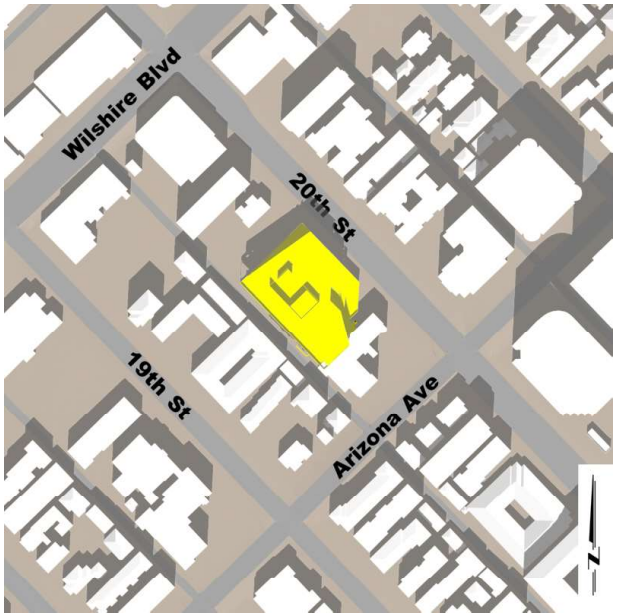
FIGURE 4.1-9

Project Shade/Shadow Conditions - Spring Equinox

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FIGURE 4.1-10

Project Shade/Shadow Conditions - Winter Solstice

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4.2 AIR QUALITY

This section describes the existing local and regional air quality conditions, identifies the associated regulatory framework, and evaluates the proposed project's potential impacts on air quality conditions due to construction and operational pollutant emissions.

4.2.1 Existing Environmental Conditions

The City of Santa Monica is located within the South Coast Air Basin (SCAB). SCAB is a 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east.

Meteorological and Topographical Conditions

The primary factors that determine air quality are the locations of air pollutant sources and the amount of pollutants emitted. Meteorological and topographical conditions, however, are also important. Factors such as wind speed and direction, air temperature gradients and sunlight, and precipitation and humidity interact with physical landscape features to determine the movement and dispersal of air pollutants. SCAB's air pollution problems are a consequence of the combination of emissions from heavy vehicular traffic and industry from the nation's second largest urban area, meteorological conditions discouraging dispersion of those emissions, and mountainous terrain surrounding SCAB that traps pollutants as they are pushed inland by the sea breeze (SCAQMD 2017). The meteorological and topographical factors affecting air quality in SCAB are described as follows.[1]

Climate

SCAB is characterized as having a Mediterranean climate (typified as semiarid with mild winters, warm summers, and moderate rainfall). The general 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 SCAB is a function of the area's natural physical characteristics (e.g., weather and topography) and of manufactured influences (e.g., development patterns and lifestyle). Moderate temperatures, comfortable humidity, and limited precipitation characterize the climate in SCAB. The average annual temperature varies little, averaging 75°F; however, with a less-pronounced oceanic influence, the eastern inland portions of SCAB show greater variability in annual minimum and maximum temperatures, and all portions have recorded temperatures over 100°F in recent years. Although SCAB has a semiarid climate, the air near the surface is moist because of the presence of a shallow marine layer. Except for infrequent periods when dry air is brought into SCAB by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds,

[1] The discussion of meteorological and topographical conditions of SCAB is based on information provided in the *Final 2016 Air Quality Management Plan* (SCAQMD 2017).

occasionally referred to as “high fog,” are a characteristic climate feature. Annual average relative humidity is 70% at the coast and 57% in the eastern part of SCAB. Precipitation is typically 9–14 inches annually and is rarely in the form of snow or hail because of typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of SCAB.

The greatest precipitation in the City occurs from December to March, during which time the rainfall averages 2–3 inches per month. The average annual precipitation is 12.62 inches. The City has a mild climate with an annual average temperature of 61°F. The coolest months of the year are typically December through February, with an annual average low of 49°F. The warmest months are typically July through October, with an annual average high of 72°F. Prevailing wind direction in the City (as measured at the Santa Monica Pier, approximately 1.9 miles southwest of the site) is from the west (WRCC 2016).

Sunlight

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain “primary” pollutants (mainly reactive hydrocarbons and oxides of nitrogen (NO_x)[2]) react to form “secondary” pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind of the emission sources. Southern California also has abundant sunshine, which drives the photochemical reactions that form pollutants such as ozone (O_3) and a substantial portion of fine particulate matter (particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$)). In SCAB, high concentrations of O_3 are normally recorded during the late spring, summer, and early autumn months, when more intense sunlight drives enhanced photochemical reactions. Due to the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

Temperature Inversions

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air mix and disperse into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in coastal Southern California. The cool, damp, and hazy sea air capped by coastal clouds is heavier than the warm, clear air, which acts as a lid through which the cooler marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above mean sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet above mean sea level, the terrain prevents the pollutants from entering the upper atmosphere, resulting in the pollutants settling in the foothill communities. Below 1,200 feet above mean

[2] NO_x is a general term pertaining to compounds of nitric oxide (NO), nitrogen dioxide (NO_2) and other oxides of nitrogen.

sea level, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours.

Mixing heights for inversions are lower in the summer, and inversions are more persistent, being partly responsible for the high levels of O_3 observed during summer months in SCAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods, allowing them to form secondary pollutants by reacting in the presence of sunlight. SCAB has a limited ability to disperse these pollutants due to typically low wind speeds and the surrounding mountain ranges.

As with other cities within SCAB, the City of Santa Monica is susceptible to air inversions, which trap a layer of stagnant air near the ground where pollutants are further concentrated. These inversions produce haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources. Elevated particulate matter less than or equal to 10 microns in diameter (PM_{10}) and $PM_{2.5}$ concentrations can occur in SCAB throughout the year, but occur most frequently in fall and winter. Although there are some changes in emissions by day-of-week and season, the observed variations in pollutant concentrations are primarily the result of seasonal differences in weather conditions.

Pollutants and Effects

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

Criteria Air Pollutants

Certain air pollutants are recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants are identified and regulated as part of the overall endeavor to prevent further deterioration and facilitate improvement in the prevalent air quality. Criteria air pollutants are defined

as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead (Pb). These pollutants, as well as toxic air contaminants (TACs), are discussed in the following paragraphs.[3] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly NO_x and volatile organic compounds (VOCs). The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere O_3 layer (stratospheric ozone) and at Earth's surface in the lower atmosphere (tropospheric ozone).[4] The O_3 that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe.

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, respiratory symptoms, worsening of lung disease leading to premature death, increased susceptibility to infections, inflammation of and damage to the lung tissue, and some immunological changes (EPA 2013; CARB 2019a). These health problems are particularly acute in sensitive receptors such as the sick, older adults, and young children.

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in and cause shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies of O_3's effects on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more

[3] The descriptions of each of the criteria air pollutants and associated health effects are based on the EPA's Criteria Air Pollutants (2016) and the CARB Glossary of Air Pollutant Terms (2016a).

[4] The troposphere is the layer of Earth's atmosphere nearest to the surface of Earth, extending outward approximately 5 miles at the poles and approximately 10 miles at the equator.

susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2019a).

A number of population groups are potentially at increased risk for O_3 exposure effects. In the ongoing review of O_3, the EPA has identified populations as having adequate evidence for increased risk from O_3 exposures include individuals with asthma, younger and older age groups, individuals with reduced intake of certain nutrients such as Vitamins C and E, and outdoor workers. There is suggestive evidence for other potential factors, such as variations in genes related to oxidative metabolism or inflammation, gender, socioeconomic status, and obesity. However further evidence is needed. (SCAQMD 2017).

The adverse effects reported with short-term O_3 exposure are greater with increased activity because activity increases the breathing rate and the volume of air reaching the lungs, resulting in an increased amount of O_3 reaching the lungs. Children may be a particularly vulnerable population to air pollution effects because they spend more time outdoors, are generally more active, and have a higher specific ventilation relative to their body weight, compared to adults. (SCAQMD 2017).

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the AAQS for NO_2, is results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher compared to lower levels of exposure. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2019b).

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas such as the proposed project location, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, and light-headedness, dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2019c).

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects at levels near the one-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 parts per million (ppm)) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. The elderly and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2019d).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in PM (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in resistance is

greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. PM_{10} tends to collect in the upper portion of the respiratory system, whereas $PM_{2.5}$ is small enough to penetrate deeper into the lungs and damage lung tissue. Suspended particulates also produce haze and reduce regional visibility and damage and discolor surfaces on which they settle.

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hours duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and world-wide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease (COPD), leading to hospitalization and emergency department visits. (CARB 2017).

Long-term (months to years) exposure to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10}

exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that PM in outdoor air pollution causes lung cancer. (CARB 2017).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and, in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

Non-Criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the Legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting

hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter. Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70 the diameter of a human hair) and, thus, is a subset of $PM_{2.5}$ (CARB 2016b). DPM is typically composed of carbon particles ("soot," also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2016b). CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM; 17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines, including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same noncancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2016b). Those most vulnerable to noncancer health effects are children whose lungs are still developing and the elderly who often have chronic health problems.

Odorous Compounds. Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air-pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air-pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005a). The SCAQMD identifies sensitive receptors as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

The closest existing sensitive receptors to the project site is the Lighthouse Church and School located approximately 10 feet to the north along 20th Street, as depicted on Figure 4.1-1, Surrounding Land Uses, in Section 4.1, Aesthetics, of this Draft EIR.[5] Furthermore, there are single-family and multi-family residences located approximately 20 feet to the west across 19th Court alley and multi-family residences located approximately 75 feet to the northeast. Multifamily residences and convalescent homes/rehabilitation centers are located south along the west side of 20th Street. Additionally, the Providence Saint John's Child and Family Development Center is located approximately 370 feet to the southeast along 20th Street. All other air quality sensitive receptors are located at greater distances from the project site and would be less impacted by emissions generated by the proposed project. Impacts are quantified below for the above sensitive receptors.

Regional and Local Air Quality Conditions

South Coast Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act amendments, the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on California

[5] Although the City is at an angle (i.e., streets are northwest or southwest), directions will be referred to as north, south, east, and west. 20th Street will be referred to as east, Arizona Avenue will be referred to as south, and so forth.

Ambient Air Quality Standards (CAAQS), rather than the NAAQS. Table 4.2-1 depicts the current attainment status of the project site with respect to the NAAQS and CAAQS as well as the attainment classifications for the criteria pollutants.

Table 4.2-1
South Coast Air Basin Attainment Classification

Pollutant	Designation/Classification	
	National Standards	***California Standards***
Ozone (O_3) – 1 hour	No Federal Standard	**Nonattainment**
Ozone (O_3) – 8 hour	**Extreme Nonattainment**	**Nonattainment**
Nitrogen dioxide (NO_2)	Unclassifiable/Attainment	Attainment
Carbon monoxide (CO)	Attainment/Maintenance	Attainment
Sulfur dioxide (SO_2)	Unclassifiable/Attainment	Attainment
Coarse particulate matter (PM_{10})	Attainment/Maintenance	**Nonattainment**
Fine particulate matter ($PM_{2.5}$)	**Serious Nonattainment**	**Nonattainment**
Lead (Pb)[1]	Partial Nonattainment	Attainment
Hydrogen sulfide	No National Standard	Unclassified
Sulfates	No National Standard	Attainment
Visibility-reducing particles	No National Standard	Unclassified
Vinyl chloride	No National Standard	No designation

Source: CARB 2018 (state); EPA 2018a (federal).
Notes: Bold text = not in attainment; Attainment = meets the standards; Attainment/Maintenance = achieve the standards after a nonattainment designation; Nonattainment = does not meet the standards; Unclassified or Unclassifiable = insufficient data to classify; Unclassifiable/Attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.
1 The CARB currently designates the Los Angeles County portion of the SCAB as a nonattainment designation for lead.

In summary, SCAB is designated as a nonattainment area for federal and state O_3 standards and federal and state $PM_{2.5}$ standards. SCAB is designated as a nonattainment area for state PM_{10} standards; however, it is designated as an attainment area for federal PM_{10} standards. SCAB is designated as an attainment area for federal and state CO standards, federal and state NO_2 standards, and federal and state SO_2 standards. While the Los Angeles County portion of the SCAB has been designated as nonattainment for the federal lead standard, it is designated attainment for the state lead standard (CARB 2018; EPA 2018a).Despite the current nonattainment status, air quality within SCAB has generally improved since the inception of air pollutant monitoring in 1976. This improvement is mainly due to lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by the SCAQMD. This trend toward cleaner air has occurred in spite of continued population growth. Despite this growth, air quality has improved significantly over the years, primarily due to the impacts of the region's air quality control program. PM_{10} levels have declined almost 50% since 1990, and $PM_{2.5}$ levels have also declined 50% since measurements began in 1999 (SCAQMD 2013). Similar improvements are observed with O_3, although the rate of O_3 decline has slowed in recent years.

Local Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. The SCAQMD monitors local ambient air quality at the proposed project site. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data from 2016 to 2018 are presented in Table 4.2-2. The West Los Angeles VA Hospital monitoring station, located at Wilshire Boulevard and Sawtelle, California 90025, is the nearest air quality monitoring station to the project site, located approximately 2.2 miles northeast from the proposed project site. Air quality data for O_3 and NO_2 from the VA Hospital monitoring station monitoring station are provided in Table 4.2-2. Because SO_2, PM_{10}, and $PM_{2.5}$ are not monitored at the VA Hospital monitoring station, CO, SO_2, and $PM_{2.5}$ measurements were taken from the Los Angeles North Main Street monitoring station (1630 North Main Street, California 90012, approximately 14.8 miles northeast from the project site). The air quality data for PM_{10} measurements were taken from the Los Angeles Westchester Parkway monitoring station (7201 Westchester Parkway, California 90045, approximately 6.2 miles southeast from the project site). The data collected these stations are considered representative of the air quality experienced in the project vicinity. The number of days exceeding the ambient air quality standards is also shown in Table 4.2-2.

Table 4.2-2
Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2016	*2017*	*2018*	*2016*	*2017*	*2018*
Ozone (O_3)										
West Los Angeles-VA Hospital	ppm	Maximum 1-hour concentration	State	0.09	0.085	0.099	0.094	0	1	0
	ppm	Maximum 8-hour concentration	State	0.070	0.073	0.077	0.074	2	3	2
			Federal	0.070	0.073	0.077	0.073	2	3	2
Nitrogen Dioxide (NO_2)										
West Los Angeles-VA Hospital	ppm	Maximum 1-hour concentration	State	0.18	0.054	0.055	0.064	0	0	0
			Federal	0.100	0.0545	0.0557	0.0647	0	0	0
	ppm	Annual concentration	State	0.030	0.011	ND	ND	–	–	–
			Federal	0.053	–	–	–	–	–	–
Carbon Monoxide (CO)										
Los Angeles-North Main Street	ppm	Maximum 1-hour concentration	State	20	–	–	–	–	–	–
			Federal	35	1.8	1.8	1.9	0	0	0
	ppm	Maximum 8-hour concentration	State	9.0	–	–	–	–	–	–
			Federal	9	1.3	1.6	1.6	0	0	0
Sulfur Dioxide (SO_2)										
Los Angeles-North Main Street	ppm	Maximum 1-hour concentration	Federal	0.075	0.134	0.197	0.179	–	–	–
	ppm	Maximum 24-hour concentration	Federal	0.14	0.013	0.032	0.013	0	0	0

Table 4.2-2
Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2016	*2017*	*2018*	*2016*	*2017*	*2018*
	ppm	Annual concentration	Federal	0.030	0.003	0.0085	0.0034	0	0	0
Coarse Particulate Matter (PM_{10})[b]										
Los Angeles-Westchester Parkway	□g/m³	Maximum 24-hour concentration	State	50	43.9	46.5	45.1	**0.0 (0)**	**0.0 (0)**	**ND (0)**
			Federal	150	43.0	46.5	45.3	**0.0 (0)**	**0.0 (0)**	**ND (0)**
	□g/m³	Annual concentration	State	20	ND	ND	ND	–	–	–
Fine Particulate Matter ($PM_{2.5}$)[b]										
Los Angeles-North Main Street	□g/m³	Maximum 24-hour concentration	Federal	35	44.3	54.9	61.4	**2.1 (2)**	**6.1 (6)**	**6.3 (6)**
	□g/m³	Annual concentration	State	12	49.4	61.7	65.3	–	–	–
			Federal	12.0	11.7	12.0	12.8	–	–	–

Sources: CARB 2019e; EPA 2019a.

Notes: — = data not available; μg/m3 = micrograms per cubic meter; ND = insufficient data available to determine the value; ppm = parts per million

Data taken from CARB iADAM (http://www.arb.ca.gov/adam) and EPA AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year.

Exceedances of federal and state standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.

Los Angeles VA Hospital Monitoring Station is located at Wilshire Boulevard and Sawtelle, Los Angeles, California 90025.

Los Angeles North Main Street Monitoring Station is located at 1630 North Main Street, Los Angeles, California 90012.

Los Angeles Westchester Parkway Monitoring Station is located at 7201 Westchester Parkway, Los Angeles, California 90045.

[a] Mean does not satisfy minimum data completeness criteria.

[b] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

4.2.2 Relevant Plans, Policies, and Regulations

Federal

Clean Air Act

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, including setting NAAQS for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan (SIP) that demonstrates how those areas will attain the standards within mandated timeframes. Each SIP is developed through a public process, formally adopted by the state, and submitted by the Governor's designee to the U.S. EPA. The CAA requires the U.S. EPA to review each plan and any plan revisions and to approve the plan or plan revisions if consistent with the CAA.

The 1977 federal Clean Air Act amendments required the EPA to identify National Emission Standards for Hazardous Air Pollutants to protect public health and welfare. HAPs include certain VOCs, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

State

California Clean Air Act

The California Clean Air Act (CCAA) requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible

for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 4.2-3.

Table 4.2-3
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	***Primary[c,d]***	***Secondary[c,e]***
O_3	1 hour	0.09 ppm (180 μg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	Same as Primary Standard
	annual arithmetic mean	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 μg/m³)
	24 hours	0.04 ppm (105 μg/m³)	0.14 ppm (for certain areas)[g]	—
	annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 μg/m³	150 μg/m³	Same as Primary Standard
	annual arithmetic mean	20 μg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 μg/m³	Same as Primary Standard
	annual arithmetic mean	12 μg/m³	12.0 μg/m³	15.0 μg/m³
Lead[j,k]	30-day average	1.5 μg/m³	—	—
	calendar quarter	—	1.5 μg/m³ (for certain areas)[k]	Same as Primary Standard
	rolling 3-month average	—	0.15 μg/m³	

Table 4.2-3
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m^3)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m^3)	—	—
Sulfates	24 hours	25 µg/m^3	—	—
Visibility-reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016c.

Notes: µg/m^3 = micrograms per cubic meter; mg/m^3= milligrams per cubic meter; ppm = parts per million by volume; O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

a California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

e National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

ff On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

g To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

h On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

i On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual

secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

j CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

k The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Air Toxics Program

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 700 pollutants, a subset of which have carcinogenic and noncarcinogenic toxicity criteria established pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment (HRA), and if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation (CARB 2014), On-Road Heavy Duty (New) Vehicle Program (CARB 2005b), In-Use Off-Road Diesel Vehicle Regulation (CARB 2011), and New Off-Road Compression-Ignition (Diesel) Engines and Equipment program (CARB 2008). These regulations and programs have timetables to which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several Airborne Toxic Control Measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

Air Quality and Land Use Handbook

CARB published the Air Quality and Land Use Handbook in 2005 to serve as a general guide for considering impacts to sensitive receptors from facilities that emit TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations

include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines, and (4) avoid siting sensitive receptors within 300 feet of a large gasoline dispensing facility (3.6 million gallons per year or more) or 50 feet of a typical gasoline dispensing facility (less than 3.6 million gallons per year) (CARB 2005a).

In April 2017, CARB published a Technical Advisory supplement to the Air Quality and Land Use Handbook recognizing that infill development as promoted by the State can place sensitive individuals in close proximity to high-volume roadways. that The Technical Advisory provides planners and other stakeholders involved in land use planning and decision-making with information on scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways. The strategies include those that reduce traffic emissions, such as vehicle speed reduction mechanisms, including roundabouts, traffic signal management, and speed limit reductions on high-speed roadways. Strategies also include those that increase the dispersion of traffic emissions, such as implementing designs that promote air flow and pollutant dispersion along street corridors (e.g., wider sidewalks, bicycle lanes, streets characterized by buildings of varying heights), solid barriers such as sound walls, and vegetation for pollutant dispersion. Other strategies include those that remove pollution from the air such as indoor high efficiency filtration. This Technical Advisory is not intended as guidance for any specific project, nor does it create any presumption regarding the feasibility of mitigation measures

California Health and Safety Code Section 41700

This section of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

Local

South Coast Air Quality Management District

The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in SCAB, where the proposed project is located. The SCAQMD operates monitoring stations in SCAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections.

Air Quality Management Plan

The SCAQMD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain state and federal ambient air quality standards in SCAB. The SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. The 2016 AQMP proposed policies and measures to achieve federal and state standards for improved air quality in SCAB and portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under SCAQMD jurisdiction. The 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air. The 2016 AQMP represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gas emissions and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017). Because mobile sources are the principal contributor to SCAB's air quality challenges, SCAQMD has been and will continue to be closely engaged with CARB and the EPA, who have primary responsibility for these sources. The 2016 AQMP recognizes the critical importance of working with other agencies to develop funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality but also local businesses and the regional economy. These "win-win" scenarios are key to implementation of this 2016 AQMP with broad support from a wide range of stakeholders.

While striving to achieve the NAAQS for O3 and PM2.5 and the CAAQS for O3, PM10, and PM2.5 through a variety of air quality control measures, the 2016 AQMP also accommodates planned growth in SCAB. Projects are considered consistent with, and would not conflict with or obstruct, implementation of the AQMP if growth in socioeconomic factors (e.g., population, employment) is consistent with the underlying regional plans used to develop the AQMP. The demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the Southern California Association of Governments (SCAG) based on general plans for cities and counties in SCAB were used in the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) (SCAG 2016) to estimate future emissions in the 2016 AQMP (SCAQMD 2017). On May 7, 2020 SCAG's Regional Council approved the Connect SoCal (2020-2045 RTP/SCS) for the purpose of federal transportation conformity. The plan was fully adopted in September 2020. The Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Connect SoCal charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura (SCAG 2020).

SCAQMD Rules

Emissions from construction, mobile, area, and stationary sources resulting from the proposed project are subject to the rules and regulations of SCAQMD (2017), which include the following:

- **Rule 201 – Permit to Construct:**[6] This rule requires that prior to construction, written authorization for such construction from the Executive Officer must be obtained.
- **Rule 203 – Permit to Operate:**[7] This rule prohibits the operations of any equipment which may cause the issuance of air contaminants without first obtaining a written permit from the Executive Officer.
- **Rule 401 – Visible Emissions:**[8] This rule establishes the limit for visible emissions from stationary sources.
- **Rule 402 – Nuisance:**[9] This rule prohibits the discharge of air pollutants from a facility that cause injury, detriment, nuisance, or annoyance to the public or damage to business or property.
- **Rule 403 – Fugitive Dust:**[10] This rule requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust, and identifies measures to reduce fugitive dust. This includes soil treatment for exposed soil areas. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate.
- **Rule 431.2 – Sulfur Content of Liquid Fuels:**[11] The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of sulfur oxides (SO_x) and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile sources.

6 Rule 201 Permit to Construction: http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-201.pdf?sfvrsn=4.
7 Rule 203 Permit to Operate: http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-201.pdf?sfvrsn=4.
8 Rule 401 Visible Emissions: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-401.pdf?sfvrsn=4.
9 Rule 402 Nuisance: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf?sfvrsn=4.
10 Rule 403 Fugitive Dust: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf?sfvrsn=4.
11 Rule 431.2 Sulfur Content of Liquid Fuels: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-431-2.pdf?sfvrsn=4.

- **Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines:**[12] This rule applies to stationary and portable engines rated at greater than 50 horsepower. The purpose of Rule 1110.2 is to reduce NO_x, VOC, and CO emissions from engines. Emergency engines, including those powering standby generators, are generally exempt from the emissions and monitoring requirements of this rule because they have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter.
- **Rule 1113 – Architectural Coatings:**[13] This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories Implementation of PDF-AQ-1 would limit the VOC content for interior and exterior coatings during construction.
- **Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities:**[14] This rule requires owners and operators of any demolition or renovation activity and the associated disturbance of asbestos-containing materials (ACM), any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of ACM.
- **Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion And Other Compression Ignition Engines:**[15] This rule requires diesel-fueled emergency engines to meet emissions standards for DPM as well as VOCs, NO_x, and CO. In addition, the engines may be required to limit non-emergency operations (maintenance activities) to specific hours of operations.

Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated metropolitan planning organization for the Southern California region and is the largest metropolitan planning organization in the United States.

On April 7, 2016, SCAG's Regional Council adopted the 2016 RTP/SCS. The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and

12 Rule 1110.2 Emissions from Gaseous and Liquid-Fueled Engines: http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1110-2.pdf.

13 Rule 1113 Architectural Coatings: http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=17.

14 Rule 1403 Asbestos Emissions from Demolition/Renovation Activities: http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1403.pdf?sfvrsn=4.

15 Rule 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines: http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1470.pdf?sfvrsn=4.

public health goals. The 2016 RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The 2016 RTP/SCS was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders within the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In June 2016, SCAG received its conformity determination from the Federal Highway Administration and the Federal Transit Administration indicating that all air quality conformity requirements for the 2016 RTP/SCS and associated 2015 Federal Transportation Improvement Program Consistency Amendment through Amendment 15-12 have been met (SCAG 2016).

As previously noted, SCAQMD's 2016 AQMP applies the SCAG growth forecasts assumed in the 2016 RTP/SCS. As described above, SCAG has recently adopted Connect SoCal (the 2020-2045 RTP/SCS). However, because the current AQMP coincides with data from the 2016 RTP/SCS, the analysis in this section relies on the current AQMP and the 2016 RTP/SCS.

City of Santa Monica

The City of Santa Monica General Plan is the fundamental planning policy document of the City, providing the framework for decision making regarding growth and development. The City's General Plan includes various policies related to improving air quality (both directly and indirectly). Applicable policies include the following:

Land Use and Circulation Element

The City's Land Use and Circulation Element (LUCE) was adopted in 2010 (last amended in 2017), and is the primary land use and transportation planning document governing existing and future land uses in the City. The LUCE encompasses the community's vision for Santa Monica's future; and establishes goals, policies, and development criteria for land uses and circulation in the City. The Plan's goals are to preserve the City's neighborhoods, reduce greenhouse gas (GHG) emissions, improve mobility and circulation, and encourage the creation of new housing near transit and serves as the City's guiding document for the future.

Most importantly, the City's adopted Land Use & Circulation Element (LUCE) identifies an integrated land use and transportation approach to reduce the city's per capita carbon footprint and its overall impact on the environment. Although the emphasis of the LUCE is the reduction of greenhouse gas (GHG) emissions, the LUCE would also reduce emissions of criteria pollutants (City of Santa Monica 2017).

Other Plans and Programs

In addition, the City has adopted the following plans and programs to provide for improved regional air quality and reduced greenhouse gas emissions:

- **Sustainable City Plan:** The City's Sustainable City Plan (SCP) provides goals and strategies for the City to follow to enhance the City's sustainability, inclusive of reducing greenhouse gas emissions. It includes nine goal areas, four of which address the amount of air quality emissions associated with City development: Resource Conservation, Environmental and Public Health, Transportation, and Open Space and Land Use. Two of these, Transportation and Open Space/Land Use, address the overall arrangement of development in the City to reduce air and GHG emissions. The SCP goals pertaining to Resource Conservation and Environment and Public Health more directly address the air quality emissions. The Resource Conservation goals directly addresses such topics as use of renewable energy and reductions in air, soil and water pollutants. The Resource Conservation Goals also set GHG emissions reduction targets for the City in order to address climate change impacts
- **Urban Forest Master Plan (UFMP)** – The revised 2017 UFMP includes a 5-year Street Tree Planting Priority Plan to increase and expand the urban forest canopy. The planting of trees would increase carbon sequestration and improve air quality. Trees remove gaseous pollutants and particulate matter from the air by absorbing them with normal air components through their leaf surface.
- **Electric Vehicle Action Plan** – The EVAP he was adopted in 2017 and seeks to expand the public charging infrastructure in the City to 300 chargers by 2020. By providing additional infrastructure, the EVAP aims to increase the percentage of electric vehicles on the road from 2% to 15% by 2025. Replacing 13% (~9,000) of the fossil-fuel powered vehicles with EVs will save an estimated 26,000 metric tons of carbon dioxide.
- **Clean Big Blue Bus (BBB) Fleet** - Big Blue Bus operates a fleet of nearly 200 vehicles transporting more than 61,000 passengers daily. The entire fleet operates on alternative fuels, including renewable natural gas (RNG) a form of liquefied and compressed natural gas (LNG/CNG), which helps to cut emissions by up to 90 percent.
- **Clean City Fleet (excluding BBB and Fire Department Vehicles)** – The City is a member of "Clean Cities," a program sponsored by the U.S. Department of Energy which promotes the use of alternative fuel vehicles. Santa Monica's Fleet Management Division is one of the most innovative and progressive programs in the nation. Approximately, 60% of the citywide vehicle fleet and over 70% of non-emergency vehicles are fueled alternatively.
- **Ban on Gasoline Powered Leaf Blowers** - Section 4.08.270 of the City Municipal Code bans the operation of gasoline powered leaf blowers within the City limits.

For further discussion of the City's Energy Code and Green Building Ordinance that also reduce air emissions, refer to Section 4.6 Greenhouse Gas Emissions. Also refer to Section 4.10 Transportation for a discussion of the City's Transportation Demand Management Ordinance which reduces vehicles miles traveled and associated air emissions.

4.2.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts related to air quality materials are based on the questions in Appendix G of the State CEQA Guidelines. According to Appendix G of the State CEQA Guidelines, a significant impact related to air quality could occur if the proposed project would:

1. Conflict with or obstruct implementation of the applicable air quality plan?
2. Result in a cumulatively considerable new increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?
3. Expose sensitive receptors to substantial pollutant concentrations?
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Pursuant to the State CEQA Guidelines (Section 15064.7), a lead agency may consider using, when available, the significance criteria established by the applicable air quality management district or air pollution control district when making determinations of significance.

In a February 2018 CEQA Guidance document (Guidance on Frequently Questioned Topics in Roadway Analysis for the California Environmental Quality Act)" released by SCAQMD, the SCAQMD further states that: "*Air districts' thresholds provide a clear quantitative benchmark to determine the significance of project and project alternative air quality impacts. They also help identify the magnitude of the impacts, facilitate the identification of feasible mitigation measures, and evaluate the level of impacts before and after mitigation measures. Since one of the basic purposes of CEQA is to inform government decision makers and the public about the potential, significant environmental effects of any proposed activities (CEQA Guidelines § 15002(a)(1)), use of air district thresholds is a best practice for CEQA impact determinations*."

In compliance with State CEQA guidelines and SCAQMD guidance, the City of Santa Monica uses the SCAQMD's thresholds to evaluate proposed development projects and assess the significance of quantifiable impacts. The potential air quality impacts of a project are, therefore, evaluated according to the thresholds adopted by the SCAQMD in connection with its CEQA Air Quality Handbook, Air Quality Analysis Guidance Handbook, and subsequent SCAQMD guidance as discussed previously.

Consistency with Air Quality Management Plan

The evaluation of whether the proposed project would conflict with or obstruct implementation of the applicable air quality plan is based on the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993), Chapter 12, Section 12.2 (Consistency Criterion No. 1), which asks whether the proposed project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP. This issue is addressed in detail under Threshold 1 in Section 4.2.5, Impacts Analysis. Consistency

Criterion No. 2 in the SCAQMD CEQA Air Quality Handbook, Chapter 12, Section 12.3, asks whether the proposed project would exceed the assumptions in the AQMP or increments based on the year of proposed project buildout and phase, as discussed further in Section 4.2.5.

Cumulative Impacts on Air Quality

Regarding cumulative impacts (checklist question 2) for nonattainment pollutants, the SCAQMD recommends that any construction-related emissions and operational emissions from individual development projects that exceed the project-specific mass daily emissions thresholds also be considered cumulatively considerable. Therefore, if emissions exceed the SCAQMD thresholds shown in Table 4.2-4, the proposed project could have the potential to result in a cumulatively considerable net increase in these pollutants and, thus, could have a significant impact on ambient air quality.

Table 4.2-4
South Coast Air Quality Management District Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	***Construction (pounds per day)***	***Operation (pounds per day)***
VOCs	75	55
NO_x	100	55
CO	550	550
SO_x	150	150
PM_{10}	150	150
$PM_{2.5}$	55	55
Lead[a]	3	3
Ambient Air Quality Standards for Criteria Pollutants[b]		
NO_2 1-hour average NO_2 annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)	
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
PM_{10} 24-hour average PM_{10} annual average	10.4 $\mu g/m^3$ (construction)[bc] 2.5 $\mu g/m^3$ (operation) 1.0 $\mu g/m^3$	
$PM_{2.5}$ 24-hour average	10.4 $\mu g/m^3$ (construction)[bc] 2.5 $\mu g/m^3$ (operation)	

Source: SCAQMD 2015a.
Notes: SCAQMD = South Coast Air Quality Management District; VOC = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; NO_2 = nitrogen dioxide; ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter.

GHG emissions thresholds for industrial projects, as added in the March 2015 revision to the SCAQMD Air Quality Significance Thresholds, were not include included in Table 4.2-4 because they are addressed within the GHG emissions analysis and not the air quality study.

[a] The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the proposed project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

[b] Ambient air quality standards for criteria pollutants are based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.

[c] Ambient air quality threshold are based on SCAQMD Rule 403.

The SCAQMD established their numerical thresholds of significance for CEQA purposes based on the regional goal to attain the NAAQS and CAAQS. Since an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, this means that the thresholds established by air districts are also protective of human health.

The SCAQMD has also provided guidance on an acceptable approach to addressing the cumulative impacts issue for air quality as discussed below:[16]

> As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR… Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

Therefore, consistent with accepted and established SCAQMD cumulative impact evaluation methodologies, the potential for the proposed project to results in cumulatively considerable impacts from regional emissions is assessed based on the SCAQMD thresholds.

Sensitive Receptors

The assessment of the proposed project's potential to expose sensitive receptors to substantial pollutant concentrations includes a localized significance threshold (LST) analysis, as recommended by the SCAQMD, to evaluate the potential of localized air quality impacts to sensitive receptors in the immediate vicinity of the proposed project. A LST analysis was performed to evaluate potential localized impacts associated with construction activities. For project sites of 5 acres or less (the proposed project is located on two parcels totaling 1.03 acres), the SCAQMD LST Methodology (2009) includes lookup tables that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., the emissions would not cause an exceedance of the applicable concentration limits for NO_2, CO, PM_{10}, and $PM_{2.5}$) without performing project-specific dispersion modeling.

[16] South Coast Air Quality Management District, Cumulative Impacts White Paper, Appendix D, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed April 23, 2019.

The LST significance thresholds for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of a project that would not cause or contribute to an exceedance of the relevant ambient air quality standards, while the threshold for PM_{10} represents compliance with Rule 403 (Fugitive Dust). The LST significance threshold for $PM_{2.5}$ is intended to ensure that construction emissions do not contribute substantially to existing exceedances of the $PM_{2.5}$ ambient air quality standards. The allowable emission rates depend on the following parameters:

- Source receptor area (SRA) in which the project is located
- Size of the project site
- Distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals)

The project site is located in SRA 2 (Northwest Coastal Los Angeles County). The SCAQMD provides guidance for applying California Emissions Estimator Model (CalEEMod) to the LSTs. LST pollutant screening level concentration data is currently published for 1-, 2-, and 5-acre sites for varying distances. The maximum number of acres disturbed on the peak day was estimated using the "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (SCAQMD 2011), which provides estimated acres per 8-hour day for crawler tractors, graders, rubber tired dozers, and scrapers. Based on the SCAQMD guidance, and assuming a grader can grade 0.5 acres per 8-hour day, it was estimated that the maximum acres on the project site that would be disturbed by off-road equipment would be 0.5 acres per day (one grader used for grading/excavation). The maximum total disturbed acreage would be 73.5 acres over approximately 196 days; therefore, the estimate of 0.5 acres per day of disturbance is conservative. Because the SCAQMD does not provide lookup table values for construction sites less than 1 acre, the LST values for a 1 acre within SRA 2 were used.

As previously discussed in Section 4.2.1, Existing Conditions, the closest sensitive receptor is the Lighthouse Church and School located approximately 10 feet northwest of the project site. As such, the LST receptor distance was assumed to be 82 feet (25 meters), which is the shortest distance provided by the SCAQMD lookup tables. The construction LST values from the SCAQMD lookup tables for SRA 2 (Northwest Coastal Los Angeles County) for a one-acre construction site and a receptor distance of 25 meters are shown in Table 4.2-5.

Table 4.2-5
Localized Significance Thresholds for Source Receptor Area 2
(Northwest Coastal Los Angeles County)

Pollutant	Threshold (pounds per day)
NO_2	103
CO	562
PM_{10}	4
$PM_{2.5}$	3

Source: SCAQMD 2009.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.

LST thresholds were determined based on the values for 1-acre site at a distance of 25 meters from the nearest sensitive receptor.

An HRA was conducted to evaluate the health risks to nearby receptors associated with TACs generated from construction emission activities at the project site. The SCAQMD's *Modeling Guidance for AERMOD* (SCAQMD 2018) provides guidance to perform dispersion modeling for use in HRAs within the South Coast Air Basin. SCAQMD's current thresholds of significance for TAC emissions are presented in Table 4.2-6.

Table 4.2-6
SCAQMD TAC Emissions Thresholds

Carcinogens	Noncarcinogens
	Acute or Chronic
Maximally exposed individual risk equals or exceeds 10 in 1 million	Hazard Index equals or exceeds 1.0 for the maximally exposed individual

Source: SCAQMD 2018.
Notes: SCAQMD = South Coast Air Quality Management District; TAC = toxic air contaminant

The assessment of the proposed project's potential to expose sensitive receptors to substantial pollutant concentrations also includes an evaluation of CO hotspots, and an assessment of the potential health effects of criteria air pollutants. The methodology and assumptions applied in the construction HRA is described in detail as follows.

Other Emissions (Including Odors)

The potential for the proposed project to result in other adverse emissions such as those leading to odors is based on the proposed project's anticipated construction activity and land use type, and the potential for the proposed project to create other adverse emissions, including an odor nuisance pursuant to SCAQMD Rule 402 (Nuisance).

4.2.4 Methodology

In accordance with CEQA and the CEQA review process, the City of Santa Monica assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The City does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the city and region will meet federal and state standards. Instead, the City relies upon the expertise of the SCAQMD and utilizes the CEQA Air Quality Handbook and newer thresholds of significance as the guidance documents for the environmental review of plans and development proposals within the South Coast Air Basin portion of its jurisdiction.

Construction

Emissions from the construction phase of the proposed project were estimated using CalEEMod Version 2016.3.2, an emissions inventory software program recommended by the SCAQMD. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the applicant and CalEEMod default values. Complete detailed construction assumptions are included in Appendix B.

As described in Chapter 3, Project Description, the proposed project would include demolition of two former residential structures, demolition of a garage attached to the former Gates, Kingsley, & Gates Funeral Home Building (GKGM Building), adaptive reuse of a portion of the GKGM Building, and construction of a new Wellness Center totaling approximately 72,812 sf. Construction start date would depend on the timing of entitlements and permit processing. For the purposes of modeling, it was assumed that construction of the proposed project would commence as early as March 2021 and would last approximately 23 months, ending in the January 2023.

Demolition would occur over approximately one month. Following demolition, preparation of the project site for building construction (i.e., grading, soil excavation for subterranean parking, trenching for dry and wet utilities, and surface improvements) would commence. Excavation/shoring activities would result in the export of approximately 58,000 cubic yards of soil. Grading activities are anticipated to be performed through the use of off-road construction equipment (e.g., grader and tractor/loader/backhoe) and would occur over approximately 8 to 9 months. Vertical construction would take approximately 13 to 14 months, while paving and architectural coating activities would each take approximately 3 weeks each.

The analysis contained herein is based on the CalEEMod default assumptions and construction schedule information provided by the proposed project applicant, which is outlined in Table 4.2-7 (duration of phases is approximate).

Table 4.2-7
Construction Phasing Assumptions

Proposed Project Construction Phase	Start Date	End Date	Duration (weeks)
Demolition	03/22/2021	04/15/2021	4
Grading/Shoring	04/16/2021	11/26/2021	32
Building Construction	11/29/2021	12/23/2022	56
Paving	12/15/2022	01/04/2023	3
Architectural Coating	01/09/2023	01/27/2023	3

Note: See Appendix B for details**.**

Construction assumptions, including general construction equipment mix assumptions, for the proposed project are provided in Table 4.2-8. Default values for horsepower and load factor as provided in CalEEMod

were used for all construction equipment listed in Table 4.2-8. It was assumed that all equipment used during each construction subphase would be operating 8 hours per day, 5 days per week. The equipment mix anticipated for construction was based on information provided by the applicant and CalEEMod default values. Detailed construction equipment modeling assumptions are provided in Appendix B.

Table 4.2-8
Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment			
	Maximum Daily Worker Trips	*Maximum Daily Vendor Truck Trips*	*Total Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*	*Horsepower*
Demolition	8	0	164	Concrete/Industrial Saw	1	3	81
				Rubber Tired Dozer	1	3	247
				Tractor/Loader/Backhoe	1	5	97
Grading/Shoring	8	4	11,600	Grader	1	6	187
				Tractor/Loader/Backhoe	1	6	97
				Bore/Drill Rig[a]	1	5	221
Building Construction	78	34	0	Crane	1	4	231
				Forklift	1	4	231
				Generator Set	1	8	84
				Tractor/Loader/Backhoe	1	5	97
				Welders[b]	2	4	46
				Aerial Lift[c]	1	8	63
Paving	14	0	0	Cement and Mortar Mixer	1	2	9
				Paver	1	2	130
				Paving Equipment	1	2	132
				Roller	1	2	80
				Tractor/Loader/Backhoe	1	2	97
Architectural Coating	16	0	0	Air Compressor	1	6	78

Notes:
See Appendix B for details**.**

[a] Assumed equipment use would be one month after start of Grading/Shoring activities.
[b] Welding was assumed to occur over a period of approximately 2 months.
[c] Would be required for 7 months of the Building Construction phase.

Operation

Operation of the proposed project has the potential to generate criteria pollutant emissions from vehicle trips generated. In addition, emissions would result from area sources on-site such as natural gas combustion, landscaping equipment, and use of consumer products. Operational emissions were estimated for buildout of the proposed project also using CalEEMod. The first full year of operation was assumed to be 2024, which is based on the completion of all construction activities.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, which includes emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage are calculated in the building energy use, which is described in the following energy source section. The proposed project would not include woodstoves or fireplaces (wood or natural gas); therefore, area source emissions associated with hearths were not included.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2017). Consumer product VOC emissions are estimated in CalEEMod for nonresidential land uses based on the floor area of buildings and the default factor of pounds of VOC emissions per building square foot per day.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of nonresidential surface coatings based on the VOC emission factor, building square footage, assumed fraction of surface area, and reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings, and SCAQMD's Rule 1113 (Architectural Coatings) governs the VOC content for interior and exterior coatings. The SCAQMD recommends VOC rates of 50 grams per liter for nonflat coatings. Both interior and exterior surfaces within CalEEMod were updated to reflect this. Consistent with CalEEMod defaults, it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For areas that include pavement, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide (CAPCOA 2017). The model default reapplication rate of 10% of area per year is assumed.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, trimmers, chain saws, and hedge trimmers. The emissions associated with landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days as a conservative measure. For Los Angeles

County, the average annual summer days are estimated to be 365 days; however, it is assumed that landscaping equipment would likely only operate during the week (not weekends), so landscape operational days were assumed to be 250 days per year in CalEEMod (CAPCOA 2017).

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod since criteria pollutant emissions occur at the site of the power plant, which is typically off-site. The estimated energy use was based on CalEEMod default values. CalEEMod 2016.3.2 uses the 2016 version of Title 24 as a basis for energy modelling which the proposed project would be required to meet. However, the 2019 standards will become effective January 1, 2020. New nonresidential buildings will use about 30% less energy versus those built under the 2016 standards.

Mobile Sources

CalEEMod was used to estimate daily emissions from vehicular sources associated with the proposed project. CalEEMod default data, including temperature, trip characteristics, variable start information, and emissions factors were used for the model inputs. The trip generation rates were updated according to the land uses (Clinical/Medical Office and Research and Development) provided in the *1242 20th Street Wellness Center Project – Non-CEQA Traffic Analysis Memorandum* (Fehr and Peers 2020) prepared for the proposed project. The proposed project would result in 1,287 weekday trips. CalEEMod default weekend trip-generation rates were adjusted based on weekday trip-generation rates per land use type, because weekend trip-generation rates were not provided in the Non-CEQA Traffic Analysis Memorandum. Project-related vehicle trips was assumed to include a mixture of vehicles in accordance with the model outputs for traffic. Emission factors representing the vehicle mix and emissions for 2024 (the first full year of operation) were used to estimate emissions associated with full buildout of the proposed project.

Toxic Air Contaminants - Health Risk Assessment

A HRA was performed to evaluate potential health risk associated with toxic air contaminants from construction of the proposed project. The following discussion summarizes the dispersion modeling and HRA methodology.

The dispersion modeling of DPM was performed using the American Meteorological Society/EPA Regulatory Model (AERMOD), which is the model SCAQMD requires for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain (EPA 2019b). For the proposed project, AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the “X/Q” values. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength and is used as a way to simplify the

representation of emissions from many sources. The X/Q values of ground-level concentrations were determined for construction emissions using AERMOD and the maximum concentrations determined for the 1-hour and period averaging periods. Principal parameters of this modeling are presented in Table 4.2-9.

Table 4.2-9
AERMOD Principle Parameters

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Santa Monica Airport (KSMO air monitoring station) was used for the dispersion modeling. A 5-year meteorological data set from 2012 through 2016 was obtained from the SCAQMD in a preprocessed format suitable for use in AERMOD.
Urban versus Rural Option	Urban dispersion option was selected due to the developed nature of the project area and per SCAQMD guidelines.
Terrain Characteristics	The terrain in the immediate vicinity of the project site is generally flat. The elevation of the site is 165 feet above sea level. The construction volume source was modeled at a release height of 5 meters.
Elevation Data	Digital elevation data were imported into AERMOD and elevations were assigned to receptors, buildings, and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the United States Geological Survey's National Elevation Dataset format with a resolution of 1/3 degree.
Emission Sources and Release Parameters	A volume source was used to model the construction scenario. The release parameter was obtained from similar equipment.
Source Release Characterizations	For modeling construction emissions dispersion using AERMOD, it was assumed that the total site area would operate in accordance with the respective construction schedules. A unit emission rate of 1.0 gram per second was normalized over the number of volume sources for each AERMOD run.
Discrete Receptors	A uniform Cartesian grid was placed over the project site with 25-meter spacing (1 kilometers by 1 kilometers) and converted into discrete Cartesian receptors to represent existing sensitive receptors adjacent to the site.

Source: See Appendix B.

Dispersion model plotfiles from AERMOD were then imported into CARB's Hotspots Analysis and Reporting Program Version 2 to determine health risk, which requires peak one-hour emission rates and annual-averaged emission rates for all pollutants for each modeling source. For the residential health risk, the HRA assumes exposure would start in the third trimester of pregnancy.

Applicable Project Design Features

To reduce project-generated construction emissions, the proposed project would implement the following project design features which will be included as conditions of approval in the project's development review permit:

PDF-AQ-1 **Construction Architectural Coating Limits**. Pursuant to the California Green building standards, the proposed project shall comply with the following volatile organic compounds

(VOC) content limits for architectural coatings during construction for non-residential and uses: 50 grams per liter VOC for all surfaces.

PDF-AQ-2 **Demolition, Grading and Construction Activities:** Compliance with provisions of the SCAQMD District Rule 403. The proposed project shall comply with all applicable standards of the Southern California Air Quality Management District, including the following provisions of District Rule 403:

a. All unpaved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust covers shall be used to reduce dust emissions and meet SCAQMD District Rule 403. Wetting a minimum of three times daily will reduce fugitive dust by 61 percent.

b. The construction area shall be kept sufficiently dampened to control dust caused by grading and hauling, and at all times provide reasonable control of dust caused by wind.

c. All clearing, earth moving, or excavation activities shall be discontinued during periods of high winds (i.e., greater than 15 mph), so as to prevent excessive amounts of dust.

d. All dirt/soil loads shall be secured by trimming, watering or other appropriate means to prevent spillage and dust.

e. All dirt/soil materials transported off-site shall be either sufficiently watered or securely covered to prevent excessive amount of dust.

f. General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions.

g. Trucks having no current hauling activity shall not idle and be turned off.

h. Ground cover in disturbed areas shall be replaced as quickly as possible.

PDF-AQ-3 **Anti-Idling Regulation:** In accordance with Section 2485 in Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location.

4.2.5 Impacts Analysis

Would the project conflict with or obstruct implementation of the applicable air quality plan?

As previously discussed, the project site is located within SCAB under the jurisdiction of the SCAQMD, which is the local agency responsible for administration and enforcement of air quality regulations for the area. The SCAQMD has established criteria for determining consistency with the 2016 AQMP in Chapter 12, Sections 12.2 and 12.3, in the SCAQMD *CEQA Air Quality Handbook* (SCAQMD 1993). The criteria are as follows (SCAQMD 1993):

- **Consistency Criterion No. 1:** The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The proposed project will not exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Consistency Criterion No. 1

Section 4.2.5, threshold criterion 2, evaluates the proposed project's potential impacts in regards to State CEQA Guidelines Appendix G (the potential to result in a cumulatively considerable net increase of a nonattainment criteria pollutant for which the project region is non-attainment). As discussed under threshold criterion 2, the proposed project would not result in a significant and unavoidable impact associated with the violation of an air quality standard. Because it would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, the proposed project would not conflict with Consistency Criterion No. 1 of the SCAQMD *CEQA Air Quality Handbook* (SCAQMD 1993).

Consistency Criterion No. 2

While striving to achieve the NAAQS for O_3 and $PM_{2.5}$ and the CAAQS for O_3, PM_{10}, and $PM_{2.5}$ through a variety of air quality control measures, the 2016 AQMP also accommodates planned growth in SCAB. Projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors (e.g., population, employment) is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook).

SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for its RTP/SCS (SCAG 2016), which is based on general plans for cities and counties in SCAB, for the development of the AQMP emissions

inventory (SCAQMD 2017).[17] The SCAG 2016 RTP/SCS and the associated Regional Growth Forecast is generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans. Although the Connect SoCal (also known as the 2020-2045 RTP/SCS) is the most recent RTP/SCS, the SCAQMD is still in the early stages of updating their AQMP. Therefore, the SCAG 2016 RTP/SCS and associated Regional Growth Forecast would be applicable in this analysis. The Final SCAG 2016 RTP/SCS provides population estimates for the years 2012 and 2040.

The project site is currently zoned Healthcare Mixed-Use (HMU) District per the City's Zoning Ordinance and has a designation of Healthcare Mixed Use in the City's General Plan LUCE. The proposed project would be consistent with the current zoning and General Plan land use designations. The proposed project includes development of a wellness center with research & development and medical office uses, which would be consistent with the City's zoning and General Plan, as well as SCAG's growth projections anticipated in the 2016 Final AQMP. Since the proposed project would not change the site land use or zoning designations, the proposed project would be consistent with the City's General Plan and zoning, as well as the anticipated SCAG's growth projections assumed in the 2016 Final AQMP. Additionally, vehicle trip generation and planned development for the project site are concluded to have been anticipated in the SCAG growth projections because the land use designation and zoning would not change (i.e., Healthcare Mixed Use). Because the proposed project is consistent with the anticipated population growth of the City and the associated vehicle trips have been factored into the underlying growth projections of the 2016 Final AQMP, the proposed project would not result in a conflict with, or obstruct implementation of, the applicable air quality plan. Accordingly, the proposed project would meet Consistency Criterion No. 2 of the SCAQMD *CEQA Air Quality Handbook*.

Summary

As described previously, the proposed project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or conflict with Consistency Criterion No. 1. Implementation of the proposed project would not exceed the demographic growth forecasts in the SCAG 2016 RTP/SCS; therefore, the proposed project would also be consistent with the SCAQMD 2016 AQMP, which based future emission estimates on the SCAG 2016 RTP/SCS. Thus, the proposed project would not conflict with Consistency Criterion No. 2. Based on these considerations, impacts related to the proposed project's potential to conflict with or obstruct implementation of the applicable air quality plan would be **less than significant**.

[17] Information necessary to produce the emission inventory for SCAB is obtained from the SCAQMD and other governmental agencies, including CARB, the California Department of Transportation (Caltrans), and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socio-economic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into their Travel Demand Model for estimating/projecting VMT and driving speeds. SCAG's socio-economic and transportation activities projections in their 2016 RTP/SCS are integrated in the 2016 AQMP (SCAQMD 2017).

Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used to help determine whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the SCAQMD significance thresholds which the SCAB is nonattainment for (VOC, NO_x, PM_{10}, or $PM_{2.5}$), it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003).

Construction Emissions

Construction of the proposed project would result in the temporary addition of pollutant emissions to the local airshed caused by on-site sources (e.g., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (e.g., on-road haul trucks, vendor trucks, and worker vehicle trips). 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.

Criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod. Construction emissions were calculated for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during the approximate 23-month construction period spanning 2021 through 2023. Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by the applicant and CalEEMod default values, and is intended to represent a reasonable scenario based on the best information available.

Implementation of the proposed project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The proposed project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce VOC emissions; however, the contractor

would be required to procure architectural coatings from a supplier in compliance with the requirements of PDF-AQ-1 (Architectural Coating Limits).

Table 4.2-10 presents the estimated maximum daily construction emissions generated during construction of the proposed project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix B.

Table 4.2-10
Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2021	1.51	26.60	12.10	0.07	5.32	1.10
2022	1.40	12.37	14.08	0.04	1.69	0.76
2023	26.89	1.78	2.91	0.01	0.25	0.12
Maximum daily emissions	**26.89**	**26.60**	**14.08**	**0.07**	**5.32**	**1.10**
SCAQMD threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix B for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These emissions reflect CalEEMod "mitigated" output, which accounts for compliance with SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). The SCAB is designated as a nonattainment area for federal and state O_3 standards and federal and state $PM_{2.5}$ standards. As such, the SCAQMD has established mass daily thresholds for VOC, NO_x, PM_{10}, and $PM_{2.5}$.

As shown in Table 4.2-10, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years. Construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. As such, impacts would be **less than significant**.

Operational Emissions

Operation of the proposed project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicle trips; area sources, including the use of consumer products, natural gas hearths, and landscape maintenance equipment; and energy sources. As discussed in Section 4.2.4, Methodology, pollutant emissions associated with long-term operations were quantified using CalEEMod. Proposed project-generated mobile source emissions were estimated in CalEEMod based on proposed project-specific trip rates (Fehr and Peers 2020). CalEEMod default values generated from project-specific land use quantities were used to estimate emissions from area and energy sources.

Table 4.2-11 presents the maximum daily area, energy, and mobile source emissions associated with operation (Year 2024) of the proposed project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix B.

Table 4.2-11
Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Area	1.70	<0.01	0.04	0.00	<0.01	<0.01
Energy	0.03	0.24	0.20	<0.01	0.02	0.02
Mobile	1.66	7.37	18.52	0.07	6.22	1.70
Project Total	**3.39**	**7.61**	**18.76**	**0.07**	**6.24**	**1.72**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District. See Appendix B for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. The SCAB is designated as a nonattainment area for federal and state O_3 standards and federal and state $PM_{2.5}$ standards. As such, the SCAQMD has established mass daily thresholds for VOC, NO_x, PM_{10}, and $PM_{2.5}$.

As shown in Table 4.2-11, the combined daily area, energy, mobile, vehicle testing, and off-road emissions would not exceed the SCAQMD operational thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Impacts associated with project-generated operational criteria air pollutant emissions would be **less than significant**.

Health Effects of Criteria Air Pollutants

Construction and operation of the proposed project would result in emissions that would not exceed the SCAQMD thresholds for any criteria air pollutants, including VOC, NO_x, CO, SOx, PM_{10}, or $PM_{2.5}$. VOCs would be associated with motor vehicles, construction equipment, and architectural coatings; however, project-generated VOC emissions would not result in the exceedance of the SCAQMD thresholds, as shown in Table 4.2-11 and Table 4.2-12. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, implementation of PDF-AQ-1 would restrict the VOC content of coatings for construction applications.

VOCs and NO_x are precursors to O_3, for which SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in SCAB due to O_3 precursor emissions tend to be

found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 AAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, because ROG and NO_x emissions associated with proposed project construction and/or operation would not exceed the SCAQMD maximum daily thresholds, it is not anticipated the proposed project would contribute to regional O_3 concentrations and the associated health effects.

Construction and operation of the proposed project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. Health effects that result from NO_2 and NO_x include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, proposed project construction would be relatively short-term, and off-road construction equipment would be operating at various portions of the site and would not be concentrated in one portion of the site at any one time. In addition, existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Construction and operation of the proposed project would not create substantial, localized NO_x impacts. Therefore, the proposed project is not anticipated to result in potential health effects associated with NO_2 and NO_x.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots, discussed in the third impact criterion, was determined to be a less than significant impact. Thus, the project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction and operation of the proposed project would also not exceed thresholds for PM_{10} and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or would obstruct the SCAB from coming into attainment for these pollutants. The proposed project would also not result in substantial DPM emissions during construction and operation, and therefore, would not result in significant health effects related to DPM exposure. Additionally, the proposed project would implement dust control strategies and be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of PM_{10} and $PM_{2.5}$ during construction and operation, it is not anticipated that the proposed project would result in potential health effects associated related to particulate matter.

The California Supreme Court's *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 decision (referred to herein as the Friant Ranch decision) (issued on December 24, 2018), addresses the need to correlate mass emission values for criteria air pollutants to specific health consequences, and contains the following direction from the California Supreme Court: "The Environmental Impact Report (EIR) must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts

further" (Italics original). Currently, SCAQMD, CARB, and EPA have not approved a quantitative method to reliably, meaningfully, and consistently translate the mass emission estimates for the criteria air pollutants resulting from the proposed project to specific health effects.

In connection with the judicial proceedings culminating in issuance of the Friant Ranch decision, the SCAQMD and the San Joaquin Valley Air Pollution Control District (SJVAPCD) filed amicus briefs attesting to the extreme difficulty of correlating an individual project's criteria air pollutant emissions to specific health impacts. Both the SJVAPCD and the SCAQMD have among the most sophisticated air quality modeling and health impact evaluation capabilities of the air districts in the state. The key, relevant points from the SCAQMD and SJVAPCD briefs is summarized herein.

In requiring a health impact type of analysis for criteria air pollutants, it is important to understand how O_3 and PM is formed, dispersed and regulated. The formation of O_3 and PM in the atmosphere, as secondary pollutants,[18] involves complex chemical and physical interactions of multiple pollutants from natural and anthropogenic sources. The O_3 reaction is self-perpetuating (or catalytic) in the presence of sunlight because NO_2 is photochemically reformed from nitric oxide (NO). In this way, O_3 is controlled by both NO_x and VOC emissions (NRC 2005). The complexity of these interacting cycles of pollutants means that incremental decreases in one emission may not result in proportional decreases in O_3 (NRC 2005). Although these reactions and interactions are well understood, variability in emission source operations and meteorology creates uncertainty in the modeled O_3 concentrations to which downwind populations may be exposed (NRC 2005). Once formed, O_3 can be transported long distances by wind and due to atmospheric transport, contributions of precursors from the surrounding region can also be important (EPA 2008). Because of the complexity of O_3 formation, a specific tonnage amount of VOCs or NO_X emitted in a particular area does not equate to a particular concentration of O_3 in that area (SJVAPCD 2015). PM can be divided into two categories: directly emitted PM and secondary PM. Secondary PM, like O_3, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x (SJVAPCD 2015). Because of the complexity of secondary PM formation, including the potential to be transported long distances by wind, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area (SJVAPCD 2015). This is especially true for individual projects, like the proposed project, where project-generated criteria air pollutant emissions are not derived from a single "point source," but from construction equipment and mobile sources (passenger cars and trucks) driving to, from and around the project site.

Another important technical nuance is that health effects from air pollutants are related to the concentration of the air pollutant that an individual is exposed to, not necessarily the individual mass quantity of emissions associated with an individual project. For example, health effects from O_3 are correlated with increases in the ambient level of O_3 in the air a person breathes (SCAQMD 2015b). However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O_3 levels over an entire region

[18] Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants.

(SCAQMD 2015b). The lack of link between the tonnage of precursor pollutants and the concentration of O_3 and $PM_{2.5}$ formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects; rather, it is the concentration of resulting O_3 that causes these effects (SJVAPCD 2015). Indeed, the ambient air quality standards, which are statutorily required to be set by EPA at levels that are requisite to protect the public health, are established as concentrations of O_3 and $PM_{2.5}$ and not as tonnages of their precursor pollutants (EPA 2018b). Because the ambient air quality standards are focused on achieving a particular concentration region-wide, the tools and plans for attaining the ambient air quality standards are regional in nature. For CEQA analyses, project-generated emissions are typically estimated in pounds per day or tons per year and compared to mass daily or annual emission thresholds. While CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the AAQS, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of O_3 or PM that will be created at or near the project site on a particular day or month of the year, or what specific health impacts will occur (SJVAPCD 2015).

In regard to regional concentrations and air basin attainment, the SJVAPCD emphasized that attempting to identify a change in background pollutant concentrations that can be attributed to a single project, even one as large as the entire Friant Ranch Specific Plan, is a theoretical exercise. The SJVAPCD brief noted that it "would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have" (SJVAPCD 2015). The situation is further complicated by the fact that background concentrations of regional pollutants are not uniform either temporally or geographically throughout an air basin, but are constantly fluctuating based upon meteorology and other environmental factors. SJVAPCD noted that the currently available modeling tools are equipped to model the impact of all emission sources in the San Joaquin Valley Air Basin on attainment (SJVAPCD 2015). The SJVAPCD brief then indicated that, "Running the photochemical grid model used for predicting O_3 attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved" (SJVAPCD 2015).

SCAQMD and SJVAPCD have indicated that it is not feasible to quantify project-level health impacts based on existing modeling (SCAQMD 2015b; SJVAPCD 2015). Even if a metric could be calculated, it would not be reliable because the models are equipped to model the impact of all emission sources in an air basin on attainment and would likely not yield valid information or a measurable increase in O_3 concentrations sufficient to accurately quantify O_3-related health impacts for an individual project.

Nonetheless, following the Supreme Court's Friant Ranch decision, some EIRs where estimated criteria air pollutant emissions exceeded applicable air district thresholds have included a quantitative analysis of potential project-generated health effects using a combination of a regional photochemical grid model (PGM)[19] and the EPA Benefits Mapping and Analysis Program (BenMAP or BenMAP–Community Edition [CE]).[20] The publicly available health impact assessments (HIAs) typically present results in terms of an increase in health incidences and/or the increase in background health incidence for various health outcomes resulting from the project's estimated increase in concentrations of O_3 and $PM_{2.5}$.[21] To date, the five publicly available HIAs reviewed have concluded that the evaluated project's health effects associated with the estimated project-generated increase in concentrations of O_3 and $PM_{2.5}$ represent a small increase in incidences and a very small percentage of the number of background incidences, indicating that these health impacts are negligible and potentially within the models' margin of error. It is also important to note that while the results of the five available HIAs conclude that the project emissions do not result in a substantial increase in health incidences, the estimated emissions and assumed toxicity is also conservatively inputted into the HIA and thus, overestimate health incidences, particularly for $PM_{2.5}$.

As explained in the SJVAPCD brief and noted previously, running the PGM used for predicting O_3 attainment with the emissions solely from an individual project like the Friant Ranch project or the proposed project is not likely to yield valid information given the relative scale involved. The five examples reviewed support the SJVAPCD's brief contention that consistent, reliable, and meaningful results may not be provided by methods applied at this time. Accordingly, additional work in the industry and more importantly, air district participation, is needed to develop a more meaningful analysis to correlate project-level mass criteria air pollutant emissions and health effects for decision makers and the public. Furthermore, at the time of writing, no HIA has concluded that health effects estimated using the PGM and BenMAP approach are substantial provided that the estimated project-generated

19 The first step in the publicly available HIAs includes running a regional PGM, such as the Community Multiscale Air Quality (CMAQ) model or the Comprehensive Air Quality Model with extensions (CAMx) to estimate the increase in concentrations of O_3 and $PM_{2.5}$ as a result of project-generated emissions of criteria and precursor pollutants. Air districts use photochemical air quality models for regional air quality planning. These photochemical models are large-scale air quality models that simulate the changes of pollutant concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere (EPA 2017).

20 After estimating the increase in concentrations of O_3 and $PM_{2.5}$, the second step in the five examples includes use of BenMAP or BenMAP-CE to estimate the resulting associated health effects. BenMAP estimates the number of health incidences resulting from changes in air pollution concentrations (EPA 2018c). The health impact function in BenMAP-CE incorporates four key sources of data: (i) modeled or monitored air quality changes, (ii) population, (iii) baseline incidence rates, and (iv) an effect estimate. All of the five example HIAs focused on O_3 and $PM_{2.5}$.

21 The following CEQA documents included a quantitative HIA to address Friant Ranch: (1) California State University Dominguez Hills 2018 Campus Master Plan EIR (CSUDH 2019), (2) March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR (March JPA 2019), (3) Mineta San Jose Airport Amendment to the Airport Master Plan EIR (City of San Jose 2019), (4) City of Inglewood Basketball and Entertainment Center Project EIR (City of Inglewood 2019), and (5) San Diego State University Mission Valley Campus Master Plan EIR (SDSU 2019).

incidences represent a very small percentage of the number of background incidences, potentially within the models' margin of error.

In summary, because construction and/or operation of the proposed project would not result in the exceedances of the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$, and because the SCAQMD thresholds are based on levels that the SCAB can accommodate without affecting the attainment date for the AAQS and the AAQS are established to protect public health and welfare, the proposed project is not anticipated to result in health effects associated with CO, SO_x or $PM_{2.5}$. As such, impacts would be **less than significant**.

In addition, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days and methods available to quantitatively evaluate health effects may not be appropriate to apply to emissions associated with the proposed project, which cannot be estimated with a high-level of accuracy.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Localized Significance Thresholds Analysis

As discussed in Section 4.2.1, sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The closest existing sensitive receptors to the project site is the Lighthouse Church and School located approximately 10 feet to the north. Furthermore, there are single-family and multi-family residences located approximately 20 feet to the west across 19th Court Alley and multi-family residences located approximately 75 feet to the northeast. Multifamily residences and convalescent homes/rehabilitation centers are located south along the west side of 20th Street. Furthermore, the Providence Saint John's Child and Family Development Center is located approximately 370 feet to the southeast.

An LST analysis has been prepared to determine potential impacts to nearby sensitive receptors during construction of the proposed project. As indicated in the discussion of the thresholds of significance (Section 4.2.3), the SCAQMD also recommends the evaluation of localized NO_2, CO, PM_{10}, and $PM_{2.5}$ impacts as a result of construction activities to sensitive receptors in the immediate vicinity of the project site. The impacts were analyzed using methods consistent with those in the SCAQMD's *Final Localized Significance Threshold Methodology* (2009). According to the *Final Localized Significance Threshold Methodology*, "off-site mobile emissions from the proposed project should not be included in the emissions compared to the LSTs" (SCAQMD 2009). Hauling of soils and construction materials associated with the project construction are not

expected to cause substantial air quality impacts to sensitive receptors along off-site roadways. Emissions from the trucks would be relatively brief in nature, would cease once the trucks pass through the main streets, and would not come close to triggering the significance threshold.

Construction activities associated with the project would result in sources of on-site fugitive dust and combustion emissions. Off-site emissions from vendor trucks, haul trucks, and worker vehicle trips are not included in the LST analysis as previously explained. The applicable construction SCAQMD localized significance criteria for SRA 2 are presented in Table 4.2-12 and compared to the maximum daily on-site emissions generated during project construction.

Table 4.2-12
Construction Localized Significance Thresholds Analysis

Maximum Onsite Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Construction Emissions	5.87	3.02	0.25	0.21
SCAQMD LST	*103*	*562*	*4*	*3*
LST Exceeded?	**No**	**No**	**No**	**No**

Source: SCAQMD 2009.
Notes: LST = localized significance threshold; NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter; $PM_{2.5}$ = fine particulate matter.
See Appendix B for detailed results.
Localized significance thresholds are shown for SRA 2 (Northwest Coastal Los Angeles County) for a 1-acre project sites corresponding to a distance to a sensitive receptor of 25 meters.
These estimates reflect control of fugitive dust required by Rule 403.
Greatest on-site NO_2, CO, PM_{10}, and $PM_{2.5}$ emissions are associated with grading in 2021.

As shown in Table 4.2-13, construction activities would not generate emissions in excess of site-specific LSTs; therefore, site-specific impacts during construction of the proposed project would be **less than significant**.

Health Effects of Toxic Air Contaminants

"Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard OEHHA risk assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects.

Construction: TACs that would potentially be emitted during construction activities would be DPM emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB ATCMs to reduce DPM emissions. According to the OEHHA, HRAs should be based on a 30-year exposure duration based on typical residency period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, the duration of proposed construction activities (approximately two years for the proposed project) would only constitute a small percentage of the total long-term exposure period. After construction is completed, there

would be no long-term source of TAC emissions. The results of the HRA for project construction is summarized in Table 4.2-13.

Table 4.2-13
Summary of Maximum Cancer and Chronic Health Risks - Unmitigated

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident					
Construction HRA	Cancer Risk	Per Million	65.26	10	**Potentially Significant**
	Chronic Hazard Index	Index Value	0.04	1.0	Less than Significant
Maximally Exposed School Receptor					
Construction HRA	Cancer Risk	Per Million	7.50	10	Less than Significant
	Chronic Hazard Index	Index Value	0.02	1.0	Less than Significant

Source: See Appendix B for complete results.

As shown in Table 4.2-13, the results of the HRA demonstrate that the TAC exposure from construction diesel exhaust emissions would result in an on-site cancer risk above the 10 in 1 million threshold for the proposed project. The Chronic Hazard Index for the proposed project would be less than one. Therefore, TAC emissions from construction activities associated with the proposed project may expose sensitive receptors to substantial pollutant concentrations and would result in a potentially significant impact; therefore, mitigation measure **MM-AQ-1** is required (see Section 4.2.6 below). Health risk impacts would, therefore, be **less than significant with mitigation incorporated**.

Operation: Operational TAC impacts could occur if the project would generate significant sources of operational TACs including diesel particulate matter. Per CARB, sources of acutely and chronically hazardous TACs include facilities with heavy industrial manufacturing processes, automotive repair facilities, and truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units, industrial manufacturing processes. The proposed project would develop a Wellness Center with research & development and clinical/medical office space. Given the research & development and clinical/medical office uses, project operations would generate minimal number of delivery trucks (associated with trash, supply deliveries, etc.) per day. Daily truck trips would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. Furthermore, trucks are required to comply with the applicable provisions of the CARB Truck and Bus regulation to minimize and reduce PM and NOX emissions from existing diesel trucks. Therefore, impacts would be less than significant.

Health Effects of Carbon Monoxide Hotpsots

Mobile source impacts occur on two scales of motion. Regionally, project-related travel would add to regional trip generation and increase the vehicle miles traveled within the local airshed and SCAB. Locally, project-generated traffic would be added to the City's roadway system near the project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and operates on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in SCAB is steadily decreasing.

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. The proposed project would not generate a substantial amount of traffic that would contribute to potential adverse traffic impacts that may result in the formation of CO hotspots. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in SCAB is steadily decreasing. Maximum background CO levels in Los Angeles County are approximately 5% and 18% of the 1-hour and 8-hour NAAQS and CAAQS, and would be expected to improve further due to reductions in motor vehicle emissions. Therefore, further analysis is not required and impacts would be **less than significant**.

Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be **less than significant**.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The proposed project includes development of medical research and development and clinical//medical office uses. Typical odors generated from operation of the proposed project would be limited to vehicle exhaust generated by employees or patrons traveling to and from the

project site and through the periodic use of landscaping or maintenance equipment. Therefore, operation of the proposed project would not result in the creation of a land use that is associated with odors and would result in an operational odor impact that is **less than significant**.

4.2.6 Cumulative Impacts

As previously discussed, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants or other substantial emissions, including odors. Cumulative impacts would be **less than significant**.

4.2.7 Mitigation Measures

The following mitigation measures would reduce potentially significant impacts to air quality to a level below significance.

MM-AQ-1: To reduce the potential for criteria air pollutants, specifically particulate matter (PM), as a result of construction of the project, the applicant shall:

Prior to the start of construction activities, the project applicant, or its designee, shall ensure that all 75 horsepower or greater diesel-powered equipment are powered with California Air Resources Board (CARB)-certified Tier 4 Interim engines, except where the project applicant establishes to the satisfaction of the City of Santa Monica (City) that Tier 4 Interim equipment is not available.

In the case where the applicant is unable to secure a piece of equipment that meets the Tier 4 Interim requirement, the applicant may upgrade another piece of equipment to compensate, such as equipping CARB-certified Tier 3 engines with the most effective Verified Diesel Emission Control Strategies available for the engine type, such as Level 3 Diesel Particulate Filters (Tier 4 engines automatically meet this requirement) or upgrading Tier 4 interim to Tier 4 Final.

4.2.8 Level of Significance After Mitigation

The construction of the proposed project would result in a potentially significant impact to sensitive receptors prior to mitigation. With the implementation of mitigation measure **MM-AQ-1**, the emissions of DPM are significantly reduced compared to the unmitigated scenario. The detailed emissions assumptions and model outputs using CalEEMod are provided in Appendix B. Table 4.2-14 shows the results of the HRA after the implementation of mitigation measure **MM-AQ-1**.

Table 4.2-14
Summary of Maximum Cancer and Chronic Health Risks - Mitigated

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident					
Construction HRA	Cancer Risk	Per Million	7.23	10	Less than Significant
	Chronic Hazard Index	Index Value	0.005	1.0	Less than Significant
Maximally Exposed School Receptor					
Construction HRA	Cancer Risk	Per Million	0.83	10	Less than Significant
	Chronic Hazard Index	Index Value	0.002	1.0	Less than Significant

Source: See Appendix B for complete results.
Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

The mitigated results shown in Table 4.2-14 demonstrate that with the implementation of mitigation measure **MM-AQ-1**, potential cancer risks at the maximally exposed school receptor would be reduced to a less than significant level. In addition, potential cancer risks at existing residential receptors would not exceed the- applicable SCAQMD threshold after implementation of mitigation measure **MM-AQ-1**. This would be a **less than significant impact**.

4.2.9 References

13 CCR 2025. Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles.

13 CCR 2449–2449.3 and Appendix A. General Requirements for In-Use Off-Road Diesel-Fueled Fleets.

17 CCR 93000. Substances Identified as Toxic Air Contaminants. In Subchapter 7, Toxic Air Contaminants.

CARB (California Air Resources Board). 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* ARB, Stationary Source Division, Mobile Source Control Division. October 2000. Accessed October 26, 2016. https://www.arb.ca.gov/diesel/documents/rrpFinal.pdf.

CARB. 2005a. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005. Accessed August 2017. https://www.arb.ca.gov/ch/handbook.pdf.

CARB. 2005b. *On-Road Heavy-Duty Diesel Engine Reduced Emission Standards*. January 6, 2005. Accessed December 2016. https://www.arb.ca.gov/msprog/onroadhd/reducstd.htm.

CARB. 2008. *Off-Road Compression-Ignition (Diesel) Engines and Equipment*. September 8, 2008. Accessed December 2016. https://www.arb.ca.gov/msprog/offroad/orcomp/regulations.htm.

CARB. 2011. *Regulation for In-Use Off-Road Diesel-Fueled Fleets*. December 2011. Accessed December 2016. https://www.arb.ca.gov/msprog/ordiesel/documents/finalregorder-dec2011.pdf.

CARB. 2014. *Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles.* January 2014. Accessed December 2016. https://www.arb.ca.gov/regact/2014/truckbus14/tbfrooal.pdf.

CARB. 2016a. "Glossary of Air Pollution Terms." Accessed October 26, 2016. http://www.arb.ca.gov/html/gloss.htm.

CARB. 2016b. "Overview: Diesel Exhaust and Health." April 12, 2016. Accessed December 2016. https://www.arb.ca.gov/research/diesel/diesel-health.htm.

CARB. 2016c. "Ambient Air Quality Standards." May 4, 2016. Accessed December 2016. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.

CARB. 2017. Inhalable Particulate Matter and Health ($PM_{2.5}$ and PM_{10}). https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm.

CARB. 2018. "Area Designation Maps/State and National." Last reviewed December 28, 2018. http://www.arb.ca.gov/desig/adm/adm.htm.

CARB. 2019a. "Ozone & Health." https://ww2.arb.ca.gov/resources/ozone-and-health

CARB. 2019b. "Nitrogen Dioxide & Health." https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health

CARB. 2019c. "Carbon Monoxide & Health." https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health

CARB. 2019d. "Sulfur Dioxide & Health." https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health

CARB. 2019e. "iADAM: Air Quality Data Statistics." Accessed October 2020. http://www.arb.ca.gov/adam/topfour/topfour1.php.

CAPCOA. 2017. *California Emissions Estimator Model (CalEEMod) User's Guide Version 2016.3.2*. Prepared by BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. November 2017. Accessed November 2017. http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

City of Inglewood. 2019. Inglewood Basketball and Entertainment Center Project EIR. http://ibecproject.com/D_AirQuality.pdf

City of San Jose. 2019. Mineta San Jose Airport Amendment to the Airport Master Plan EIR. https://www.sanjoseca.gov/Home/ShowDocument?id=44596

City of Santa Monica. 2017. *2010 Land Use and Circulation Element*. Last amended 2017. Accessed December 2017. https://www.smgov.net/uploadedFiles/Departments/PCD/Plans/General-Plan/Revised%20LUCE%207.24.15_web.pdf.

CSUDH (California State University Dominguez Hills). 2019. *California State University Dominguez Hills Campus Master Plan EIR*. https://www.csudh.edu/Assets/csudh-sites/fpcm/docs/campus-master-plan/2019-09-11-FEIR-appendices.pdf

EPA (U.S. Environmental Protection Agency). 2008. Final Ozone NAAQS Regulatory Impact Analysis. March 2008. https://www3.epa.gov/ttnecas1/regdata/RIAs/452_R_08_003.pdf

EPA. 2013. "Integrated Science Assessment of Ozone and Related Photochemical Oxidants." U.S. EPA, EPA/600R-10/076F, 2013.

EPA. 2016. "Criteria Air Pollutants." Last updated October 19, 2016. Accessed October 26, 2016. https://www.epa.gov/criteria-air-pollutants.

EPA. 2017. Support Center for Regulatory Atmospheric Modeling (SCRAM) - Photochemical Air Quality Modeling. https://www.epa.gov/scram/photochemical-air-quality-modeling

EPA. 2018a. "Region 9: Air Quality Analysis, Air Quality Maps." Last updated September 28, 2018. http://www.epa.gov/region9/air/maps/.

EPA. 2018b. "Ground-level Ozone Basics." Last updated October 31, 2018. https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics

EPA. 2018c. Community Multiscale Air Quality (CMAQ) Models. https://www.epa.gov/cmaq/cmaq-models-0

EPA. 2019a. "AirData: Access to Air Pollution Data." Last updated July 31, 2018. http://www.epa.gov/airdata/ad_rep_mon.html.

EPA. 2019b. AERMOD Implementation Guide. Accessed August 2019. https://www3.epa.gov/ttn/scram/models/aermod/aermod_implementation_guide.pdf.

Fehr and Peers. 2020. *1242 20th Street Wellness Center Project – Non-CEQA Traffic* Analysis. Memorandum. November 25, 2020. Prepared by Fehr and Peers for the City of Santa Monica.

March JPA (March Joint Powers Association). 2019. *K4 Warehouse and Cactus Channel Improvements EIR*. https://www.marchjpa.com/documents/docs_forms/K-4_Final_Draft_EIR.pdf

NRC (National Research Council). 2005. *Interim Report of the Committee on Changes in New Source Review Programs for Stationary Sources of Air Pollutants*. Washington, DC: The National Academies Press. https://doi.org/10.17226/11208.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*. February 2015.

SCAG (Southern California Association of Governments). 2016. *Final 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy.* Adopted April 2016. Accessed October 26, 2016. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.

SCAG. 2020. *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy - Connect SoCal*. Adopted September 3, 2020. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx.

SCAQMD (South Coast Air Quality Management District). 1993. *CEQA Air Quality Handbook*. December 2016. http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc?sfvrsn=2.

SCAQMD. 2003. *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution.* August 2003. Accessed January 2017. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf?sfvrsn=2.

SCAQMD. 2009. *Final Localized Significance Threshold Methodology.* October 21, 2009. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2.

SCAQMD. 2011. "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds." Accessed October 26, 2016. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2.

SCAQMD. 2013. *Final 2012 Air Quality Management Plan*. February 2013. Accessed October 26, 2016. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-(february-2013)/main-document-final-2012.pdf.

SCAQMD. 2015a. "SCAQMD Air Quality Significance Thresholds." March 2015. Accessed October 26, 2016. http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.

SCAQMD. 2015b. Brief of Amicus Curiae in Support of Neither Party, *Sierra Club v. County of Fresno*, Case No. S219783 (filed Apr. 13, 2015). https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf.

SCAQMD. 2017. Final 2016 Air Quality Management Plan. March 2017. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf

SCAQMD. 2018. "SCAQMD Modeling Guidance for AERMOD." Accessed April 2018. http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/modeling-guidance.

SDSU (San Diego State University). 2019. *San Diego State University Mission Valley Campus Master Plan EIR Additional Information Regarding Potential Health Effects of Air Quality Impacts.* December 2019. https://missionvalley.sdsu.edu/assets/pdfs/FEIR/appendices/4_2_3_SDSU_MV_Health_Effects_Memo.pdf.SJVAPCD (San Joaquin Valley Air Pollution Control District). 2015. Brief of Amicus Curiae in Support of Defendant And Respondent, County Of Fresno, And Real Party In Interest And Respondent, Friant Ranch, L.P., Sierra Club v. County of Fresno, Case No. S219783 (filed Apr. 13, 2015). https://www.courts.ca.gov/documents/7-s219783-ac-san-joaquin-valley-unified-air-pollution-control-dist-041315.pdf

WRCC (Western Regional Climate Center). 2016. *Santa Monica Pier, California (047953), Monthly Climate Summary*. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7953.

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4.3 CONSTRUCTION EFFECTS

This section evaluates potential construction impacts on sensitive land uses due to construction of the proposed project. Although construction activities are temporary and common in urban environments, nearby sensitive uses around a construction site may be adversely affected by construction-related impacts associated with aesthetics, air quality, hazards and hazardous materials, noise, and transportation. While construction effects associated with these issue areas are analyzed fully in individual sections of this EIR, the conclusions of those analyses are also summarized here for ease of understanding the full range of construction-related impacts on sensitive uses.

4.3.1 Existing Environmental Conditions

The project site is located in the City of Santa Monica (City), in the western portion of Los Angeles County. The project site is located in Mid-City, north of Santa Monica Boulevard within the Healthcare Mixed Use District. The project site is bordered by 20th Street on the east, Arizona Avenue to the south, the 19th Court alley to the west, and the Lighthouse Church and School to the north.[1] The approximately 45,009-square-foot (1.03 acre) project site includes two parcels addressed as 1925 Arizona Avenue and 1242 20th Street.

Existing Sensitive Land Uses

Some land uses are considered more sensitive to construction effects than others, depending on the population groups and the activities involved. People most likely to be affected by construction effects such as air pollution and noise include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these people live or spend considerable amounts of time are known as sensitive receptors. Land uses where noise-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential uses (CARB 2005). The South Coast Air Quality Management District (SCAQMD) identifies air quality-sensitive receptors as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

The nearest off-site sensitive receptors to the proposed project is the Lighthouse Church and School located approximately 10 feet to the north. Furthermore, there are single-family and multi-family residences located approximately 20 feet to the west across 19th Court Alley and multi-family residences located approximately 75 feet to the northeast. Multifamily residences and convalescent homes/rehabilitation centers are located south along the west side of 20th Street. Additionally, the Providence Saint John's Child and Family Development Center (which includes a daycare) is located approximately 370 feet to the southeast along 20th Street.

[1] Although the City is at an angle (i.e., streets are northwest or southwest), directions will be referred to as north, south, east, and west. 20th Street will be referred to as east, Arizona Avenue will be referred to as south, and so forth.

For more in-depth descriptions of the existing setting of each issue area discussed in this section please see the individual impact sections: Section 4.1, *Aesthetics*; Section 4.2, *Air Quality*; Section 4.7, *Hazards and Hazardous Materials*; Section 4.9, *Noise*; and Section 4.10, *Transportation*.

4.3.2 Relevant Plans, Policies, and Regulations

Applicable regulatory framework discussion is incorporated by reference from the individual and associated environmental issue areas and is not repeated here. Please see the following sections of the EIR for specific regulations pertaining to the issue areas Section 4.1, *Aesthetics*; Section 4.2, *Air Quality*; Section 4.7, *Hazards and Hazardous Materials*; Section 4.9, *Noise*; and Section 4.10, *Transportation*.

4.3.3 Thresholds of Significance

In general, a project may have a significant impact related to construction effects if the project would:

1. Have considerable construction-period impacts due to the scope, or location of construction activities.

Significance thresholds for each of the specific environmental issue areas are discussed in the respective impact sections of the EIR.

4.3.4 Methodology

The following impact analysis summarizes the potential construction effects of the proposed project. The major impacts associated with construction analyzed in this section include aesthetics, air quality, hazards and hazardous materials, noise, and transportation. The construction-specific methodologies and significance criteria for each of these specific environmental issues are discussed in their respective sections in this EIR: Section 4.1, *Aesthetics*; Section 4.2, *Air Quality*; Section 4.7, *Hazards and Hazardous Materials*; Section 4.9, *Noise*; and Section 4.10, *Transportation*.

4.3.5 Impacts Analysis

Would the project have considerable construction-period impacts due to the scope, or location of construction activities?

Construction of the proposed project is anticipated to be conducted in one phase, lasting for 23 months. The construction schedule for the project would depend on a number of factors including approval of entitlements, plan checks, and building permits. For the purposes of this EIR, construction is conservatively assumed to begin as early as March 2021, ending in January 2023. Project construction would include approximately 1 month for demolition, 8 to 9 months for excavation and shoring, approximately 13 to 14 months for building construction, and approximately 2 months for finishing.

An estimated 4 to 39 construction workers would be on-site at any one time. Construction worker parking would be provided via the use of agreements with neighboring structures, and if required, a shuttle service would be employed to deliver construction workers from parking areas to the project site. Following the construction of the substructure including foundation and underground levels, estimated at approximate month 14, on-site parking for workers will be accommodated. All required equipment and material staging would be provided on-site or as approved off-site through valid permits, and all work shall be subject to a Construction Mitigation Plan to be approved by the City (MM-TRA-1). The Construction Mitigation Plan will address street and sidewalk closures, truck hauling routes, construction hours, etc.

Aesthetics

Construction of the proposed project would occur in one phase. Construction would involve demolition of two former residential structures, demolition of a garage attached to the former Gates, Kingsley, & Gates Funeral Home (GKGM Building), adaptive reuse of a portion of the GKGM Building, and construction of a new Wellness Center totaling approximately 72,812 square feet.

Within the area of construction, construction vehicles and equipment, including backhoes, pile drivers, bulldozers, excavators, forklifts, loaders, dump trucks, and cranes, may be in operation during working hours. In addition, a temporary influx of construction workers would be observed on-site. Visual changes to the project site would occur throughout the duration of construction as the form of the new structure slowly take shape. However, all demolition and construction activities would be of a temporary duration and would cease once the new building is operational. visibility of construction equipment and vehicles and the demolition and construction of new structures on the project site would be not be significant due to the temporary nature of construction activities and receptor's familiarity with construction effects within an urban setting. Furthermore, construction fencing would be erected along the perimeter of the site pursuant to Santa Monica Municipal Code (SMMC) requirements.

Therefore, because construction activities would be partially screened from view in accordance with SMMC requirements and effects would be experienced over a temporary timeframe, construction activities would not degrade the existing scenic quality of the site and its surroundings. Impacts would be **less than significant**. No mitigation is required.

Light and Glare

Throughout the duration of construction, construction activities would typically occur during hours permitted by the Santa Monica Municipal Code (Monday through Friday, 8:00 a.m. to 6:00 p.m., and Saturday, 9:00 a.m. to 5:00 p.m.) and would not generally require the use of portable lighting sources to illuminate development areas during evening hours. Any use of portable lighting elements on the project site during construction would be temporary and of short duration (for example, during the last hour of the workday in late fall and winter months). In these instances, portable lighting would be used to illuminate the development area and concentrated onto the area of active construction. Widespread use of portable

lighting across the project site during individual phases would not occur. In addition, use of portable lighting would conform to applicable shielding, light trespass, and maximum height standards established by the SMMC (see Section 9.21.080(C)(3)(4)(5)). Compliance with SMMC general standards pertaining to shielding of lighting (Section 9.21.080(C)(3)) would also minimize the potential for portable lighting elements to create obtrusive glare on adjacent properties or public rights-of-way.

Due to the anticipated limited need for portable lighting on the project site, the temporary and short-term duration of its use, and the proposed project's conformance with the Municipal Code, use of lighting on the project site during construction activities would not adversely affect nighttime views in the area. Impacts would be **less than significant**. No mitigation is required.

Air Quality

Criteria Air Pollutant Emissions

The proposed project is located within the South Coast Air Basin (SCAB), which is the local agency responsible for administration and enforcement of air quality regulations for the area. The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SCAB, where the proposed project is located. The SCAQMD operates monitoring stations in the SCAB, to monitor whether the SCAB meets applicable federal and state requirements for criteria pollutants. Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Pollutants of concern include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter less than or equal to 10 microns in diameter (PM_{10}; coarse), particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$; fine), and lead.

Construction of the proposed project would result in the temporary addition of pollutant emissions to the local airshed caused by on-site sources (e.g., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (e.g., on-road haul trucks, vendor trucks, and worker vehicle trips). 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.

Implementation of the proposed project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The proposed project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other

finishes, and application of asphalt pavement would also produce VOC emissions; however, the contractor would be required to procure architectural coatings from a supplier in compliance with the requirements of PDF-AQ-1 (Architectural Coating Limits).

As shown in Table 4.2-10 (see Section 4.2, *Air Quality*), daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years. Construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. As such, construction air quality impacts would be **less than significant**. No mitigation is required.

Localized Significance Threshold Analysis

As indicated in the discussion of the thresholds of significance (Section 4.2.3 of Section 4.2, *Air Quality*), the SCAQMD also recommends the evaluation of localized NO_2, CO, PM_{10}, and $PM_{2.5}$ impacts as a result of construction activities to sensitive receptors in the immediate vicinity of the project site. The impacts were analyzed using methods consistent with those in the SCAQMD's *Final Localized Significance Threshold Methodology* (2009). According to the *Final Localized Significance Threshold Methodology*, "off-site mobile emissions from the project should not be included in the emissions compared to the LSTs" (SCAQMD 2009). Hauling of soils and construction materials associated with the proposed project construction are not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways. Emissions from the trucks would be relatively brief in nature, would cease once the trucks pass through the main streets, and would not come close to triggering the significance threshold.

Construction activities associated with the proposed project would result in sources of on-site fugitive dust and combustion emissions. According to Table 4.2-12 (see Section 4.2, *Air Quality*), construction activities would not generate emissions in excess of site-specific LSTs; therefore, site-specific impacts during construction and operation of the proposed project would be **less than significant**. No mitigation is required.

Health Impacts of Toxic Air Contaminants

A health risk assessment (HRA) was performed to evaluate potential health risk associated with toxic air contaminants from construction of the proposed project. Results of the construction HRA are presented in Table 4.2-13 (see Section 4.2, *Air Quality*). As shown in Table 4.2-13, the results of the HRA demonstrate that the TAC exposure from construction diesel exhaust emissions would result in an on-site cancer risk above the 10 in 1 million threshold for the proposed project. The Chronic Hazard Index for the proposed project would be less than 1. Therefore, TAC emissions from construction activities associated with the proposed project may expose sensitive receptors to substantial pollutant concentrations and would result in a potentially significant impact; therefore, mitigation measure **MM-AQ-1** is required. Health risk impacts would, therefore, be **less than significant with mitigation incorporated**.

Health Impacts of Criteria Air Pollutants

Construction of the proposed project would result in emissions that would not exceed the SCAQMD thresholds for any criteria air pollutants, including VOC, NO_x, CO, SO_x, $PM_{10,}$ or $PM_{2.5}$. VOCs would be associated with motor vehicles, construction equipment, and architectural coatings; however, project-generated VOC emissions would not result in the exceedance of SCAQMD thresholds. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, implementation of PDF-AQ-1 would restrict the VOC content of coatings for construction applications.

VOCs and NO_x are precursors to O_3, for which the SCAB is designated as nonattainment with respect to the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). The health effects associated with O_3 are generally associated with reduced lung function. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC and NO_x emissions associated with proposed project construction could minimally contribute to regional O_3 concentrations and the associated health impacts. However, because of the minimal contribution during construction, health impacts would be considered less than significant.

Construction of the proposed project would also not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or would obstruct the SCAB from coming into attainment for these pollutants. The proposed project would also not result in substantial diesel particulate matter emissions during construction, and therefore would not result in significant health effects related to diesel particulate matter exposure. Additionally, the proposed project would be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction, health impacts would be considered less than significant.

Construction of the proposed project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. Health impacts that result from NO_2 and NO_x include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, proposed project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the project site and would not be concentrated in one portion of the site at any one time. In addition, existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Construction of the proposed project would not require use of any stationary sources (e.g., diesel generators, boilers, fuel cell) that would create substantial, localized NO_x impacts. Therefore, potential health impacts associated with NO_2 and NO_x would be less than significant.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots is discussed in detail in Section 4.2.5 (see Section 4.2, Air Quality) and is determined to be a less than significant impact. Thus, the proposed project's CO emissions would not contribute to significant health effects associated with this pollutant.

In summary, construction of the proposed project would not result in exceedances of the SCAQMD significance thresholds for criteria pollutants and potential health impacts associated with criteria air pollutants would be **less than significant**. No mitigation is required.

Hazards and Hazardous Materials

Use of Hazardous Materials

A variety of hazardous materials, including fuels for equipment and vehicles, new and used motor oils, cleaning solvents, and paints, would be used and stored on-site during construction of the proposed project. These materials are not considered acutely hazardous and would be used in limited quantities. Construction contractors are responsible for accident prevention and containment, and typical construction specifications include provisions for proper management of hazardous substances and wastes. All contractors are required to comply with applicable laws and regulations regarding hazardous materials and hazardous waste management and disposal. Examples of hazardous materials management include preventing the disposal or release of hazardous materials onto the ground or into groundwater or surface water during construction and providing completely enclosed containment for all refuse generated in the planning area. In addition, all construction waste, including trash, litter, garbage, solid waste, petroleum products, and any other potentially hazardous materials, would be removed and transported to a permitted waste facility for treatment, storage, and/or disposal. Proper use and disposal of these materials in accordance with federal, state, and local laws would not pose a significant risk to the public or to the environment. Impacts would be **less than significant**. No mitigation is required.

Asbestos and Lead-Based Paint

Construction would involve demolition and renovation of some buildings on the project site. Due to the age of the buildings, construction activities could result in exposure of workers and/or the public to asbestos-containing materials (ACM) and lead-containing materials (LCM). The results of an on-site survey indicate that ACM and LCM are present in the two former residential structures on the project site, which would be demolished during construction (see Appendix E). The GKGM Building also has the potential to contain LCM and ACM, due to the age of the structure. While most of the GKGM Building would remain in place, the attached garage would be demolished. Additionally, some exterior improvements would occur to the GKGM Building, as part of adaptive reuse of a portion of the building. Potential effects to workers or members of the public could occur from direct contact with the substances, incidental ingestion of the substances, and/or inhalation of airborne dust released from dried materials during construction. Therefore, mitigation measures **MM-HAZ-1** and **MM-HAZ-2** are required to ensure the proper removal of LCM and ACM occur. Impacts would therefore be **less than significant with mitigation incorporated**.

Subsurface Contamination

The project site is located near several sites where hazardous materials may have been released to the groundwater or soil. In the event that off-site releases of hazardous materials have entered the soil or

groundwater underlying the project site, contaminated soil or water could be encountered during construction activities. Construction activities would involve excavations up to 65 feet below grade. While groundwater is not expected to be encountered during excavation due to the depth of the water table, local seepage could be encountered, especially if excavation is undertaken during the rainy season. (See Section 4.5 of this EIR for additional details on excavations at the project site.) In the event that contaminated soil or groundwater is encountered, it would need to be removed, transported, and/or disposed of. During these processes, workers or the general public could potentially be exposed to the contaminated material, resulting in a potentially significant impact.

The project site could potentially have an abandoned underground storage tank (UST), or aboveground storage tank (AST), associated with an area previously used as an automobile service bay. In the event that an AST is present on the project site, it would be identified during demolition and removed and disposed in accordance with local, state, and federal laws. In the event that a UST is present on the project site and currently or historically leaked into the ground, there is the possibility of residual contamination in the soil, caused by the UST. The UST may need to be removed and disposed of during or prior to construction. Soil contamination and/or removal and disposal of the UST could potentially expose workers or the public to hazardous materials associated with the chemicals that were stored in the UST, resulting in a potentially significant impact.

Due to the potential for soil or groundwater contamination at the project site, potentially significant impacts could occur during project construction. Mitigation measure **MM-HAZ-3** would ensure that any potential USTs are properly detected and removed. Mitigation measure **MM-HAZ-4** is required to ensure that pre-construction subsurface investigation occurs to identify any potential contamination. **MM-HAZ-5** and **MM-HAZ-6** would ensure that if subsurface contamination is identified, soils would be properly transported and disposed of in a manner that would minimize hazards to workers, the public, and the environment. With implementation of mitigation measures **MM-HAZ-1** through **MM-HAZ-6** into the proposed project, and upon compliance with applicable federal, state, and local laws related to the transport, use, and disposal of potentially hazardous materials and wastes, construction impacts would be **less than significant with mitigation incorporated**.

Emergency Response and Evacuation Plans

Construction of the proposed project would involve activities typical of an urban infill development project, which are routine in an urban environment and would not be expected to impair or physically interfere with the City's emergency response and evacuation plans. Construction would not involve any obstructions or closures along City-designated disaster routes, including Santa Monica Boulevard. Santa Monica Boulevard would remain open as a potential disaster route throughout construction. Traffic generated during project construction would not substantially change the use and function of any nearby disaster routes. In the event of an emergency, the City's emergency plans would be implemented and would proceed in the same manner with or without project construction. Impacts would be **less than significant**. No mitigation is required.

Noise

Construction Noise Levels

The types of construction equipment that would be used to construct the proposed project include standard equipment that would be employed for any routine construction project of this scale, such as excavators, graders, trenchers, cranes, rubber-tired bulldozers, generators, and paving equipment. Construction equipment with substantially higher noise-generation characteristics (such as pile drivers, rock drills, blasting equipment) would not be necessary.

Construction activities would occur in close proximity to the following noise-sensitive receivers: the Lighthouse Church and School, with a playground located approximately 10 feet from the project site and a patio and structure located approximately 40 feet from the project site; residences located approximately 20 feet west of the project site; residences located approximately 75 feet northeast and south of the project site; and the Ambrose Hotel across 20th Street. The closest noise-sensitive receivers are located approximately 100 feet from the acoustic center of construction activity (the idealized point at which the energy sum of all construction activity noise, near and far, would be centered). Thus, the distance to construction activities for the closest noise-sensitive uses (residences, church, and school staff, students and visitors) would be as close as 10 feet, but would typically be approximately 100 feet away. Other nearby single-family and multi-family residences are located at distances ranging from approximately 50 feet to several hundred feet away.

As described in Section 4.9.1 of this EIR, the Federal Highway Administration's RCNM was used to estimate construction noise levels at these noise-sensitive land uses. The worst-case, hourly average noise levels (dBA L_{eq}) from the proposed construction activities are summarized in Table 4.9-11 in Section 4.9 Noise of this EIR. Also provided in Table 4.9-11 are the respective significance thresholds for the nearby noise-sensitive land uses, which are derived either from the exterior noise standards in SMMC Section 4.12.060 (Table 4.9-9 in Section 4.9) plus 20 dBA or the existing ambient noise levels presented in Table 4.9-4 plus 20 dBA (whichever is higher). The worst-case, maximum noise levels (dBA L_{max}) from the proposed construction activities are summarized in Table 4.9-12. Also provided in Table 4.9-12 are the respective significance thresholds for the nearby noise-sensitive land uses, which are derived either from the exterior noise standards in SMMC Section 4.12.060 (Table 4.9-9) plus 40 dBA or the existing ambient noise levels presented in Table 4.9-4 plus 40 dBA (whichever is higher). The complete set of RCNM input and output data for construction noise is provided in Appendix F.

Based upon the construction noise analysis, the City's hourly average noise standards (shown in Table 4.9-11) would be exceeded during several construction phases of the proposed project at the Lighthouse Church and School playgrounds, and at the residences to the west, located west of 19th Court Alley. As shown in Table 4.9-12, the proposed project would not generate maximum noise levels that are more than 40 dBA greater than the exterior noise levels. The proposed project could potentially exceed SMMC

construction noise standards if construction is conducted outside of the hours from 10 a.m. to 3 p.m. Monday through Friday. Implementation of mitigation measure **MM-NOI-1** is, therefore, required to reduce the potential impact to a level of **less than significant with mitigation incorporated**.

Groundborne Vibration

Construction activities that might expose persons to excessive groundborne vibration or groundborne noise could cause a potentially significant impact. Groundborne vibration information related to construction activities has been collected by the California Department of Transportation (Caltrans 2013). Information from the California Department of Transportation indicates that transient vibrations (such as construction activity) with a peak particle velocity (ppv) of approximately 0.035 inches per second may be characterized as barely perceptible, and vibration levels of 0.24 inches per second ppv may be characterized as distinctly perceptible. The City's Municipal Code Section 4.12.070 sets the permissible threshold of perceptibility at more than 0.05 inches per second root mean square (RMS).[2] However, the vibration caused by a variety of activities, including construction activity and moving vehicles, is exempt from this standard.

Groundborne vibration is typically attenuated over short distances. The heavier pieces of construction equipment, such as large bulldozers and caisson drill rigs, would have PPVs of approximately 0.089 inches per second or less at a distance of 25 feet (DOT 2018), as shown in Table 4.9-16 (see Section 4.9, Noise). According to the Caltrans guidance, vibration structural damage criteria (refer to Table 4.9-3 in Section 4.9, Noise), vibration levels exceeding 0.5 inches/second would have the potential to cause damage to historic and some old buildings, and older residential structures for transient sources. Vibration levels exceeding 0.2 inches/second would have the potential to cause damage to fragile buildings. Based upon the Caltrans guidance for human response (refer to Table 4.9-2), vibration levels of approximately 0.24 inches/second would be distinctly perceptible, and vibration levels of approximately 0.035 inches/second would be barely perceptible.

At the nearest existing off-site noise/vibration-sensitive land uses (the Lighthouse Church School playground, patio, and structure), construction activities could take place within approximately 10 feet of the playground, and within approximately 40 feet of the patio and structure. The nearest existing residences (located west of 19th Court Alley) would be located approximately 20 feet from the nearest construction activities. At the next-nearest residences, located to the east on the east side of 20th Street, construction activities would occur within approximately 70 feet. For the Providence Saint John's Medical Plaza at the southeast corner of 20th/Arizona Avenue, construction activities for the new building would occur approximately 250 feet away. In addition, the rear garage portion of the existing on-site GKGM Building would be demolished, and construction/grading activities for the new Wellness Center building would take place within 2-3 feet of the GKGM Building.

[2] RMS is defined as the square root of the average of the squared amplitude of the signal. The RMS value is always less than ppv; for a single frequency condition, the RMS value is about 70% of the ppv (Caltrans 2013).

Using the guidance and methodologies developed by the U.S. Department of Transportation's Federal Transit Administration (DOT 2018), the maximum vibration levels (i.e., assuming that construction activities with the highest vibration levels take place at the edge of the project site) were estimated at the nearest noise- and vibration-sensitive land uses. The results are summarized in Table 4.9-17 (see Section 4.9, Noise). As shown in Table 4.9-17 (see Section 4.9, Noise), the maximum vibration levels would exceed the thresholds for potential for structural damage at the GKGM Building; the structural damage threshold would be exceeded up to a distance of 15 feet from heavy equipment, such as a large bulldozer or caisson drill rigs. Nearby off-site structures would not exceed the applicable vibration damage thresholds. The thresholds for potential human annoyance would be exceeded at the school playground. The human annoyance threshold at the church school would be exceeded up to a distance of 15 feet from heavy equipment. The potential vibration impacts would be reduced by the implementation of mitigation measure **MM-NOI-1**. In addition, mitigation measure **MM-NOI-2** is required to reduce vibration impacts directly. With the implementation of these mitigation measures, impacts regarding building damage and annoyance effects of vibration would be **less than significant with mitigation incorporated**.

Transportation

The proposed project's construction activities would be constructed in one phase, tentatively scheduled to begin as early as March 2021, ending in January 2023. The tentative construction schedule assumed for the purposes of analysis within this EIR is shown in Table 4.2-7, Construction Phasing Assumptions (see Section 4.2, Air Quality).

Construction traffic would include haul trucks, cement trucks, equipment and material delivery trucks, and construction worker vehicles. As shown in Table 4.2-8 (see Section 4.2, Air Quality), the maximum daily vendor truck trips in any given phase would be 34 truck trips, and the maximum daily worker trips in any given phase would be 78 worker trips. Construction worker vehicles, materials deliveries, and other construction-related trips are expected to add heavy truck trips per day to streets within the vicinity of the project mainly during demolition and grading/shoring phases of construction period. In total, construction traffic is anticipated to result in a total of 164 haul truck trips during the demolition phase and 11,600 haul truck trips during grading/shoring phase. The construction haul route would be determined in coordination with City staff and residential streets would be avoided to the extent practicable.

Construction-related increases in traffic would be short-term in nature and lower in volume than the operational vehicle trips associated with the proposed Project. Therefore, it would not contribute significantly to long-term traffic congestion. However, increased construction traffic on streets, particularly large haul trucks and other heavy equipment (e.g., cement trucks and cranes), may disrupt traffic flows, reduce lane capacities, and generally slow traffic movement. In addition, such traffic could interfere with or delay transit operations and disrupt pedestrian and bicycle circulation. Other potential construction-related impacts include idling, parked, or queued heavy trucks that could potentially obstruct visibility. Project

construction may also require the temporary or extended closure of adjacent traffic lanes and sidewalks on surrounding streets to accommodate excavation for operation of construction equipment.

As a result, construction impacts are considered potentially significant. Implementation of mitigation measure MM-TRA-1 would require preparation of a Construction Impact Mitigation Plan (Plan) to address construction traffic routing and control, vehicular and pedestrian safety, pedestrian/bicycle access and parking, street closures, and construction parking. This Plan would be prepared to address traffic impacts that could occur during project construction, which is anticipated to occur over 23 months. Implementation of mitigation measure MM-TRA-1 would reduce the project's construction traffic impact to less than significant with mitigation incorporated.

4.3.6 Cumulative Impacts

It is anticipated that construction of the proposed project would overlap with other future projects in the immediate vicinity, resulting in potentially significant cumulative construction impacts throughout the duration of the proposed project. Refer to Sections 4.1 through 4.14 for full discussion of potential cumulative construction impacts associated with the proposed project. In the category of transportation, MM-TRA-1 would be applied to address the potential for project construction to contribute to cumulative construction-related transportation effects in the City. Cumulative impacts for construction effects would be considered less than significant with incorporation of the mitigation measures listed in Section 4.3.7, below.

4.3.7 Mitigation Measures

MM-AQ-1 (See Section 4.2, *Air Quality*)

MM-HAZ-1 (See Section 4.7, *Hazards and Hazardous Materials*)

MM-HAZ-2 (See Section 4.7, *Hazards and Hazardous Materials*)

MM-HAZ-3 (See Section 4.7, *Hazards and Hazardous Materials*)

MM-HAZ-4 (See Section 4.7, *Hazards and Hazardous Materials*)

MM-HAZ-5 (See Section 4.7, *Hazards and Hazardous Materials*)

MM-HAZ-6 (See Section 4.7, *Hazards and Hazardous Materials*)

MM-NOI-1 (See Section 4.9, *Noise*)

MM-NOI-2 (see Section 4.9, *Noise*)

MM-TRA-1 The applicant shall prepare, implement, and maintain a Construction Impact Mitigation Plan for review and approval prior to issuance of a building permit to address and manage traffic during construction and shall be designed to:

- Prevent traffic impacts on the surrounding street network
- Ensure safety for both those constructing the proposed project and the surrounding community.
- Prevent substantial truck traffic through residential neighborhoods
- Provide coordination with adjacent or nearby construction projects

The Construction Impact Mitigation Plan shall be subject to review and approval by the following City departments: Public Works, Fire, Planning and Community Development, and Police to ensure that the Plan has been designed in accordance with this mitigation measure and meets City standards. This review shall occur prior to issuance of grading or building permits. It shall, at a minimum, include the following:

Ongoing Requirements throughout the Duration of Construction

- A detailed Construction Impact Mitigation Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, and parking lanes. The plan shall include specific information regarding the project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such plans shall be reviewed and approved by the Strategic and Transportation Planning Division prior to commencement of construction and implemented in accordance with this approval.
- Work within the public right-of-way shall be performed between 9:00 a.m. and *4:00 P.M.* This work includes dirt and demolition material hauling and construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed after the issuance of an after-hours construction permit.
- Streets and equipment shall be cleaned in accordance with established Public Works Department requirements.
- Trucks shall only travel on a City-approved construction route. Truck queuing/staging shall not be allowed on Santa Monica streets. Limited queuing may occur on the construction site itself.
- Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be onsite, with a minimum amount of materials within a work area in the public right-of-way, subject to a current Use of Public Property Permit.
- Any requests for work before or after normal construction hours within the public right-of-way shall be subject to review and approval through the After Hours Permit process administered by the Building and Safety Division.

- Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City of Santa Monica.

Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction

- The Applicant shall advise the traveling public of impending construction activities (e.g., information signs, portable message signs, media listing/notification, and implementation of an approved Construction Impact Mitigation Plan).
- The Applicant shall provide timely notification of construction schedules to all affected agencies (e.g., MTA, Big Blue Bus, Police Department, Fire Department, Public Works Department, and Planning and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 500 feet.
- The Applicant shall coordinate construction work with affected agencies in advance of start of work. Approvals may take up to two weeks per each submittal.

4.3.8 Level of Significance After Mitigation

The construction of the proposed project would result in a potentially significant impact to sensitive receptors prior to mitigation. With the implementation of mitigation measure **MM-AQ-1**, the emissions of DPM would be significantly reduced compared to the unmitigated scenario. The detailed emissions assumptions and model outputs using CalEEMod are provided in Appendix B. With the implementation of mitigation measure **MM-AQ-1**, potential cancer risks at the maximally exposed school receptor would be reduced to a less than significant level. In addition, potential cancer risks at existing residential receptors would not exceed the applicable SCAQMD threshold after implementation of mitigation measure **MM-AQ-1**, as demonstrated in Table 4.2-14 in Section 4.2, Air Quality. Impacts would be **less than significant with mitigation incorporated**.

Construction-period impacts related to hazards and hazardous materials requires implementation of mitigation measures **MM-HAZ-1** through **MM-HAZ-6** to reduce impacts to **less than significant with mitigation incorporated**.

Implementation of mitigation measures **MM-NOI-1** and **MM-NOI-2** is required to help ensure that temporary noise impacts are reduced during construction activities. With the incorporation of mitigation measures **MM-NOI-1** and **MM-NOI-2**, impacts associated with construction noise would be **less than significant with mitigation incorporated**.

Implementation of mitigation measure **MM-TRA-1** would reduce potentially significant impacts from construction traffic to a **less than significant impact with mitigation incorporated**.

4.3.9 References

Caltrans. 2013. *Transportation and Construction Vibration Guidance Manual*. Sacramento, California: Caltrans Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. September 2013.

CARB (California Air Resources Board). 2005. *On-Road Heavy-Duty Diesel Engine Reduced Emission Standards*. January 6, 2005. Accessed December 2016. https://www.arb.ca.gov/msprog/onroadhd/reducstd.htm.

DOT (U.S. Department of Transportation). 2018. Transit Noise and Vibration Impact Assessment Manual. DOT, Federal Transit Administration. September 2018.

SCAQMD (South Coast Air Quality Management District). 1993. *CEQA Air Quality Handbook*. December 2016. http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc?sfvrsn=2.

SCAQMD. 2009. *Final Localized Significance Threshold Methodology.* March 2009. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf.

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4.4 CULTURAL RESOURCES

This section describes the existing cultural resources on and near the project site, identifies associated regulatory requirements, evaluates potential impacts on cultural resources (historic resources, archaeological resources, human remains) due to implementation of the proposed 20th Street Wellness Center Project (proposed project), and identifies relevant mitigation measures.

All historic built environment resources within the proposed project site were analyzed as part of the *Historic Resources Technical Report, Historic Resources Survey, Evaluation, and Analysis of Potential Project Impacts, 1242 20th Street Wellness Center Project,* dated November 2020 and prepared by Ostashay & Associates Consulting (see Appendix C).

4.4.1 Existing Conditions

The project site is located in the City of Santa Monica (City), in the western portion of Los Angeles County. The City of Santa Monica is a fully urbanized community and is bounded by the City of Los Angeles on the north, south, and east with the Pacific Ocean on the west. Specifically, the project site is bordered by 20th Street on the east, Arizona Avenue to the south, the 19th Court alley to the west, and the Lighthouse Church and School to the north. The project site, located in Mid-City, north of Santa Monica Boulevard within the Health Care Mixed Use District, at the northwest corner of Arizona Avenue and 20th Street covers approximately 1.03 acres (45,009 sf). The project site currently is occupied by a 2-story Tudor Revival style commercial building (the Gates, Kingsley & Gates Mortuary [GKGM]) with a connected 4-car garage, two 2-story former residential structures (currently partially occupied with office uses), and a surface parking lot. The project site contains two parcels. The Assessor Parcel Numbers (APN) associated with these two parcels are 4276-013-033 (with address of 1925 Arizona Avenue) and 4276-013-032 (with addresses of 1234 and 1242 20th Street), respectively.

The parcel addressed as 1925 Arizona Avenue is comprised of three full lots that are tied and each measure 50 feet by 150 feet, as well as the northeast portions (70 feet) of three additional lots to the immediate north, which are also tied. The legal description for this property is defined as the Town of Santa Monica tract, northeast 70 feet of lots G, H, and I and all of lots J, K, and L, Block 105. This site currently contains the Tudor Revival style GKGM Building (former funeral home) with an administration building connected to a small chapel structure with landscaped grounds that was completed in 1933. The administration portion of the building is L-shaped in plan with the offices in the recessed gabled western wing. In the void created by the "L" shape of the building plan a grassy lawn is circled by a paved driveway spanned by a porte cochere. Within the grassy front lawn area is a large a fountain that has been converted into a planter. The driveway running under the porte-cochere has two curb cuts, one on Arizona Avenue and one on 20th Street; the driveway as well as the grassy front lawn are currently utilized as outdoor seating for the restaurant with a landscaped shaded canopy. The small one-story chapel attached to the east side of the building fronts onto 20th Street (currently adaptively used as a restaurant). It too is designed in the Tudor Revival style. Behind

(north) the building is an attached one-story, four-car garage and a paved parking lot is to the north of the chapel. The GKGM property has been previously identified as a potential City of Santa Monica landmark by the City as part of their on-going historic resources survey efforts.

The site addressed with the Los Angeles County Assessor as 1242 20th Street contains two Minimal Traditional style buildings that were built in 1956 (a 3-unit, 1234 20th Street) and 1965 (a 7-unit apartment, 1242 20th Street) (Los Angeles County, Office of the Assessor 2019). These buildings are currently being leased for office use, but were historically used as apartments until 2016. With substantial setbacks from 20th Street, they are situated to the north of the Tudor Revival Style property on the northwest portion (80 feet) of the three tied lots mentioned above. The legal description for this property is defined as the Town of Santa Monica tract, northwest 80 feet of lots G, H, and I, Block 105. These two apartment buildings have not been previously assessed for potential historical significant under any of the prior City sponsored survey efforts.

The immediate area outside of the project boundary is developed primarily with low-rise, multi-family residences dating from the 1940s and 1950s through to the 1970s and 1980s. A service alley runs north and south from Arizona Avenue to Wilshire Boulevard along the western edge of the project site boundary. Two small, single-family bungalows (1915 Arizona Avenue, 1922; 1257 19th Street, 1921) are just to the west of the project location with contemporary commercial, medical facilities across the street to the southeast.

The three parcels north of the project site along 20th Street are developed as an ecclesiastical facility. The first lot (lot F; APN: 4276-013-004) immediately adjoining the project site at 1228 20th Street is a paved parking for the church at 1220 20th Street and associated school (1224 20th Street). The Los Angeles County Assessor address for both the church and school is listed as 1224 20th Street, on two tied parcels (lots E and D; APN: 4276-013-028). The school (Lighthouse Church School, established in 1983) occupies a modest Craftsman style bungalow that was built in 1922 as a single-family dwelling with paved parking at the rear that also serves as a playground. The adjacent church building to the north was erected in 1934 as the International Foursquare Gospel Church and continues to operate as a Christian Fellowship Ministries Foursquare Gospel Church (Santa Monica Foursquare Church) under the name of the Lighthouse Church. Both the bungalow and church property have been previously evaluated for historical significance as part of the City's past survey efforts. Under the most recent survey work the bungalow was found to be eligible for local designation as a City of Santa Monica Structure of Merit. The church was initially surveyed in 1994 and was evaluated as eligible for City of Santa Monica Structure of Merit recognition. The City's Historic Resources Inventory 2018 survey update reconfirmed this finding of eligibility. Both the bungalow and church are outside of the survey study area.

4.4.1.1 Historical Setting

City of Santa Monica History

In 1875, the original townsite of Santa Monica was surveyed, including all the land extending from Colorado Street on the south to Montana on the north, and from 26th Street on the east to the Pacific Ocean on the west. Between 1893 and the 1920s, the community operated as a tourist attraction, visited by mostly wealthy patrons. Those areas just outside of the incorporated city limits were semi-rural in setting and were populated with scattered residences. After the advent of the automobile in the 1920s, Santa Monica experienced a significant building boom, with homes being constructed in the tracts north of Montana and east of Seventh Street for year-round residents. Commercial buildings, primarily one- or two-story in height, initially concentrated along 2nd and 3rd Streets between Colorado Avenue and Wilshire Boulevard also began to expand eastward beyond the central business district of the city at this time.

The project site is located in the Mid-City area, east of the present central business district of Santa Monica. It is situated within a residential neighborhood, which is flanked by commercial businesses along Wilshire Boulevard and Santa Monica Boulevard. Medical facilities are to the nearby east of the funeral home site. The varied land uses in this section of Santa Monica suggest how the area developed. Prior to the 1910s, the area was largely undeveloped. Only a scattering of residences dotted the semi-rural landscape of the time, as depicted in the 1918 Sanborn Fire Insurance map. By the mid-1920s, however, many of the empty lots were filled with modest residential housing stock.

The next phase of phase of development occurred in the late 1920s and 1930s, when multi-family buildings began replacing some of the smaller single-family homes. It was during this time that the nearby Wilshire (Nevada Avenue) and Santa Monica (Oregon Avenue) corridors assumed their current primarily commercial character. It was during this period that the Gates, Kingsley & Gates Mortuary (GKGM Building), originally called Gates, Mendenhall, & Gates Mortuary, was constructed at the northwest corner of Arizona Avenue and 20th Street in 1933.

These development trends intensified in the post-World War II years, as depicted in the 1950 Sanborn Fire Insurance map. The result being the redevelopment of older, intact housing stock or the infill of parcels with larger one- and two-story apartment buildings, such as the apartment buildings at 1234 and 1242 20th Street. Redevelopment continued into the modern era with the construction of additional apartment buildings and the expansion of medical facilities in the immediate area.

The Modern Mortuary in the United States

The funeral home is a distinct 20th century property type that reflected the changing attitudes towards death and mourning at the time. Historically, family members died in the home and mourning among friends and family typically occurred at the home. The role of the undertaker was typically performed by the local livery stable keeper, who provided the hearse and funeral carriage, by the carpenter, who made the coffin, or by

the sexton, who was charged with bell-tolling and grave digging. The undertaker's responsibility was supplying the coffin, providing chairs for the home, taking charge of pallbearers, supervising removal of the body and ensuring the body was lowered into the grave. Most often, undertakers operated out of their home

Beginning at the turn of the 20th century; however, the "undertaker" became "funeral director." This change of semantics paralleled the transition of death from an intimate family experience at home to a sanitized celebration off-site as part of an increasingly standardized funerary industry. The new title reflected the rise of the celebration of the recently deceased by elaborate ceremony and expensive accoutrements in an appropriate setting. Changes in the medical profession and medical technology led to the rise of the modern hospital and by the 1920s, combined with rising incomes and higher cost of health services, fewer and fewer individuals died at home. Hospital and medical staff increasingly handled the details of post-mortem, even more so to the exclusion of the family beyond deciding the preferences of the deceased. It also reflected the growing acceptance of embalming in treating the recently deceased.

Paralleling the rise of the funeral home were several factors, the rise of apartment buildings and residential hotels altered the concept of a residence for many from a detached house to a unit on a floor within a building. Of single-family homes, new construction tended toward smaller homes without large rooms for gatherings as the traditional parlor. The rise of the street car dispersed the city's population into suburbs, a dispersion accelerated dramatically by the popularity and use of the automobile by the general public.

These trends also combined with changes in the 1920s in the real estate financing that allowed the rise of specific use buildings, such as the site-specific funeral home. In that era, real estate developments were increasingly financed with leveraged funds provided by loan associations, insurance companies, savings banks and other lending institutions with developers only making low down payments, often as little as 10 percent. This "easy money" acted as an accelerant to the real estate development of the area. On the large scale, it produced grand buildings like the 1930 Chrysler Building or the 1931 Empire State Building, both in New York City. On the smaller scale, it allowed business owners the opportunity to create a building specifically for their enterprise, such as the funeral home.

By the 1920s, the business became more professional and "undertakers" could be properly trained in the current industry standards and trends of the time. As funeral homes multiplied, so did a variety of professional associations that organized men at the national and state levels, the trade publications that exclusively catered to an emerging class of authorities and standards for the management, treatment and process of operating a modern mortuary, and the establishment of educational institutions for the formal training of funeral directors.

The funeral industry gradually emerged as an economically sophisticated, politically adept, and consumer-oriented institutional powerhouse that revolved around the embalmed, viewable body. But the industry encompassed much more than embalming chemical companies and national professional associations.

Casket manufacturers, florists, cosmetic corporations, automobile companies, cemetery associations, insurance agencies, and other related businesses also played a role in the financial triumph of the industry.

The operation and design logistics of the funeral home of that era was complex. Typically, it required domesticated space to meet the needs of mourners. Such spaces included a reception room, chapel for services, and slumber rooms for private viewing, along with adjacent family rooms. In some instances, there were child's slumber rooms and a second smaller chapel. A number of slumber rooms were critical in allowing services to be staged with efficiency. From a business perspective, a funeral parlor also contained a casket sales room, offices, and storage. There was also an operating room for embalming and dressing room for final preparations. As a 24-hour a day operation, funeral homes also included one or more residential apartments and often times a "lady attendant." Finally, the modern funeral home needed to accommodate the automobile, with appropriate settings for arriving and departing bodies, and with appropriate accommodations for staging processions.

History of the Project Site

Gates, Kingsley & Gates Mortuary

By the early 1920s, only three "funeral directors" were listed in the local city directories. The terms funeral home or mortuary were not referenced in the classified business sections of those early directory listings. The 1923 classified business section of the local city directory listed the following funeral homes under the heading "funeral directors," Kirkelie OA & Company at 202 Main Street in Ocean Park; the Mendenhall Funeral Home at 1318 4th Street (previously referred to as Mendenhall & Clatworthy [1921-1923] and Boone & Clatworthy [1920-1921]); and J Walter Todd at 1307 7th Street at Arizona Avenue. Within only a few years, the mortuary business in Santa Monica was to usher in a new era of modern funeral homes.

Construction work begun on the new Tudor Revival style funeral home at the corner of 20th Street and Arizona Avenue in May 1933. Of wood-frame, plaster construction the Gates, Mendenhall and Gates mortuary facility (briefly referred to as Mendenhall & Gates Funeral Home) was designed by local architect Francis D. Rutherford with assistance by architect George Dunderdale. Plans and specifications for the new funeral home were prepared by the Maule Building Company of Santa Monica. The Maule Building Company also acted as the general contractor for the new project. The mortuary's one-story chapel wing named "Little Chapel of the Dawn," was designed to be similar in style and appearance to the "Wee Kirk o' the Heather" chapel at Forest Lawn Memorial Park in Glendale.

The Tudor Revival style GKGM Building with its chapel at the northwest corner of Arizona Avenue and 20th Street was completed and formally opened in September 1933. As part of the site development the non-denomination Little Chapel of the Dawn was dedicated with a church service held on Sunday, September 10, 1933, the second day of celebrations. The dedication of the attached two-story administration portion of the building was also held on that Sunday afternoon.

A two-page spread in the *Santa Monica Evening Outlook* dated from September 9, 1933 highlighted the development of the mortuary and church site. Various articles lauded the property's architectural design, project architects and contractors, and the property owners and operators. Congratulatory advertisements and photographs of the buildings and grounds were also included in the newspaper coverage from that date. Among its competitors at that time, it was one of the grandest structures of its type and would remain so for many years.

The new Gates, Mendenhall and Gates Mortuary at 1925 Arizona Avenue signaled the expansion of the Mendenhall Funeral Home as well as the partnership between Clifford J. Mendenhall (1897-1989), Mark T. Gates (1907-1972) and his father Reverend Eugene F. Gates (1873-1957). At the time the Gates, Mendenhall and Gates Mortuary opened there were three other funeral homes operating in the Santa Monica area as well as one in West Los Angeles. After construction of the new building, the Gates, Mendenhall and Gates Mortuary continued to be successful because of their ability to meet the needs of the surrounding diverse community, offer a modern facility with a caring staff, and they provided an accommodating and attractive establishment. According to newspaper accounts, archival data, and city directory information the Gates, Mendenhall and Gates mortuary offered a "home-like" setting for the deceased and mourning with all the functions and services of a contemporary funeral home. The business also included 24 hour ambulance service, as Gates, Mendenhall and Gates owned and operated an innovative side and rear door hearse. Ambulance services as an adjunct business to funeral homes was quite commonplace prior to the 1970s, since mortuaries typically had to operate hearses and, therefore, had drivers and necessary equipment and facilities.

Besides the Little Chapel of the Dawn for services and prayer (as well as weddings and other social events), the eastern half of the building operated the administration aspects of the business with space for a reception room, slumber rooms, casket sales, offices and storage, a walk-in safe, bathrooms, and an embalming room and dressing room for final preparations. On the second floor of the building were two apartment units where staff of the 24 hour mortuary resided and stood on-call. The officials of the funeral home resided off-site with their families, though early-on Mark Gates and his wife Sarah lived briefly in one of the apartments on-site.

By the end of 1940, Clifford J. Mendenhall, president of the firm and one of the funeral directors, had transitioned out of his position and moved to the San Gabriel Valley with his family. Virgil B. Kingsley, who had been with the firm since 1936, then became a managing partner, funeral director and secretary-treasurer in the business. With this change, Frank Gates became president and Mark Gates remained as vice-president. Accordingly, following the departure of Mendenhall, the company's name was amended to Gates, Kingsley & Gates Mortuary (also referred to as Gates, Kingsley and Gates). With a brisk business at hand, they opened another mortuary in nearby Westwood.

To supplement the company's income Gates, Kingsley & Gates constructed a 3-unit, two-story apartment building in 1956. This improvement was built on a portion of lots G and H of Block 105 (in the Town of Santa Monica tract) along the western property line, north of the mortuary building (1234 20th Street). An additional two-story, 7-unit apartment building was built by Gates, Kingsley & Gates just south of the other apartment building in 1965 (1242 20th Street). Hence, they also went into the apartment management business, which continued until the overall site was sold in 2016.

By the 1970s, Gates, Kingsley & Gates had acquired a number of local mortuaries, including the Wilshire Funeral Home and Price-Daniel Mortuary of West Los Angeles. The acquisition of the Wilshire Funeral Homes did not include the property and its operations were consolidated to the 20th Street and Arizona Avenue facility. Years later the company consolidated again with the merger of another longtime family mortuary Moeller-Murphy. It then became Gates, Kingsley & Gates Moeller Murphy (later changed to Kingsley & Gates, Moeller & Murphy). Since 1994, the business was later sold again to Service Corporation International (SCI) and operated under the SCI brand "Dignity Memorial. In August 2016, the subject property closed its doors permanently and ceased operation.

The Tudor style Little Chapel of the Dawn has hosted hundreds of weddings, as well as funerals, in the past several decades. Over the years, the Gates, Kingsley & Gates Mortuary and the associated Little Chapel of the Dawn have also had their share of celebratory funeral services. Because of its well-established professional operations, long-term service to the local residents, respect for the dead and mourning, and reverence for privacy the GKGM Building was the funeral home of choice for many in the area. Funeral services for former President Ronald Reagan (1911-2004) and his wife Nancy (1921-2016) were both held there. The arrangements were prearranged by the Reagans decades prior to their deaths. Other services have been held at the Little Chapel of the Dawn for many actors, actresses, playwrights, artists, former Santa Monica mayors, television personalities, and entertainers, including Stewart and Dorothy Granger; Stanton MacDonald Wright; Mark T. Gates; George Carlin; Dick Clark; and Bea Arthur; among others.

Associated People

Eugene F. Gates

Eugene Frank Gates, the first secretary-treasurer of the Gates, Mendenhall and Gates mortuary, was a financial investor in the business and took over its management affairs when the expanded mortuary business officially opened. Reverend Frank Gates (1872-1957), as he was referred to by acquaintances, hailed from Indiana where he was born and raised. He graduated from DePauw University and attended Garrett Biblical Institute, a Methodist seminary in the Midwest, and became well known in ministerial circles. He came to California with his family in 1914 and eventually landed in Santa Monica by the mid-1920s. He had served as pastor for the First Methodist Episcopal Church in Springfield, Azusa, Los Angeles, Alhambra, and Santa Monica. He retired from the ministry in 1932 and the following year helped to found

Gates, Mendenhall & Gates. From 1932 to 1938, he served as financial executive and adviser of the Goodwill Industries of Los Angeles. When Virgil B. Kingsley became a partner in the business in 1940, Frank Gates became president of the firm. Frank Gates was active in the business and civic organizations until his death in 1957. At that time, his wife Fannie Gates became vice president of the company until her death in 1961.

Clifford J. Mendenhall

Clifford James Mendenhall (1897-1989) became a partner in a small funeral parlor called Boone & Clatworthy. This funeral home business located at 1318 4th Street in Santa Monica began in 1921 and was operated by Joseph B. Boone and Reverend William C. Clatworthy. Boone retired and Mendenhall joined Clatworthy in 1921. Only a few years later, Clatworthy retired in 1923 with Mendenhall buying out his interest in the firm. Mendenhall continued his sole proprietorship of the funeral home for several years until his partnership with the Gates family and the formal opening of the Gates, Mendenhall & Gates Mortuary in 1933.

Born in 1897 in Illinois, Mendenhall was a third generation licensed mortician and a graduate of Worsham College in Chicago. After serving in World War I he worked in the funeral business in Hollywood for a year before moving to Santa Monica and establishing himself in the local mortuary business. With some financial assistance from Reverend Eugene F. Gates and a successful business already in operation the modest Mendenhall funeral home was ready to expand into a more modern, larger facility. With an already established business and years of experience Mendenhall was the senior funeral director of the Gates, Mendenhall & Gates Mortuary and served as its president. By 1940, Mendenhall had moved on and out of Santa Monica to Monrovia where he lived with his wife Margaret for over twenty years.

Mark T. Gates

Mark Thomas Gates, son of Eugene Frank and Fannie Gates, was born in Nebraska in 1907. He was 14 years old when he and his family arrived in Santa Monica. He attended Santa Monica High School and went on to study at the California College of Embalming in Los Angeles to become a mortician. As an apprenticeship he worked under Clifford J. Mendenhall at his funeral home on 4th Street in Santa Monica prior to becoming a partner and vice-president of the new Gates, Mendenhall & Gates Mortuary. Mark T. Gates was quite active not only in his mortuary business, but was fully engaged in the community. In his early years, he was a member of the board of directors of the Santa Monica-Ocean Park Junior Chamber Commerce and a member of the Kappa Alpha Phi fraternity. Later, he and the Gates, Mendenhall & Gates Mortuary joined the local Chamber of Commerce among other community organizations. Gates was very active in the civic duties of the area having served as Santa Monica's representative on the board of the Metropolitan Water District for many years. He was also past exalted ruler of the Santa Monica Elks Lodge, past president of the Santa Monica Lions Club, and a member of a number of Masonic organizations. He was appointed to the City of Santa Monica's first city council

and was elected mayor under the newly created council-manager form of government that was established in March 1947. He served on the council and as the city's first mayor from March 1947 to April 1951. When his father, E. F. Gates, passed away in 1957, Mark T. Gates became president of the Gates, Kingsley & Gates Mortuary. He remained in that position until his death in 1972 at the age of 64 years. Funeral services for Mark T. Gates were held at the First United Methodist Church in Santa Monica, and he was laid to rest at the Eternal Valley Cemetery in Santa Clarita.

Virgil B. Kingsley

Virgil Bert Kingsley was born in Glendora, California in 1911 to Hugh and Bessie Kingsley. He is an alumnus of Citrus Union High School in Glendale and graduated from Pomona College and later attended the University of Southern California. He worked as an accountant during the mid-1930 and lived in Santa Monica and Venice at the time before marrying and moving to South Pasadena in 1936. In the late 1930s, he worked at Gates, Mendenhall & Gates. It was at that time that he changed careers and in 1940, he became a partner and a funeral director in the business. He and his family moved to Santa Monica and remained there for many years. During the 1940s, the Kingsley lived in an apartment conveniently located across the street from the funeral home. They later moved to 22nd Street just south of San Vicente Boulevard. Engaged in the mortuary business for decades, he was involved with the profession on numerous levels, as well as actively involved in civic affairs and the local organizations and clubs of the community. He was president of the California Funeral Directors Association and founding president of the Los Angeles County Funeral Directors Association. Kingsley also served as a member and president of the California Cemetery State Board (now the California Cemetery and Funeral Bureau).

Virgil B. Kingsley was appointed to the Santa Monica City Council in November 1968 to fill an unexpired term through April 1969. He was formally elected to a four year seat on the council in April 1969 and briefly served as mayor in 1971 (he resigned from the post at the end of April of that year). Kingsley was also a founding chairman of the National Conference of Christians and Jews, which in 1984 presented him with its Humanitarian Award for his civic service. He passed away in Newport Beach in 1989.

Francis D. Rutherford

Little is known about architect Francis David Rutherford (1883-1933) of Santa Monica. He was born and raised in Salt Lake City, Utah by his parents Sarah and John Rutherford. He studied architecture at the University of Utah and went on to establish a practice in Salt Lake City. His architectural career in Salt Lake City included several partnerships with other architects during a period from 1907 to 1921. There he designed several commercial buildings as well as industrial structures, educational facilities, a church, and a college gymnasium. In 1921, he moved his family to Santa Monica. March of that same year, he received his certificate to practice architecture in California and set up his design practice in the bay side community with an associate, D.D. Smith. That partnership lasted only a few years and Rutherford went on to have his own practice until his death in early 1933. One of last designs were the Tudor Revival style Gates,

Mendenhall & Gates Mortuary and Chapel at 1925 Arizona Avenue. He died suddenly from a heart attack in January just a few months before the grand opening of the new funeral home. His death came prior to the official announcement of construction for the new mortuary facility. Besides the Arizona Avenue mortuary property, Rutherford also designed a number of other well-known Santa Monica buildings, including the Santa Monica Outlook Building (demolished) and the Madison School (1926). In addition, his portfolio of work included the design of several school buildings in Venice, Burbank, and Los Angeles, as well as the Hollywood Citizens News Building (1930), the Alhambra Post-Dispatch Building, and the Long Beach Sun Building (1929) in Long Beach. Ironically, his memorial service was held at the Todd & Leslie memorial chapel in Santa Monica.

Tudor Revival Architectural Style

The GKGM Building is designed in the Tudor Revival style, a sub-variant of the Period Revival architectural style popular in the 1920s and 1930s. The end of World War I brought Period Revival styles to the masses and the styles were applied to the design of a variety of building types, including funeral homes. Tudor Revival is a term usually associated with properties designed with half-timbering features. The term suggests that these buildings imitate medieval English architecture from the early 16th century. However, most Tudor Revival style properties were inspired by building techniques from the Elizabethan era.

The most distinguishing feature of the style was ornamental false half-timbering and an emphasis on steeply pitched, front-facing gables. The style was initially associated with wealth because of its use of intricate masonry patterning and expensive materials. By the end of the 1920s, masonry veneering techniques allowed even modest examples of the style to mimic closely the brick and stone exteriors on some English prototypes from the Tudor and Jacobean periods and elevations were clad in contrasting shades of brick.

The Tudor Revival style in Santa Monica, as well as much of Southern California, is usually characterized by stucco or brick clad buildings featuring a façade or two dominated by one or more prominent cross gables, usually steeply pitched. While half-timbering is usually present on many examples of the style, decorative siding features could also be constructed of stucco, wood, or brick. Fenestration often included canted bays with diamond pane casement or fixed windows, as well as narrow multi-pane frames. Picturesque windows of leaded glass or diamond patterned lights were also common. Most examples of the style also have one or more chimneys, commonly capped by decorative chimney pots.

Mortuary (GKGM) Property

City of Santa Monica Designation Criteria

In assessing local City of Santa Monica historical significance, the property appears to satisfy a number of City landmark criteria, including 9.36.100(a)(1); 9.36.(a)(2); 9.36.100(a)(3), 9.36.100(a)(4), and 9.36.100(a)(6). Despite some alterations that have occurred to the property over the years, including those

that were done for the new Tartine Restaurant, it retains sufficient integrity to convey its historic character and qualities that justify its eligibility as a potential local landmark.

The GKGM property embodies distinctive architectural qualities in its design, materials, setting and craftsmanship. The design of the property is such that it fully incorporates the key elements of the Tudor Revival idiom in a manner that exemplifies an important property type, period of construction, and architectural style valuable for future study and preservation in the community. The property was intentionally designed not to overwhelm its surroundings or appear ostentatious. Like many funeral homes, Eugene F. Gates and Clifford J. Mendenhall selected a residential area for the location of their new business. However, unlike many similar ventures, the two men selected a building form and style that complemented its immediate area rather than dominating it. Although broader than its neighbors, the GKGM Building does not rise above them. In addition, as seen in early photographs and building permits, there was a conscious attempt to landscape the property with a grass lawn, ornamental trees, and foundation plantings as seen in the rest of the area. Gates and Mendenhall chose to blend their new improvement into the neighborhood, their choice to make use of the Tudor Revival style successfully conveys the sense of dignity, respect, and restrained grandeur that their clients sought. As such, the property exemplifies a particular property type (funerary) in the City and strongly manifests elements of the architectural heritage and early social and diverse commercial history of the City. Hence, the property satisfies City landmark criteria 9.36.100(a)(1).

The interesting use and application of building materials in the GKGM Building surpasses that of most others designed in the Tudor Revival idiom. The stylistic vocabulary of this building appears to have been strongly dictated or influenced by the contemporary trends and academic design principles of the period. Despite some alterations, the unique property is an excellent example of the Tudor Revival style as integrated into a funerary commercial enterprise. As such, it visually and physically manifests the City's unique architectural heritage. Its aesthetic qualities are also recognized and are considered noteworthy as it visually and physically articulates the Tudor Revival design concepts of design. Therefore, the property satisfies City landmark criteria 9.36.100(a)(2) and 9.36.100(a)(4).

It is also associated with a person of local importance. The property is associated with Mark T. Gates, the City of Santa Monica's first mayor under the council-city manager form of government. Gates involvement with the funeral business coincided with his active participation in the local community's civic affairs. As such, the Gates, Kingsley & Gates property is probably the last physical reminder of Mark T. Gates contribution to the community. Therefore, the property appears to satisfy Santa Monica landmark criterion 9.36.100(a)(3).

In addition, because of its distinct architecture, property type, and siting at the northwest corner of Arizona Avenue and 20th Street, the property has a unique location and has become an established and familiar visual feature of the neighborhood. Therefore, it satisfies Santa Monica landmark criterion 9.36.100(a)(6).

NRHP/CRHR Criteria

Although the property appears eligible for listing as a City of Santa Monica Landmark, it does not appear to meet the thresholds of significance for listing in the National Register or California Register under any applicable criteria. The GKGM property is not known to be individually associated with important historical events that have made significant contributions to the broad patterns of our history. Therefore, it is not eligible for listing on the California Register under Criterion 1 or the National Register under Criterion A. In addition, the GKGM Building is not known to be associated with persons important in our past per State and National criteria. While research identified several individuals who owned the funeral home and operated its services none of the individuals appear significant enough to render the property eligible under California Register 2 and National Register Criterion B. As for architectural merit, while the GKGM property is reflective of Tudor Revival architecture and represents a mortuary property type from the period, due to several alterations, including those made along primary (front, east) elevations, the building does not rise to the level of significance necessary for listing under California Register Criterion 3 and National Register Criterion C. There is also no evidence to indicate that architect Francis D. Rutherford should be considered a master in his field; hence, the property's ineligibility for listing under California Register Criterion 3 and National Register Criterion C. Furthermore, since it is not expected to yield information important in prehistory or history the subject property is not eligible under California Register Criterion 4 and National Register Criterion D. Nonetheless, because of its local City of Santa Monica landmark eligibility, the property is considered a historical resource for CEQA purposes.

Character-Defining Features

Every historic property is unique, with its own identity and its own distinguishing character. A property's form and detailing are important in defining its visual historic character, style, and significance. It is a property's tangible features that embody its significance for association with specific historical events, important personages, or distinctive architecture and it is those elements; therefore, that should be retained and preserved. Character refers to all those visual aspects and physical features that comprise the appearance of every historic property.

Character refers to all those visual aspects and physical features that comprise the appearance of every historic property. According to National Park Service Preservation Brief 17, Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character, character-defining features include the overall shape of a property (building, structure, etc.), its material, craftsmanship, decorative details, interior spaces and features (as applicable), as well as the various aspects of its site and immediate environment (form, configuration and orientation).

The Secretary of the Interior's Standards for the Treatment of Historic Properties defines historic character by the form and detailing of materials, such as masonry, wood, stucco, plaster, terra cotta, metal, etc.; specific features, such as roofs, porches, windows and window elements, moldings, staircases, chimneys, driveways,

garages, landscape and hardscape elements, etc.; as well as spatial relationships between buildings, structures, and features; room configurations; and archaic structural and mechanical systems. Identifying those features or elements that give a historic property visual character and which should be taken into account and preserved to the maximum extent possible is important in order for the property to maintain its historical significance.

The character-defining features associated with the Gates, Kingsley & Gates property are those features that reflect and define its historical association and Tudor Revival style architectural qualities. These features are detailed in Appendix C.

Integrity Considerations

Integrity is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance, and the historical resource's ability to convey that significance. The evaluation of integrity is sometimes a subjective judgment, but is must always be grounded in an understanding of a property's physical features and how they relate to its significance. The concept of integrity includes seven aspects or qualities that, in various combinations, define integrity: location, design, setting, materials, workmanship, feeling, and association (NPS 1990). To retain historic integrity, a property will generally possess several, if not most, of the aspects. The retention of specific aspects of integrity is paramount for a property to convey its significance.

Some alterations have occurred to the property since it was erected in 1933. However, the building overall retains many original physical features that enable it to convey the site's distinctive property type, historic character and architectural identity. The large fountain in the front lawn area of the property was added to the site in 1937. Oversite of the fountain work was by the original owner: Gates, Mendenhall and Gates. The remodel work of the administration wing's front façade and exterior cladding modification along the east side of the administration building were completed in 1952. Similarly, the exterior work scope conducted at that time was undertaken by Gates, Kingsley & Gates, who also acted as the builder/contractor.

In addition, the adaptive reuse work recently completed for the chapel was conducted consistent with the guidelines and recommendations of the SOI Standards. Upon completion of the sensitive rehabilitation work to the chapel wing, those qualities that define and associate the overall property with its historical property type remain intact. The architectural design and Tudor Revival style of this 1930s funerary property is also still visually and physically evident despite the recent modifications to the chapel. The general layout, exterior spatial relationships, design, and material integrity remain somewhat intact.

Two-Story Building, 1234 20th Street

There is no information to indicate that the 1234 20th Street apartment building has made a significant contribution to the broad patterns of our history. In addition, research has not shown that it is associated

with the lives of persons important in our past (local, state, or national history). While the wide wood siding, stucco, and hip roof are elements of a simplified Minimal Traditional style, the building as a whole is nothing more than a box with limited surface treatment along all four elevations. In addition, there is no indication to expect the property to yield information important in our past (history or prehistory). Therefore, the property does not satisfy the criteria required for listing in the NRHP or CRHR or for City of Santa Monica landmark recognition. For the purposes of CEQA, this property is not considered a historical resource. The property has an OHP California Historical Resource Status Code of 6Z (ineligible for any type of landmark designation).

Two Story Building, 1242 20th Street

In assessing potential historical significance of the 1242 20th Street property, it does not appear to meet the criteria required for listing in the NRHP or CRHR, or for Santa Monica landmark designation. The property does not possess sufficient historical importance or architectural merit to warrant such designations. The integrity of the building is still good, but it is not a distinctive or unique example of any particular style, period or method of construction. It also does not represent the work of a master. In addition, the apartment building does not have any known associations with any persons or events important in local, state, or national history. There is also evidence to indicate that the property would yield or is likely to yield information important in history or prehistory. For the purposes of CEQA, this property is not considered a historical resource. The property has an OHP California Historical Resource Status Code of 6Z (ineligible for any type of landmark designation).

Project Site Summary

The above significance evaluation identifies the GKGM Building as appearing eligible for listing as a City of Santa Monica Landmark; however, it does not appear to meet the criteria for listing in the NRHP or CRHR under any applicable criteria. The two Minimal Traditional style buildings, 1234 20th Street and 1242 20th Street, do not satisfy the criteria required for listing in the NRHP or CRHR, or for City of Santa Monica landmark recognition. As such, only the GKGM Building is considered an historical resource under CEQA.

4.4.1.2 Cultural Records Search Results

Records Search of the California Historical Resources Information System (CHRIS)

Archaeological resources represent and document activities, accomplishments, and traditions of previous civilizations and link current and former inhabitants of an area. Archaeological resources may date from the historic or prehistoric period, and include deposits of physical remains of the past (e.g., artifacts, manufacturing debris, dietary refuse, and the soils in which they are contained) or areas where prehistoric or historic activity measurably altered the earth.

To identify known resources in the area, on July 16, 2018, Dudek completed a search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC) for the proposed project site and surrounding 0.5-mile radius. This search included mapped prehistoric, historical, and built-environment resources; State of California Department of Parks and Recreation Series 523 Forms (DPR forms) site records; technical reports; archival resources; and ethnographic references. Additional consulted sources included historical maps of the proposed project site, the NRHP, the CRHR, the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility.

Previously Conducted Cultural Resource Studies

Results of the records search for cultural resources studies indicated that 16 previous cultural resource studies have been conducted within a 0.5-mile radius of the proposed project site. None of these studies intersect, overlap, or are adjacent to the proposed project site. Details from the cultural resources studies records search are included in Table 4.4-1.

Table 4.4-1
Previously Conducted Cultural Resources Studies Within 0.5 Mile of the Project Site

SCCIC Report No.	Title of Study	Author(s) and Date	Proximity to Project Site
LA-01975	Cultural Resource Survey and Clearance Report for the Proposed American Telephone and Telegraph Los Angeles Airport Central Office to the Santa Monica Central Office Fiber-optic Communication Route	N.J. Neuenschwander 1989	Outside
LA-03402	Archaeological Reconnaissance at 1436-1444 16th Street, Santa Monica, California	King, Chester 1996	Outside
LA-04450	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 416-03, in the County of Los Angeles, California	Duke, Curt 1999	Outside
LA-05038	Cultural Resource Assessment for AT&T Wireless Services Facility Number R325, County of Los Angeles, Ca	Lapin, Philippe	Outside
LA-06126	Acquisition of Two Parcels for the Future Demolition of Two Commercial Structures Located at 2601-2615 Santa Monica Boulevard Santa Monica	Maki, Mary K.	Outside
LA-06498	Highway Project Involving Upgrading of Intersection Within the City of Santa Monica Located Between San Vicente Blvd. (north; Ocean Park (south); 9th Street (west); and 30th Street (east)	McKenna, Jeanette A.	Outside

Table 4.4-1
Previously Conducted Cultural Resources Studies Within 0.5 Mile of the Project Site

SCCIC Report No.	Title of Study	Author(s) and Date	Proximity to Project Site
LA-06503	Environmental Assessment for Federal Emergency Management Agency (FEMA) Funding Under the Seismic Hazard Mitigation Program for Hospitals (SHMP) of the Santa Monica-UCLA Medical Center Facilities Reconstruction Project 1250 16th St. Santa Monica, Ca 90404	Bissell, Ronald M.	Outside
LA-06506	Cultural Resource Assessment for AT&T Wireless Services Facility Number, R322.1 County of Los Angeles, California	Duke, Curt	Outside
LA-06884	Cultural Resource Assessment Cingular Wireless Facility No. Sm 250-01 Santa Monica, Los Angeles County, California	Harper, Caprice D.	Outside
LA-07248	A Cultural Resources Investigation and Architectural Evaluation of the Property Located at 1253 18th St., Santa Monica, Los Angeles County, California	McKenna, Jeanette A.	Outside
LA-09453	Exposition Corridor Transit Project Phase 2 Archaeological Survey Report	Ehringer, Candice and Strauss, Monica	Outside
LA-11005	Westside Subway Extension Historic Property Survey Report and Cultural Resources Technical Report	Unknown, Mr./Mrs.	Outside
LA-11184	Exposition Corridor Project Phase 2 (FTA 070320A), Request for Concurrence--Detailed Reconnaissance Survey	Born, Monica	Outside
LA-11305	Historical Resources Evaluation Report for the Exposition Corridor Transit Project Phase 2, Los Angeles County, California	Meiser, M.K.	Outside
LA-11793	Addendum to the Historical Resources Evaluation Report and Archeological Survey Report for Project Changes and Design Options the Exposition Corridor Transit Project Phase 2, Los Angeles County, California	Meiser, M.K.	Outside
LA-11908	A Phase I Cultural Resources Investigation and Architectural Evaluation of the 1802 Santa Monica Boulevard Mixed Use Project Area in the City of Santa Monica, Los Angeles County, California	McKenna, Jeanette	Outside

Source: Appendix C (confidential)

4.4.2 Relevant Plans, Policies, and Ordinances

Federal

National Register of Historic Places

The National Register of Historic Places (NRHP) is the United States' official list of districts, sites, buildings, structures, objects, prehistoric archaeological sites, historic-period archaeological sites, traditional cultural properties, and cultural landscapes worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must meet at least one of the following criteria:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.

To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity". Integrity is defined in NRHP guidance, "How to Apply the National Register Criteria," as "the ability of a property to convey its significance". Districts, sites, buildings, structures, and objects must possess integrity of location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property will always possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.

NRHP guidance further asserts that properties be completed at least 50 years ago to be considered for eligibility. Properties completed fewer than 50 years before evaluation must be proven to be "exceptionally important" (criteria consideration G) to be considered for national listing.

Secretary of the Interior's (SOI) Standards for Rehabilitation and for Treatment of Historic Properties

As stated above, projects that may affect historic resources are considered to be mitigated to a level of less than significant, if they conform to the SOI Standards. Projects with no other potential environmental impacts qualify for a Class 31 exemption under CEQA if they meet the SOI Standards.

The definition of "rehabilitation" assumes that at least some repair or alteration of a historic property will be needed in order to provide for an efficient contemporary use or maintain its historic use. However, these repairs and alterations must not damage or destroy materials, features, or finishes that are important in defining a property's historic character and significance.

The ten standards for rehabilitation are as follows:

a. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

b. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

c. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

d. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

e. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.

f. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive historic feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

g. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

h. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

i. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterized the property. The new work shall be

differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and mass to protect the integrity of the property and its environment.

j. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The SOI Standards were developed by the NPS to assist property owners and managers in rehabilitating their historic properties. The SOI Standards contain a specific hierarchy for decision-making in assessing the rehabilitation of any historic building. First, the significant materials and features of a property must be identified. Then a method for their retention and preservation must be found. If the physical condition of character-defining materials warrants additional work, repair is recommended. If deterioration or damage precludes repair, then replacement can be considered.

In addition to the rehabilitation of character-defining features, the SOI Standards also address alterations and additions to historic properties, as well as retrofitting properties for health and safety requirements. Some alterations to a historic property may be needed to assure its continued use; however, these modifications should not obscure or destroy important character-defining features of the property or jeopardize those qualities that justify or convey the property's historical significance.

State

California Register of Historical Resources

In California, the term "cultural resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code, Section 5020.1(j)). In 1992, the California legislature established CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's cultural resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code, Section 5024.1(a)). A resource is eligible for listing in the CRHR if the State Cultural Resources Commission determines that it is a significant resource and that it meets any of the following NRHP criteria:

1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

4. Has yielded, or may be likely to yield, information important in prehistory or history (California Public Resources Code, Section 5024.1(c)).

Resources less than 50 years old are not considered for listing in the CRHR, but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (see 14 CCR, Section 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing on the NRHP are automatically listed on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local cultural resource surveys. The State Historic Preservation Office maintains the CRHR.

Native American Historic Cultural Sites

The Native American Historic Resources Protection Act (California Public Resources Code, Section 5097 et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to one year in jail to deface or destroy a historic or cultural Native American site that is listed or may be eligible for listing in the CRHR.

California Environmental Quality Act

As described further below, the following CEQA statutes and State CEQA Guidelines are relevant to the analysis of archaeological and historic resources:

1. California Public Resources Code, Section 21083.2(g): Defines "unique archaeological resource."
2. California Public Resources Code, Section 21084.1, and State CEQA Guidelines, Section 15064.5(a): Defines cultural resources. In addition, State CEQA Guidelines, Section 15064.5(b), defines the phrase "substantial adverse change" in the significance of a cultural resource. It also defines the circumstances when a project would materially impair the significance of a cultural resource.
3. California Public Resources Code, Section 21074(a): defines "Tribal cultural resources" and Section 21074(b): defines a "cultural landscape."

4. California Public Resources Code, Section 5097.98, and State CEQA Guidelines, Section 15064.5(e): These statutes set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
5. California Public Resources Code, Sections 21083.2(b)–21083.2(c), and State CEQA Guidelines, Section 15126.4: These statutes and regulations provide information regarding the mitigation framework for archaeological and historic resources, including options of preservation-in-place mitigation measures; identifies preservation-in-place as the preferred manner of mitigating impacts to significant archaeological sites.

Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an [sic] cultural resource" (California Public Resources Code Section 21084.1; State CEQA Guidelines Section 15064.5(b)). A "cultural resource" is any site listed or eligible for listing in the CRHR. The CRHR listing criteria are intended to examine whether the resource in question: (a) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; (b) is associated with the lives of persons important in our past; (c) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or (d) has yielded, or may be likely to yield, information important in pre-history or history.

The term "cultural resource" also includes any site described in a local register of historic resources, or identified as significant in a cultural resources survey (meeting the requirements of California Public Resources Code Section 5024.1(q)).

CEQA also applies to "unique archaeological resources." California Public Resources Code, Section 21083.2(g), defines a "unique archaeological resource" as any archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person (California Public Resources Code, Section 21083.2(g)).

All cultural resources and unique archaeological resources – as defined by statute – are presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code, Section 21084.1; 14 CCR 15064.5(a)). The lead agency is not precluded from determining that a resource is a cultural resource

even if it does not fall within this presumption (California Public Resources Code, Section 21084.1; 14 CCR 15064.5(a)). A site or resource that does not meet the definition of "cultural resource" or "unique archaeological resource" is not considered significant under CEQA and need not be analyzed further (California Public Resources Code, Section 21083.2(a); 14 CCR 15064.5(c)(4)).

Under CEQA a significant cultural impact results from a "substantial adverse change in the significance of an [sic] cultural resource [including a unique archaeological resource]" due to the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an cultural resource would be materially impaired" (14 CCR 15064.5(b)(1); California Public Resources Code, Section 5020.1(q)). In turn, the significance of a cultural resource is materially impaired when a project:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an cultural resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of cultural resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an cultural resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a cultural resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA (14 CCR 15064.5(b)(2)).

Pursuant to these sections, CEQA first evaluates evaluating whether a project site contains any "cultural resources," then assesses whether that project will cause a substantial adverse change in the significance of a cultural resource such that the resource's historical significance is materially impaired.

When a project significantly affects a unique archaeological resource, CEQA imposes special mitigation requirements. Specifically:

> [i]f it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:
>
> 1. Planning construction to avoid archaeological sites.
> 2. Deeding archaeological sites into permanent conservation easements.

3. Capping or covering archaeological sites with a layer of soil before building on the sites.
4. Planning parks, greenspace, or other open space to incorporate archaeological sites (California Public Resources Code, Sections 21083.2(b)(1)–21083.2(b)(4)).

If these "preservation in place" options are not feasible, mitigation may be accomplished through data recovery (California Public Resources Code, Section 21083.2(d); 14 CCR 15126.4(b)(3)(C)). California Public Resources Code, Section 21083.2(d), states that:

> [e]xcavation as mitigation shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project. Excavation as mitigation shall not be required for a unique archaeological resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report (California Public Resources Code, Section 21083.2(d)).

These same requirements are set forth in slightly greater detail in State CEQA Guidelines, Section 15126.4(b)(3), as follows:

A. Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
B. Preservation in place may be accomplished by, but is not limited to, the following:
    1. Planning construction to avoid archaeological sites;
    2. Incorporation of sites within parks, greenspace, or other open space;
    3. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site[; and]
    4. Deeding the site into a permanent conservation easement.
C. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the cultural resource, shall be prepared and adopted prior to any excavation being undertaken (14 CCR 15126.4(b)(3)).

Note that, when conducting data recovery, "[i]f an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation" (14 CCR 15126.4(b)(3)). However, "[d]ata recovery shall not be required for an cultural resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the

archaeological or historic resource, provided that determination is documented in the EIR and that the studies are deposited with the California Cultural Resources Regional Information Center" (14 CCR 15126.4(b)(3)(D)).

Finally, State CEQA Guidelines, Section 15064.5, assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are set forth in California Public Resources Code, Section 5097.98.

California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (California Health and Safety Code, Section 7050.5b). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (California Health and Safety Code, Section 7050.5c). The NAHC will notify the Most Likely Descendant (MLD). California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the MLD by the NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Local

City of Santa Monica Municipal Code – Ch. 9.56 Landmarks and Historic Districts

The City's Landmark and Historical Preservation Ordinance establishes the City Landmarks Commission, whose powers include local level designations of historic resources as Landmarks or Structures of Merit. The City's Landmarks Commission also makes a recommendation to the Council on Historic District designation, based on certain required findings contained in the Landmarks Ordinance.

Section 9.56.100 Landmarks Criteria

For a resource to be eligible for individual Landmark status, it must meet one or more of the following criteria:

- It exemplifies, symbolizes, or manifests elements of the cultural, social, economic, political or architectural history of the City
- It has aesthetic or artistic interest or value, or other noteworthy interest or value
- It is identified with historic personages or with important events in local, state or national history

- It embodies distinguishing architectural characteristics valuable to study of a period, style, method of construction, or the use of indigenous materials or craftsmanship, or is a unique or rare example of an architectural design, detail or historical type valuable to such a study
- It is a significant or a representative example of the work or product of a notable builder, designer or architect
- It has a unique location, a singular physical characteristic, or is an established and familiar visual feature of a neighborhood, community or the City

9.56.080 Structure of Merit Criteria

A building, structure, or object may be designated a Structure of Merit if the Landmarks Commission determines that it merits official recognition because it has one of the following characteristics:

A. The resource has been identified in the City's Historic Resources Inventory.

B. The resource is a minimum of 50 years of age and meets one of the following criteria:

   1. The resource is a unique or rare example of an architectural design, detail or historical type.

   2. The resource is representative of a style in the City that is no longer prevalent.

   3. The resource contributes to a potential Historic District. (Added by Ord. No. 2486CCS §§ 1, 2, adopted June 23, 2015)

9.56.100 Historic District Designation Criteria

A geographic area or a noncontiguous grouping of thematically related properties may be designated a Historic District if the Council finds that such area meets one of the following criteria:

1. Any of the (Landmarks) criteria identified in Section 9.56.100(A)(1) through (6).

2. It is a noncontiguous grouping of thematically related properties or a definable area possessing a concentration of historic, scenic or thematic sites, which contribute to each other and are unified aesthetically by plan, physical development or architectural quality.

3. It reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning.

4. It has a unique location, a singular physical characteristic, or is an established and familiar visual feature of a neighborhood, community or the City. (Added by Ord. No. 2486CCS §§ 1, 2, adopted June 23, 2015; amended by Ord. No. 2520CCS § 56, adopted June 14, 2016)

Santa Monica Historical Resources Inventory

The Santa Monica Historic Resources Inventory (HRI) is a database used by the City to identify properties of potential historic significance. Each property listed on the HRI has been evaluated based on a "windshield survey" conducted by preservation professionals using nationwide standards and criteria. For each property listed on the HRI, the City Planning Division has an identifying California Historic Resource Status Code. The HRI was last updated in 2018.

Santa Monica General Plan Historic Preservation Element

The Historic Preservation Element of the Santa Monica General Plan contains goals and policies intended to preserve the historic built environment of the City of Santa Monica. The following lists the goals and objectives applicable to the proposed project.

Goal 2: Identify and evaluate historic and cultural resources on a regular basis.

Objective 2.1: Update and maintain the Santa Monica Historic Resources Inventory by adopting a regular survey, inventory, and evaluation program.

Objective 2.2: Review the identified property types in the current inventory and conduct additional surveys to identify types and contexts.

Objective 2.3: Make the City's inventory of historic and cultural resources available to the public, City staff, and decision-makers.

Goal 3: Increase public awareness of the history of Santa Monica and historic preservation in the City.

Objective 3.1: Support the continued development of the Santa Monica City Library Local History Collection and support the distribution of historic preservation informational materials through the library.

Objective 3.4: Increase public access to historic preservation documents.

Objective 3.6: Encourage public comment and participation in preservation decision making.

Objective 3.8: Encourage the installation of plaques and/or public art related to historic buildings and sites in the City.

Goal 4: Protect historic and cultural resources from demolition and inappropriate alterations.

Objective 4.1: Ensure compliance with the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act.

Objective 4.6: Encourage salvaging of architectural elements that would otherwise be transported to landfills as a result of demolition.

4.4.3 Thresholds of Significance

Appendix G of the State CEQA Guidelines provides a set of screening questions that address impacts with regard to cultural resources.

Historical Resources

The following question, relevant to historical resources, is used as the significance threshold by the City in this section:

Would the project:

- Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

According to the State CEQA Guidelines Section 15064.5(b), a project involves a "substantial adverse change" in the significance of the resource when one or more of the following occurs:

(1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

(2) The significance of a historical resource is materially impaired when a project:

(A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register of Historical Resources; or

(B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in a historical resources survey meeting the requirements of Section 5024(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and

> that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Under CEQA, a proposed development must be evaluated to determine how it may impact the potential eligibility of a structure(s) or a site for designation as a historic resource. The maintenance, repair, stabilization, restoration, preservation, conservation, or reconstruction of a historic resource in a manner consistent with the Secretary of the Interior's Standards and Guidelines (Weeks and Grimmer1995) generally will constitute mitigation of impacts to a less-than-significant level.

Accordingly, a project would have a significant impact on historical resources if:

- The project would materially impair the eligibility of a building, structure or site as a historic resource such that it would no longer be eligible for inclusion in the California Register or local register.

Archaeological Resources and Human Remains

Appendix G of the State CEQA Guidelines provides screening questions that address potential impacts related to archaeological resources and human remains. These questions are listed below and are used as the significance thresholds by the City in this section:

Would the project:

- Cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5?
- Disturb any human remains, including those interred outside of dedicated cemeteries.

As defined in Section 21083.2 of CEQA a "unique" archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site is to be treated in accordance with the provisions of Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources

to be preserved in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. The *CEQA Guidelines* note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (*CEQA Guidelines* Section 15064.5(c)(4)).

4.4.4 Methodology

Historical Resources

The analysis of impacts on historical resources is based on the Historic Resources Technical Report prepared by Ostashay & Associates Consulting for the proposed project (Appendix C). This report describes results of the pedestrian survey of the proposed project site for cultural resources, building development and archival research, recordation, and evaluation of several buildings on the proposed project site over 45 years of age, and an assessment of project-related impacts to historical resources in conformance with CEQA and all applicable local municipal code and planning documents.

In order to identify and assess the proposed project site for historical significance, a multi-step methodology was utilized. A record search to identify previously documented historic resources was conducted. This search included a review of the NRHP and its annual updates, determinations of eligibility for National Register listings, the CRHR, and the California Historical Resources Inventory System (CHRIS) maintained by the State Office of Historic Preservation (OHP). The City of Santa Monica Historic Resources Inventory (SMHRI) was also reviewed to identify any previously surveyed properties within the study area.

Site inspections of the proposed project site were made to assess existing conditions, define the historic resources survey study area, document potential significant properties, and identify character-defining features of those properties evaluated as historically significant. A survey of the study area, including photography and the collection of archival background data, was then performed. Additional background and site-specific research was also conducted in order to evaluate potential historic resources within their proper historic context.

Criteria of the NRHP, CRHR, and the City of Santa Monica preservation program, as applicable, were employed to evaluate properties and/or re-confirm the significance of any previously identified properties. In addition, the survey methodology of the OHP was utilized (OHP 1995). More specifically, in conducting the identification and evaluation of historic resources located within the study area, the following tasks were performed:

- Searched archival records of the NRHP, CRHR, CHRIS, and the SMHRI.
- Conducted field inspections of the study area (proposed project site) and photographed the site and its features.

- Collected and reviewed relevant historic images and archives including, but not limited to those at the Regional History Center at the University of Southern California, the Los Angeles Public Library (2019), the Santa Monica Public Library, the Santa Monica Historical Museum, and the University of California, Los Angeles and the University of California, Santa Barbara.
- Conducted site-specific research on historic resources including a review of relevant architectural plans, building permits, tax assessor records, Sanborn Fire Insurance Maps, tract maps, and other archival documents.
- Reviewed and analyzed previous documentation, ordinances, statutes, regulations, bulletins, and technical materials relating to federal, state, and local historic preservation, designation assessment processes, and related programs.

Additional supplemental material was also provided by the City and the proposed project applicant's preservation architect Robert Chattel of Chattel, Inc. Historic Preservation Consultants. The current historic resources survey assessment of the proposed project site was conducted and prepared by Jan Ostashay, Principal, Ostashay & Associates Consulting. Ms. Ostashay satisfies the U.S. Secretary of the Interior's Professional Qualification Standards in history and architectural history.

Historic Resources Survey Study Area

The historic resources survey study area (study area) is influenced by the size, scale, location, and nature of the project, in addition to any potential direct and indirect impacts the project may have on identified historic resources. The current survey study area was defined based on anticipated potential direct and indirect effects of the proposed project on identified historic resources. The survey study area was, therefore, considered to include all parcels (improvements) within the project site as well as those parcel lots immediately adjacent to the project site unless already separated by a roadway or alley. The project site is bordered by 20th Street (east), Arizona Avenue (south), 19th Court alley (west), and an adjacent lot to the north developed in 1991 as a driveway and parking lot.

To ensure all built-environment historic resources that may be potentially affected by the proposed project are considered those parcels within the study area that contain buildings, structures, or objects that were at least 45 years of age (or appeared to possess exceptional significance if less than 45 years old) at the time of the assessment, have substantial integrity, and exhibited distinguishing characteristics or important associations known to be potentially significant were subject to intensive-level study. Upon defining the survey study area, four (4) properties were identified as being located within the project site or immediately adjacent to the site, including: (1) the GKGM Building (former Mortuary Property); (2) 1234 20th Street Building; (3) 1242 20th Street Building; and (4) parking lot/driveway parcel at 1228 20th Street.. Any properties identified as vacant parcels or developed as driveways/parking lots within the survey study area were not evaluated. Properties evaluated within the survey study area are identified in Table 4.4-2 below.

Table 4.4-2
Properties Evaluated Within Survey Study Area

Address	Description	Year Built	OHP Rating
1925 Arizona Avenue	Former Mortuary Property	1933	5S3
1234 20th Street	Multi-Family Building/Office Use	1956	6Z
1242 20th Street	Multi-Family Building /Office Use	1965	6Z

Notes: OHP RATING KEY
5S3: Individually eligible for local listing by survey evaluation.
6Z: Found ineligible for National Register, California Register, or local designation by survey evaluation.

The GKGM property (Tudor Revival style commercial building) has been previously identified and evaluated under the City's on-going historic resources survey process. It was first assessed as part of the Santa Monica Historic Resources Inventory Phase Three Survey process (1990-1993) in 1992. At that time, the property was recognized for its distinctive architectural merit and was, therefore, assigned a National Register Status Code (now the California Historical Resource Status Codes) of 5S1 (individually eligible for local designation). Following the Northridge earthquake in 1994, the property was re-surveyed for historical significance in 1995 as part of the City's assessment to determine the earthquake's overall effects to those properties listed in its Historic Resources Inventory. Though the property suffered some damage from the earthquake, repairs were made in-kind sufficiently enough to retain its City of Santa Monica Landmark eligibility (5S1). In 2007, under the City's Citywide Historic Resources Survey Update the property's eligibility as a City of Santa Monica landmark once again reconfirmed.

The two former apartment buildings at 1234 and 1242 20th Street, to the north of the GKGM property, have not been previously surveyed or evaluated for historical significance. The parcel to the immediate north of the project site (1228 20th Street), measuring 50 feet by 150 feet, is developed as a paved parking lot-driveway that serves the religious organization at 1220-1224 20th Street. A small semi-altered bungalow structure with an address of 1224 20th Street is located two parcels north of the project site and is used as a preschool for the church next door at 1220 20th Street. The modest bungalow structure was previously identified under the 2008 citywide historic resources survey update as ineligible for any type of designation, but was noted as "may warrant special consideration in the local planning process." The 2018 Historic Resources Inventory update assessed the bungalow property as eligible for City of Santa Monica Structure of Merit recognition. The church building, known as the Santa Monica Foursquare Church- Lighthouse Church, was also previously assessed under prior survey efforts conducted by the City. It was identified as potentially eligible for designation under the 1994 and 2008 citywide historic resources surveys as a City of Santa Monica Structure of Merit. The 2018 historic resources inventory update also identified the church in its formal survey evaluation as a potential City of Santa Monica Structure of Merit. Both the bungalow structure and church building are outside of the survey study area and are each sited on separate yet tied parcels.

The current survey was conducted pursuant to OHP methodology, which gives a 45-year threshold for assessing properties for historical significance. During the current survey process three (3) pre-1973 properties were identified within the survey study area, as listed in Table 4.4-2 below.

Archaeological Resources/Human Remains

The analysis of archaeological resources is based on (1) a cultural resource records search at the CHRIS-SCCIC at California State University, Fullerton to review recorded archaeological resources within a 0.5-mile radius of the project site, as well as a review of cultural resource reports and historic topographic maps on file; (2) review of the California Points of Historical Interest (CPHI), the California Historical Landmarks (CHL), the California Register, the National Register, and the California State Historic Resources Inventory listings; (3) a Sacred Lands File (SLF) search commissioned through the Native American Heritage Commission (NAHC); and (4) review of available Sanborn Maps, historic aerial imagery; and other technical studies (Phase I Environmental Site Assessment Report) to understand the land use history of the project site.

4.4.5 Impacts Analysis

Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

The following provides an evaluation of the three properties comprising the project site relative to historical significance in consideration of City of Santa Monica, CRHR, and NRHP designation criteria and integrity requirements.

Chapter 3, Project Description, provides the conceptual plan/preliminary design information for the proposed project. The precise details of design, such as materials and colors, will be determined upon final design review by the Architectural Review Board and/or the appropriate City-designated body; the conceptual plan/illustration in this EIR represents the most current development scenario under evaluation and consideration.

The proposed project has the potential to impact a historic resource, namely the GKGM Building, in three regards. The rehabilitation and adaptive reuse of the GKGM Building, the demolition of the rear garage, and construction of a new three-story building with subterranean parking at the historic property's north side could result in direct and indirect impacts to the resource as detailed in the following analysis:

Tudor Style Property (1925 Arizona Avenue)

Proposed Rehabilitation

The proposed project involves the in-kind rehabilitation and reuse of a portion of the Tudor style GKGM Building. Much of the work proposed would include the rehabilitation of exterior features along primary (south and east) elevations of the GKGM building's administration wing and the reconfiguration and adaptive use of its interior spaces. The one-story chapel wing of the GKGM building, which currently houses a full-service restaurant, would remain as currently configured and would continue to be utilized as in the existing condition. No work to the chapel wing is considered under the proposed project.

The work proposed for the exterior of the administration wing would remove the exterior stone veneer that currently clads the east and south walls (primary elevations) of the building at the first floor, which is a non-character-defining feature, in order to restore portions of the structure's original design scheme and appearance dating from 1933, its date of construction. Additionally, the exterior door along the interior driveway side of the administrative portion of GKGM Building would be replaced. Curb cuts that allow vehicular access to the L-shaped driveway would be removed and vehicular use of the driveway would be eliminated, allowing for the continued use of outdoor seating for the restaurant. Lastly, a portion of the existing walkway near the chapel would be removed and replaced with bicycle parking.

As conceptually proposed, all identified exterior character-defining features would be preserved in place; many would be restored in-kind; repaired, as necessary; or replaced in-kind depending upon condition. As an additional scope, the existing garage (a secondary structure) located at the rear of the administration wing along the alley would be removed to provide additional space for the proposed new construction work, which would then act as a transitional connection point between the old and new buildings.

The proposed project plans, including rehabilitation work to the GKGM property, is currently considered a concept design with limited work scope detail specificity provided at the time of the environmental review. As the schematic plans reviewed for this EIR are considered conceptual and such plans are subject to further refinement, it is possible that final project design could include elements that would result in a potentially significant impact to the historic resource. Therefore, mitigation measures are required to implement this aspect of the proposed project to ensure that potential impacts to the GKGM property are reduced to less than significant, as discussed in detail below.

Proposed Demolition

Under the proposed project, the one-story garage structure attached to the rear of the GKGM building's administration wing would be removed to allow for the construction of a new three-story building with five subterranean parking levels onto the project site to the north. The garage is considered an ancillary accessory structure along a secondary elevation of the Tudor style GKGM building and its removal would not jeopardize the property's significant historical associations or integrity in relationship to its architecture and design,

location, property type, and character-defining features. The proposed demolition work would require the use of typical construction equipment, such as backhoes, to break up and remove existing building materials, concrete and asphalt; heavy equipment such as bulldozers and excavators; and heavy trucks to haul away large amounts of debris. As a portion of the historic resource will be demolished and is also closely adjacent to where additional demolition activities will take place, it could potentially be subject to detrimental vibration impacts. Within the project site, implementation of **MM-NOI-2**, as set forth in Section 4.9 Noise of this EIR, would reduce ground-borne vibration impacts on the on-site historic GKGM building to a less than significant level. As such, impacts during demolition adjacent to the GKGM Building would be **less than significant with mitigation incorporated**.

Demolition is also proposed for the removal of the two non-historic apartment buildings and associated concrete block privacy walls as well as the paved parking to the north of the GKGM property. The demolition of the apartment buildings, concrete block walls and paved parking lot would not cause a substantial adverse change to the historic qualities of the GKGM property. Therefore, mitigation measures are not required for this particular scope of work as it is considered a less than significant impact.

Proposed New Construction

Because the proposed project includes construction of a 45 foot, three-story building adjacent to an historic resource, three types of potential impacts are examined: 1) impacts related to construction methods; 2) impacts related to the design of the new adjacent construction; and 3) impacts related to the location, scale, and massing of the new construction adjacent to the historic property.

Construction Methods

Construction methods have the potential to directly affect the historic materials and features of the GKGM Building. Standard 5 of the SOI Standards states that “distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.” Damage caused by the construction of the new adjacent improvement could potentially violate this Standard, resulting in an adverse impact. In order to meet the SOI Standards, methods used for preparing the site and building the new structure should not damage the historical resource. In particular excavation, such as excavation required for the subterranean parking, has the potential to cause vibration, undermining of walls and footings, and increase in seismic risk. As there is a potential for construction methods, specifically vibration impacts, to damage the historic GKGM property, compliance with **MM-NOI-2** would reduce any potential construction method impacts to a less than significant level. As such, impacts during construction adjacent to the GKGM Building would be **less than significant with mitigation incorporated**.

Design of New Construction

The design of the addition at the rear of the GKGM Building and the adjacent new construction behind the historic resource has the potential to disrupt or distract from the historic character of the GKGM Building. Design issues are referenced in SOI Standards 9 and 10 for Rehabilitation.

The baseline for appropriately designing new construction in the vicinity of historic resources is articulated in SOI Standard 9:

> New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

Standard 9 requires that new construction be "differentiated from the old" and "compatible" with the historical resource. Guidelines for implementing the SOI Standards further state that the scale, massing, height, materials, and color of new construction should be visually compatible with the character of the adjacent historic building, and should preserve the relationships between the building and site features. This allows for flexibility in applying the SOI Standards to local conditions and specific circumstances on a case-by-case basis. New construction improvements that are compatible with historic buildings should not necessarily mirror the surface appearance of the existing building, but may respond to, and can reveal subtle underlying principles in the historic architecture and the setting of the site.

Under the proposed project, a new contemporary style three-story, 45 foot tall new building (57 feet with mechanical screen walls) comprising approximately 59,548 square feet would be constructed behind (north of) the existing GKGM building. A portion of this new improvement would be attached onto the northwest side (rear) of the GKGM building's administration wing. To implement this part of the project, the ancillary portion of the former funeral home composing mainly of the building's attached garage, as well as the two non-historic residential apartment structures to the north, all concrete block walls on-site, and the paved parking lot behind the GKGM property would be removed.

The new construction proposed consists of a large irregular rectangular shape building capped with a flat roof with perforated screened mechanical equipment on top and five basement levels of subterranean parking. Design features and materials of the new work includes the use of large limestone panel cladding, stucco sheathing at its north elevation, expanses of glazed windows and doors, a variation of solids to voids on all levels with concrete panels separating the recessed fenestration along the upper floors, limited architectural ornamentation, semi-public outdoor terraces with metal panel railings on the upper levels, an open common plaza and main entry at its south end, landscaped planters at street level, and automobile access to the underground public parking off the alley to the west.

While the design for the new construction in the proposed project is conceptual, the current plans and illustrations indicate that the new design would be clearly differentiated from the existing historic resource yet compatible and respectful in terms of its design, materials, location, restrained architectural articulation, and setbacks. Visual simulations from key vantage points along Arizona Avenue and 20th Street illustrate that the historic property would remain nearly unchanged with the south and east facades clearly visible and intact from the public rights-of-way.

The baseline for SOI Standard 10 requires that new construction be "undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired." As conceptually proposed, all new construction appears to be designed as separate elements that potentially could be removed in the future, with minimal impact to the historic GKGM property and its associated character-defining features.

While the design of the new construction appears preliminarily consistent with the SOI Standards, to moderate any potentially significant impacts from occurring prior to, during, and after project implementation and to ensure full compliance with the SOI Standards upon preparation and compliance review of final project plans, implementation of MM-CUL-1 and MM-CUL-2 would reduce any potential impacts to a **less than significant level.**

Location, Scale, and Massing of New Construction

In addition to requiring compatibility of design, SOI Standard 9 also states that new construction will be compatible in "size, scale, proportion, and massing to protect the integrity of the [historic] property and its environment." Because the new building adjacent to the GKGM property is appropriately located to the north of the historic property at the rear (a secondary elevation) of the administration wing it would not obstruct significant primary views of the historic resource or its identified character-defining features along Arizona Avenue or 20th Street.

Though larger in square footage and taller than the historic GKGM Building, much of the new construction is setback away from the historic resource in terms of location, scale and proportion, and massing to respect and maintain its historic integrity, character-defining features, spatial relationships, overall historic character, and prominent physical/visual presence at the corner of Arizona Avenue and 20th Street.

As conceptually proposed, the new construction is designed with a strategically placed carve-out of wall massing with integrated stepped open terraces at its southeastern orientation. By carving out the southeast corner of the new building a large open plaza is created, which will act as an interactive gathering place for street level pedestrians between the old and new improvements. This transitional outdoor space along with the proposed series of stepped back semi-public terraces integrated into the new construction acts as a visual buffer and further helps minimize the size, scale and proportion, massing, and overall presence of the new building adjacent to the historic GKGM Building.

As such, the conceptual (schematic) design and work for the new construction proposed, from a location, scale and massing perspective, appears to respect the architectural and historical qualities, spatial relationships, and architectural vocabulary of the historic property. While the project plans reviewed for this EIR are considered conceptual and such plans are subject to further refinement by the City's Planning Commission, ARB, and/or Landmarks Commission, the likelihood of these reviewing bodies requesting substantial changes to the location, scale, and massing of the proposed new construction is unlikely. Therefore, impacts would be **less than significant** and mitigation measures are not required to implement this portion of the project.

Minimal Traditional Style Building, 1234 20th Street

Under the proposed project, the 1234 20th Street building will be demolished. The building was assessed for historical significance and was found to lack any type of historical significance or architectural merit and to be ineligible for NRHP and CRHR listing, as well as for City of Santa Monica Landmark designation. For the purposes of CEQA compliance, this property is not considered an historical resource pursuant to the State CEQA Guidelines. Therefore, there would be **no impact**.

Minimal Traditional Building, 1242 20th Street

Under the proposed project, the 1242 20th Street building will be demolished. Similar to the building at 1234 20th Street, the building was assessed for historical significance and was found to be ineligible for NRHP and CRHR listing, as well as for City of Santa Monica Landmark designation for similar reasons as the 1234 20th Street property. For the purposes of CEQA compliance, this property is not considered an historical resource pursuant to the State CEQA Guidelines. Therefore, there would be **no impact**.

Lighthouse Church and School, 1224 20th Street

The modest bungalow structure located at 1224 20th Street and previously identified under prior historic survey work efforts as potentially eligible for City of Santa Monica Structure of Merit designation would not be directly or indirectly impacted by the implementation of the proposed project. Similarly, the church building located at 1220 20th Street, which was also previously identified as potentially eligible for City of Santa Monica Structure of Merit recognition, would not be directly or indirectly impacted by the implementation of the proposed project. As there is a 50 foot wide by 150 foot long buffer (large paved parking lot) between the two historical resources and the project site those characteristics of the bungalow and church building that convey their historical significance and justify their eligibility as potential City of Santa Monica Structures of Merit would be retained unaltered. Because of the buffer, the clear separation between the two historical resources and the project site is of sufficient distance as to maintain the scale, massing, proportions, and overall historic character of both the bungalow and church. As a result, the impact to the Lighthouse Church and School would be **less than significant**; as such, mitigation measures for this aspect of the proposed project are not required.

Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Results from the CHRIS records search indicated no archaeological resources were identified on the project site, nor were any previously conducted studies identified within the project site. Details pertaining to these resources are listed in Table 4.4-1. However, because it is possible that intact archaeological deposits are present at subsurface levels and could be uncovered during ground-disturbing activities, mitigation measure **MM-CUL-3** will be required during construction of the proposed project. With the inclusion of mitigation measure **MM-CUL-3**, impacts related to archaeological resources would be a **less than significant impact with mitigation incorporated**.

Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

There is no evidence of human remains on the proposed project site, and the potential for the inadvertent discovery of human remains on the proposed project site is very low because there is no evidence of any historical camps or human settlement on the site. Additionally, existing regulations through California Health and Safety Code Section 7050.5 et seq. state that if human remains are discovered during proposed project construction, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Further, pursuant to California PRC Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition of the remains has been made. If the County Coroner determines the remains to be Native American, the NAHC shall be contacted within a reasonable time. Subsequently, the NAHC shall identify the most likely descendant (MLD). The MLD shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in California PRC Section 5097.98. Given the very low potential for human remains on the proposed project site and required compliance with existing regulations pertaining to the discovery of human remains, the proposed project would result in a **less than significant impact** to human remains. No mitigation is required.

4.4.6 Cumulative Impacts

Historical Resources

Cumulative impacts to historic resources evaluate whether impacts of the proposed project and related past, present, or future projects, when taken as a whole, substantially diminish the number of historic resources within the same or similar historic context or property type. Impacts to historic resources, if any, tend to be site specific. However, cumulative impacts would occur if the proposed project and other projects cumulatively affect historic resources in the immediate vicinity or involve resources that are examples of the same style or property type as those within the proposed project site.

Under the proposed project, the GKGM property would be rehabilitated in-kind in a manner consistent with the SOI Standards and adaptively reused. The identified character-defining features of the historic resource

would be preserved; repaired, as necessary; or replaced in-kind depending upon severity of condition. In addition, as mitigated, the new construction proposed for the project site north of the historic resource would not physically or visually impact the historic qualities of the GKGM property. Hence, the former mortuary property as a whole would remain eligible for local designation as a City of Santa Monica landmark.

The modest bungalow structure located at 1224 20th Street and previously identified under prior historic survey work efforts as potentially eligible for City of Santa Monica Structure of Merit designation would not be directly or indirectly impacted by the implementation of the proposed project. Similar is the finding for the church building located at 1220 20th Street, which was also previously assessed as potentially eligible for recognition as a City of Santa Monica Structure of Merit. Both structures are outside of the project site boundary and the survey study area. As there is a one parcel buffer (50 foot wide by 150 foot long) between the bungalow and project site as well as a two parcel buffer (total width 100 feet) between the church building and the project site to the south those tangible characteristics of the bungalow and church building that convey their local historical significance and justify their eligibility as potential Structures of Merit would be retained unaltered. Because of the substantial distance and clear physical and visual separation between the two improvements and the project site is of sufficient space the two properties would remain eligible as potential Structures of Merit. Therefore, impacts would be less than significant and mitigation measures are not required for either the bungalow or church building.

As described in Section 4 of this EIR, other known pending and approved cumulative projects have been identified. It is possible that some of these projects could demolish buildings deemed to be a historic resource that were built in a similar architectural style, or of a similar property type, or even potentially by the same architect. Regardless, as this property would not contribute to the loss of a historic resource with similar historical or architectural context, cumulative impacts associated with the GKGM property would be less than significant. Furthermore, Section 4 of this EIR provides a list of cumulative projects in the project area. None of the cumulative projects would involve the demolition or alteration of a historical resource in the same architectural style (Tudor Revival), a similar property type (funerary), or designed by the same architect as the proposed project. Regardless, as the proposed project, would not contribute to the loss of an historical resource with similar historical or architectural context, cumulative impacts on historic resources associated with the GKGM Building would be **less than significant**.

Archaeological Resources and Human Remains

The geographic scope of the cumulative archaeological/human remains analysis is the region surrounding the proposed project site. The proposed project site is located in a predominantly developed and commercial area, consisting of hospital, residential, creative office, research and development, and medical uses. Ongoing development and growth in the broader proposed project area may result in a cumulatively significant impacts to buried cultural resources due to the continuing disturbance of undeveloped areas, which could potentially contain significant, buried archaeological resources or human remains. However, the proposed project would be constructed on a developed and disturbed site that has been subject to previous ground-disturbing actives,

which greatly limits the potential for buried, unrecorded archaeological resources or human remains to underlay the proposed project site. Nonetheless, mitigation measure **MM-CUL-3** is required to help to ensure that, in the event of an unanticipated find, the resource is protected, researched, and potentially preserved (if subsequently deemed warranted) to maintain integrity and significance.

Cumulative impacts to archaeological resources and human remains evaluate whether the impacts of the proposed project and other cumulative projects, when taken as a whole, substantially diminish the number of historical, archaeological, or tribal resources within the same or similar context or property type. As discussed throughout this section, the proposed project could have significant impacts to unknown buried archaeological resources and human remains, and mitigation would be required to reduce adverse impacts to levels less than significant. It is anticipated that such resources that are potentially affected by cumulative projects would also be subject to the same requirements of CEQA as the proposed project and mitigate for their impacts, if applicable. The determinations of significance would be made on a case-by-case basis, and the effects of cumulative development on archaeological resources and human remains would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, the proposed project would not contribute to a cumulatively considerable impact associated with archaeological resources and human remains due to the fact that impacts to cultural resources would be **mitigated to a less than significant** level.

4.4.7 Mitigation Measures

The following mitigation measures will be adhered to during construction of the proposed project to mitigate potential impacts related to historical resources and unanticipated archaeological resources:

MM-CUL-1 ***Archival Recordation Documentation***. Prior to any alteration of the GKGM Building or removal of its character-defining features or other building components for the implementation of the proposed project, a recordation document similar in format and content to an Historic American Buildings Survey (HABS) Level II recordation document shall be prepared by the Applicant. The work shall be completed by a qualified historic preservation professional with at least five (5) years of relevant experience who meets the requirements of the U.S. Secretary of the Interior's Professional Qualifications for history, architectural history, and/or historic architecture (pursuant to 36 CFR 61). The HABS-like document shall record the history of the property and its contextual relationship to the overall history of the community. Its physical condition, both historic and current, should also be described in the document through the use of site plans; original as-built drawings, as available; historical and current graphics and photographs; and written data and text. Field photos and notes may also be included as supporting exhibit material. All document components should be completed in accordance with the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation (HABS standards). This recordation document shall include at a minimum:

- A written historic and descriptive report completed in narrative format. The report shall be stored onto an electronic medium (such as a USB drive) for safekeeping.
- A sketch floor plan for each section of the GKGM Building, including floor levels shall accompany the recordation document. A sketch plan of the entire site of the property is also required. Such illustrations shall be stored onto a labeled CD for safekeeping.
- High-resolution digital photographs in accordance with Historic American Buildings Survey (HABS) guidelines and standards shall be included in the report. Views shall include contextual views, all exterior elevations, details views of significant exterior architectural features of the property (site, grounds, Administration, Chapel), and interior views of significant historical architectural features or spaces (Chapel only). Such photographs shall be logged, tagged, and collected onto a media storage device for safe archiving and copies provided to those repositories receiving the HABS finished document. A site plan coordinated with the photo log should also be included. Such photographs shall be stored onto an electronic medium (such as a USB drive) for safekeeping.
- Available historic photographs and, as available, historic and/or current as-built plans or other historic illustrations of the GKGM Building shall be reproduced digitally or photographically and included in the recordation document. Such digital material shall also be stored onto an electronic medium (such as USB drive) for safekeeping.

The HABS documentation shall be submitted to the City (Planning & Community Development, City Planning Division). In addition, one original photographic copy of the documentation reproduced on archival paper as specified above shall be assembled and offered to each of the following entities:

- One set shall be offered to and, if accepted, deposited in the archives of the Santa Monica Conservancy.
- One set shall be offered to and, if accepted, deposited in the archives of the Santa Monica History Museum.
- One set shall be offered to and, if accepted, deposited in the archives of the City of Santa Monica Public Library (Main Branch, local history collection).

MM-CUL-2 ***Preservation Protection Plan***. Prior to the submittal of project plans for plan check review by the City, the Project Applicant shall prepare a "Preservation-Protection Plan" to ensure that implementation of the site improvements would be conducted in conformance with applicable SOI Standards. At a minimum, a Preservation-Protection Plan shall be prepared for the entire historic GKGM site, including the administration wing, Little Chapel of the Dawn wing, and all associated landscape-hardscape features on the property. Such a document shall include the following, at a minimum, and shall be submitted to the City for review and approval upon draft completion and final completion.

- Architectural recordation of existing conditions, features, spaces, and materials prior to the commencement of proposed project construction related activities, including demolition, excavation, grading, and development.
- Materials analysis, conservation, and treatment programs identified to assist in the compliant rehabilitation of the GKGM Building.
- Preparation of a Historic Structures Report (HSR) for the GKGM Building (administration building [exterior]; chapel [interior and exterior]; site grounds, including landscape/hardscape features).
- SOI Standards compliant plan reviews, guidance and oversight, and demolition/construction monitoring by a qualified historic preservation consultant with a minimum of seven (7) years of relevant experience.
- An interpretive program to convey the historical and architectural history and associations of the historic property.

As part of the Preservation Protection Plan, an HSR shall be prepared that would include the architectural recordation and assessment of the site, features, materials, finishes, spaces, forms, textures, etc. The HSR would provide documentary, graphic, and physical information about the property's history, character-defining features, and its existing conditions. The report shall also include appropriate methods for treatment of the existing exterior features, materials, finishes, spaces, landscape/hardscape elements, and circulation patterns of the overall GKGM Building, as well as the interior features, materials, finishes, spaces, and configuration of the chapel; a recommended scope of work as part of the rehabilitation of the historic property; and provided information and recommendations for further treatment and maintenance.

The treatment program for the historic property would involve conditions investigations, testing, research, and the identification of necessary repairs by a team of qualified historic architects, architectural historians, and conservators. As necessary, a materials conservation assessment should also be included in the HSR. This report shall be prepared

according to the National Park Service publication *Preservation Brief 43: The Preparation and Use of Historic Structures Reports*. A copy of this report shall be submitted to the City's Planning Division for review and approval prior to the submittal of 25% completion plans (demolition, architectural, structural, landscape, etc.) to the City for design review and plan check. Final digital copies of this report shall also be donated to the Santa Monica Public Library, Santa Monica Conservancy, and Santa Monica History Museum, at a minimum.

The Preservation Protection Plan shall also stipulate that the Applicant retain a qualified historic preservation professional with at least seven (7) years of relevant experience who satisfies the Secretary of the Interior's Professional Qualification Standards for History, Architectural History, and/or Historic Architecture pursuant to 36 CFR 61. This preservation professional shall provide guidance and oversight for the preservation and rehabilitation of the historic GKGM property; review and comment on rehabilitation design plans (initial, 25%, 50%, 75% completion plans at a minimum) for compliance with the SOI Standards, review and comment on final construction plans (including demolition, structural, architectural, mechanical, electrical, and landscape plans) for compliance with the SOI Standards; and conduct periodic monitoring during demolition, excavation, grading and construction work for the purposes of protecting and preserving character-defining features and those qualities of the property that justify its local City of Santa Monica landmark eligibility. In addition, the preservation professional shall prepare the necessary written and illustrated documentation for the associated monitoring efforts in a series of construction monitoring reports/memos. A final sign-off of the project completion is also required by the consulting preservation professional in coordination with the project general contractor/design team and City prior to the issuance of a certificate of occupancy. Any plans prepared for the project and submitted to the City for review shall be also assessed for SOI Standards compliance by City staff.

In addition, the Preservation-Protection Plan shall address the applicable use of the California Historical Building Code and the relevant guidelines specific in the SOI Standards and NPS briefs, bulletins, references and guidelines, for any code compliant work associated with issues such as egress, fire safety, railing heights, door widths, accessibility, etc.

The Preservation-Protection Plan, including information drawn from the HSR, shall also guide the development of a publicly accessible interpretive program on the history and architecture of the GKGM property. The historic interpretive exhibit(s) should include or interpret information specific to the history and architecture of the site, the important individuals associated with the former Gates, Kingsley & Gates Mortuary, and its historical association with the mortuary history of the community. This creative/educational component shall be developed with the assistance of a qualified architectural historian or

historic preservation professional with at least five (5) years of relevant experience who satisfies the applicable Secretary of the Interior's Professional Qualifications Standards pursuant to 36 CFR 61. The historic interpretive program (exhibits) may be located within the publicly accessible interior spaces of the historic property and/or as an outdoor interpretive program within the GKGM property grounds. The program/exhibit(s) will not be housed in (or on) the adjacent new construction improvement appended to the north side of the administration wing

MM-CUL-3 ***Unknown Archaeological Resources*.** In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f); California PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work—such as preparation of an archaeological treatment plan, testing, or data recovery—may be warranted.

4.4.8 Level of Significance After Mitigation

The GKGM Building is eligible for listing as a City of Santa Monica landmark. Therefore, it is considered a historic resource under the State CEQA Guidelines and is subject to CEQA. The proposed project includes rehabilitation, demolition and new construction on the GKGM Building and adjacent parcels to the north (which comprises the project site). As a result, the proposed project was analyzed for its potential to negatively impact the identified historic resource. The analysis concluded that the proposed project would not cause a substantial adverse change to the GKGM Building because, with the required **MM-CUL-1** and **MM-CUL-2** implemented, it would not materially alter in an adverse manner those physical characteristics that convey the historical resource's significance and that justify its designation eligibility as a City landmark. Hence, the proposed project would have a **less than significant impact with mitigation incorporated** on the historical resource.

Mitigation measure **MM-CUL-3** is required, which would ensure that if archaeological resources (sites, features, or artifacts) are exposed during construction activities, all construction work occurring within the discovery would stop until a qualified archaeologist can evaluate the significance of the find and determine whether or not additional study is warranted. With the incorporation of mitigation measure **MM-CUL-3**, impacts associated with archaeological resources would be a **less than significant impact with mitigation incorporated**.

4.4.9 References

Grimmer, Anne E. and Kay D. Weeks. 1995. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*. National Park Service, U.S. Department of the Interior. Updated in 2017 by Gimmer, Anne E.

Los Angeles County, Office of the Assessor. 2019. Property Assessment Information System. Accessed January 10, 2019. http://maps.assessor.lacounty.gov/GVH_2_2/Index.html?configBase=http://maps.assessor.lacounty.gov/Geocortex/Essentials/REST/sites/PAIS/viewers/PAIS_hv/virtualdirectory/Resources/Config/Default.

Los Angeles Public Library. 2019. Online Database: California Index. Accessed January 10, 2019. https://www.lapl.org/.

NPS (National Park Service). 1990. *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*. Washington, DC: U.S. Dept. of the Interior, National Park Service, Interagency Resources Division.

OHP (California State Office of Historic Preservation). 1995. *Instructions for Recording Historical Resources*. March 1995. Accessed January 10, 2019. http://ohp.parks.ca.gov/pages/1054/files/manual95.pdf

Sanborn Fire Insurance Maps, City of Santa Monica.

Santa Monica Public Library, Santa Monica Index.

Santa Monica Public Library, Santa Monica Image Archives.

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4.5 GEOLOGY AND SOILS

This section describes the existing geological setting of the proposed project site, identifies associated regulatory requirements, and evaluates potential geological/soils hazards and impacts to buried paleontological resources or geological features that could occur with development of the proposed project.

Data used to prepare this section were taken from the Safety Element of the City of Santa Monica (City) General Plan (City of Santa Monica 1995), the City of Santa Monica Land Use and Circulation Element Environmental Impact Report (City of Santa Monica 2010a), the City of Santa Monica Building and Safety Guidelines for Geotechnical Reports (City of Santa Monica 2010b), a site-specific geotechnical report (Geocon West, Inc. 2016, Appendix D), and public information provided by the California Geological Survey. Full reference list entries for all cited materials are provided in Section 4.5.9, References.

4.5.1 Existing Environmental Conditions

The proposed project is to be located on an approximately 1.03-acre site located at 1925 Arizona Avenue and 1242 20th Street in the City of Santa Monica. The topography of the project site slopes gently to the south-southeast, at an average elevation of about 165 feet above sea level. There are no unique geologic features on the project site.

Regional Setting

The City of Santa Monica (City) is located just south of the boundary between the Transverse Ranges and Peninsular Ranges geomorphic provinces. The Transverse Ranges geomorphic province to the north is characterized by east-west trending mountain ranges that include the Santa Monica Mountains. The Santa Monica, Hollywood, Raymond, Sierra Madre, and Cucamonga faults mark the southern boundary of the province. The Peninsular Range province is characterized by northwest/southeast trending alignments of mountains and hills and intervening basins, reflecting the influence of northwest trending major faults and folds controlling the general geologic structural fabric of the region. This province extends northwesterly from Baja California into the Los Angeles Basin and westerly into the offshore area, including Santa Catalina, Santa Barbara, San Clemente and San Nicolas islands. This province is bounded on the east by the San Jacinto fault zone. The Los Angeles Basin is the northernmost part of the Peninsular Ranges province.

The project site is located on the Santa Monica plain near the northwest margin of the Los Angeles basin and about 3 miles south of the Santa Monica Mountains. The Santa Monica plain is a Pleistocene age surface that has been uplifted, dissected by erosion, and locally infilled with Holocene age alluvial deposits.

Earthquake Faults and Seismicity

The City is located in a portion of the southern California region that is crossed by a number of faults. The California Geological Survey (CGS 2018a) classifies faults as:

- Holocene-active faults, which are faults that have moved during the past approximate 11,700 years. These faults are by definition considered an active fault and capable of surface rupture (see below for further discussion).
- Pre-Holocene faults, which are faults that have not moved in the past 11,700 years. This class of fault may be capable of surface rupture, but is not regulated under the Alquist-Priolo Special Studies Zones Act of 1972.
- Age-undetermined faults, which are faults where the recency of fault movement has not been determined.

There are numerous faults in the greater Los Angeles area that are categorized as Holocene-active and pre-Holocene faults. The nearest fault to the site is the Santa Monica Fault, which traverses the northeast portion of the City. the closest fault to the project site is the Santa Monica Fault, which is comprised of various segments with several strands.[1] The westernmost segment (Segment 1) begins where the Santa Monica Fault comes onshore at Pacific Palisades and extends to the northeast towards Santa Monica Canyon, primarily as a single trace. Segment 2 is much wider and consists of several strands trending east through the City of Santa Monica and south of Brentwood Knoll. Segments 3 and 4 trend more northeasterly and are expressed as a semi-continuous series of linear scarps in the older alluvial fan deposits, with Segment 4 specifically paralleling Santa Monica Boulevard as it enters the Cheviot Hills. East of the Cheviot Hills and the West Beverly Hills lineament (WBHL), Segment 5 is mapped as a single trace in the Benedict Canyon Wash alluvial plain trending to the northeast towards the mapped location of the buried Salt Lake Fault. The Santa Monica fault system is characterized with an oblique left-lateral strike-slip movement with calculated minimum dip-slip only rates of approximately 0.5 to 0.6 mm/year to approximately 1.0 mm/year based on mechanical models of the faults in the Los Angeles Basin.[2]

Other nearby faults include the nearby Malibu Coast Fault Zone, the Newport–Inglewood Fault Zone, and the Palos Verdes Hills Fault (CGS 2010, 2018b). The highest seismic risks to the project site originate from these faults, because each has the potential to generate moderate to large earthquakes that could cause ground shaking in Santa Monica and nearby communities. In addition to these known faults, movement along buried blind thrust faults, which have no obvious surface features, can also occur across the greater Los Angeles area. These faults, as well as numerous other regional faults (e.g., the San Andreas, San Fernando, and Whittier Faults), are capable of producing moderate to major earthquakes that could significantly affect the City, including the proposed project site (Geocon West, Inc. 2016). As with all of Southern California, the site has experienced historic earthquakes from various regional faults. The seismicity of the region surrounding the site was formulated based on research of an electronic database of earthquake data.

[1] California Geological Survey Fault Evaluation Report, The Hollywood, Santa Monica and Newport-Inglewood Faults in the Beverly Hills and Topanga 7.5' Quadrangles Los Angeles County, California Brian P.E. Olson Engineering Geologist January 5, 2018.

[2] Ibid.

Earthquake magnitudes are quantified using the Richter scale, which is a logarithmic scale whereby each whole number increase in Richter magnitude represents a tenfold increase in the amplitude of the seismic wave generated by an earthquake. For example, at the same distance from a fault, the shaking during a magnitude 5.0 earthquake will be 10 times larger than a magnitude 4.0 earthquake while the amount of energy released would increase by a factor of 32. Earthquakes of Richter magnitude 6.0 to 6.9 are classified as moderate, those between 7.0 and 7.9 are classified as major, and those of 8.0 or more are classified as great.

A partial list of moderate to major magnitude earthquakes that have occurred in the Southern California area within the last 100 years near the project site include the Northridge earthquake on January 17, 1994 (magnitude 6.7), the Whitter Narrows Earthquake on October 1, 1987 (magnitude 5.9) the Sierra Madre Earthquake on June 28, 1991 (magnitude 5.8), and the Big Bear earthquake on June 28, 1992 (magnitude 6.4).

Surface Rupture

Surface rupture involves the displacement and cracking of the ground surface along a fault trace. Surface ruptures are visible instances of horizontal or vertical displacement, or a combination of the two, typically confined to a narrow zone along the fault. Surface rupture is more likely to occur in conjunction with active fault segments where earthquakes are large, or where the location of the movement (earthquake hypocenter) is shallow.

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 regulates development near Holocene-active faults to mitigate the hazard of surface fault rupture. This Act requires the State Geologist to establish regulatory zones (known as Alquist-Priolo Special Study Fault Zones) around the surface traces of Holocene-active faults and to issue appropriate maps. Local agencies must regulate most development projects within the zones. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If a Holocene-active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault.

In January 2018, the California Geological Survey established Alquist-Priolo Fault Zones around the Santa Monica Fault. The project site is not located within an Alquist-Priolo Earthquake Fault Zone, as the project site is approximately 900 feet southeast of the Santa Monica fault.

Subsurface Groundwater

The Coastal Plain of the Los Angeles Basin is sub-divided into several distinct groundwater basins. These groundwater basins are caused by geologic features such as non-water bearing bedrock, faults, and other features that impede the flow of groundwater such as folds and groundwater mounds. The City is underlain

by the Santa Monica sub-basin of the Los Angeles groundwater basin. Groundwater within the Santa Monica sub-basin occurs in all of its deposits from the recent alluvium down to the fractured Tertiary sediments, with the movement of groundwater in the sub-basin generally towards the south with some minor subsurface flow towards the west.

Soil borings conducted on the project site did not encounter groundwater to a maximum depth of 75 feet below the existing ground surface. The historically highest groundwater level is approximately 40 feet below existing grade. It is unlikely that groundwater levels will ever exceed the historic high levels (Geocon West, Inc. 2016).

Subsurface Soil Conditions

The project site is underlain by two feet of artificial fill below the ground surface. Artificial fill generally consists of slightly moist and firm dark brown silt with various amounts of sand and gravel. The fill is likely the result of past grading or construction activities at the site. Deeper fill may exist between excavations and in other portion of the site that were not directly explored.

Underlying the fill are Pleistocene age older alluvial fan deposits, consisting of interlayered silt, silty sand and well graded sand with gravel. The deposits contain varying amounts of gravel and cobbles. The soils are medium dense to very dense or firm to stiff.

Liquefaction/Lateral Spreading

Liquefaction occurs when partially saturated soil enters a liquid state, resulting in the soil's inability to support overlying structures. Liquefaction typically occurs in areas where the groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. Lateral spreading consists of lateral movement of gently to steeply sloping saturated soil deposits that is caused by earthquake-induced liquefaction. As ground acceleration and shaking duration increase during an earthquake, liquefaction potential increases.

The Seismic Hazards Mapping Act of 1990 directs the California Department of Conservation, Division of Mines and Geology (now the California Geological Survey), to identify and mitigate seismic hazards. According to the Seismic Hazards Zone Map for the Beverly Hills Quadrangle (CGS 2018b), the project site is not located within a Liquefaction Hazard Zone (Figure 4.5-1). Similarly, the site is not located within a City-designated Liquefaction Hazard Zone (City of Santa Monica 2010b).

A site-specific liquefaction analysis was performed by Geocon West, Inc. (2016), consistent with the Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS 2008). Based on the analysis, the potential for liquefaction and associated ground deformations beneath the project site is very low.

Subsidence/Differential Settlement

Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. The project site is not located within an area of known ground subsidence. No known large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring or planned at the project site or in the general site vicinity. Therefore, the potential for ground subsidence due to withdrawal of fluids or gases at the project site is considered low (Geocon West, Inc. 2016).

In addition, one of the primary geologic hazards in the City is differential settlement related to uncertified fills. Clay mining operations since the early 1900's in the central portion of the City resulted in excavations that were backfilled with uncompacted fills, and in some cases utilized as landfills, which may result in differential settlement (City of Santa Monica 1995). However, the project site is not located within an area of former clay mining (City of Santa Monica 2010b).

Expansive Soils

Expansive soils tend to swell with seasonal increases in soil moisture in the winter months and shrink as soils become drier in the summer months. Repeated shrinking and swelling of the soil can lead to stress and damage of structures, foundations, fill slopes and other associated facilities. Expansive soils owe their characteristics to the presence of swelling clay minerals. Based on soil sampling completed at the project site, soils near the proposed foundation elevations are considered to have a very low expansion potential and are classified as non-expansive (Geocon West, Inc. 2016).

Paleontological Resources

Paleontological resources include fossil remains or traces of past life forms, including both vertebrate and invertebrate species, as well as plants. Paleontological resources are generally found within sedimentary rock formations. The City of Santa Monica rests on surface deposits of younger and older Quaternary alluvium, derived primarily from the Santa Monica Mountains to the north. The younger (i.e., Holocene, past 11,700 years) alluvial deposits do not contain significant vertebrate fossils, but these deposits are underlain by older (i.e., Pleistocene, 11,700 to 1.6 million years) Quaternary deposits that contain significant vertebrate fossils at varying depths, beginning as shallow as 6 feet beneath the ground surface. The project site is directly underlain by older alluvium (Dibblee and Ehrenspeck 1991), with shallow areas of artificial fill resulting from prior development.

Based on a paleontological records search completed in August 2018, the Natural History Museum of Los Angeles County (LACM) does not have any vertebrate fossil localities recorded within the project site boundaries or within a 0.5-mile buffer. However, a fossil lion (Felis atrox) was discovered at a depth of about 6 feet below ground surface, approximately 0.8 mile southeast of the site (along Michigan Avenue, between Olympic and Cloverfield boulevards). The LACM also reported specimens of horse (Equus) and

ground sloth (Paramylodon) that were recovered at depths greater than 11 feet, from locality LACM 7879, located approximately 2 miles southeast of the project site (McLeod 2018; City of Santa Monica 2010a).

In addition, past excavation activities within the western Los Angeles Basin have encountered paleontological resources in older Quaternary (i.e., Pleistocene) alluvial deposits. Jefferson (2012) reported numerous localities from this part of Los Angeles County that yielded Ice Age fossil amphibians, reptiles, birds, and mammals, including toad (Bufo), newt (Taricha), turtle (Clemmys marmorata), snake (Colubridae), grebe (Podiceps nigricollis), gopher (Thomomys bottae), rabbit (Sylvilagus), rodents (Peromyscus, Neotoma, and Heteromyidae), vole (Microtus californicus), sloth (Paramylodon), mammoth (Mammuthus), mastodon (Mammut americanum), horse (Equus), camel (Camelops), bison (Bison), carnivore (Canis), and human (Homo sapiens). Therefore, the Pleistocene-age deposits underlying the project site have a moderate to high paleontological resource sensitivity.

4.5.2 Relevant Plans, Policies, and Regulations

State

Alquist-Priolo Earthquake Fault Zoning Act (1972)

The purpose of this Act is to regulate types of development near active faults to mitigate the hazard of surface rupture. Under this Act, the State Geologist is required to delineate earthquake fault zones/Alquist-Priolo Fault Zones along known Holocene-active faults in California. The Act also requires that geologic studies be conducted to locate and assess any Holocene-active fault traces in and around known Holocene-active fault areas prior to development of buildings for human occupancy. Local cities and counties must regulate certain development projects within the Alquist-Priolo Fault Zones, generally by issuing building permits only after geologic investigations demonstrate that development sites are not threatened by future surface displacement. A buffer prohibiting the construction of structures for human occupancy may be established. Typically, structures for human occupancy are not allowed within 50 feet of the trace of an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act, passed by the California legislature in 1990, addresses earthquake hazards from non-surface fault rupture, including liquefaction and seismically induced landslides. The act established a mapping program for “seismic hazard zones” that have the potential for liquefaction, strong ground shaking, or other earthquake and geologic hazards. To date, the California Geological Survey has only created liquefaction hazard maps for U.S. Geological Survey quadrangle maps in the greater Los Angeles and San Francisco Bay areas, including the City of Santa Monica. Under Public Resources Code Section 2697, cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard. Each city or county shall submit one copy of each geotechnical report, including mitigation measures, to the State Geologist within 30 days of its approval.

California Building Code

The state regulations protecting structures from geo-seismic hazards are contained in the California Building Code (24 CCR, Part 2), which is updated on a triennial basis. These regulations apply to public and private buildings in the state. Until January 1, 2008, the California Building Code was based on the then-current Uniform Building Code and contained additions, amendments, and repeals specific to building conditions and structural requirements of the State of California. The 2019 California Building Code, effective January 1, 2020, is based on the current International Building Code and enhances the sections dealing with existing structures. Seismic-resistant construction design is required to meet more stringent technical standards than those set by previous versions of the California Building Code.

Chapters 16 and 16A of the 2019 California Building Code include structural design requirements governing seismically resistant construction, including (but not limited to) factors and coefficients used to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design. Chapters 18 and 18A include (but are not limited to) the requirements for foundation and soil investigations (Section 1803); excavation, grading, and fill (Section 1804); damp-proofing and water-proofing (Section 1805); allowable load-bearing values of soils (Section 1806); the design of foundation walls, retaining walls, embedded posts and poles (Section 1807), and foundations (Section 1808); and design of shallow foundations (Section 1809) and deep foundations (Section 1810). Chapter 33 of the 2019 California Building Code includes (but is not limited to) requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes (Section 3304).

Construction activities are subject to occupational safety standards for excavation and trenching, as specified in the California Safety and Health Administration regulations (Title 8 of the California Code of Regulations) and in Chapter 33 of the California Building Code. These regulations specify the measures to be used for excavation and trench work where workers could be exposed to unstable soil conditions. The proposed project would be required to employ these safety measures during excavation and trenching.

As indicated previously, the California Building Code is updated and revised every three years. The 2019 version of the California Building Code became effective January 1, 2020. It is anticipated that the proposed project would use the most current California Building Code at the time of building permit issuance (i.e., 2019 Title 24 building code).

Local

Santa Monica General Plan – Safety Element

In January 1995, the City of Santa Monica adopted the Safety Element of the General Plan as one of seven state-required elements that must be included in the General Plan. The goals and policies from the Safety Element that are applicable to the proposed project are stated below:

Goal 1 Minimize the economic impact of strong ground motion, liquefaction, and fault rupture on public and private property, and protect the public from earthquake hazards.

Policy 1.1 The City shall promote strengthening of planned utilities (when feasible), the retrofit and rehabilitation of existing potentially hazardous structures and lifeline utilities, and the relocation of certain Critical Facilities to increase public safety and minimize potential damage from seismic and geologic hazards. (Subsections 1.1.1–1.1.7)

Policy 1.2 The City shall strengthen the project permit and review process to ensure that proper actions are taken to mitigate the impact of seismic hazards, to encourage structural and nonstructural seismic design and construction practices that minimize earthquake damage in critical facilities, and to prevent the total collapse of any structure designed for human occupancy. (Subsections 1.2.1–1.2.5)

Policy 1.2.3 – Through the environmental review process, the City shall encourage special development standards, designs, and construction practices to reduce seismic risks to acceptable levels for projects involving critical facilities, large-scale residential, and major commercial or industrial developments.

Policy 1.3 The City shall require geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and development review process. (Subsections 1.3.1–1.3.7)

Policy 1.4 The City shall encourage alternative project designs or low intensity land uses during environmental and developmental review process in areas determined to have significant seismic or geologic constraints. (Subsection 1.4.1)

Policy 1.5 The City shall improve the reduction of risks from seismic and/or geologic hazards during property transfers, including encouraging structural strengthening and site maintenance to reduce the risk to tolerable levels. (Subsections 1.5.1–1.5.4)

Goal 6 Maintain short- and long-range plans to protect public health, safety, and economic welfare from disaster caused by earthquakes, landslides, inundation, fire, hazardous materials accidents, and other natural or manmade disasters.

Policy 6.1 The City shall stringently enforce code regulations, adopt or modify ordinances and take other actions as needed to prepare and response [sic] effectively to emergencies. (Subsections 6.1.1–6.1.10)

City of Santa Monica Municipal Code, Article 8 Building Regulations

Section 8.12.010 – Adoption of California Building Code

The City of Santa Monica sets the minimum design and construction standards for construction. The California Building Code (2019 Edition), which adopts by reference the International Building Code, was adopted with local amendments and provisions, and with Chapters 8.18 and 8.48 through 8.80 of the Santa Monica Municipal Code, and is known as the Santa Monica Building Code (SMBC).

Section 8.12.050 – Supplemental Land Hazard Regulations

Certain portions of the City were established as Seismic Hazard Zones and Geologic Hazard Zones in the Safety Element. These areas and all accompanying information have been incorporated into the Municipal Code as Land Hazard Zones. All construction that is within a Land Hazard Zone shall be subject to special design requirements, which are necessary to affect the stated purpose of these codes. Special design requirements shall conform to the guidelines of the California Department of Conservation, Division of Mines and Geology (which is now the California Geological Survey).

City of Santa Monica Guidelines for Geotechnical Reports

The City implements General Plan Safety Element Policy 1.3 through the City Guidelines for Geotechnical Reports (last updated 2010). The guidelines establish standards for data and analysis that must be included in the geotechnical investigations, peer review of that data, and demonstration of compliance with applicable CBC regulations and standards for review, set forth by the California Geological Survey Special Publication 117 - Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS 2008). During the plan check process (i.e., before a grading or building permit can be issued) for a proposed project, a geotechnical investigation following the City Guidelines for Geotechnical Reports must be submitted to the City's Building and Safety Division for review and approval.

4.5.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to geology and soils are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.). The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). These questions are listed below and are used as the significance thresholds by the City in this section.

Would the project:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of as known fault. Refer to Division of Mines and Geology Special Publication 42?
    b. Strong seismic ground shaking?
    c. Seismic-related ground failure, including liquefaction?
    d. Landslides?
2. Result in substantial soil erosion or the loss of topsoil?
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect risks to life or property?
5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Issues Not Further Analyzed

Questions 1(d), 2, and 5 were analyzed in the Initial Study (Appendix A) and impacts were determined to be less than significant. A summary of the analysis presented in the Initial Study for Questions 1(d), 2, and 5 is provided below.

Question (1)(d) Landslides: The project site topography is relatively flat to gently sloping, with no nearby adjacent hillsides that might be susceptible to landslides. The site is not located within an area of high risk landslide susceptibility (City of Santa Monica 2014). Additionally, the site is not within an area identified as having a potential for seismic slope instability. There are no known landslides near the site, nor is the site in the path of any known or potential landslides. As such, the potential for the proposed project to directly or indirectly cause slope stability hazards is considered low. Therefore, Question 1(d), regarding landslides, does not require consideration of this topic in the analysis below.

Question (2) Soil Erosion: Temporary erosion could occur during grading and excavation of the project. However, since the proposed project is greater than 1 acre, the construction contractor is required to prepare and comply

with a Storm Water Pollution Prevention Plan, which would provide erosion-control measures. Additionally, Section 7010.060 of the SMMC requires construction-phase erosion-control measures to reduce erosion-related impacts (City of Santa Monica 2018). Therefore, the proposed project would not result in substantial soil erosion or loss of topsoil.

Question (5) Septic Tanks: Sewer services are available for the disposal of wastewater at the project site and the project development does not propose the use of septic tanks or alternative waste water disposal systems. Therefore, Question 5, regarding the capability of soils to support septic systems or alternative waste water disposal systems, does not require consideration of this topic in the analysis below.

4.5.4 Methodology

Information regarding the existing regional geology and seismically induced hazards are based on published maps and reports completed by the California Geological Survey, the City of Santa Monica General Plan Safety Element (1995), and the City of Santa Monica Building and Safety Guidelines for Geotechnical Reports (2010b). Specific geologic/soils information for the project site was based on geotechnical reports completed on-site (Geocon West, Inc. 2016, Appendix D). The following analysis considers whether the proposed project, which is described in Chapter 3, Project Description, of this EIR, would directly or indirectly cause or exacerbate geological/soils hazards.

Construction-related impacts are considered for the project as a whole. Operational-related impacts of the proposed project are considered in the context of seismic and/or other geological hazards to structures, employees, and visitors. Adherence to design and construction standards, as required by state and local regulations, would ensure maximum practicable protection for users of the buildings and associated infrastructure. The potential increased geologic hazards resulting from development under the proposed project were evaluated with consideration to the mitigating effects of existing safety standards in the SMBC.

Applicable Project Design Features

In compliance with existing requirements, the proposed project would implement the following project design feature:

PDF-GEO-1 **Final Geotechnical Report**. Prior to the issuance of grading or building permits, new construction for the project would be subject to a site-specific Final Geotechnical Report that would be reviewed and approved by the City's Building and Safety Division. The Final Geotechnical Report would be prepared in accordance with the requirements of the City's most recent Guidelines for Geotechnical Reports. The City's Building and Safety Division requires the approval of a Final Geotechnical Report that specifically addresses the conditions at a project site and the proposed building design at the time of final building plan check. Such reports must identify design requirements for structures and foundations to ensure structural integrity and occupant safety. All recommendations and design

features in the Final Geotechnical Report are required to be incorporated into the building design.

PDF-GEO-2 **Excavation/Shoring:** All excavation activities would be required to adhere to provisions of the SMMC and CBC, including Section 3304 of Chapter 33 of the CBC, which includes requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes. Excavation and shoring requirements are enforced through the City's plan check process, which requires project applicants to prepare and submit excavation and shoring plans to the City's Building and Safety Division prior to the issuance of a building permit.

4.5.5 Impacts Analysis

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (a) rupture of a known earthquake fault (b) strong seismic ground shaking; (c) seismic-related ground failure, including liquefaction?

(a) Fault Rupture

The project site is not located within an Alquist-Priolo Earthquake Fault Zone (CGS 2018b) (Figure 4.5-1). The nearest such zone, located approximately 100 feet northwest of the project site, is associated with the Santa Monica Fault. The risk of fault rupture on the project site is low. The proposed project would not directly or indirectly cause or exacerbate existing fault rupture risks from the construction of the new building on the project site. There are no faults known to cross underneath the project site. As a result, **no impacts** would occur. No mitigation is required.

(b) Seismic Ground Shaking

The City of Santa Monica is located in a seismically active area. Movement along major faults in proximity to the City such as the Santa Monica Fault, as well as along buried blind thrust faults, can occur across the greater Los Angeles area. These faults, as well as numerous other regional faults (e.g., San Andreas, San Fernando, and Whittier), are capable of producing moderate to major earthquakes that could affect the City, including the proposed project site. However, the proposed project would be constructed in accordance with State and City building standards. As with all development within the City, the project is required to comply with the seismic safety requirements of the CBC and SMBC. Proper engineering and compliance with Title 24 of the CBC and the SMBC would ensure the maximum feasible protection of the buildings and occupants.

The SMBC includes requirements to ensure that new development do not cause or exacerbate geological and soil hazards, including seismic ground shaking. Measures to minimize the risk of loss, injury, and death from the construction of new buildings are included within the SMBC, with specific provisions for seismic

design. Additionally, the proposed project would be required to meet seismic-safety and construction design criteria, based on the recommendations of the final project-specific geotechnical report (Geocon West, Inc. 2016, Appendix D). The Final Geotechnical report would be prepared in accordance with the requirements of the City's most recent Guidelines for Geotechnical Reports, which require projects to evaluate site-specific geologic hazards, including seismic ground shaking hazards. Projects are required to assess the site-specific peak ground acceleration associated with a 10 percent probability of exceedance in 50 years and are required to incorporate seismic design factors to mitigate for such risk. As such, the proposed project would not directly or indirectly cause or exacerbate adverse effects involving seismic ground shaking. As a result, impacts would be **less than significant**. No mitigation is required.

(c) Seismic-related Ground Failure

Based on existing groundwater depths in excess of 75 feet and the historical highest groundwater level of approximately 40 feet below ground surface, the potential for liquefaction and associated ground deformations beneath the project site is very low. Furthermore, as with all development within the City, the proposed project is required to comply with the CBC and SMBC. The SMBC includes requirements to ensure that new development does not cause or exacerbate geological and soil hazards including seismic ground shaking and seismically related ground failure. Measures to minimize the risk of loss, injury, and death from the construction of new buildings are included within the SMBC, with specific provisions for seismic design. Additionally, the proposed project would be required to meet the most recent seismic-safety building criteria and construction design recommendations of the final project-specific geotechnical report (Geocon West, Inc. 2016, Appendix D). The proposed project would not directly or indirectly cause or exacerbate adverse effects involving seismic related ground failure. As a result, impacts would be **less than significant**. No mitigation is required.

Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

The proposed project would include a three-story, 45-foot tall building with five levels of underground parking. Vertical excavations up to 65 feet in height may be required for excavation and construction of the proposed subterranean levels and foundations. The excavations are expected to expose artificial fill and alluvial soils, which may be subject to caving where granular soils are exposed. Gravel and cobbles should be expected. Groundwater was not encountered during the geotechnical investigation; however, local seepage may be encountered during excavations, especially if completed during the rainy season, thus, exacerbating the potential for caving (Geocon West, Inc. 2016).

However, as with all development within the City, the proposed project is required to comply with the SMBC. Measures to minimize the risk of soil collapse associated with temporary excavations are included in the SMBC. Additionally, the proposed project would be required to meet the most recent building safety criteria

and construction design recommendations of the Final Geotechnical Report (which would be the same or similar to those within the preliminary geotechnical report provided herein - Geocon West, Inc. 2016, Appendix D). Shoring of vertical excavations up to 65 feet would be required to prevent caving of temporary excavations. In addition, to accommodate local groundwater seepage and/or future groundwater level rise to the depth of the proposed subterranean garage, either a permanent dewatering system would be installed or the structure would be designed for hydrostatic pressure based on the historic high groundwater level of 40 feet below the ground surface.

As such, specific engineering design and construction measures would be implemented to anticipate and mitigate hazards to human life and property caused by potential caving, local groundwater seepage, and rising groundwater levels. In addition, construction activities are also subject to occupational safety standards for temporary excavation and trenching, as specified in the California Safety and Health Administration regulations (Title 8 of the California Code of Regulations). These regulations specify the measures to be used for excavation and trench work where workers could be exposed to unstable soil conditions. As such, with compliance with SMBC and the recommendations of the Final Geotechnical Report, impacts would be **less than significant**.

Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Based on the project-specific geotechnical investigation (Geocon West, Inc. 2016), on-site soils are considered non-expansive. As such, impacts are considered **less than significant**. No mitigation is required.

Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As previously discussed, the project site is fully developed with built structures and surface parking, and the topography is relatively flat to gently sloping with no nearby adjacent hillsides or other features that might be considered unique geologic features.

Vertebrate fossil remains have been recovered within Pleistocene sediments within the City of Santa Monica and its surrounding areas, at depths as shallow as 6 feet. These finds include a fossil specimen of an extinct lion along Michigan Avenue, approximately 0.8-mile southeast of the project site. Given the proximity of the project site to past fossil discoveries, and due to the relatively shallow depths of discovery, the project site is moderately to highly sensitive for supporting paleontological resources. The proposed project would include an approximately 5-level subterranean parking garage. Excavations that extend below a depth of about 5 feet may encounter significant fossil vertebrate specimens (McLeod 2018). Because ground-disturbing activities associated with construction of the proposed project have the potential to uncover and damage/or destroy a unique paleontological resource or site, implementation of mitigation

measure **MM-GEO-1** would be required to reduce potential impacts. Therefore, potentially significant impacts to paleontological resources would be **less than significant with mitigation incorporated**.

4.5.6 Cumulative Impacts

Geologic Hazards

The geographic context for the analysis of the proposed project's contribution in creating cumulative geologic hazards is generally site-specific, rather than cumulative in nature, because each project site has a different set of geologic considerations that would be subject to uniform site development and construction standards. Furthermore, the proposed project does not propose construction (including grading/excavation) or design features which could directly or indirectly contribute to an increase in a cumulative geological hazard. All construction work and development for the proposed project would occur within site boundaries – the proposed project would not cumulatively alter geological conditions or features.

Furthermore, potential cumulative impacts on geological, seismic, and soil conditions would be reduced to less than significant on a site-by-site basis by modern construction methods and compliance with CBC and SMBC regulatory requirements that ensure building safety. Additionally, cumulative projects in the City would be required to prepare and submit a site-specific geotechnical report for review and approval by the City's Building and Safety Division prior to the issuance of grading or building permits. These geotechnical reports would be prepared in accordance with the requirements of the City's most recent Guidelines for Geotechnical Reports. The City's Building and Safety Division requires the approval of the final geotechnical report that specifically addresses the conditions at a project site and the proposed building design at the time of final building plan check. As such, the potential for the proposed project to directly or indirectly cause cumulative geotechnical hazards to affect on-site or off-site areas would be minimal, resulting in a **less than significant impact**.

Paleontological Resources

The geographic scope of the cumulative paleontological resources analysis is the region surrounding the project site, which is located in a predominantly developed area, consisting of churches, schools, multi-family residential uses, commercial uses, and medical/healthcare related buildings. Cumulative impacts to paleontological resources could occur when the impacts of the proposed project and other related cumulative projects, when taken as a whole, substantially diminish the number of paleontological resources within the same or similar context or property type. Ongoing development and growth in the broader project area may result in a cumulatively significant impact to paleontological resources due to the continuing disturbance of deeper (i.e., for subterranean garages) subsurface soils, which could potentially contain significant buried paleontological resources. As a result, mitigation measure **MM-GEO-1** is required to help ensure that, in the event of an unanticipated find of a significant paleontological resource, the resource is protected, researched, and potentially preserved (if subsequently deemed warranted) to maintain integrity and significance.

It is anticipated that paleontological resources that are potentially affected by cumulative projects would also be subject to the same requirements of CEQA as the proposed project and mitigate for their impacts, if applicable. The determinations of significance would be made on a case-by-case basis, and the effects of cumulative development on paleontological resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, the proposed project would not contribute to a cumulatively considerable impact associated with respect to paleontological resources. Impacts are considered **less than significant**.

4.5.7 Mitigation Measures

Consistent with recommendations by the Natural History Museum of Los Angeles County (McLeod 2018), the following mitigation measure will be adhered to during construction of the proposed project to mitigate potential impacts related to unanticipated paleontological resources:

MM-GEO-1 Prior to the commencement of any grading activity, the applicant shall retain a qualified paleontologist to ensure the implementation of a paleontological monitoring program. The Society of Vertebrate Paleontology (SVP 2010) defines a qualified paleontologist as having:

> "1. A graduate degree in paleontology or geology, and/or a publication record in peer reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience.
>
> 2. At least two full years professional experience as assistant to a Project Paleontologist with administration and project management experience; supported by a list of projects and referral contacts.
>
> 3. Proficiency in recognizing fossils in the field and determining significance.
>
> 4. Expertise in local geology, stratigraphy, and biostratigraphy.
>
> 5. Experience collecting vertebrate fossils in the field."

The qualified paleontologist shall attend any preconstruction meetings and manage the paleontological monitor(s) if he or she is not doing the monitoring. A paleontological monitor should be onsite during all excavations below the depth of previously disturbed sediments. The SVP (2010) defines a qualified paleontological monitor as having:

> "1. Bachelor of Science or Bachelor of Arts degree in geology or paleontology and one year experience monitoring in the state or

geologic province of the specific project. An associate degree and/or demonstrated experience showing ability to recognize fossils in a biostratigraphic context and recover vertebrate fossils in the field may be substituted for a degree. An undergraduate degree in geology or paleontology is preferable, but is less important than documented experience performing paleontological monitoring, or

2. Associate in Applied Science or Associate in Arts degree in geology, paleontology, or biology and demonstrated two years' experience collecting and salvaging fossil materials in the state or geologic province of the specific project, or
3. Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in the state or geologic province of the specific project.
4. Monitors must demonstrate proficiency in recognizing various types of fossils, in collection methods, and in other paleontological field techniques."

The paleontological monitor shall monitor construction excavations below a depth of five feet below ground surface and be equipped with necessary tools for the collection of fossils and associated geological and paleontological data. The monitor shall complete daily logs detailing the day's excavation activities and pertinent geological and paleontological data. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find.

Following the paleontological monitoring program for discovered resources, a final monitoring report shall be submitted to the City for approval. The report should summarize the monitoring program and include geological observations and any paleontological resources recovered during paleontological monitoring for the proposed project.

4.5.8 Level of Significance After Mitigation

Through compliance with City and State regulations and requirements, impacts associated with seismic hazards, and unstable soils would be **less than significant**. Project design and construction would be conducted in accordance with the Final Geotechnical Report to be prepared and approved as required by the City's plan check process.

With regard to paleontological resources, mitigation measure **MM-GEO-1** requires a qualified paleontologist to be present during preconstruction meetings, and to be on the project site during all rough grading and other significant ground-disturbing activities. In the event that paleontological resources are exposed during construction activities, the paleontological monitor will temporarily halt or divert grading activities, establish a buffer, and prepare a mitigation and monitoring program for the proposed project. With the incorporation of mitigation measure **MM-GEO-1**, impacts associated with paleontological resources would be **less than significant**.

4.5.9 References

CGS (California Geological Survey). 2008. *Guidelines for Evaluating and Mitigating Seismic Hazards in California*. Special Publication 117A. http://www.conservation.ca.gov/cgs/shzp/webdocs/Documents/SP117.pdf.

CGS. 2010. *Fault Activity Map of California*. Geologic Data Map No. 6, Scale 1:750,000. Compiled and interpreted by C.W. Jennings and W.A. Bryant.

CGS. 2018a. *Earthquake Fault Zones, A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California*. Special Publication 42, Revised 2018.

CGS. 2018b. *The Alquist-Priolo Earthquake Fault Zoning (AP) Map*. Released January 11, 2018. http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/BEVERLY_HILLS_EZRIM.pdf.

City of Santa Monica. 1995. *City of Santa Monica General Plan Safety Element*. Adopted January 1995. Accessed May 2017. https://www.smgov.net/uploadedFiles/Departments/PCD/Plans/General-Plan/Safety-Element/Adopted-Safety-Element-1995.pdf.

City of Santa Monica. 2010a. City of Santa Monica Land Use and Circulation Element Final Environmental Impact Report. Adopted April 2010. Accessed January 28, 2019. https://www.smgov.net/uploadedFiles/Departments/PCD/Environmental-Reports/2010-Land-Use-and-Circulation-Element-Final-Environmental-Impact-Statement.pdf.

City of Santa Monica. 2010b. *Guidelines for Geotechnical Reports*. Version 1.6. City of Santa Monica Building and Safety. March 2010. https://www.smgov.net/uploadedFiles/Departments/PCD/Permits/Guidelines-for-Geotechnical-Reports.pdf.

City of Santa Monica. 2014. “City of Santa Monica Geologic Hazards.” Accessed December 4, 2020. http://csmgisweb.smgov.net/docs/mapcatalog/geohaz.pdf

City of Santa Monica. 2018. “Construction and Demolition Waste FAQs.” Accessed July 25, 2018. https://www.smgov.net/Departments/PublicWorks/ContentSolidWaste.aspx?id=8137.

Dibblee, T.W., and Ehrenspeck, H.E. 1991. Geologic Map of the Beverly Hills and Van Nuys (south ½) Quadrangles, Los Angeles County, California. Accessed January 28, 2019. https://ngmdb.usgs.gov/Prodesc/proddesc_214.htm.

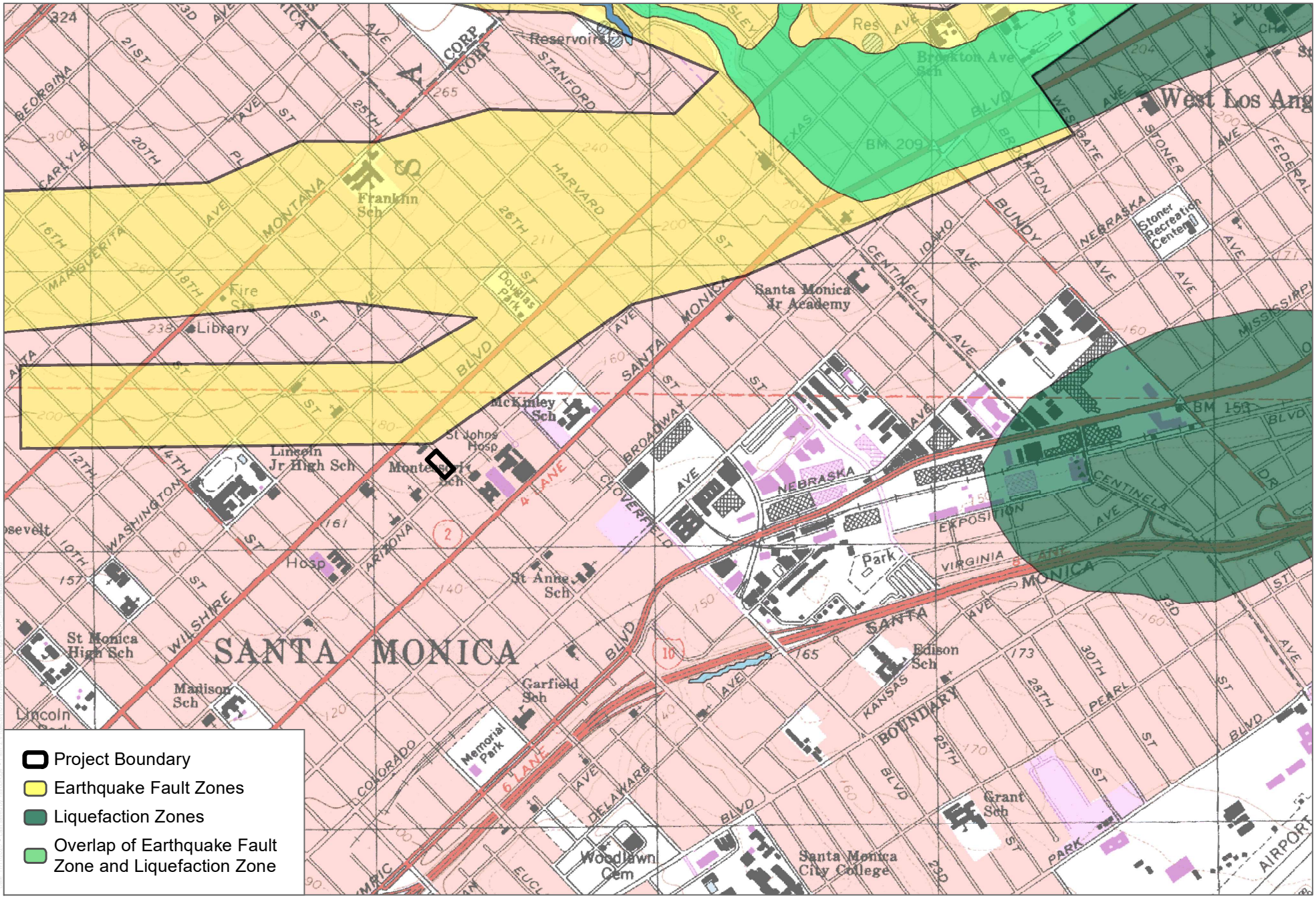
Geocon West, Inc. 2016. *Geotechnical Investigation, Proposed Mixed-Use Development, 1242 20th Street, Santa Monica, California*. Prepared for 1925 Arizona (LA), LLC c/o CIM Group, Los Angeles, California, May 6. Project No. A9414-06-01.

Jefferson, G.T. 2012. A Catalog of Late Quaternary Vertebrates from California. Natural History Museum of Los Angeles County, Technical Reports 7:1-174. Unpublished revision: 18 May 2012.

McLeod, S.A. 2018. Vertebrate Paleontology Records Check for Paleontological Resources for the Proposed 20th Street Wellness Center Project, Dudek Project # 10179, in the City of Santa Monica, Los Angeles County, Project Area. Unpublished Records Search Results Letter from the Natural History Museum of Los Angeles County, Los Angeles, California.

SVP (Society of Vertebrate Paleontology). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. 11 p. Accessed January 28, 2019.

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SOURCE: City of Santa Monica Guidelines for Geotechnical Reports, 2010

DUDEK

0 750 1,500 Feet

FIGURE 4.5-1

Santa Monica Wellness Project Seismic Hazard Zones

20th Street Wellness Center Project EIR

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4.6 GREENHOUSE GAS EMISSIONS

This section includes a discussion of global climate change, describes the regulatory and planning framework related to greenhouse gas (GHG) emissions and climate change, and evaluates the GHG emissions generated by the proposed project during construction and operation. The analysis also addresses the consistency of the proposed project with applicable GHG regulations and policies set forth by the State of California, South Coast Air Quality Management District (SCAQMD), Southern California Association of Governments (SCAG) and the City of Santa Monica (City) to reduce GHGs.

4.6.1 Existing Environmental Conditions

4.6.1.1 Climate Change Overview

Climate change refers to any significant change in measures of Earth's climate, such as temperature, precipitation, and wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human-caused, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process, as follows: Short-wave radiation emitted by the sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and greenhouse gases (GHGs) in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales, and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-20th century, and is the most significant driver of observed climate change (EPA 2017; IPCC 2013). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and

secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further in Section 4.6.1.5, Potential Effects of Climate Change.

4.6.1.2 Greenhouse Gases

A greenhouse gas is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (see also California Environmental Quality Act (CEQA) Guidelines Section 15364.5).[1] Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.[2]

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities, and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are the combustion of fuels such as coal, oil, natural gas, and wood, and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon

1 Climate-forcing substances include GHGs and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in California Health and Safety Code Section 38505, so impacts associated with other climate-forcing substances are not evaluated herein.

2 The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change's (IPCC) Second Assessment Report (1995), IPCC's Fourth Assessment Report (2007), California Air Resources Board's "Glossary of Terms Used in GHG Inventories" (CARB 2017a), and U.S. Environmental Protection Agency's "Glossary of Climate Change Terms" (EPA 2016).

production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (such as in rockets, racecars, and aerosol sprays).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are powerful synthetic GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone-depleting substances (e.g., chlorofluorocarbons (CFCs), hydrochlorofluorocarbon (HCFCs), and halons). The most prevalent fluorinated gases are the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to ozone-depleting substances for many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the ozone-depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF_6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** NF_3 is used in the manufacture of a variety of electronics, including semiconductors and flat-panel displays.

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere), and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric ozone.

Hydrochlorofluorocarbons. HCFCs are a large group of compounds whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is short-lived and varies spatially,

which makes it difficult to quantify its global warming potential. Diesel particulate matter emissions are a major source of black carbon and are toxic air contaminants that have been regulated and controlled in California for several decades to protect public health. Because of the California Air Resources Board's (CARB) regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California were reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere, and maintains a climate that is necessary for life.

Ozone. Tropospheric ozone, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric ozone, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O_2), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric ozone due to chemical reactions that may be enhanced by climate change results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat, and can cool the atmosphere by reflecting light.

4.6.1.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo (i.e., the reflection of radiation)) (EPA 2016). The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of carbon dioxide equivalent (CO_2e).

The current version of the California Emissions Estimator Model (CalEEMod) (Version 2016.3.2) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the proposed project.

4.6.1.4 Sources of GHG Emissions

Global Inventory

Anthropogenic GHG emissions worldwide in 2016 (the most recent year for which data is available) totaled approximately 49,300 million metric tons (MMT) of CO_2e, excluding land use change and forestry (PBL 2017). Six countries—China, the United States, the Russian Federation, India, Japan, and Brazil—and the European community accounted for approximately 65% of the total global emissions, or approximately 32,255 MMT CO_2e (PBL 2017). Table 4.6-1 presents the top GHG-emissions-producing countries.

Table 4.6-1
Six Top Greenhouse Gas Producer Countries and the European Union

Emitting Countries (listed in order of emissions)	Greenhouse Gas Emissions (MMT CO_2e)
China	13,010
United States	6,430
European Union	4,430
India	3,650
Russian Federation	2,220
Japan	1,400
Brazil	1,115
Total	**32,255**

Source: PBL 2017.
Note: MMT CO_2e = million metric tons of carbon dioxide equivalent.

National and State Inventories

Per the U.S. Environmental Protection Agency's (EPA) Inventory of U.S. Greenhouse Gas Emissions and Sinks: *1990–2018* (EPA 2020), total United States GHG emissions were approximately 6,676.6 MMT CO_2e in 2018. The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 81.3% of total GHG emissions (5,428.1 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 92.8% of CO_2 emissions in 2018 (5,031.8 MMT CO_2e). Relative to 1990, gross United States GHG emissions in 2018 are higher by 3.7%, down from a high of 15.2% above 1990 levels in 2007. GHG emissions decreased from 2017 to 2018 by 2.9% (188.4 MMT CO_2e) and overall, net emissions in 2018 were 10.2% below 2005 levels (EPA 2020).

According to California's 2000–2017 GHG emissions inventory (2019 edition), California emitted 424.10 MMT CO_2e in 2017, including emissions resulting from out-of-state electrical generation (CARB 2019). The sources of GHG emissions in California include transportation, industrial uses, electric power production from both in-state and out-of-state sources, commercial and residential uses, agriculture, high global-warming potential substances, and recycling and waste. The California GHG emission source categories (as defined in CARB's 2008 Scoping Plan) and their relative contributions in 2017 are presented in Table 4.6-2.

Table 4.6-2
Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Transportation	169.86	40%
Industrial uses	89.40	21%
Electricity (in state)	38.45	9%
Electricity (imports)	23.94	6%
Residential	26.00	6%
Commercial	15.14	4%
Agriculture	32.42	8%
High GWP substances	19.99	5%
Recycling and waste	8.89	2%
Totals	**424.19**	**100%**

Source: CARB 2019.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent; GWP = global warming potential.
Emissions reflect 2017 California GHG inventory.
[a] Percentage of total has been rounded and total may not sum due to rounding.

During the 2000 to 2017 period, per capita GHG emissions in California have continued to drop from a peak in 2001 of 14.1 MT per person to 10.7 MT per person in 2017, representing a 24% decrease. In addition, total GHG emissions in 2017 were approximately 5 MMT CO_2e less than 2016 emissions. The declining trend in GHG emissions, coupled with programs that will continue to provide additional GHG reductions going forward, demonstrates that California is just below the 2020 target of 431 MMT CO_2e (CARB 2019).

Total 2015 GHG emissions for the City of Santa Monica (the most recent year available) were estimated at approximately 1,110,315 MT CO2e. Transportation emissions constituted 65 percent of total GHG emissions while commercial, residential, industrial, and solid waste, and aviation represented 14 percent, 12 percent, 5 percent, 3 percent, and 2 percent, respectively. Total per capita GHG emissions from the City in 2015 were 11.9 MT CO2e per person.

4.6.1.5 Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 Intergovernmental Panel on Climate Change Synthesis Report (IPCC 2014) indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, rising sea levels, and ocean acidification (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand

and supply. The primary effect of global climate change has been a 0.2°C (0.36°F) rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of approximately 0.2°C per decade is projected, and there are identifiable signs that global warming could take place.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights. Shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year. Sea levels have risen, and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures increased by approximately 1.7°F from 1895 to 2011, with warming the greatest in the Sierra Nevada (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1°F to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights (CCCC 2012). A decline in the Sierra Nevada snowpack, which accounts for approximately half of the surface water storage in California, by 30% to as much as 90% is predicted over the next 100 years (CAT 2006).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers, with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid- to late 21st century in central, and most notably, Southern California. By the late century, all projections show drying, and half of them suggest that 30-year average precipitation will decline by more than 10% below the historical average (CCCC 2012).

A summary of current and future climate change impacts to resource areas in California, as discussed in the Safeguarding California: Reducing Climate Risk (CNRA 2014), is provided below.

Agriculture. The impacts of climate change on the agricultural sector are far more severe than the typical variability in weather and precipitation patterns that occur year to year. Some of the specific challenges faced by the agricultural sector and farmers include more drastic and unpredictable precipitation and weather patterns; extreme weather events that range from severe flooding to extreme drought to destructive storm events; significant shifts in water availably and water quality; changes in pollinator lifecycles; temperature fluctuations, including extreme heat stress and decreased chill hours; increased risks from invasive species and weeds, agricultural pests, and plant diseases; and disruptions to the transportation and energy infrastructure supporting agricultural production. These challenges and associated short-term and long-term impacts can have both positive and negative effects on agricultural production. Nonetheless, it is predicted that current crop and livestock production will suffer long-term negative effects resulting in a substantial decrease in the agricultural sector if not managed or mitigated (CNRA 2014).

Biodiversity and Habitat. The state's extensive biodiversity stems from its varied climate and assorted landscapes, which have resulted in numerous habitats where species have evolved and adapted over time. Specific climate change challenges to biodiversity and habitat include species migration in response to climatic changes, range shifts, and novel combinations of species; pathogens, parasites, and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; and threshold effects (i.e., a change in the ecosystem that results in a "tipping point" beyond which irreversible damage or loss can be recouped). Habitat restoration, conservation, and resource management across California and through collaborative efforts among public, private, and nonprofit agencies has assisted in the effort to fight climate change impacts on biodiversity and habitat. One of the key measures in these efforts is ensuring species' ability to relocate as temperature and water availability fluctuate due to of climate change (CNRA 2014).

Energy. The energy sector provides California residents with a supply of reliable and affordable energy through a complex, integrated system. Specific climate change challenges for the energy sector include temperature rise, fluctuating precipitation patterns, increasing extreme weather events, and sea-level rise. Increasing temperatures and reduced snowpack negatively impact the availability of a steady flow of snowmelt to feed hydroelectric reservoirs. Higher temperatures also reduce the capacity of thermal power plants, since power plant cooling is less efficient at higher ambient temperatures. Increased temperatures will also increase electricity demand associated with air conditioning. Natural gas infrastructure in coastal California is threatened by sea-level rise and extreme storm events (CNRA 2014).

Forestry and Wildfire. Forests occupy approximately 33% of California's 100 million acres and provide key benefits such as wildlife habitat, absorption of CO_2, renewable energy, and building materials. The most significant climate-change-related risk to forests is accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large-scale vegetation mortality, and, combined with increasing

temperatures, have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts, and vegetation conversions. These factors contribute to decreased forest growth, geographic shifts in tree distribution, loss of fish and wildlife habitat, and decreased carbon absorption. Climate change may result in increased establishment of non-native species, particularly in rangelands where invasive species are already a problem. Invasive species may be able to exploit temperature or precipitation changes, or quickly occupy areas denuded by fire, insect mortality, or other climate change effects on vegetation (CNRA 2014).

Although the wildfire risk in Santa Monica is non-existent, the City is within close proximity to a number of mountainous ranges where wildfire risks are projected to increase due to climate change. For example, increased fire risks in both the low and high emissions scenarios are predicted for areas in the Santa Monica Mountains just outside the City,

Ocean and Coastal Ecosystems and Resources. Sea-level rise, changing ocean conditions, and other climate-change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems, in addition to threatening people and infrastructure located along the California coastline and in coastal communities. Sea-level rise, in addition to more frequent and severe coastal storms and erosion, are threatening vital infrastructure such as roads, bridges, power plants, ports, airports, gasoline pipes, and emergency facilities, as well as negatively impacting coastal recreational assets such as beaches and tidal wetlands. Water quality and ocean acidification threaten the abundance of seafood and other plant and wildlife habitats throughout California and globally (CNRA 2014).

Based on the City's Vulnerability Assessment to Climate Change Report, the most significant climate change effects to Santa Monica relate to the City's coastal location and setting. Sea level rise and coastal flooding as a result of climate change would place miles of transportation infrastructure, beaches, homes, and businesses and concessionaires at risk to damage from wave action and inundation. The City is projected to experience an increase of 5.3"-12" of sea level rise from now to 2030 (early century), 11.6"-23.8" around 2030-2050 (mid-century) and 36.6"-113" around 2050-2100 (late century. A significant number of public facilities and infrastructure, buildings, and the Santa Monica Pier would be vulnerable to sea level rise.

Public Health. Climate change can impact public health through various environmental changes and is the largest threat to human health in the 21st century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies and extreme events such as heat, floods, droughts, and wildfires. Increased frequency, intensity, and duration of extreme heat and heat waves are likely to increase the risk of mortality due to heat-related illness, and exacerbate existing chronic health conditions.

An extreme heat day is defined as a day between April and October when the maximum temperature exceeds a heat threshold. This threshold is often calculated as the 98th percentile of historical maximum temperatures between April 1 and October 31 based on observed daily temperature data. The City is expected to experience an increase of 3 extremely hot days (above 95 degrees) per year by 2100 in the City.

Air quality is expected to worsen with increasing climate change. Air quality is strongly dependent on weather, and climate change is expected to impact air quality through warming temperatures and more frequent episodes of stagnant air Santa Monica's coastal location, ocean breezes, and vehicle reduction measures result in better air quality than other portions of the Los Angeles region. The number of days above the ozone standard, however, has been steadily declining since the 1980's in the South Coast Air Basin. However, in the summer of 2016, Southern California experienced its worst smog since 2009. By August 2016, ozone had exceeded federal standards on 91 days since the beginning of the year, compared to 67 days over the same period the previous year. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness such as asthma and allergies. Additional health effects that may be impacted by climate change include cardiovascular disease, vector-borne diseases, mental health impacts, and malnutrition. Increased frequency of these ailments is likely to subsequently increase the direct risk of injury and/or mortality (CNRA 2014).

Transportation. Residents of California rely on airports, seaports, public transportation, and an extensive roadway network to gain access to destinations, goods, and services. Although the transportation industry is a source of GHG emissions, it is also vulnerable to climate change risks. Particularly, sea-level rise and erosion threaten many coastal California roadways, airports, seaports, transit systems, bridge supports, and energy and fueling infrastructure. Increasing temperatures and extended periods of extreme heat threaten the integrity of the roadways and rail lines. High temperatures cause road surfaces to expand, which leads to increased pressure and pavement buckling. High temperatures can also cause rail breakages, which could lead to train derailment. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure, which can impair movement of people and goods, and potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion, landslides, mudslides, and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety (CNRA 2014).

Water. Water resources in California support residences, plants, wildlife, farmland, landscapes, and ecosystems, and bring trillions of dollars in economic activity. Climate change could seriously impact the timing, form, and amount of precipitation; runoff patterns; and the frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to earlier snowmelt, which can impact water supply availability, natural ecosystems, and winter recreation. Water supply availability during the intense dry summer months is heavily dependent on the snowpack accumulated during winter. Increased risk of flooding has a variety of public health concerns, including water quality, public safety, property damage, displacement, and post-disaster mental health problems. Prolonged and intensified droughts can also negatively groundwater reserves and result in increased overdraft and subsidence. Droughts can also negatively impact agriculture and farmland throughout the state. The higher risk of wildfires can lead to increased erosion, which can negatively impact watersheds and result in poor water quality. Water temperatures are also prone to increase, which can negatively impact wildlife that rely on a specific range of temperatures for suitable habitat (CNRA 2014).

In March 2016, the California Natural Resources Agency released Safeguarding California: Implementation Action Plans, a document that shows how California is acting to convert the recommendations contained in the 2014 Safeguarding California plan into action (CNRA 2016). Additionally, in May 2017, the California Natural Resources Agency released the draft Safeguarding California Plan: 2017 Update, which is a survey of current programmatic responses for climate change, and contains recommendations for further actions (CNRA 2017). The California Natural Resources Agency released its Safeguarding California Plan: 2018 Update in January 2018, which provides a roadmap for state agencies to protect communities, infrastructure, services, and the natural environment from climate change impacts. The 2018 Safeguarding California Plan includes 69 recommendations across 11 sectors and more than 1,000 ongoing actions and next steps developed by scientific and policy experts across 38 state agencies (CNRA 2018). As with previous state adaptation plans, the 2018 Update addresses acceleration of warming across the state; more intense and frequent heat waves; greater riverine flows; accelerating sea-level rise; more intense and frequent drought; more severe and frequent wildfires; more severe storms and extreme weather events; shrinking snowpack and less overall precipitation; and ocean acidification, hypoxia, and warming.

4.6.2 Relevant Plans, Policies, and Regulations

Federal

Massachusetts v. Environmental Protection Agency (EPA)

In Massachusetts v. EPA (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."
- The administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Federal Vehicle Standards

In August 2018, EPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new standards for model years 2021 through 2026.

Compared to maintaining the post-2020 standards now in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2%–3% of total daily consumption, according to the Energy Information Administration) and would impact the global climate by 3/1000th of one degree Celsius by 2100 (EPA and NHTSA 2018). California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. Thus, the timing and consequences of the 2018 federal proposal are speculative at this time.

On September 27, 2019, EPA and NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program." (84 Fed. Reg. 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the EPA and NHTSA issued Part Two of the SAFE Rule, which will go into effect 60 days after being published in the Federal Register. The Part Two Rule sets CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light duty trucks for model years 2021 through 2026. This issue is evolving as California and 22 other states, as well as the District of Columbia and four cities, filed suit against the EPA and a petition for reconsideration of the rule on November 26, 2019. The litigation is not expected to be resolved for at least several months.

State

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other state regulations and goals. The following text describes executive orders, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

State Climate Change Targets

Executive Order (EO) B-55-18. EO B-55-18 (September 2018) establishes a statewide policy for the state to achieve carbon neutrality no later than 2045, and achieve and maintain net negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the state's GHG emissions. CARB will work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Executive Order (EO) B-30-15 and Senate Bill (SB) 32/Assembly Bill (AB) 197. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_2e.

The executive order also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

SB 32 and AB 197 (2016) are companion bills that set a new statewide GHG reduction targets, make changes to CARB's membership, increase legislative oversight of CARB's climate-change-based activities, and expand dissemination of GHG and other air-quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030 and 80% below the 1990 levels by 2050. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

SB 605 and SB 1383. SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of short lived climate pollutants (SLCPs) in the state, and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for CH_4 and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its Short-Lived Climate Pollutant Reduction Strategy (SLCP Reduction Strategy) in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH_4, and fluorinated gases.

SB 375. SB 375 (2008), the Sustainable Communities and Climate Protection Act of 2008, addresses GHG emissions through regional plans. SB 375 required CARB to adopt regional GHG reduction targets from passenger vehicles for the years 2020 and 2035. Regional metropolitan planning organizations (MPO) are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The SCS is intended to integrate land use and transportation planning and establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets established by CARB. If an SCS is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. Pursuant to Government Code Section 65080(b)(2)(K), an SCS does not regulate the use of land; supersede the land use authority of cities and counties; or require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those

strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In September 2010, CARB adopted the first SB 375 targets for the regional metropolitan planning organizations. The targets for Southern California Association of Governments (SCAG) are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. Achieving these goals through adoption of a SCS is the responsibility of the metropolitan planning organizations. SCAG adopted its first RTP/SCS in April 2012. The plan quantified a 9% reduction by 2020 and a 16% reduction by 2035 (SCAG 2012). In June 2012, CARB accepted SCAG's quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets. On April 4, 2016, the SCAG Regional Council adopted the 2016 RTP/SCS, which builds upon the progress made in the 2012 RTP/SCS. The updated RTP/SCS quantified an 8% reduction by 2020 and a 13% reduction by 2030 (SCAG 2016). In June 2016, CARB accepted SCAG's quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets. In March 2018, CARB approved SCAG's updated targets of an 8% reduction by 2020 and a 19% reduction by 2030, effective October 1, 2018, which are consistent with the reduction targets from the Connect SoCal (2020-2045 RTP/SCS), fully adopted in September 2020.

EO S-3-05 and AB 32. EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050. EO S-3-05 also directed the California Environmental Protection Agency to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team (CAT) was formed, which subsequently issued reports from 2006 to 2010.

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emissions limitation, emissions reduction measure, or market-based compliance mechanism adopted.

State Climate Change Plans

CARB Climate Change Scoping Plans. On January 20, 2017, CARB released its 2017 Climate Change Scoping Plan Update (Scoping Plan Second Update) for public review and comment (CARB 2017b). This update presents CARB's strategy for achieving the state's 2030 GHG target as established in SB 32 (discussed below), including continuing the Cap-and-Trade Program through 2030, and includes a new approach to reduce GHGs from refineries by 20%. The Second Update incorporates approaches to cutting short-lived climate pollutants (SLCPs) under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by CARB in March 2017), acknowledges the need for reducing emissions in agriculture, and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon. During development of the Second Update, CARB held a number of public workshops in the natural and working lands, agriculture, energy, and transportation sectors to inform development of the 2030 Scoping Plan Update (CARB 2016). When discussing project-level GHG emissions reduction actions and thresholds, the Second Update states, "achieving no net increase in GHG emissions is the correct overall objective, but it may not be appropriate or feasible for every development project. An inability to mitigate a project's GHG emissions to zero does not necessarily imply a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA" (CARB 2017b). The Second Update was approved by CARB's Governing Board on December 14, 2017.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32 and the EOs and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and EOs if it meets the general policies in reducing GHG emissions in order to facilitate the achievement of the state's goals and does not impede attainment of those goals. As discussed in several cases, a given project need not be in perfect conformity with each and every planning policy or goals to be consistent. A project would be consistent, if it will further the objectives and not obstruct their attainment.

Building Energy

Title 24, Part 6. Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Although not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code (PRC) Section 25402(b)(1)). The regulations receive input from members of industry and the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (PRC Section 25402(d)) and cost effectiveness (PRC Sections 25402(b)(2) and (b)(3)). These standards are updated to consider and incorporate new energy-

efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The current Title 24 standards are the 2019 Title 24 Building Energy Efficiency Standards, which became effective January 1, 2020. The standards would require that all low-rise residential buildings shall have a photovoltaic system meeting the minimum qualification requirements such that annual electrical output is equal to or greater than the dwelling's annual electrical usage. Notably, net energy metering rules limit residential rooftop solar generation to produce no more electricity than the home is expected to consume on an annual basis. Single-family homes built with the 2019 standards will use about 7% less energy due to energy efficiency measures versus those built under the 2016 standards, while new nonresidential buildings will use about 30% less energy (CEC 2018).

The California Public Utilities Commission (CPUC), CEC, and CARB previously established a goal of achieving zero net energy (ZNE) for new construction in California. The key policy timelines include (1) all new residential construction in California will be ZNE by 2020, and (2) all new commercial construction in California will be ZNE by 2030 (CPUC 2013). As most recently defined by the CEC in its 2015 *Integrated Energy Policy Report*, a ZNE code building is "one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building" using the CEC's Time Dependent Valuation metric (CEC 2015).

The 2019 Title 24 standards take a significant step towards the state's ZNE goal. However, as explained by the CEC, California's energy landscape has changed since the ZNE target was set. Electricity produced for the grid now comes substantially from renewables, and 60 percent renewable electricity generation is required by 2030. Further, new net energy metering rules also limit the amount of residential rooftop solar generation to no more electricity production than the home is annually expected to consume.

The 2019 Title 24 standards therefore focus on building energy efficiency and ensuring solar electricity generated onsite is used onsite. "Looking beyond the 2019 standards, the most important energy characteristic for a building will be that it produces and consumes energy at times that are appropriate and responds to the needs of the grid, which reduces the building's emissions" (CEC 2018). In furtherance of that characteristic, the 2019 standards require that new homes include solar PV to meet the home's expected annual electric needs, and also encourage demand responsive technologies including battery storage, heat pump water heaters, and improving the building's thermal envelope through high performance attics, walls and windows. These smarter homes perform better and affect the grid less, which reduces the building's GHG emissions.

Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11

of Title 24) is commonly referred to as California's Green Building Standards (CALGreen), and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective January 1, 2017.

The California Building Standards Commission approved amendments to the voluntary measures of the CALGreen standards in December 2018. The 2019 CALGreen standards became effective January 1, 2020. As with the 2019 Title 24 standards, the 2019 CALGreen standards focus on building energy efficiency. The 2019 CALGreen standards are the current applicable standards. For nonresidential projects, some of the key mandatory CALGreen 2019 standards involve requirements related to bicycle parking, designated parking for clean air vehicles, electric vehicle (EV) charging stations, shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, recycled water supply systems, construction waste management, excavated soil and land clearing debris, and commissioning (24 CCR Part 11). For high-rise residential buildings (i.e. more than 4 floors), the non-residential measures generally apply.

Title 20. Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include: refrigerators, refrigerator-freezers and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

SB 1. SB 1 (Murray) (August 2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the Public Resources Code, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for both homes and businesses within 10 years of adoption, and placing solar energy

systems on 50% of new homes within 13 years of adoption. SB 1, also termed “Go Solar California,” was previously titled “Million Solar Roofs.”

AB 1470 (Solar Water Heating). This bill established the Solar Water Heating and Efficiency Act of 2007. The bill makes findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. The bill defines several terms for purposes of the act. The bill requires the commission to evaluate the data available from a specified pilot program, and, if it makes a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

Renewable Energy and Energy Procurement

SB 100. SB 100 (2018), also called the 100 Percent Clean Energy Act of 2018, requires the State to increase its renewable portfolio standard (RPS) for electricity to 33% by 2020, 44% by 2024, 52% by 2027, and 60% by 2030. SB 100 also states that it is the policy of the State 100% of the retail sales of electricity to California will be from carbon-free resources. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

SB 350. SB 350 (2015) expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by 2030, be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

SB X1 2. SB X1 2 (2011) expanded the RPS by establishing that 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

Mobile Sources

SB 350*.* In 2015, SB 350, the Clean Energy and Pollution Reduction Act, was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation

sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see Public Utilities Code Section 740.12).

EO B-16-12. EO B-16-12 (2012) directs state entities under the governor's direction and control to support and facilitate development and distribution of ZEVs. This executive order also sets a long-term target of reaching 1.5 million ZEVs on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80% less than 1990 levels by 2050. In furtherance of this executive order, the governor convened an Interagency Working Group on ZEVs that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet.

Heavy Duty Diesel. CARB adopted the final Heavy Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014 to reduce DPM and oxides of nitrogen (NOx) emissions from heavy-duty diesel vehicles. The rule requires DPM filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule will require nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxic Control Measure to limit idling of diesel-fueled commercial vehicles on December 12, 2013. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (13 CCR 2485).

Advanced Clean Cars Program. In January 2012, CARB approved the Advanced Clean Cars program, an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single, coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2011). To improve air quality, CARB implemented new emission standards to reduce smog-forming emissions beginning with 2015 model-year vehicles. It is estimated that by 2025, cars will emit 75% less smog-forming pollution than the average new car sold before 2012.

To reduce GHG emissions, CARB, in conjunction with the EPA and NHTSA, adopted new GHG standards for model years 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% by 2025. The Zero Emissions Vehicle (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in 2018 to 2025 model years. The Clean Fuels Outlet regulation will ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of the new advanced technology vehicles as they come to the market.

Senate Bill 375. SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035 and to update those targets every 8 years. SB 375 requires the state's 18 regional metropolitan planning

organizations (MPOs) to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP) that will achieve the GHG reduction targets set by CARB. If a MPO is unable to devise an SCS to achieve the GHG reduction target, the MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code, Section 65080(b)(2)(K), a SCS does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In September 2010, CARB adopted the first SB 375 targets for the regional metropolitan planning organizations. The targets for Southern California Association of Governments (SCAG) are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. Achieving these goals through adoption of a SCS is the responsibility of the metropolitan planning organizations. SCAG adopted its first RTP/SCS in April 2012. The plan quantified a 9% reduction by 2020 and a 16% reduction by 2035 (SCAG 2012). In June 2012, CARB accepted SCAG's quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets. On April 4, 2016, the SCAG Regional Council adopted the 2016 RTP/SCS, which builds upon the progress made in the 2012 RTP/SCS. The updated RTP/SCS quantified an 8% reduction by 2020 and a 13% reduction by 2030 (SCAG 2016). In June 2016, CARB accepted SCAG's quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets. In March 2018, CARB approved SCAG's updated targets of an 8% reduction by 2020 and a 19% reduction by 2030, effective October 1, 2018, which are consistent with the reduction targets from the Connect SoCal (2020-2045 RTP/SCS), fully adopted in September 2020.

Solid Waste

AB 939 and AB 341. In 1989, AB 939, known as the Integrated Waste Management Act (PRC Sections 40000 et seq.), was passed because of the increase in waste stream and decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed of, and jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that

identify priority strategies that CalRecycle believes will assist the state in reaching the 75% goal by 2020, legislative and regulatory recommendations and an evaluation of program effectiveness (CalRecycle 2015).

AB 1826 Chesbro (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

Water

EO B-29-15. In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the executive order extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The executive order includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increased the requirements for landscape water use efficiency and broadened its applicability to include new development projects with smaller landscape areas.

Regional/Local

Southern California Association of Governments' Regional Transportation Plan/Sustainable Communities Strategy

In September 2010, CARB adopted the first SB 375 targets for the regional metropolitan planning organizations. The targets for Southern California Association of Governments (SCAG) are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. Achieving these goals through adoption of a SCS is the responsibility of the metropolitan planning organizations. SCAG adopted its first RTP/SCS in April 2012. The plan quantified a 9% reduction by 2020 and a 16% reduction by 2035 (SCAG 2012). In June 2012, CARB accepted SCAG's quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets. On April 4, 2016, the SCAG Regional Council adopted the 2016 RTP/SCS, which builds upon the progress made in the 2012 RTP/SCS. The updated RTP/SCS quantified an 8% reduction by 2020 and a 13% reduction by 2030 (SCAG 2016). In June 2016, CARB accepted SCAG's quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets. In March 2018, CARB approved SCAG's updated targets of an 8% reduction by 2020 and a 19% reduction by 2030, effective October 1, 2018, which are consistent with the reduction

targets from the Connect SoCal (2020-2045 RTP/SCS), adopted May 2020. See Section 4.2, Air Quality, of this EIR for additional discussion on SCAG.

City of Santa Monica Climate Action and Adaptation Plan

In May 2019, the City adopted the new Climate Action and Adaptation Plan (CAAP) to achieve carbon neutrality by 2050, as well as to develop measures to adapt and prepare for unavoidable climate change impacts. The CAAP establishes an interim goal of reducing carbon emissions 80% below 1990 levels by 2030 to build momentum to achieving carbon neutrality by 2050 or sooner. The CAAP focuses on eight objectives in three sectors: zero net carbon buildings, zero waste and sustainable mobility. The CAAP also lays out a framework for increasing Santa Monica's resilience to climate change through four sectors: Climate Ready Community, Water Self-Sufficiency, Coastal Flooding Preparedness and Low Carbon Food & Ecosystems. The CAAP identifies areas in local government, community building and support to augment by including climate change considerations and adaptation measures. The intent of the CAAP is to provide overarching policy direction with respect to climate change through Citywide objectives and broad strategies to reduce GHG emissions. The CAAP is not a regulatory plan to be applied on a project by project basis. Rather, the City recognizes that GHG reduction goals cannot be achieved by individual projects alone, but instead requires a comprehensive Citywide approach that would include the enactment of future plans, changes to existing ordinances, and an integrated and sustainable approach to land use/transportation planning.

City of Santa Monica General Plan

The City of Santa Monica General Plan is the fundamental planning policy document of the City, providing the framework for decision-making regarding growth and development. The City's General Plan includes various goals and policies related to reducing GHG emissions. Applicable policies include the following (City of Santa Monica 2017):

Land Use and Circulation Element

The City's Land Use and Circulation Element (LUCE) was adopted in 2010 (last amended in 2020), and is the primary land use and transportation planning document governing existing and future land uses in the City. The LUCE encompasses the community's vision for Santa Monica's future; and establishes goals, policies, and development criteria for land uses and circulation in the City. The Plan's goals are to preserve the City's neighborhoods, reduce GHG emissions, improve mobility and circulation, and encourage the creation of new housing near transit and serves as the City's guiding document for the future. LUCE goals and policies that are pertinent to the reduction of GHG emissions are provided below:

Linking Land Use and Transportation Policy: Addressing Climate Change

Goal LU2 Integrate Land Use and Transportation for GHG Emission Reduction – Integrate land use and transportation, carefully focusing new development on transit-rich

boulevards and in the districts, to create sustainable active pedestrian-friendly centers that decrease reliance on the automobile, increase walking, bicycling and transit use, and improve community quality of life.

Policy LU2.5 Achieve vehicle trip reduction through comprehensive strategies that designate land uses, establish development and street design standards, implement sidewalks, bicycle and roadway improvements, expand transit service, manage parking and strengthen Transportation Demand Management (TDM) programs that support accessibility by transit, bicycle and foot, and discourage vehicle trips at a district-wide level. Monitor progress using tools that integrate land use and transportation factors. Increase bicycle and pedestrian connectivity in transit districts and adjust bus and shuttle services to ensure success of the transit system.

Policy LU2.6 Focus new development in defined districts to create active spaces that can support diverse local-serving retail and services, walkability, arts and culture. Require, whenever possible, new development to provide convenient and direct pedestrian and bicycle connections.

Goal LU4 Complete Sustainable Neighborhoods – Create complete neighborhoods that exemplify sustainable living practices with open spaces, green connections, diverse housing, local employment, and local-serving businesses that meet the daily needs of residents and reduce vehicle trips and GHG emissions.

Policy LU4.4 Engage pedestrians with ground floor uses, building design, site planning, massing and signage that promote vibrant street life and emphasize transit and bicycle access.

Policy LU4.7 Emphasize pedestrian and bicycle access throughout the City, with a special focus on neighborhood gathering areas. Provide direct and convenient bicycle and pedestrian connections between destinations. Prioritize land use patterns that generate high transit ridership at major transit stops.

Policy LU4.8 Utilize parking and TDM Districts to facilitate efficient use of parking resources, shared and reduced parking opportunities, and trip reduction goals.

Goal LU5 Cluster housing, employment, local-serving retail and services around the Expo Light Rail line to reduce vehicle trips, create complete neighborhoods and support transit.

Policy LU8.1 Require participation in TDM programs for projects above the base to encourage walking, biking, and transit, and to reduce vehicle trips. Engage existing development in TDM Districts and programs to encourage reduction of existing vehicle trips.

Policy LU8.3 Ensure pedestrian, bicycle and transit mobility by creating facilities for comfortable walking throughout the City, a complete and safe bicycle network, and convenient and frequent transit service that will make transit an attractive option for all types of trips.

Policy LU8.4 Prioritize investment in amenities for pedestrian, bicycle, and transit movement to facilitate green connections and mobility.

Improving the Quality of Life

Goal LU15 Encourage well-developed design that is compatible with the neighborhoods, responds to the surrounding context, and creates a comfortable pedestrian environment.

Policy LU15.4 Encourage new development to be open and inviting with visual and physical permeability, connections to the existing street and pedestrian network, and connections to the neighborhoods and the broader community.

Policy LU15.5 Encourage the design of sites and buildings to facilitate easy pedestrian- and bicycle-oriented connections and to minimize the separation created by parking lots and driveways.

Policy LU15.9 Buildings should incorporate pedestrian-scaled elements with durable, quality materials and detailing located on the lower stories adjacent to the pedestrian.

Goal LU16.1 Assure that buildings are sustainable, are environmentally sound and contribute to the City's urban form.

Policy LU17.1 Encourage new ground level open space including, but not limited to landscaped areas, gathering spaces and play areas in new development.

Policy LU17.2 Utilize streets as the largest and most universally accessible public spaces in the community by improving them with landscaping (particularly shade trees) pedestrian facilities and other enhancements that promote active recreation and creates a system of green connections throughout the City.

Goal LU20 Maintain a citywide pattern of street trees to reduce GHGs and heat gain, provide biodiversity, and provide shade to create a comfortable pedestrian environment.

Citywide Neighborhoods

Policy N1.4 Preserve and protect existing neighborhoods against potential impacts related to development: traffic, noise, air quality, and encroachment of commercial activities.

Policy N1.10 Design neighborhood streets to be pedestrian- and bicycle-friendly, to minimize the negative impacts of the automobile, and to be safe and well illuminated.

Goal N3 Locate services and amenities within walking distance of neighborhoods.

Policy N3.3 Create direct and safe pedestrian and bicycle connections between residential areas and nearby boulevards through the provision of improved walkways, greenways, plazas, bicycle trails and open space.

Mid-City Neighborhoods

Goal N24 Ensure that walking and bicycling are safe and comfortable on all neighborhood streets at all times of day.

Sustainability and Climate Change

Goal S4 Increase the use of renewable energy in the City.

Goal S5 Improve the environmental performance of buildings.

Policy S5.1 Continue to maintain a building code and prescriptive compliance options that meet or exceed state requirements for energy, water and other sustainability standards. Specifically, pursue California Energy Commission goals to achieve "zero net" energy buildings by 2020 for low-rise residential buildings and 2030 for commercial buildings and achieve a LEED [Leadership in Energy and Environmental Design] equivalent local building code by 2020.

Policy S5.6 Encourage cool roofs or green roofs on new buildings.

Policy S5.7 Encourage cool paving on new plazas and parking lots.

Policy S5.8 Encourage installation of electrical outlets in loading zones and on the exterior of new buildings to reduce emissions from gas-powered landscape maintenance and operating refrigeration for delivery trucks.

Goal S6 Promote water conservation and increase the use of reclaimed and recycled water.

Policy S6.3 Implement landscape water conservation requirements for new construction projects.

Goal S8 Reduce the amount of solid waste citywide.

Community Enrichment

Policy CE1.6 Continue to enhance tree canopy and coverage through the coordinated citywide tree planting *Urban Forest Master Plan*.

Circulation

Goal T4 Support local and regional air quality, sustainability and GHG emission reduction goals through the management of Santa Monica's streets.

Policy T4.1 Manage the City's transportation system to meet overall CO_2 and Vehicle Miles Traveled reduction goals.

Policy T4.2 Ensure that travel by bicycle and transit is time-competitive with autos.

Goal T8 Provide a beautiful and attractive pedestrian environment throughout the City.

Policy T8.4 Design buildings to prioritize pedestrian access from the street, rather than from a parking lot.

Goal T10 Ensure that the bicycle network is attractive to cyclists of all ages and experience levels.

Policy T10.2 Encourage major employers to provide covered and secure bicycle parking and shower and locker facilities for their bicycle commuters, or to assist in funding bicycle-transit centers in nearby locations.

Santa Monica Sustainable City Plan

The Santa Monica City Council initially adopted the Santa Monica Sustainable City Plan (Sustainability Plan) in September 1994, with updates occurring three times, most recently in January 2014. It was designed to help the City of Santa Monica (City) and the community think, plan, and act more sustainability. The Sustainable City Plan includes goals and strategies for the City and community to conserve and enhance local resources, safeguard human health and the environment, maintain a healthy and diverse economy, and improve the livability and quality of life for all community members in the City. To assess progress on meeting citywide goals, nine target areas were identified: resource conservation, environmental and public health, transportation, sustainability local economy, open space and land use, housing, community education and civic participation, human dignity, and arts and culture. For each target area, numerical indicators were developed to help the City achieve each goal by 2020 (City of Santa Monica 2014).

Santa Monica Municipal Code (SMMC)

The City's Green Building Standards Code (reflected in SMMC Chapters 8.106 and 8.108) and Energy Reach Code (SMMC Chapter 8.36.010) establishes a set of green building and energy efficiency requirements for new buildings. These requirements address energy efficiency (requiring new commercial buildings to be all electric or if mixed fuel, be 10% more efficient than the 2019 California Energy Code), with requirements for solar energy use and provisions for electric vehicle charging capacity. Further, Chapter 8.108 includes requirements for energy efficient landscaping and water conservation; and construction and demolition (C&D) waste recycling, with a required diversion rate for C&D waste of 70 percent. Refer to Section 4.13 Energy of the EIR for a discussion of these regulations.

The SMMC also includes requirements for individual development projects to support alternative modes of transportation, thereby reducing VMT and associated GHG emissions. Section 9.53 of the SMMC, Transportation Demand Management (TDM), includes provisions for development of TDM Plans for individual projects and payment of TDM fees to support City efforts for TDM outreach and Transportation Management Organizations (TMO) formation activities. Refer to Section 4.10 Transportation of the EIR for a discussion of these regulations.

4.6.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts related to GHGs are based on the questions in Appendix G of the State CEQA Guidelines. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). According to Appendix G of the State CEQA Guidelines, a significant impact related to GHG emissions would occur if the proposed project would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The State CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the State CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA.

Section 15064.4(b) of the CEQA Guidelines states that "*in determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonable foreseeable*

incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. "

Further, the CEQA guidelines state the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: the extent a project may increase or reduce GHG emissions compared to the existing environmental setting; whether project emissions exceed a threshold of significance that the lead agency determines applies to the project; and 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 (14 CCR 15064.4(b)). "*In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long term climate goals or strategies, provided that substantial evidence is provided to show how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable*."

There are currently no established thresholds adopted by the State or the City for assessing whether the GHG emissions of a project would be considered a cumulatively considerable contribution to global climate change. Under CEQA, public agencies are encouraged, but not required to, adopt thresholds of significance for environmental impacts. Section 15064.7(c) of the CEQA Guidelines specifies that "*when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence*". A lead agency may also use thresholds on a case-by-case basis. (Id., subd. (b).) Each case must be analyzed in light of its own facts and circumstances. A lead agency may also choose to review a project's environmental impacts using more than one threshold. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact. Regardless of which threshold(s) are used, the agency must support its analysis and significance determination with substantial evidence. (CEQA Guidelines, § 15064.7.)

In a recent document entitled *Draft Discussion: CEQA and Climate Change* paper, OPR has described some of the methods that a lead agency may use in selecting the appropriate threshold below which the lead agency may find an impact is less than significant (OPR 2018). This includes:

a. Efficiency Based Threshold – An efficiency metric (rather than an absolute number) would compare projects of various types, sizes, and locations equally, and determine whether a project is consistent with the State's reduction goals. For example, an efficiency metric for a residential project can be expressed on a per capita basis, and a metric for an office project can be expressed on a per employee basis.

b. Compliance with State Goals and Percentage Reduction from BAU Emissions

c. Consistency with Relevant Regulations, Plans, Policies, and Regulatory Programs

d. Absolute Numerical/Quantitative Threshold

Although the project's GHG emissions have been quantified as discussed under the Methodology section below, neither CARB, SCAQMD, nor the City has adopted quantitative project-level significance thresholds for assessing impacts related to GHG emissions applicable to the project. In the absence of any adopted quantitative threshold and for the proposed project, the determination of whether or not the proposed project would result in a cumulatively considerable contribution to the cumulative impacts of global climate change is based on a combination of thresholds:

- If the project would be consistent with the applicable regulatory plans and policies to reduce GHG emissions, which include CARB's Climate Change Scoping Plan, SCAG's 2020-2045 RTP/SCS, and the City of Santa Monica's LUCE, Sustainable City Plan, Green Building and Energy Code, and Climate Action and Adaptation Plan that set forth a number of GHG reduction strategies and targets.

4.6.4 Methodology

With respect to GHG emissions, the CEQA Guidelines state in CCR Section 15064.4(a) that lead agencies should "*make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate*" GHG emissions. The CEQA Guidelines note that a lead agency shall have the discretion to "*quantify the GHG emissions from a project, and/or rely on a qualitative analysis or other performance based standards*" (14 CCR 15064.4(a)).

A lead agency may take either a quantitative or qualitative approach to the analysis of a GHG impacts. Under either approach, the lead agency's analysis must demonstrate a good-faith effort to disclose the amount and significance of greenhouse gas emissions resulting from a project, based to the extent possible on scientific and factual data. (CEQA Guidelines, § 15064.4, subd. (a).) In its CEQA review of projects, the City of Santa Monica has chosen to provide both a quantitative and qualitative GHG analysis for full disclosure.

The GHG emissions from the proposed project is quantified to disclose the amount, type, and sources of GHG emissions that could occur. Consistent with SCAQMD's guidance, GHG emissions from construction and operation of the proposed project were calculated using the CalEEMod Version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects (CAPCOA 2017). CalEEMod was developed in collaboration with the air districts of California, and is recommended by the SCAQMD. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an

accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.

Construction GHG Emissions

Construction model inputs regarding construction equipment are described in more detail in Section 4.2, Air Quality, of this EIR. In summary, construction emissions for the proposed project are estimated by a applying conservative construction schedule (i.e., assuming construction occurs at the earliest feasible date). This assumes that the project would be constructed over a 23-month period, commencing as early as March 2021 and ending in the January 2023. The SCAQMD guidance, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, recognizes that construction-related GHG emissions from projects "occur over a relatively short-term period of time" and that "they contribute a relatively small portion of the overall lifetime project GHG emissions" (SCAQMD 2008). The guidance recommends that construction project GHG emissions should be "amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies." Accordingly, GHG emissions from construction have been amortized over the 30-year lifetime of the project.

Operational GHG Emissions

Operational GHG emissions were estimated for buildout of the proposed project. The first full year of operation was assumed to be 2024, which is based on the conservative assumption that this will be the earliest year for completion of all construction activities. Operational GHG emissions include those from area sources, energy sources, mobile sources, solid waste, and water/wastewater.

Area Sources

CalEEMod was used to estimate GHG emissions from the project's area sources, including operation of landscape maintenance equipment, which produces minimal GHG emissions. See Section 4.2, Air Quality, for a discussion of landscaping equipment emissions calculations. Consumer product use and architectural coatings result in volatile organic compound emissions, which are analyzed as part of the air quality analysis.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). The estimation of operational energy emissions was based on CalEEMod land use defaults and units or total area (i.e., square footage) of the project's land use. For nonresidential buildings, CalEEMod energy intensity value (electricity or natural gas usage per square foot per year) assumptions were based on the California Commercial End-Use Survey database. Emissions are calculated by multiplying the energy use by the utility carbon intensity (pounds of GHGs per kilowatt-hour

(kWh) for electricity or 1,000 British thermal units for natural gas) for CO_2 and other GHGs. Annual natural gas emissions were estimated in CalEEMod using the default emissions factors. Notably, the Clean Power Alliance would provide electricity to the project site through the purchase of clean energy delivered by Southern California Edison. As discussed in Section 4.6.2, SB X1 2 established a target of 33% from renewable energy sources for all electricity providers in California by 2020. The CO_2 emissions intensity factor for utility energy use in CalEEMod was adjusted consistent with the City's defaulted electricity supplier, Clean Power Alliance, in which 100% of the power mix provided to the proposed project would be generated by eligible renewable sources (City of Santa Monica 2019). In addition, it was assumed that the proposed project would comply with energy efficiency standards of the 2019 Title 24 standards.

For commercial buildings, the City's Green Building Standards requires the installation of a solar photovoltaic (PV) system with a minimum rating of 2 watts per square foot of the building footprint. Because the proposed project's building footprint is approximately 20,181 sf, the proposed project would be required to install a minimum of 40.0 kWh of solar PV panels. As described in Chapter 3, Project Description, the project would have 53 kW of PV panels.

Mobile Sources

CalEEMod was used to estimate daily emissions from proposed vehicular sources. CalEEMod default data, including temperature, trip characteristics, variable start information, emissions factors, and trip distances, were used for the model inputs. The trip generation rates were updated according to the land uses (Clinical/Medical Office, Research and Development) provided in the *1242 20th Street Wellness Center Project – Non-CEQA Traffic Analysis Memorandum* (Fehr and Peers 2020). As indicated in the Non-CEQA Traffic Analysis Memorandum, the proposed project would result in 1,287 weekday trips. Notably, trip generation for the proposed project accounts for trip reductions from the implementation of transportation demand management (TDM) measures. Because weekend trip generation rates were not provided in the Non-CEQA Traffic Analysis Memorandum, CalEEMod default Saturday and Sunday trip generation rates were adjusted based on weekday trip generation rates per land use type.

Solid Waste

The project would generate solid waste, and therefore, result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were updated to estimate GHG emissions associated with solid waste. The proposed project would result in approximately 536,550 lbs per year or 268.28 tons per year.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the proposed project would require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the proposed project would require the use of electricity for conveyance and treatment, along with GHG emissions

generated during wastewater treatment. Water consumption for indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated for the proposed project using CalEEMod default values.

Project Consistency with GHG Reduction Plans

OPR's CEQA Guidelines encourage lead agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. Section 15183.5 of the CEQA Guidelines states that a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted mitigation program, or plan for the reduction of GHG emissions.

The analysis of the project's consistency with GHG reduction plans includes a review of the CARB's Climate Change Scoping Plan (last updated in May 2014). The Scoping Plan provides strategies and recommendations for achieving the AB 32 target, and the California CAT Report provides recommendations for specific emission reduction strategies for reducing GHG emissions and reaching the targets established in AB 32 and Executive Order S-3-05.

Additionally, the analysis reviews the project against the City's CAAP. The intent of the CAAP is to provide overarching policy direction with respect to climate change through Citywide objectives and broad strategies to reduce GHG emissions. The CAAP is not a regulatory plan to be applied directly to individual development projects. Rather, the City recognizes that GHG reduction goals cannot be achieved by individual projects alone, but instead requires a comprehensive Citywide approach that would include the enactment of future plans, changes to existing ordinances, and an integrated and sustainable approach to land use/transportation planning. The discussion of whether the proposed project would impede or conflict with the draft CAAP is intended as informational only to inform the planning process and does not constitute findings of environmental impacts related to GHG.

The City has also adopted the LUCE, SCP, and Green Building and Energy Reach Code that include goals, policies and actions for the purpose of reducing local GHG emissions. A determination is made as to whether the proposed project would conflict with the goals, policies and actions in the aforementioned plans and regulations.

Applicable Project Design Features

To reduce project-generated construction emissions, the proposed project would implement the following project design features:

PDF-GHG-1 **Transportation Demand Management**. The project is required to implement a Transportation Demand Management (TDM) Plan per the City of Santa Monica TDM Ordinance (Chapter 9.53 of the Santa Monica Municipal Code) that would include physical

and programmatic elements to reduce single occupancy vehicle trips and achieve the targeted average vehicle ridership (AVR) of 2.0 for the Healthcare Mixed Use District.

The project would be required to provide each employee with information about carpooling/vanpooling, transit, air pollution, bicycle routes and facility, walking and pedestrian safety, and alternatives to driving alone to work every day. Furthermore, the project would be required to prepare an Emission Reduction Plan, which shall include the option of 1) purchase of mobile source emission reduction credits or 2) preparation and implementation of Employee Trip Reduction Plan to achieve the applicable AVR target of 2.0. Annual monitoring is a requirement of the developer TDM Plan.

PDF-GHG-2 **Green Building Standards.** The proposed project would be required to meet or exceed the City's Green Building Standards and the Energy Reach Code requirements (Sections 8.106, 8.108, and 8.36.030 of SMMC). This includes the installation of solar electric photovoltaic systems with a minimum total wattage 2.0 times the square footage of the building footprint (2.0 watts per square foot).

4.6.5 Impacts Analysis

Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As stated in Section 4.6.3 above, the significance determination for GHGs are based on project consistency with the applicable regulatory plans and policies to reduce GHG emissions, which include CARB's Climate Change Scoping Plan, SCAG's 2020-2045 RTP/SCS, and the City of Santa Monica's LUCE, Sustainable City Plan, Green Building and Energy Code, and Climate Action and Adaptation Plan that set forth a number of GHG reduction strategies and targets. Plan and policy consistency analyses are presented below under the "Consistency Analysis" subheading. In addition, the proposed project's GHG emissions have been quantified below for informational purposes only under the "GHG Emissions" subheading.

GHG Emissions

Construction

Construction of the proposed project would result in GHG emissions that would primarily be associated with the use of off-road construction equipment, on-road hauling and vendor trucks, and worker vehicles. On-

site sources of construction GHG emissions include off-road equipment and off-site sources, including haul trucks, vendor trucks, and worker vehicles. CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 4.2 of this EIR. Construction of the proposed project is anticipated to commence as early as March 2021, ending in January 2023, for a total duration of approximately 23 months.

Table 4.6-3 presents construction emissions for the proposed project for 2021 through 2023.

Table 4.6-3
Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2021	567.72	0.06	0.00	569.20
2022	346.13	0.04	0.00	347.04
2023	3.66	<0.01	0.00	3.67
Total	**917.51**	**0.10**	**0.00**	**919.91**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent
See Appendix B for complete results.

As discussed in Section 4.6.3, Thresholds of Significance, per SCAQMD guidance, construction emissions should be amortized over the operational life of the project, which is assumed to be 30 years (SCAQMD 2008). Amortized construction emissions are discussed under "Operational Impacts," below.

Operational

Long-term operations of the proposed project would result in GHG emissions through mobile sources and area sources (landscape maintenance equipment); energy use (natural gas and generation of electricity consumed by the proposed project); generation of electricity associated with wastewater treatment and with water supply, treatment, and distribution; and solid waste disposal. Annual GHG emissions from these sources were estimated using CalEEMod.

The estimated operational GHG emissions from project area sources, energy consumption, solid waste, water consumption, and wastewater treatment associated with the proposed project in 2024 are shown in Table 4.6-4. Details of the emission calculations are provided in Appendix B.

Table 4.6-4
Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	0.01	<0.01	0.00	0.01
Energy (natural gas and electricity)	47.79	<0.01	<0.01	48.07

Table 4.6-4
Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Mobile	900.93	0.04	0.00	901.98
Solid waste	54.46	3.22	0.00	134.92
Water supply and wastewater	7.34	0.75	0.02	31.48
Construction (amortized over 30 years)	—	—	—	*30.66*
			Total Emissions	**1,147.12**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
See Appendix B for complete results.
Project GHG emissions are based on the "mitigated" CalEEMod outputs which includes incorporation of the City's Solar Ordinance which would require a minimum of 40 kWh of solar PV panels to be installed.

Table 4.6-4 indicates that the GHG emissions associated with development of the proposed project would be approximately 1,147 MT CO_2e per year and is included here for informational purposes. As stated above, significance of the proposed project in the category of GHG emissions is determined based on the GHG plan and policy consistency analysis presented below.

Consistency Analysis

Consistency Analysis with the Santa Monica Sustainable City Plan

The City adopted its Sustainable City Plan in September 1994 (most recently updated in January 2014), which is a long-term plan to reduce GHG emissions from municipal operations and community activities within the City, and would also help Santa Monica become a more "sustainable" city. To become a more sustainable city, the Sustainability City Plan identifies a series of goal areas to help guide the City in the areas of resource conservation, environmental and public health, transportation, local economy, open space and land use, housing, community education and civic participation, human dignity, and arts and culture. Targets that are applicable to the proposed project include meeting the City's waste diversion goal, reducing the amount of water, energy, and fuels consumed, decreasing the reliance on automobiles, and demonstrating energy efficiency in new development. The proposed project would comply with the sustainability requirements included in the State and City codes, including use of energy-efficient heating, ventilation, and air conditioning (HVAC) systems, light-emitting diode (LED) lighting, low-flow plumbing equipment, Energy Management Systems which would control lighting and HVAC, and compliance with waste recycling requirements defined in the Zero Waste Strategic Operations Plan. Furthermore, the proposed project would develop a TDM plan, as required by the City's TDM Ordinance. The TDM plan would include a variety of trip reduction strategies such as transit pass subsidy, parking cash out, ridesharing, bicycle facilities, priority carpool parking, etc.

Table 4.6-5 and Table 4.6-6 provides an overview of applicable measures and goals within the Sustainable City Plan and CAAP and the proposed project's consistency with them. As shown in Tables 4.6-5 and 4.6-6, the proposed project does not conflict with any of the GHG-reducing measures or goals within the Sustainable City Plan and CAAP and thus is consistent with these Plans.

Table 4.6-5
Proposed Project Consistency with the Sustainable City Plan Greenhouse Gas Emission Reduction Strategies

Sustainable City Plan Targets	Proposed Project Consistency
Resource Conservation	
Do not exceed year waste consumption 2000 levels, reduce per capita generation to 2.4 lbs per person per day, and achieve an 85% diversion rate.	*Consistent*. The proposed project would divert as much waste during construction as possible with on-site recycling containers to support the city's recycling goal; and meet the construction waste diversion of at least 70 percent from landfills. During construction, all wastes would be recycled to the maximum extent possible and would comply with CALGreen's requirement of 65% of construction and demolition waste being diverted from landfills. Meeting these standards would reduce energy consumption and water consumption.
Reduce citywide water demand by 1,300,000 gallons per day (GPD). Reduce per capita use to 123 gallons per capita per day (GPCD) (500,000 GPD).	*Consistent*. The proposed project would be developed to meet the latest water efficiency standards, and thus would support the Citywide goal to reduce water demand.
Reduce community GHG emissions 20% below 1990 levels and reduce corporate GHG emissions 30% below 1990 levels.	*Consistent*. The proposed project would develop an employment project in the HMU district in proximity to transit, and as such would be consistent with LUCE goals to reduce vehicle miles traveled and GHG emissions. As such, the proposed project would not inhibit the City from achieving the GHG goals established
Transportation	
Create a multi-modal transportation system that minimizes and, where possible, eliminates pollution and motor vehicle congestion while ensuring safe mobility and access for all without compromising our ability to protect public health and safety. Facilitate a reduction in automobile dependency in favor of affordable alternative, sustainable modes of travel.	*Consistent*. These two Transportation Goals pertain to the overall development patterns within the City, and are consistent with the City's efforts to increase development density along transportation corridors. The proposed project would complement the overall goal, and would implement features that are supportive of efforts to reduce vehicle miles traveled.

Table 4.6-5
Proposed Project Consistency with the Sustainable City Plan Greenhouse Gas Emission Reduction Strategies

Sustainable City Plan Targets	Proposed Project Consistency
	The proposed project would be accessible to numerous public transportation services within a quarter-mile of the project site as well as walking distance to the Metro E Light Rail, close proximity to multiple other destinations including job centers and residential uses. The project site is located one block north of the Broadway bike path, which is the City's major east-west bike corridor. Additionally, the project would provide on-site bike racks in accordance with the City's requirements. These features would minimize vehicle trips and encourage employees to utilize alternative modes of transportation including public transportation, walking, and bicycling. The new development would also pay traffic impact fees and provide transportation demand management programs (TDMs) pursuant to SMMC Sections 9.53 and 9.66.
Increase the amount of pedestrian facilities annually.	*Consistent*. The proposed project would contribute to the existing neighborhood and create a pedestrian-oriented design along the 20th Street frontage. Design elements included as a part of the proposed project would include, transparent windows, publicly accessible open space, and thoughtful landscaping improvements to create a continuous and pleasant pedestrian experience between Wilshire Boulevard and Santa Monica Boulevard.
Increase the amount of bicycle facilities annually.	*Consistent*. The proposed project would provide ample on-site bicycle storage facilities for employees, patrons, and visitors.

Source: City of Santa Monica 2019.

Table 4.6-6
Proposed Project Consistency with the Climate Action and Adaptation Plan

Sustainable City Plan Targets	Proposed Project Consistency
Zero Net Carbon Buildings	
Objective 1. Achieve 100 percent renewable grid electricity. Objective 2. Install 100 MW of local solar energy. Objective 3. Reduce fossil fuel use 20 percent in existing buildings. Objective 4. Discourage fossil fuels in new buildings.	*Consistent*. The energy needs for operation of the project would be minimized as the proposed project would be designed to meet the applicable energy efficiency requirements of the City's Green Building Standards and Energy Reach Code. The project would include PV panels on the roof decks that would provide a minimum of 2 kilowatts per sf of building footprint. Additionally, the proposed project would automatically be defaulted receive its energy from the Clean Power Alliance (which uses 100 percent renewable energy sources).

Table 4.6-6
Proposed Project Consistency with the Climate Action and Adaptation Plan

Sustainable City Plan Targets	Proposed Project Consistency
Sustainable Mobility	
Objective 6. Convert 50 percent of local trips to foot, bike, scooter & skateboard. Objective 7. Convert 25 percent of commuter trips to transit.	Consistent. The proposed project would contribute to the existing neighborhood and create a pedestrian-oriented design along the 20th Street frontage. The proposed project would also provide on-site bicycle parking and implement a TDM plan with measures to reduce vehicle trips/VMT and promote alternative transportation. By locating new employment opportunities in the HMU District, employees and visitors of the proposed Project would have access to existing public transit (e.g., Metro buses, Metro E Light Rail, etc.).

Consistency with SCAG 2020–2045 RTP/SCS

At the regional level, SCAG has adopted the Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the purpose of reducing GHG emissions attributable to passenger vehicles in the City and surrounding areas. Although the RTP/SCS does not regulate land use or supersede the exercise of land use authority by SCAG's member jurisdictions (e.g., the City), the RTP/SCS is a relevant regional reference document for purposes of evaluating the connection of land use and transportation patterns and the corresponding GHG emissions. The 2020-2045 RTP/SCS provides broad direction and guidance for future development – encouraging the development of new uses in areas well served by transit, and in urban infill areas (SCAG 2020). As an employment center project within proximity to the Big Blue Bus routes and the Metro E Light Rail, the proposed project would support the goals and policies of the 2020-2045 RTP/SCS. Additionally, redevelopment of the project site would support the overarching intent of the 2020-2045 RTP/SCS by avoiding sprawling development. The proposed project is located adjacent to existing commercial and residential uses and would connect these uses to create cohesive infill development.

Consistency with CARB's Scoping Plan

As discussed in Section 4.6.2, the Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations.[3] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and

[3] The Final Statement of Reasons for the amendments to the State CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. Table 4.6-7 highlights measures that have been, or will be, developed under the Scoping Plan and the proposed project's consistency with Scoping Plan measures. To the extent that these regulations are applicable to the proposed project, its inhabitants, or uses, the proposed project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

Table 4.6-7
Proposed Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	*Consistent*. The proposed project's employees and visitors would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low-Carbon Fuel Standard	T-2	*Consistent*. Motor vehicles driven by the proposed project's employees and visitors would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	*Consistent*. The proposed project's location near mass transit services which would reduce dependence on passenger vehicle trips and shorter trip lengths, which would reduce GHG emissions.
Advanced Clean Transit	Proposed	Not applicable.
Last-Mile Delivery	Proposed	Not applicable.
Reduction in VMT	Proposed	Not applicable.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	*Consistent*. Motor vehicles driven by the proposed project's employees and visitors would maintain proper tire pressure when their vehicles are serviced. Vehicles would replace tires in compliance with CARB vehicle standards that are in effect at the time of vehicle or tire purchase. Motor vehicles driven by the project's employees would use low-friction oils when their vehicles are serviced. The project's employees and the City would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Ship Electrification at Ports (Shore Power)	T-5	Not applicable.
Goods Movement Efficiency	T-6	Not applicable.

Table 4.6-7
Proposed Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction		
Heavy-Duty Vehicle GHG Emission Reduction • Tractor-Trailer GHG Regulation • Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	Not applicable.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Proposed Project	T-8	Not applicable.
Medium and Heavy-Duty GHG Phase 2	Proposed	Not applicable.
High-Speed Rail	T-9	Not applicable.
Electricity and Natural Gas Sector		
Energy Efficiency Measures (Electricity)	E-1	*Consistent*. The proposed project will comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards. Furthermore, the proposed project would incorporate passive design to reduce energy use, including making use of local climate conditions, efficient systems, and would incorporate use of solar PV panels.
Energy Efficiency (Natural Gas)	CR-1	Not applicable.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	*Consistent*. The proposed project would include solar water heating where feasible.
Combined Heat and Power	E-2	Not applicable.
Renewable Portfolios Standard (33% by 2020)	E-3	*Consistent*. The electricity used by the proposed project will benefit from reduced GHG emissions resulting from increased use of renewable energy

Table 4.6-7
Proposed Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
		sources.
Renewable Portfolios Standard (50% by 2050)	Proposed	*Consistent*. The electricity used by the proposed project will benefit from reduced GHG emissions resulting from increased use of renewable energy sources. Electricity would be provided by the Clean Power Alliance in which 100% of the electricity provided would be from renewable sources.
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	*Consistent*. As required by the City, on-site generation of renewable energy using solar panels will be included on rooftop space available to offset a portion of the proposed project's electricity consumption. However, specifications regarding the size of rooftop solar incorporated is unknown.
Water Sector		
Water Use Efficiency	W-1	*Consistent*. The proposed project would be required to comply with statewide water conservation requirements reducing water usage by 20%. Furthermore, low-flow plumbing equipment would be installed including waterless urinals, two flush toilets, and automated restroom faucets.
Water Recycling	W-2	Not applicable. Recycled water is not available to the site.
Water System Energy Efficiency	W-3	Not applicable. This is applicable for the transmission and treatment of water, but it is not applicable for the proposed project.
Reuse Urban Runoff	W-4	Not applicable. The proposed project would not reuse urban water on-site.
Renewable Energy Production	W-5	Not applicable. Applicable for wastewater treatment systems. Not applicable for the proposed project.
Green Buildings		
1. State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	*Consistent*. The proposed project would be required to be constructed in compliance with state or local green building standards in effect at the time of building construction.
2. Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	*Consistent*. The proposed project would meet green building standards that are in effect at the time of design and construction.
3. Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	*Consistent*. The proposed project would be required to be constructed in compliance with local green building standards in effect at the time of building construction.

Table 4.6-7
Proposed Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
4. Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	Not applicable. This is applicable for existing buildings only. It is not applicable for the project except as future standards may become applicable to existing buildings.
Industry Sector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	Not applicable.
Oil and Gas Extraction GHG Emission Reduction	I-2	Not applicable.
Reduce GHG Emissions by 20% in Oil Refinery Sector	Proposed	Not applicable.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	Not applicable.
Refinery Flare Recovery Process Improvements	I-4	Not applicable.
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks	I-5	Not applicable.
Recycling and Waste Management Sector		
Landfill Methane Control Measure	RW-1	Not applicable.
Increasing the Efficiency of Landfill Methane Capture	RW-2	Not applicable.
Mandatory Commercial Recycling	RW-3	*Consistent*. During both construction and operation, the proposed project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act, as amended. During construction, all wastes would be recycled to the maximum extent possible.
Increase Production and Markets for Compost and Other Organics	RW-3	Not applicable.
Anaerobic/Aerobic Digestion	RW-3	Not applicable.
Extended Producer Responsibility	RW-3	Not applicable (applicable to product designer and producers).
Environmentally Preferable Purchasing	RW-3	Not applicable (applicable to product designer and producers).
Forests Sector		
Sustainable Forest Target	F-1	Not applicable.
High GWP Gases Sector		

Table 4.6-7
Proposed Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	*Consistent*. The proposed project's employees would be prohibited from performing air conditioning repairs and would be required to use professional servicing.
SF_6 Limits in Non-Utility and Non-Semiconductor Applications	H-2	Not applicable.
Reduction of Perfluorocarbons (PFCs in Semiconductor Manufacturing	H-3	Not applicable.
Limit High GWP Use in Consumer Products	H-4	*Consistent*. The proposed project would use consumer products that would comply with the regulations that are in effect at the time of manufacture.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	*Consistent*. Motor vehicles driven by project employees would comply with the leak test requirements during smog checks.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	Not applicable.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	Not applicable.
SF_6 Leak Reduction Gas Insulated Switchgear	H-6	Not applicable.
40% reduction in methane and hydrofluorocarbon (HFC) emissions	Proposed	Not applicable.
50% reduction in black carbon emissions	Proposed	Not applicable.
Agriculture Sector		
Methane Capture at Large Dairies	A-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.

Source: CARB 2008 and CARB 2017b.
Notes: CARB = California Air Resources Board; CCR = California Code of Regulations; GHG = greenhouse gas; GWP = global warming potential; SB = Senate Bill; SF_6 = sulfur hexafluoride

Based on the analysis in Table 4.6-7, the proposed project would be consistent with the applicable strategies and measures in the CARB Scoping Plan.

Consistency with SB 32 and EO S-3-05

The proposed project would not impede the attainment of the most recent State GHG reduction goals identified in EO S-3-05 and SB 32. As discussed in Section 4.6.2, SB 32 establishes a statewide goal of reducing GHG emissions to 40% below 1990 levels by 2030 while EO S-3-05 establishes a statewide goal of reducing GHG emissions to 80% below 1990 levels by 2050. While there are no established protocols or thresholds of significance for that future year analysis; CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping states that the level of reduction is achievable in California (CARB 2014). In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and EO S-3-05. This is confirmed in the 2017 Scoping Plan, which states (CARB 2017b):

> The Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Scoping Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

The proposed project would not interfere with implementation of any of the above-described GHG reduction goals for 2030 or 2050 because the proposed project would not result in GHG emissions that would either directly or indirectly have a significant impact on the environment. This analysis provides support for the conclusion that the project would not impede the state's trajectory toward the above-described statewide GHG reduction goals for 2030 or 2050.

As discussed previously, the proposed project is consistent with the City's Sustainable City Plan, Climate Action and Adaptation Plan, LUCE, SCAG's Connect SoCal 2020-2045 RTP/SCS, and CARB's 2017 Scoping Plan, and would not conflict with the state's trajectory toward future GHG reductions. In September 2018, EO B-55-18 was signed which commits the state to total carbon neutrality by 2045. However, since the specific path to compliance for the state in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the proposed project would be speculative and cannot be identified at this time. The proposed project's consistency would assist in meeting the City's contribution to GHG emission reduction targets in

California. With respect to future GHG targets under SB 32 and EO S-3-05, CARB has also made clear its legal interpretation is that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet SB 32's 40% reduction target by 2030 and EO S-3-05's 80% reduction target by 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the state on its trajectory toward meeting these future GHG targets. Based on the considerations previously outlined, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. This impact would be **less than significant**.

4.6.6 Cumulative Impacts

As previously discussed in Section 4.6.1, Existing Conditions, the analysis of GHG emissions and climate change impacts are inherently cumulative in nature. As shown in Section 4.6.5, the proposed project would not conflict with adopted GHG plans, policies, or regulations. Therefore, the proposed project's contribution to GHG emissions would not be cumulatively considerable and would be **less than significant**.

4.6.7 Mitigation Measures

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

4.6.8 Level of Significance After Mitigation

Impacts from GHGs as a result of implementing the proposed project would be **less than significant**. Therefore, no mitigation is required.

4.6.9 References

CalRecycle (California Department of Resources, Recycling and Recovery). 2015. *AB 341 Report to the Legislature*. August 2015.

CAPCOA (California Air Pollution Control Officers Association). 2017. *California Emissions Estimator Model (CalEEMod) User's Guide Version 2016.3.2*. Prepared by BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. Accessed December 2017. http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

CARB (California Air Resources Board). 2008. *Climate Change Scoping Plan: A Framework for Change*. December 12, 2008. http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf.

CARB. 2011. "Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider the "LEV III" Amendments to the California Greenhouse Gas and Criteria Pollutant Exhaust and Evaporative Emission Standards and Test Procedures and to the On-Board

Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, and to the Evaporative Emission Requirements for Heavy-Duty Vehicles." December 7, 2011. https://www.arb.ca.gov/regact/2012/leviiidtc12/dtcisor.pdf.

CARB. 2014. *First Update to the Climate Change Scoping Plan Building on the Framework Pursuant to AB 32 – The California Global Warming Solutions Act of 2006.* May 2014. http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

CARB. 2016. "AB 32 Scoping Plan." CARB Website Tracking Progress on the 2030 Scoping Plan Update. December 2, 2016. https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm.

CARB 2017a. "Glossary of Terms Used in GHG Inventories." Last updated June 6, 2017. https://www.arb.ca.gov/cc/inventory/faq/ghg_inventory_glossary.htm.

CARB. 2017b. *The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target*. January 20, 2017. Accessed January 2017. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

CARB. 2019. "California Greenhouse Gas Emission Inventory—2019 Edition." August 12, 2019. Accessed August 2019. http://www.arb.ca.gov/cc/inventory/data/data.htm.

CAT (California Climate Action Team). 2006. *Final 2006 Climate Action Team Report to the Governor and Legislature*. Sacramento, California: CAT. March 2006. http://www.climatechange.ca.gov/climate_action_team/reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF.

CAT. 2010. *Climate Action Team Biennial Report*. Sacramento, California: CAT. April 2010. Accessed February 2014. http://www.energy.ca.gov/2010publications/CAT-1000-2010-004/CAT-1000-2010-004.PDF.

CCCC (California Climate Change Center). 2012. *Our Changing Climate 2012: Vulnerability & Adaptation to the Increasing Risks from Climate Change in California*. July 2012. Accessed August 2016. http://www.energy.ca.gov/2012publications/CEC-500-2012-007/CEC-500-2012-007.pdf.

CEC (California Energy Commission). 2015. *2015 Integrated Energy Policy Report.* CEC-100-2015-001-CMF. Accessed September 25, 2017. http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-01/TN212017_20160629T154354_2015_Integrated_Energy_Policy_Report_Small_File_Size.pdf.

CEC. 2018. 2019 Building Energy Efficiency Standards – Frequently Asked Questions. https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf.

City of Santa Monica. 2014. *Sustainability City Plan*. Accessed April 2018. https://www.smgov.net/uploadedFiles/Departments/OSE/Categories/Sustainability/Sustainable-City-Plan.pdf.

City of Santa Monica. 2017. 2010 Land Use and Circulation Element. Last amended 2017. Accessed December 2017. https://www.smgov.net/Departments/PCD/Plans/2010-Land-Use-and-Circulation-Element/.

City of Santa Monica. 2019. Energy – Clean Power Alliance Utility. Accessed March 2019. https://www.smgov.net/Departments/OSE/Categories/Energy/Clean_Power_Alliance_Utility.aspx.

CNRA (California Natural Resources Agency). 2009. *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97*. December 2009.

CNRA. 2014. *Safeguarding California: Reducing Climate Risk: An Update to the 2009 California Climate Adaptation Strategy.* July 2014. Accessed May 2017. http://resources.ca.gov/docs/climate/Final_Safeguarding_CA_Plan_July_31_2014.pdf.

CNRA. 2016. *Safeguarding California: Implementation Action Plans*. March. Accessed May 2017. http://resources.ca.gov/docs/climate/safeguarding/Safeguarding%20California-Implementation%20Action%20Plans.pdf.

CNRA. 2017. *Draft Report Safeguarding California Plan: 2017 Update.* May. Accessed August 2017. http://resources.ca.gov/wp-content/uploads/2017/05/DRAFT-Safeguarding-California-Plan-2017-Update.pdf.

CNRA. 2018. *Safeguarding California Plan: 2018 Update*. January. Accessed February 2018. http://resources.ca.gov/docs/climate/safeguarding/update2018/safeguarding-california-plan-2018-update.pdf.

CPUC (California Public Utilities Commission). 2013. "California's Zero Net Energy Policies and Initiatives." September 18, 2013. http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=10718.

EPA (U.S. Environmental Protection Agency). 2016. "Glossary of Climate Change Terms." August 9, 2016. Accessed August 2016. https://www3.epa.gov/climatechange/glossary.html.

EPA. 2017. "Climate Change." Last updated January 19, 2017. Accessed January 2017. https://www.epa.gov/climatechange.

EPA. 2020. *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990–2018*. EPA 430-R-20-002. April 31, 2020. Accessed April 29, 2020. .

EPA and NHTSA (Department of Transportation's National Highway Traffic Safety Administration). 2018. *The Safer Affordable Fuel-Efficient 'SAFE' Vehicles Rule for Model Years 2021-2026 Passenger Vehicles and Light Trucks*. Proposed Rule August 2018. Accessed May 2019. https://www.govinfo.gov/content/pkg/FR-2018-08-24/pdf/2018-16820.pdf.

Fehr and Peers. 2020. *1242 20th Street Wellness Center Project – Non-CEQA Traffic* Analysis. Memorandum. November 25, 2020. Prepared by Fehr and Peers for the City of Santa Monica.

IPCC (Intergovernmental Panel on Climate Change). 1995. *IPCC Second Assessment Synthesis of Scientific-Technical Information Relevant to Interpreting Article 2 of the U.N. Framework Convention on Climate Change*.

IPCC. 2007. "Summary for Policymakers." In *Climate Change 2007: The Physical Science Basis*, edited by S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller, 1–18. A Report of Working Group I of the IPCC. New York, New York, Cambridge University Press. Accessed September 2017. https://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf.

IPCC. 2013. *Climate Change 2013: The Physical Science Basis*. *Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Edited by T.F. Stocker, D. Qin, G.K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P.M. Midgley. New York, New York: Cambridge University Press. http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf.

IPCC. 2014. *Climate Change 2014: Synthesis Report*. Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. https://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.

OPR (California Governor's Office of Planning and Research). 2018. *Discussion Draft CEQA and Climate Change Advisory*. Discussion Draft Climate Change Advisory (ca.gov)

PBL (PBL Netherlands Environmental Assessment Agency). 2017. Trends in Global CO_2 and Total Greenhouse Gas Emissions, 2017 Report. Accessed June 2018. http://www.pbl.nl/sites/default/files/cms/publicaties/pbl-2017-trends-in-global-co2-and-total-greenhouse-gas-emissons-2017-report_2674.pdf.

SCAG (Southern California Association of Governments). 2012. *2012–2035 Regional Transportation Plan/Sustainable Communities Strategy*. Adopted April 2012. Accessed December 2016. http://rtpscs.scag.ca.gov/Pages/2012-2035-RTP-SCS.aspx.

SCAG. 2016. *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy*. Adopted April 2016. Accessed December 2016. http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx.

SCAG. 2020. *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*, Connect SoCal. Accessed May 2020.

SCAQMD (South Coast Air Quality Management District). 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. October 2008.

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4.7 HAZARDS AND HAZARDOUS MATERIALS

This section describes the existing conditions related to hazards and hazardous materials within the vicinity of the project site, identifies associated regulatory requirements, and evaluates potential hazards/hazardous materials impacts with implementation of the proposed project.

Information contained in this section is based on hazardous materials assessments that were conducted for the project site, as well as the Safety Element of the City of Santa Monica (City) General Plan (City of Santa Monica 1995). The site-specific hazardous materials assessments consist of an *Environmentally Regulated Materials Survey Report*, dated August 2016 and prepared by Citadel Environmental Services, Inc. (Citadel) and a *Phase I Environmental Site Assessment for Commercial Properties – Crematorium and Apartment Housing – 1925 Arizona Street & 1242 20th Street, Santa Monica, California*, dated June 2015 and prepared by Northgate Environmental Management, Inc. (Northgate). These reports are included in Appendix E of this EIR.

Hazardous Materials Definition

The term "hazardous materials" refers to hazardous substances and hazardous waste. Under federal and state laws, any substance, including waste, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (i.e., causes adverse health effects), ignitable (i.e., has the ability to burn), corrosive (i.e., causes severe burns or damage to materials), or reactive (i.e., causes explosions or generates toxic gases). Hazardous materials are any materials that, because of quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment (California Health and Safety Code, Chapter 6.95, Section 25501(n)(1)). Hazardous wastes are hazardous substances that no longer have a practical use such as material that has been abandoned, discarded, spilled, contaminated, or is being stored prior to proper disposal.

In some cases, past industrial or commercial activities on a site may have resulted in spills or leaks of hazardous materials to the ground, resulting in soil and/or groundwater contamination. Hazardous materials may also be present in building materials and released during building demolition or renovation activities. If improperly handled, hazardous materials and wastes can cause public health hazards when released to the soil, groundwater, or air. The four basic exposure pathways through which an individual can be exposed to a chemical agent include inhalation, ingestion, bodily contact, and injection. Exposure can come as a result of an accidental release during transportation, storage, or handling of hazardous materials. Disturbance of subsurface soil during construction can also lead to exposure of workers or the public from stockpiling, handling, or transportation of soils contaminated by hazardous materials from previous spills or leaks.

One of the purposes of hazardous materials studies, such as a Phase I Environmental Site Assessment, is to identify whether any "recognized environmental conditions" (RECs) exist on a site. The American Society for Testing and Materials (ASTM) defines RECs as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimus conditions, a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies, are not RECs.

4.7.1 Existing Environmental Conditions

As part of the Phase I Environmental Site Assessment (ESA) that was conducted for the proposed project (see Appendix E), the existing and historical uses of the project site and its surroundings were assessed through a review of historical aerial photographs and topographic maps, regulatory agency records, interviews, information obtained online, and a site reconnaissance. This information, which is summarized below, enables identification of potentially hazardous conditions on or near the project site.

Existing Hazards/Hazardous Materials

Under current conditions, the project site is occupied by a restaurant housed in the former Gates, Kingsley, & Gates Funeral Home (referred to as the GKGM Building), which is a 2-story Tudor Revival-style structure with a connected 4-car garage, and a surface parking lot. The project site is also developed with two 2-story structures (one 7-unit building and one 3-unit building) currently leased as office space (formerly used as residential), as well as surface parking spaces adjacent to the buildings.

Based on the Phase I ESA field reconnaissance, no indications of current activities or uses on adjacent properties were observed that would have an impact on the environmental conditions of the project site.

Historical Land Uses

Project Site

According to the Phase I ESA, the project site has been developed since the 1910s. The earliest uses of the project site appear to be residential in nature. Sanborn Maps dated for 1918 show one dwelling on the northern portion of the project site and a shed located along the alleyway to the south. An additional dwelling was located where the existing apartment building currently stands.

The GKGM Building was constructed on the project site in 1933. The funeral home business was in operation until 2016, when the GKGM Building was vacated. (A portion of this building is now occupied by a restaurant, as described above.) Two apartment buildings were constructed on the project site in 1956

and 1965. The apartments are located north of the GKGM Building. The apartments were also vacated in 2016 but are now leased as offices.

Based on site investigations, a number of potentially hazardous materials were used on-site in association with the former funeral home operations. Embalming activities using formaldehyde were conducted within a preparation room on the first floor of the funeral home. Waste from this process was disposed via sewer lines connected to the City's sewer system. However, at the time the building was vacated in 2016, the preparation room no longer served as an embalming area and was instead used for storage. Embalming was no longer occurring on-site. No potentially hazardous environmental conditions were identified in association with the previous embalming activities at the project site.

The funeral home also had a second floor, consisting of two former apartment units, which were converted to offices. There were no observations of any hazardous materials or potential environmental concerns in the office areas of the funeral home. According to interviews with funeral home personnel, cremation processes were never conducted on-site.

The funeral home also included a garage and automobile service bay for the funeral home vehicles, which were located adjacent to the main funeral home and chapel structure. The garage was used until the time the building was vacated, but the automobile servicing activities had ceased prior to vacation of the building. During the site reconnaissance, a vent pipe extending the length of the garage was observed, in the vicinity of the former service bay, with a roof vent. This vent pipe and vent may indicate the presence of a former gasoline or waste oil tank that was used for vehicle maintenance in the service bay. However, there was no other evidence of underground or aboveground storage tanks on the project site. The possible presence of a storage tank is identified as a potential REC.

Surrounding Land uses

The project area has been developed with auto garages and churches since the 1920s. Between 1920 and 1950, the area experienced rapid growth and was mostly developed by the 1950s. A church has existed to the northwest of the project site since the 1950s. Several auto garages were located along the alleyway to the south of the project site. Some of the auto-related uses were in operation until the 1990s; however, the properties along the alleyway to the south of the project site are now residential. Similarly, several properties along Wilshire Boulevard were previously developed with drycleaners. Based on these previous uses within the site vicinity, there is the potential that soil and/or groundwater contamination underlies the project site. The possible presence of contamination on the project site is identified as a potential REC.

Regulatory Database Review

As part of the Phase I ESA, Northgate reviewed a regulatory database search that was conducted by Environmental Database Resources, Inc. (EDR). The database search helps identify the use, generation, storage, treatment, or disposal of hazardous materials or release incidents of such materials on or near the

project site. The database search included the following databases: National Priority List; Comprehensive Environmental Response, Compensation, and Liability Information System; Resource Conservation Recovery Information System; lists of underground storage tanks; and lists of leaking underground storage tanks. Northgate also conducted a review of the following: the Department of Toxic Substances Control (DTSC) EnviroStor website; State Water Resources Control Board (SWRCB) GeoTracker website; and, records held at the Santa Monica Fire Department (SMFD), the City of Santa Monica Office of Sustainability and the Environment, Los Angeles County Department of Public Works, and the South Coast Air Quality Management District. For a complete list of all databases that were reviewed as part of the Phase I ESA, see Appendix E.

The project site was not identified on any of the regulatory databases that were searched. However, a number of listings were identified within the vicinity of the project site. Due to the nearby listings, the soil and/or groundwater underlying the project site could be affected by the past or present use of hazardous materials in the vicinity of the project site. Table 4.7-1 summarizes the listings that were identified as having the potential to affect the project site.

Table 4.7-1
Database Listings

Property Name	Agency Database	Location Relative to Site	Description
1239 19th Street	EDR Historic Auto Station	Approximately 100 feet south and crossgradient of the project site	This facility was identified on the EDR Historic Auto Station database. The address was identified in 2006 and listed as “medical engine.”
St. John’s Medical Plaza – 1301 20th Street	CA FID UST, SWEEPS UST	Approximately 300 feet east and downgradient of the project site	This facility was listed on the CA FID UST and SWEEPS UST databases. According to the SWEEPS database, one 1,000-gallon diesel UST is reportedly associated with this property. No records of a release to soil or groundwater were found to be associated with this tank.
Foreign Car Service – 1209 19th Street	RCRA, FINDS	Approximately 475 feet northwest and upgradient of the project site	This facility is listed on the RCRA-NonGen and FINDS databases. According to the database report, this facility previously had a generator to dispose of hazardous waste associated with dry cleaning operations. No violations were found in association with this prior generator.
John Leeds – 2002 Wilshire Boulevard	EDR Historic Auto Station	Approximately 500 feet northwest and upgradient of the site	This facility was identified on the EDR Historic Auto Station database. The address was identified in 1948 and 1954 as a gasoline and oil service station.
Park Avenue Cleaners – 1902	EDR Historic Cleaners	Approximately 500 feet west–northwest and upgradient of the project site	This facility was identified on the EDR Historic Cleaners database. This facility was listed as Park Avenue Cleaners from 2001 until 2012.

Table 4.7-1
Database Listings

Property Name	Agency Database	Location Relative to Site	Description
Wilshire Boulevard			
D R Shawyer – 1914 Wilshire Boulevard	EDR Historic Auto Station	Approximately 600 feet northwest and upgradient of the project site	This facility was identified on the EDR Historic Auto Station database. According to the database report, this facility operated as an automobile repairing facility from 1928 until 1948. No other listings were identified on this property.
Hallmark Cleaners – 1907 Wilshire Boulevard	EDR Historic Cleaners, CA DRYCLEANERS, CA EMI, RCRA-SQG, FINDS	Approximately 600 feet northwest and upgradient of the project site	This facility was identified on the EDR Historic Cleaners database, CA DRYCLEANERS, CA EMI, RCRA-SQG, and FINDS database. According to the database report, this facility has been operational as a dry cleaning facility since 1948. This facility was identified as a dry cleaning and laundry services facility, specifically for power laundries, family, and commercial. An inactive date was listed of June 30, 2011. This facility was also identified in the EMI database for 1987, 1990, 1993, and 1995. A small-quantity generator was present at this facility to dispose tetrachloroethylene and halogenated solvents. In 2018, the Los Angeles Regional Water Quality Control Board began a site assessment of this facility, because subsurface and soil vapor samples collected in the vicinity were found to contain volatile organic compounds, specifically tetrachloroethylene. Hallmark Cleaners is adjacent to the sampling locations and may have used the chemicals detected in the soil and soil vapor. The site assessment is reported as ongoing on SWRCB's GeoTracker site, as of November 2020.

Source: Appendix E; SWRCB 2020a
Notes: EDR = Environmental Database Resources, Inc.; CA FID UST = Facility Inventory Database; SWEEPS UST = underground storage tank listing maintained by the Regional Water Quality Control Board in the 1980s; RCRA = Resource Conservation and Recovery Act; FINDS = Facility Index System/Facility Identification Initiative Program Summary Report; CA EMI = California Emissions Inventory Data; RCRA-SQG = Resource Conservation and Recovery Act registered small generators of hazardous materials; SWRCB = California State Water Resources Control Board.

As shown in Table 4.7-1, a number of dry cleaners and auto stations have operated in the vicinity of the project site. Soil and groundwater contamination could potentially be present on the project site, based on the long-term and historic uses in the project area.

Asbestos and Lead Survey

The Phase I ESA identified the potential for the on-site structures to have asbestos-containing materials (ACM) and lead-containing materials (LCM), based on the age of the structures, and the potential presence of ACM and LCM was identified as a potential environmental concern. As such, in 2016, Citadel conducted an assessment of ACM and LCM at the 7-unit building and the 3-unit building on the project site. Both ACM and LCM were found within the structures (see Appendix E). Due to the construction date of the GKGM Building, potential ACM and LCM may be present within the GKGM Building as well.

4.7.2 Relevant Plans, Policies, and Regulations

Federal

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," were enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. Through CERCLA, the United States Environmental Protection Agency (EPA) was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. Through various enforcement tools, EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. CERCLA also enabled the revision of the National Contingency Plan. The National Contingency Plan provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List, which is a list of contaminated sites warranting further investigation by the EPA. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) gives the EPA the authority to control hazardous waste from "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The federal Hazardous and Solid Waste

Amendments are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste, as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank (UST) program.

Superfund Amendments and Reauthorization Act

In 1986, Congress passed the Superfund Amendments and Reauthorization Act. The act required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations, provided new enforcement authorities and settlement tools, increased state involvement in every phase of the Superfund program, and increased the focus on human health problems posed by hazardous waste sites. The Superfund Amendments and Reauthorization Act also required EPA to revise the Hazard Ranking System to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites, which may be placed on the National Priorities List.

Occupational and Safety Health Act

Congress passed the Occupational and Safety Health Act to ensure worker and workplace safety. Its goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Occupational and Safety Health Act also created the National Institute for Occupational Safety and Health as the research institution for the Occupational Safety and Health Administration (OSHA). OSHA is a division of the U.S. Department of Labor that oversees the administration of the Occupational and Safety Health Act and enforces standards in all 50 states.

State

Cortese List/Government Code 65962.5

California Government Code Section 65962.5 requires that information regarding environmental impacts of hazardous substances and wastes be maintained and provided at least annually to the Secretary for Environmental Protection. Commonly referred to as the Cortese list, this information must include the following: sites impacted by hazardous wastes, public drinking water wells that contain detectable levels of contamination, USTs with unauthorized releases, solid waste disposal facilities from which there is migration of hazardous wastes, and all cease and desist and cleanup and abatement orders. This information is maintained by various agencies, including the DTSC, State Department of Health Services, SWRCB, and local Certified Unified Program Agencies (CUPA). As each of the regulatory agencies typically now maintains these records in an electronic format, those requesting a Cortese list for a site are directed to the individual regulatory agencies. Typically, records searches are conducted via a regulatory database

search company. Unless otherwise requested, the records search companies usually conduct the records searches in accordance with American Society for Testing and Materials (ASTM) Standard of Practice E 1527-13 Standard Practice for ESAs. The list of databases searched is more comprehensive than the Cortese list; thus, the Cortese list is not just a single list.

California Safety and Health Code

In California, the handling and storage of hazardous materials is regulated by Division 20, Chapter 6.95 of the California Health and Safety Code. Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a hazardous materials business plan. Hazardous materials business plans contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state.

Chapter 6.95 of the Health and Safety Code establishes minimum statewide standards for hazardous materials business plans. Businesses are required to prepare a hazardous materials business plan if they use, handle, or store a hazardous material (including hazardous waste) or an extremely hazardous material in disclosable quantities greater than or equal to the following:

- 500 pounds of a solid substance
- 55 gallons of a liquid
- 200 cubic feet of compressed gas
- A hazardous compressed gas in any amount (highly toxic with a threshold limit value of 10 parts per million or less)
- Extremely hazardous substances in threshold-planning quantities

In addition, in the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by the California Health and Safety Code, facilities are also required to prepare a risk management plan and California accidental release plan. The risk management plan and accidental release plan provide information on the potential impact zone of a worst-case release and require plans and programs designed to minimize the probability of a release and mitigate potential impacts.

The California Health and Safety Code also establishes procedures for the proper handling, storage, treatment, and transportation of medical waste. Provisions related to medical waste are found in Sections 117600–118360. (These sections codify the California Medical Waste Management Act, which was passed in 1990.) Medical waste includes sharps, bio-hazardous waste, chemotherapy, pathology, and pharmaceutical waste. In the County of Los Angeles, the state serves as the enforcement agency for the Medical Waste Management Act (specifically, the California Department of Public Health (CDPH) Medical Waste Management Program is the enforcement agency). The enforcement agency is empowered under

the California Medical Waste Management Act to inspect, cite violations, recommend enforcement action, and assess fees for required permits and registrations (CDPH 2020).

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

The DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Law. Both laws impose cradle-to-grave regulatory systems for handling hazardous waste in a manner that protects human health and the environment. California EPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other CUPAs.

California Hazardous Waste Control Act

The DTSC is responsible for the enforcement of the Hazardous Waste Control Act (California Health and Safety Code, Section 25100 et seq.), which creates the framework under which hazardous wastes are managed in California. The law provides for the development of a state hazardous waste program that administers and implements the provisions of the federal RCRA cradle-to-grave waste management system in California. It also provides for the designation of California-only hazardous waste and development of standards that are equal to or, in some cases, more stringent than federal requirements. The Hazardous Waste Control Act lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program was created in 1993 by Senate Bill 1082 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities of environmental and emergency management programs. The program is implemented at the local government level by CUPAs. In the City of Santa Monica, the SMFD is the CUPA. The program consolidates, coordinates, and makes consistent the following hazardous materials and hazardous waste programs (program elements):

- Hazardous Waste Generation (including on-site treatment under Tiered Permitting)
- Aboveground Petroleum Storage Tanks (only the spill prevention, control, and countermeasure (SPCC) plan)
- USTs
- Hazardous Material Release Response Plans and Inventories

- California Accidental Release Prevention Program
- Uniform Fire Code Hazardous Material Management Plans and Inventories

Local

Certified Unified Program Agency

A CUPA is a local agency that has been certified by California EPA to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority. A participating agency is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A designated agency is a local agency that has not been certified by California EPA to become a CUPA but is the responsible local agency that would implement the six unified programs until they are certified.

The SMFD is the designated CUPA for the City and is the primary local agency with responsibility for implementing federal and state laws pertaining to hazardous materials management. The SMFD maintains records regarding location and status of hazardous materials sites in the City and administers programs that regulate and enforce the transport, use, storage, and manufacturing, and remediation of hazardous materials. The SMFD contracts with the Los Angeles County Fire Department for hazardous waste inspection and enforcement components of the unified program (SMFD 2018).

City of Santa Monica General Plan Safety Element

The General Plan Safety Element (City of Santa Monica 1995) addresses a variety of natural and human-related hazards, and contains goals and policies aimed at reducing the risk associated with these hazards. These goals and policies related to hazardous materials are listed as follows.

Goal 5 Minimize threats to public health and safety from hazardous materials by strengthening local code enforcement actions, especially for multiple releases caused by earthquakes.

Policy 5.1 The use, storage, and transportation of toxic, explosive, and other hazardous and extremely hazardous materials shall be strictly controlled to prevent unauthorized discharges.

Policy 5.1.2 The City shall continue to manage the Hazardous Materials Disclosure Program to identify and regulate business handling types and quantities of extremely hazardous materials, or hazardous materials in greater than consumer types and quantities.

Policy 5.1.3 The City shall continue to require annual reporting by businesses to the Environmental Programs Division of the use, storage or manufacture of hazardous or extremely hazardous materials in any quantity. The City shall continue to require annual submission or verification of

business emergency plans by businesses that use, store or manufacture any hazardous or extremely hazardous materials in quantities equal to or greater than 55 gallons, 500 pounds or 200 cubic feet.

Santa Monica Municipal Code

Section 5.24 of the Santa Monica Municipal Code establishes a hazardous materials release response plan. The ordinance requires all businesses that handle any hazardous material or mixture containing hazardous materials to establish and implement a business plan for emergency response to a release or threatened release of hazardous materials. The business plan must describe emergency response plans and procedures to be used in the event of an accident. The requirements are established to prevent or mitigate the damage to the health and safety of persons and the environment from the release or threatened release of hazardous materials into the workplace and environment.

Emergency Response Plan

The City Office of Emergency Management has prepared the Multi Hazard Functional Emergency Plan. This plan addresses the City's response to natural or human-caused disasters. It provides an overview of operational concepts and identifies components of the City's emergency/disaster management organization with the Standardized Emergency Management Systems and the National Incident Management System. The plan focuses on large-scale events and places emphasis on emergency/disaster planning, volunteer training, public outreach, and resources for disaster response (City of Santa Monica 2013).

The City also prepares the All Hazards Mitigation Plan, which includes resources and information to assist City residents, public and private sector organizations, and others interested in planning for natural hazards. The mitigation plan provides a list of activities that may assist the City in reducing risk and preventing loss from future natural hazard events. The action items address multi hazard issues and activities to be undertaken in the event of earthquakes, landslides, flooding, tsunamis, wildfires, and severe windstorms/thunderstorms (City of Santa Monica 2016).

4.7.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts related to hazards and hazardous materials are based on the questions in Appendix G of the State CEQA Guidelines. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). These questions are listed below and are used as the significance thresholds by the City in this section.

Would the project:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
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?
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would is create a significant hazard to the public or the environment?
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Issues Not Further Analyzed

Questions 5 and 7 were analyzed in the Initial Study (see Appendix A) and impacts were determined to be less than significant. A summary of the analysis presented in the Initial Study for Questions 5 7 is provided below.

Question 5 Airport Hazards: The Santa Monica Airport is approximately 1.8 miles south of the project site. However, the project site is not located within the boundaries of the Airport Influence Area for this airport (County of Los Angeles 2003). The Santa Monica Municipal Airport is governed by the Santa Monica Airport Code and the Los Angeles Regional Planning Commission/Airport Land Use Commission's Airport Land Use Compatibility guidelines. Normal airport operations that comply with applicable regulations would not pose a safety hazard to the surrounding areas, including the proposed project site. Furthermore, the proposed project would not introduce structures to the project site having the potential to interfere with aircraft, resulting in a safety hazard. The proposed project would not involve high-rise structures in proximity to the airport. For these reasons, the proposed project would not result in safety hazards for people residing or working in the area. Additionally, the proposed project would not result in excessive noise for people residing or working in the area. According to the Airport Influence Area Map, the project site is located outside of the 65 CNEL Airport Land Use Noise Contour. As such, there is little potential to expose people working in the project area to excess noise levels from a nearby airport.

Question 7 Wildland Fires: The project site is located within a fully developed area and is not located adjacent to, or in the vicinity of, wildland areas. Implementation of the proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death from wildland fires.

Therefore, Questions 5 and 7 will not be further analyzed in this section.

4.7.4 Methodology

Impact determinations in this section are based on the potential risks of exposure to hazards and hazardous materials during construction and operation of the proposed project. The analysis contained within this section is based on the analysis contained within the Phase I ESA and the asbestos and lead survey (see Appendix E). The Phase I ESA includes (1) a reconnaissance of the project site; (2) a search of regulatory agency records; (3) review of available historical aerial photographs, topographic maps, Sanborn fire insurance maps, and City directories; (4) an environmental lien search; and (5) interview of funeral home personnel. The asbestos and lead survey identifies and quantifies ACM and LCM in the interior, exterior, and roofs of the 7-unit building and the 3-unit building on the project site.

4.7.5 Impacts Analysis

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

Hazardous materials would be used during the construction and operation of the proposed project. Hazardous materials that may be used include fuels, lubricating fluids, solvents, cleaning products, and potentially hazardous medical materials and wastes. If these materials are released, they can prove to be hazardous to the environment and/or the public. The potential effects of the project relative to the transport, use, and disposal of hazardous materials during construction and operation are discussed below.

Construction Impacts

A variety of hazardous materials, including fuels for equipment and vehicles, new and used motor oils, cleaning solvents, and paints, would be used and stored on-site during construction of the proposed project. These materials are not considered acutely hazardous and would be used in limited quantities. Construction contractors are responsible for accident prevention and containment, and typical construction specifications include provisions for proper management of hazardous substances and wastes. All contractors are required to comply with applicable laws and regulations regarding hazardous materials and hazardous waste management and disposal. Examples of hazardous materials management include preventing the disposal or release of hazardous materials onto the ground or into groundwater or surface water during construction and providing

completely enclosed containment for all refuse generated during construction. In addition, all construction waste, including trash, litter, garbage, solid waste, petroleum products, and any other potentially hazardous materials, would be removed and transported to a permitted waste facility for treatment, storage, and/or disposal. Proper use and disposal of these materials in accordance with federal, state, and local laws would not pose a significant risk to the public or to the environment.

Asbestos and Lead-Based Paint

Construction would involve demolition and renovation of some buildings on the project site. Due to the age of the buildings, construction activities could result in exposure of workers and/or the public to ACM and LCM. The results of an on-site survey indicate that ACM and LCM are present in the 7-unit building and the 3-unit building on the project site, which would be demolished during construction (see Appendix E). The GKGM Building also has the potential to contain ACM and LCM, due to the age of the structure. While most of the GKGM Building would remain in place, the connected 4-car garage would be demolished. Additionally, some exterior improvements would occur to the GKGM Building, as part of adaptive reuse of a portion of the building. Potential effects to workers or members of the public could occur from direct contact with the substances, incidental ingestion of the substances, and/or inhalation of airborne dust released from dried materials during construction. Therefore, mitigation measures **MM-HAZ-1** and **MM-HAZ-2** are required to ensure that proper removal of LCM and ACM occur.

Subsurface Contamination

As indicated in Section 4.7.1, the project site is located near several sites where hazardous materials may have been released to the groundwater or soil. In the event that off-site releases of hazardous materials have entered the soil or groundwater underlying the project site, contaminated soil or water could be encountered during construction activities. Construction activities would involve excavations up to 65 feet below grade. While groundwater is not expected to be encountered during excavation due to the depth of the water table, local seepage could be encountered, especially if excavation is undertaken during the rainy season. (See Section 4.5 of this EIR for additional details on excavations at the project site.) In the event that contaminated soil or groundwater is encountered, it would need to be removed, transported, and/or disposed of. During these processes, workers or the general public could potentially be exposed to the contaminated material, resulting in a potentially significant impact.

As indicated in Section 4.7.1, the project site could potentially have an abandoned UST or aboveground storage tank (AST), associated with an area previously used as an automobile service bay. In the event that an AST is present on the project site, it would be identified during demolition and removed and disposed in accordance with local, state, and federal laws. In the event that a UST is present on the project site and currently or historically leaked into the ground, there is the possibility of residual contamination in the soil, caused by the UST. The UST may need to be removed and disposed of during or prior to construction. Soil contamination and/or removal and disposal of the UST could potentially expose workers or the public to

hazardous materials associated with the chemicals that were stored in the UST, resulting in a potentially significant impact.

Due to the potential for soil or groundwater contamination at the project site, potentially significant impacts could occur during project construction. Mitigation measure **MM-HAZ-3** would ensure that any potential USTs are properly detected and removed. Mitigation measure **MM-HAZ-4** is required to ensure that pre-construction subsurface investigation occurs to identify any potential contamination. **MM-HAZ-5** and **MM-HAZ-6** would ensure that if subsurface contamination is identified, soils would be properly transported and disposed of in a manner that would minimize hazards to workers, the public, and the environment. With implementation of mitigation measures **MM-HAZ-1** through **MM-HAZ-6** into the proposed project, and upon compliance with applicable federal, state, and local laws related to the transport, use, and disposal of potentially hazardous materials and wastes, construction impacts would be **less than significant with mitigation incorporated**.

Operational Impacts

Routine operation of the proposed project would include the use of various hazardous materials, including chemical reagents, solvents, fuels, paints, and cleansers. These materials would be used for building and grounds maintenance. Many of the hazardous materials used for building and grounds maintenance would be considered household hazardous wastes and/or universal wastes by the EPA, which regards these types of wastes to be common to businesses and households and to pose a lower risk to people and the environment relative to other hazardous wastes, when they are properly stored, transported, used, and disposed of in accordance with local, state, and federal laws.

The proposed project would also include operation of a variety of medical uses, such as medical research and development, laboratory uses, operation of specialized equipment, outpatient care, medical clinics, and medical offices. These uses would involve a variety of potentially hazardous medical materials, which would be stored and used on-site, as well as transported to and from the site for delivery and disposal. Potentially hazardous medical materials that may be used on-site include pharmaceuticals, regulated medical waste, sterilants, disinfectants, medical oxygen, biohazardous materials, radioactive materials, medical sharps, and stains used in laboratories. The hazardous materials used during operation of the proposed project would be used on-site, transported to and from the project site, and ultimately disposed of off-site. During these processes, there is the potential for a hazardous materials incident to occur, if hazardous substances are handled improperly or unsafely such that the substance is released or the public is exposed to the substance. However, the use, storage, and transport of hazardous materials and wastes are subject to applicable federal, state, and local health and safety regulations (e.g., RCRA and the Hazardous Waste Control Act “cradle to grave” requirements). All hazardous materials generated and/or used on the project site would be managed in accordance with all relevant federal, state, and local laws, including the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR 4.5). Furthermore, compliance with OSHA workplace and work practices requirements would avoid the exposure of persons and the environment to hazardous materials.

Medical wastes are regulated by state laws that set forth specific requirements for handling, treating, storing, and disposing medical waste. As stated in Section 3.4.4 of this EIR, any medical-related waste, in the event it is generated, would be stored on-site per regulatory and industry procedures and transported off-site by qualified vendors in accordance with applicable regulations. Pursuant to the California Medical Waste Management Act of 1990, the Wellness Center would be required to prepare a medical waste management plan (MWMP) for submittal to the CDPH's Medical Waste Management Program, in the event that the Wellness Center generates medical wastes. The MWMP must describe the types and amounts of medical waste generated and how the waste would be disposed. Additionally, California Health and Safety Code, Division 20, Chapter 6.95, requires preparation of a hazardous materials business plan (HMBP) for any business using 55 gallons (liquid) or 500 pounds (solid) or more of hazardous materials. HMBPs contain information on hazardous materials inventory, inspections, training, recordkeeping, and reporting and is submitted electronically through the California Environmental Reporting System.

The project would generate medical waste similar to the types of medical waste currently generated within the vicinity of the project site at the nearby medical campuses (namely, PSJHC and Santa Monica-UCLA Medical Center). In addition to the regulations and practices described above, the following requirements would apply to storage and handling of medical wastes and other hazardous wastes at the project site: (1) hazardous materials are required to be stored in designated areas designed to prevent accidental release; (2) OSHA requirements prescribe safe work environments for workers working with materials that present a moderate explosion hazard, high fire or physical hazard, or health hazard; (3) federal and state laws related to the storage of hazardous materials would be complied with to maximize containment and provide for prompt and effective clean-up in case of an accidental release; and (4) Hazardous Materials Inventory and Response Planning Reports would be filed with the City in accordance with Unified Program Permit requirements.

Compliance with applicable regulations involving hazardous materials and potentially hazardous medical materials during operation would ensure that such materials are transported, used, and disposed in a manner that minimizes potential effects to workers, the public, and the environment. Due to the types of materials that would be used on the project site and the existing regulations that are required, it is not expected that the proposed project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Upon compliance with applicable regulations, operational impacts would be **less than significant**.

Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction Impacts

As previously described, construction activities on the project site would involve the use and storage of a variety of hazardous materials, including fuel, oil, grease, solvents, and paints. These materials are not considered acutely hazardous and would be used in limited quantities. Additionally, these materials would be handled, stored, used, and disposed of in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Compliance with these regulations would reduce the potential for hazardous materials to be released to the environment during construction. In addition, the construction contractor would be required to implement a Storm Water Pollution Prevention Plan during construction activities, which would help prevent any contaminated runoff from leaving the project site.

Asbestos and Lead-Based Paint

Construction would involve demolition and renovation of the existing buildings on the project site. Due to the age of the buildings, construction activities could result in exposure of workers and/or the public to ACM and LCM. The results of an on-site survey indicate that ACM and LCM are present in the 7-unit building and the 3-unit building on the project site, which would be demolished during construction (see Appendix E). The GKGM Building also has the potential to contain LCM and ACM, due to the age of the structure. While most of the GKGM Building would remain in place, the connected 4-car garage would be demolished. Additionally, some exterior improvements would occur to the GKGM Building, as part of adaptive reuse of a portion of the building. Potential effects to workers or members of the public could occur from direct contact with the substance, incidental ingestion of the substance, and/or inhalation of airborne dust released from dried materials during construction. As such, mitigation measures **MM-HAZ-1** and **MM-HAZ-2** are required to ensure that proper removal and abatement of LCM and ACM occur.

Subsurface Contamination

As indicated in the discussion above, excavation at the project site has the potential to expose contaminated soils and/or groundwater, in the event that such contamination is present at the project site. In the event of upset or accident conditions during construction, excavation activities and/or removal of the potential UST could create a significant hazard to the public or the environment, resulting from the release of potentially hazardous materials. As such, mitigation measure **MM-HAZ-3** is required to ensure that any potential USTs are properly detected and removed. Additionally, the project site is located near several sites where hazardous materials may have been released to the groundwater or soil. In the event that off-site releases of hazardous materials have entered the soil or groundwater underlying the project site, contaminated soil or water could be encountered during construction activities. In the event of upset or accident conditions during excavation activities and/or removal of contaminated

soil or groundwater (if present), a significant hazard to the public or the environment could result from the release of potentially hazardous materials. Mitigation measure **MM-HAZ-4** is required to ensure that pre-construction subsurface investigation occurs to identify any potential contamination. **MM-HAZ-5** and **MM-HAZ-6** would ensure that if subsurface contamination is identified, soils would be properly transported and disposed of in a manner that would minimize hazards to workers, the public, and the environment. Upon the incorporation of mitigation measures **MM-HAZ-1** through **MM-HAZ-6** into the proposed project, and upon compliance with applicable federal, state, and local laws related to the transport, use, and disposal of potentially hazardous materials and wastes, construction impacts would be **less than significant with mitigation incorporated**.

Operational Impacts

Routine operation of the proposed project would include the use of various hazardous materials, including chemical reagents, solvents, fuels, paints, and cleansers. These materials would be used for building and grounds maintenance. Many of the hazardous materials used for building and grounds maintenance would be considered household hazardous wastes and/or universal wastes by the EPA, which regards these types of wastes to be common to businesses and households and to pose a lower risk to people and the environment relative to other hazardous wastes, when they are properly stored, transported, used, and disposed of in accordance with local, state, and federal laws.

The proposed project would also include the operation of a variety of medical uses, such as medical research and development, laboratory uses, operation of specialized equipment, outpatient care, medical clinics, and medical offices. These uses would involve a variety of potentially hazardous medical materials, as described and characterized in the discussion above. In the event of an upset or accident condition involving hazardous materials used during project operation, such materials could be released to the environment and could pose a hazard to the public or the environment. However, due to the types of materials that would be used on the project site and the existing regulations that are required to be put in place, it is not expected that the proposed project would create a significant hazard to the public or the environment due to a reasonably foreseeable upset or accident condition.

The use, storage, and transport of hazardous materials and wastes are subject to applicable federal, state, and local health and safety regulations (e.g., RCRA and the Hazardous Waste Control Act “cradle to grave” requirements). All hazardous materials generated and/or used on the project site would be managed in accordance with all relevant federal, state, and local laws, including the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR 4.5). Furthermore, compliance with OSHA workplace and work practices requirements would avoid the exposure of persons and the environment to hazardous materials.

Medical wastes are regulated by state laws that set forth specific requirements for handling, treating, storing, and disposing of medical waste. As stated in Section 3.4.4 of this EIR, any medical-related waste, in the event it is generated, would be stored on-site per regulatory and industry procedures and transported

off-site by qualified vendors in accordance with applicable regulations. Pursuant to the California Medical Waste Management Act of 1990, the Wellness Center would be required to prepare a MWMP for submittal to the CDPH's Medical Waste Management Program, in the event that the Wellness Center generates medical wastes. The MWMP must describe the types and amounts of medical waste generated and how the waste would be disposed. Additionally, California Health and Safety Code, Division 20, Chapter 6.95, requires the preparation of a HMBP for any business using 55 gallons (liquid) or 500 pounds (solid) or more of hazardous materials. HMBPs would contain information on hazardous materials inventory, inspections, training, recordkeeping, and reporting and is submitted electronically through the California Environmental Reporting System.

The project would generate medical waste similar to the types of medical waste currently generated within the vicinity of the project site, at the nearby medical campuses (namely, PSJHC and Santa Monica-UCLA Medical Center). In addition to the regulations and practices described above, the following requirements would apply to storage and handling of medical wastes and other hazardous wastes at the project site: (1) hazardous materials are required to be stored in designated areas designed to prevent accidental release; (2) OSHA requirements prescribe safe work environments for workers working with materials that present a moderate explosion hazard, high fire or physical hazard, or health hazard; (3) federal and state laws related to the storage of hazardous materials would be to complied with to maximize containment and provide for prompt and effective clean-up in case of an accidental release; and (4) Hazardous Materials Inventory and Response Planning Reports would be filed with the City in accordance with Unified Program Permit requirements.

Compliance with applicable regulations involving hazardous materials and potentially hazardous medical materials during operation would ensure that such materials are transported, used, stored, and disposed in a manner that minimizes the potential for upset and accident conditions resulting in the release of a hazardous material into the environment. Due to the types of materials that would be used on the project site and the existing regulations that are required, it is not expected that the proposed project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions. Upon compliance with applicable regulations, operational impacts would be **less than significant**. No mitigation is required.

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

The project site is adjacent to the Lighthouse Church and School, located at 1220 20th Street approximately 10 feet to the north of the site. The project site is also approximately 0.15 mile northeast of the Pacifica Christian High School, located at 1730 Wilshire Boulevard. As such, the proposed project would be located within one-quarter mile of existing schools.

Construction Impacts

As described above, project construction activities may involve the use of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. These materials are not considered acutely hazardous and would be used in limited quantities. Further, the transportation, storage, use, and disposal of such hazardous materials during construction activities would be conducted in accordance with applicable federal, state, and local statutes and regulations. Demolition and renovation of the existing buildings at the project site could result in the release of hazardous building materials such as ACM and LCM, which may create a hazard for the public, with the potential to affect students, staff, and visitors at nearby schools. However, mitigation measures **MM-HAZ-1** and **MM-HAZ-2** have been set forth to ensure that proper removal of LCM and ACM occur. Implementation of **MM-HAZ-1** and **MM-HAZ-2** would minimize the potential for the release of ACM and LCM during construction of the proposed project, thereby minimizing the potential for students, faculty, and visitors at nearby schools to be exposed to hazardous materials during proposed project construction.

As identified above, there is the potential for subsurface contamination at the project site, which could be released to the environment during excavation, resulting in the potential to affect students, staff, and visitors at nearby schools. However, mitigation measures **MM-HAZ-3** through **MM-HAZ-6** have been set forth to ensure that contaminated materials (if any) are detected prior to construction and are properly removed, handled, and disposed, if present. Implementation of these measures would minimize the potential for the release of soil or groundwater contaminants during construction of the proposed project. Upon compliance with regulatory requirements and the incorporation of mitigation measures **MM-HAZ-1** through **MM-HAZ-6** into the proposed project, construction impacts would be **less than significant with mitigation incorporated**.

Operational Impacts

During operation of the proposed project, hazardous materials that are routinely used for building and grounds maintenance would be present on-site, such as chemical reagents, solvents, fuels, paints, and cleansers. The proposed project would also involve the use, storage, transport, and disposal of a variety of medical materials and medical wastes, some of which may be considered hazardous. A release or accident involving potentially hazardous materials and/or wastes may create a hazard for the public, with the potential to affect students, staff, and visitors at nearby schools. However, due to the types of materials that would be used on the project site and the existing regulations that are required to be put in place, the proposed project is not expected to create a significant hazard to nearby schools.

Many of the hazardous materials that would be used for building and grounds maintenance are common to businesses and households and pose a lower risk to people and the environment relative to some less common hazardous materials. Furthermore, such materials would be stored, transported, used, and disposed of in accordance with local, state, and federal laws, which would minimize the potential for such materials be

released to the environment and to affect nearby schools. Additionally, as described in the discussions above, hazardous materials and medical wastes would be handled in accordance with an MWMP and an HMBP. These plans would set forth safety and management protocols for medical wastes and other hazardous materials. Implementation of these plans would ensure that hazardous materials used at the Wellness Center are handled and treated in a manner that minimizes releases and accidents to the extent practicable. These plans would also require oversight and enforcement from CDPH's Medical Waste Management Program, from the City, and from SMFD. As described in the discussions above, the hazardous materials used on-site would also be subject to a variety of local, state, and federal laws, which require proper handling and storage of hazardous materials. Upon preparation and implementation of a MWMP and a HMBP, as well as compliance with applicable federal, state, and local regulations for the use of hazardous materials, the proposed project is not expected to result in effects related to hazardous materials or hazardous emissions at nearby schools. As such, upon compliance with applicable regulations involving hazardous materials, operational impacts would be **less than significant**. No mitigation is required.

Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would is create a significant hazard to the public or the environment?

As explained in Section 4.7.1, the project site is not included on any hazardous waste site list, including the DTSC's EnviroStor database, the SWRCB's GeoTracker site, the Cortese list, the Superfund Site list, or other lists compiled pursuant to Section 65962.5 of the Government Code (Appendix E; SWRCB 2020b; DTSC 2020). However, as explained in Section 4.7.1, the Phase I ESA identified the potential presence of an abandoned UST on the project site. In the event that the project site does contain a UST, there is some potential that it could pose a hazard to the public or to the environment during construction, in the event that it is not safely handled and removed. As such, mitigation measure **MM-HAZ-3** is required to ensure that the presence or absence of a UST is confirmed prior to construction. Mitigation measure **MM-HAZ-3** would also ensure that, if a UST is identified on the project site, it is handled and removed in accordance with regulations and the oversight of the SMFD. Compliance with the SMFD's protocol and requirements would ensure that the UST is removed and handled in a manner that minimizes potential hazards to the public and environment to the extent feasible.

As described in 4.7.1, there are numerous properties in the vicinity of the project site that can be found on hazardous wastes site lists. As identified in the Phase I ESA, there is some potential that off-site use and release of hazardous materials at these sites has contaminated soil and/or groundwater underlying the project site. Additionally, in the event that a UST is present on the project site, there is the possibility of residual contamination in soils from the UST. For these reasons, excavation on the project site could result in the release of soil or groundwater contamination, resulting in a hazard to the public or to the environment. However, mitigation measure **MM-HAZ-4** has been set forth to ensure that the project site is properly tested for the presence or absence of soil and/or groundwater contamination prior to construction. In the event

that contamination is detected, mitigation measures **MM-HAZ-5** and **MM-HAZ-6** would be required. These measures would require that a soil management plan and health and safety plan be prepared and implemented. These plans would reduce the potential for the release of any soil and/or groundwater contamination into the environment and would minimize the potential for workers and the public to be exposed to hazardous materials. Upon the implementation of mitigation measures **MM-HAZ-3** through **MM-HAZ-6**, impacts relating to hazardous materials sites would be **less than significant with mitigation incorporated**.

Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City's Office of Emergency Management has prepared the City's Multi Hazard Functional Emergency Plan and the All Hazards Mitigation Plan. As discussed in Section 4.7.2, these plans are prepared for the purpose of disaster planning. The Multi Hazard Functional Emergency Plan addresses the City's planned response to natural or human-caused disasters. The All Hazards Mitigation Plan provides a list of activities that may assist the City in reducing risk and preventing loss from future natural disasters. The proposed project would be required to be consistent with these plans and would not impair implementation of these plans, as further substantiated below. Additionally, the County of Los Angeles Department of Public Works designates disaster routes. The closest disaster route to the project site is Santa Monica Boulevard, located approximately 700 feet from the project site (County of Los Angeles 2008).

Construction Impacts

Construction of the proposed project would involve activities typical of an urban infill development project, which are routine in an urban environment and would not be expected to impair or physically interfere with the City's emergency response and evacuation plans. Construction would not involve any obstructions or closures along City-designated disaster routes, including Santa Monica Boulevard. Santa Monica Boulevard would remain open as a potential disaster route throughout construction. Traffic generated during project construction would not substantially change the use and function of any nearby disaster routes. In the event of an emergency, the City's emergency plans would be implemented and would proceed in the same manner with or without project construction. Impacts would be **less than significant**. No mitigation is required.

Operational Impacts

Operation of the proposed project may increase traffic on nearby roadways. However, it would not involve obstructions to any roadways in the area and, therefore, would not affect emergency evacuation routes. In the event of a major emergency, project-related traffic would not obstruct evacuation routes or plans. The City requires plan check and approval from the SMFD, which would ensure that the SMFD has inspected the plans and determined that access driveways and fire and life safety measures on the project site would

be in accordance with applicable codes. Adherence to SMFD regulations would ensure safety and access compliance for the Wellness Center. For these reasons, the proposed project would not interfere with emergency response and evacuation plans, and impacts would be **less than significant**. No mitigation is required.

4.7.6 Cumulative Impacts

The geographic scope of the cumulative hazards and hazardous materials analysis is the immediate project area, including surrounding land uses and other nearby properties. Adverse effects of hazards and hazardous materials tend to be localized, and thus, the area near the project site would be most affected by project activities.

Cumulative impacts related to hazards and hazardous materials would result from projects that combine to increase exposure to hazards and hazardous materials. As described in Sections 4.7.1 through 4.7.6, the proposed project would have less than significant impacts with mitigation measures incorporated. The proposed project would comply with all federal, state, and local regulations pertaining to the use, transport, and release of hazardous materials. The potential release of hazardous materials during demolition or renovation of older buildings and ground-disturbing activities would be reduced from compliance with applicable regulations and incorporation of the mitigation measures outlined in Section 4.7.6. Thus, the proposed project would not result in hazardous impacts on nearby properties.

Cumulative projects would also be subject to federal, state, and local regulations pertaining to the use, storage, transport and disposal of hazards and hazardous materials. Cumulative projects may also require similar mitigation measures to help further reduce potential impacts. For these reasons, the proposed project's contribution to cumulative impacts to the public or environment resulting from hazards and hazardous materials would be **less than cumulatively considerable with mitigation incorporated**.

The proposed project could result in minor effects to implementation of emergency response and evacuation plans, since it would increase the number of vehicles traveling in the area. However, the project would not result in any permanent roadway obstructions, and the design of the project would be required to undergo review and plan check by the SMFD. SMFD plan check and adherence to SMFD regulations would ensure that the proposed project would not pose a substantial impairment to emergency response and evacuation plans. Cumulative projects in the City would also undergo SMFD plan check and would be required to comply with SMFD regulations, thereby ensuring that all projects in the area are determined to have adequate access and would not pose a threat to emergency operations in the City. The proposed project and related projects would also be required to conform to the City's emergency and evacuation response plans. For these reasons, the proposed project's contribution to effects on implementation of emergency response or evacuation plans would be **less than cumulatively considerable**.

4.7.7 Mitigation Measures

Implementation of the following mitigation measures would reduce identified impacts related to hazards and hazardous materials to less than significant levels.

MM-HAZ-1 Asbestos Containing Materials (ACM): Pursuant to South Coast Air Quality Management District (SCAQMD) requirements, testing for the presence of ACM shall be conducted in the portions of the former Gates, Kingsley, & Gates Funeral Home Building to be demolished or rehabilitated prior to demolition or rehabilitation. Any ACM found in this building and the existing on-site 7-unit building and 3-unit building shall be removed by a licensed and certified asbestos abatement contractor prior to demolition of these buildings pursuant to SCAQMD Rule 1403 and California Division of Occupational Safety and Health (CalOSHA) Asbestos Regulations.

MM-HAZ-2 Lead Containing Materials (LCM): Testing for the presence of LCM shall be conducted prior to demolition or rehabilitation of structures. Any LCM found shall be removed by lead-certified personnel following the California Division of Occupational Safety and Health (CalOSHA) lead standards contained in CCR Title 8, Section 1532.1 and lead-safe work practices prior to demolition of these buildings. An environmental contractor with California Department of Public Health certified workers shall be retained to carry out the work in compliance with the regulations that govern LCM.

MM-HAZ-3 Potential Underground Storage Tank: Prior to construction, the applicant will conduct a Ground Penetrating Radar survey to determine the presence or absence of an underground storage tank on the project site, associated with the former automobile service bay. In the event that an underground storage tank is discovered, the removal of the underground storage tank shall be permitted and completed in accordance with the Santa Monica Fire Department requirements and any other agencies with oversight (e.g., Department of Toxic Substances Control).

MM-HAZ-4 Subsurface Investigation: Prior to construction, the applicant will conduct a vapor, soil vapor, and groundwater investigation at the project site. Sampling shall be conducted in accordance with guidance documents from the California Department of Toxic Substances Control.

MM HAZ-5 Soils Management Plan (SMP): Should the investigation required under MM-HAZ-4 above reveal chemicals of concern above applicable California Human Health Screening Levels, the project applicant shall retain a qualified environmental consultant to prepare a SMP, which will be submitted to the California Department of Toxic Substances Control (DTSC), the Los Angeles Regional Water Quality Control Board (RWQCB), and/or City of Santa Monica Fire Department for review and approval prior to the commencement of excavation and grading activities. The recommendations of the applicable oversight agency shall be incorporated in the SMP. A qualified environmental consultant shall be present on the

project site during grading and excavation activities in the known or suspected locations of contaminated soils or the UST, and shall be on call at other times as necessary, to monitor compliance with the SMP and to actively monitor the soils and excavations for evidence of contamination. The SMP shall be implemented during excavation and grading activities on the project site to ensure that any contaminated soils are properly identified, excavated, and disposed of off-site, as follows:

Soil Testing/Segregation: The SMP shall be prepared and executed in accordance with South Coast Air Quality Management District (SCAQMD) Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil. The SMP shall require the timely testing and sampling of soils so that contaminated soils can be separated from inert soils for proper disposal. The SMP shall specify the testing parameters and sampling frequency. During excavation, Rule 1166 requires that soils identified as contaminated shall be sprayed with water or another approved vapor suppressant, or covered with sheeting during periods of inactivity of greater than an hour, to prevent contaminated soils from becoming airborne. Under Rule 1166, contaminated soils shall be transported from the project site by a licensed transporter and disposed of at a licensed storage/treatment facility to prevent contaminated soils from becoming airborne or otherwise released into the environment.

Stockpile Management: During the project's excavation phase, the applicant shall remove and properly dispose of contaminated materials in accordance with the provisions of the SMP. If soil is stockpiled prior to disposal, it will be managed in accordance with the project's Storm Water Pollution Prevention Plan, prior to its transfer for treatment and/or disposal. All impacted soils would be properly treated and disposed of in accordance with SCAQMD Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil, as well as applicable requirements of DTSC and LARWQCB.

MM HAZ-6 Health and Safety Plan (HASP): Should the assessment required under MM-HAZ-4 reveal chemicals of concern above applicable California Human Health Screening Levels, the applicant shall commission a HASP to be prepared in compliance with Occupational Safety and Health Administration (OSHA) Safety and Health Standards (29 Code of Federal Regulations 1910.120) and California Division of Occupational Safety and Health (CalOSHA) requirements (CCR Title 8, General Industry Safety Orders and California Labor Code, Division 5, Part 1, Sections 6300-6719) and submitted for review by the City of Santa Monica Department of Building and Safety. The HASP would address, as appropriate, safety requirements that would serve to avoid significant impacts or risks to workers or the public in the event that elevated levels of subsurface gases are encountered during grading and excavation. Site workers shall be familiar with the health and safety plan and soil management plan and shall be trained on how to identify suspected contaminated soil. The HASP shall include, at a minimum, the following:

- Procedures for restricting access to the contaminated area except for properly trained personnel
- Procedures for notification and reporting, including internal management and local agencies (e.g., Santa Monica Fire Department, County of Los Angeles Fire Department), as needed
- Health and safety measures for removal and excavation of contaminated soil
- Regulatory considerations
- Worker health and safety plan for management of contaminated materials

4.7.8 Level of Significance After Mitigation

Implementation of the mitigation measures listed in Section 4.7.7 would reduce potentially significant impacts from hazards and hazardous materials to **less than significant** levels.

4.7.9 References

CDPH (California Department of Public Health). 2020. "Medical Waste Management Program Local Enforcement Agency". Last Updated January 13, 2020. Accessed November 12, 2020. https://www.cdph.ca.gov/Programs/CEH/DRSEM/Pages/EMB/MedicalWaste/Local-Enforcement-Agencies.aspx.

City of Santa Monica. 1995. *Safety Element of the General Plan*. January 1995. Accessed July 3, 2018. https://www.smgov.net/uploadedFiles/Departments/PCD/Plans/General-Plan/Safety-Element/Adopted-Safety-Element-1995.pdf.

City of Santa Monica. 2013. *Multi Hazard Functional Emergency Plan 2013*. Accessed July 3, 2018. https://www.smgov.net/Departments/OEM/Preparedness/Multi-Hazard_Plan.aspx.

City of Santa Monica. 2016. *All Hazards Mitigation Plan*. Approved by the Federal Emergency Management Agency on October 4, 2016. Accessed November 12, 2020. https://www.smgov.net/Departments/OEM/default.aspx.

County of Los Angeles. 2003. "Santa Monica Airport – Airport Influence Area." Prepared by the Los Angeles County Airport Land Use Commission. May 13, 2003. July 5, 2018. http://planning.lacounty.gov/aluc/airports#anc-apm.

County of Los Angeles. 2008. Disaster Route Maps by City. *City of Santa Monica Map*. Created by the County of Los Angeles Department of Public Works. July 10, 2008. Accessed July 5, 2018. http://dpw.lacounty.gov/dsg/disasterroutes/city.cfm.

DTSC (California Department of Toxic Substances Control). 2020. *EnviroStor Database*, Search by Map Location. Accessed November 13, 2020. http://www.envirostor.dtsc.ca.gov/public/.

SMFD (Santa Monica Fire Department). 2018. "Certified Unified Program Agency (CUPA)." Accessed July 3, 2018. https://www.santamonicafire.org/Content.aspx?id=7402.

SWRCB (State Water Resources Control Board). 2020a. GeoTracker Case Summary and Profile (Hallmark Cleaners # T10000011533). Accessed November 13, 2020. https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000011533.

SWRCB. 2020b. GeoTracker Database, Search by Map Location. Accessed November 13, 2020. http://geotracker.waterboards.ca.gov/.

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4.8 LAND USE AND PLANNING

This section describes the existing land use setting of the project site, identifies the relevant planning framework, and evaluates the consistency of the proposed project with City adopted land use goals, programs, policies and regulations, as well as regional plans and related planning policy documents. The analysis is primarily focused on an assessment of consistency with the City's Land Use and Circulation Element, the City's Hospital Area Specific Plan, the City's Zoning Ordinance; and Southern California Association of Government's (SCAG's) 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS 2020).

4.8.1 Existing Environmental Conditions

City of Santa Monica

The City of Santa Monica (the City) is approximately 8.3 square miles in west Los Angeles County, approximately 15 miles west of downtown Los Angeles. The City is surrounded by the communities of Pacific Palisades to the north, Brentwood and West Los Angeles to the east, and Mar Vista and Venice to the south. The City is accessible via the Interstate 10 (I-10) freeway (also known as the Santa Monica Freeway) and Interstate 405 (I-405). The I-10 freeway bisects the City from east to west, and terminates at its western end at Pacific Coast Highway (PCH), which links Santa Monica to Malibu and the Santa Monica Mountains.

The City is a coastal urban community with a broad mix of land uses including housing, mixed-use, commercial, light industrial, open space, institutional, oceanfront, and public uses. The City has a range of housing opportunities including single-family, low-, medium-, and high-density housing. Commercial land uses in the City include retail, restaurant, entertainment, office, and service commercial, which are concentrated within the Downtown and along boulevards and avenues such as Broadway, Wilshire Boulevard, Santa Monica Boulevard, Lincoln Boulevard, and Colorado Avenue.

The project site is located in Mid-City, north of Santa Monica Boulevard within the Healthcare Mixed Use (HMU) District. The HMU District includes the Santa Monica-UCLA Medical Center (SM-UCLA), the Providence Saint John's Health Center (PSJHC), and the area immediately around and between these facilities. The district is generally bound by Wilshire Boulevard to the north, 23rd Street to the east, Broadway to the south, and 14th Street to the west.

Project Site

The project site consists of approximately 45,009 sf of property (1.03 acre) located in the Mid-City neighborhood, north of Santa Monica Boulevard within the Healthcare Mixed Use District (see Figure 3-1, Regional Map in Chapter 3). Specifically, the project site is located at the northwest corner of Arizona Avenue and 20th Street. The approximately 1.03-acre project site includes two parcels addressed as 1925 Arizona Avenue, 1234 20th Street and 1242 20th Street. The Assessor Parcel Numbers (APN) associated with these two parcels are 4276-013-033 and 4276-013-032, respectively.

The parcel addressed as 1925 Arizona Avenue currently contains a 2-story Tudor Revival-style building that was constructed in 1933. This building was formerly occupied by the Gates, Kingsley, & Gates Funeral Home and is referred to herein as the "GKGM Building." The GKGM Building currently houses a new restaurant and vacant administrative office space that was formerly used for the funeral home business. The funeral home business ceased operation in 2016 and the building remained vacant until early 2019, when renovations took place inside the building's chapel and a portion of the ground floor of the administrative portion for the current restaurant. The 3,356-sf restaurant opened in March 2020. The remaining rear portions of the building, including the second story and rear garages, are not utilized.

The GKGM Building is L-shaped with the administrative offices in the recessed western wing adjacent to Arizona Avenue. The front yard includes a grassy lawn with a half-circle driveway that contains a large fountain that has been converted into a planter. This driveway has two curb cuts, one on Arizona Avenue and one on 20th Street. The driveway is currently utilized as outdoor seating for the restaurant with a landscaped shaded canopy. Attached to the rear of the GKGM Building is an enclosed 4-car garage along 19th Court.

The rear (north) portion of the 1925 Arizona Avenue site is occupied by a paved surface parking lot, which abuts the sidewalk along 20th Street and the backside (east) of 1242 20th Street. The surface parking lot is striped to provide 13 parking stalls and 6 parking lanes. Two driveways on 20th Street provide for entry and exit to the parking lot.

The GKGM Building has been previously identified as a potential historic resource in the City's Historic Resources Inventory.

The parcel addressed as 1242 20th Street contains two 2-story buildings: one 3-unit building that was built in 1956 and one 7-unit apartment built in 1965. The buildings are currently leased for office space, but the buildings were used as residential units until 2016 (when they became vacant). Pursuant to the Ellis Act, the project applicant filed a Notice of Intent to Withdraw the rental units from the market in November 2015. Subsequently, in 2016, the residential units were withdrawn from the market. The buildings are leased as office space (currently partially occupied).

On-site landscaping includes ornamental trees near the 7-unit and 3-unit buildings, shrubs, planters, and plants near the GKGM Building, and a grassy area near the corner of 20th Street and Arizona Avenue. Off-site street trees are located along 20th Street and Arizona Avenue.

Surrounding Land Uses

The HMU District includes the City's two major hospitals: Santa Monica-UCLA Medical Center and the PSJHC, and encompasses a mix of medical-related, healthcare, residential, and commercial land uses (see Figure 4.1-1, Surrounding Land Uses, in Section 4.1, Aesthetics). The immediate vicinity of the project site includes the following uses:

- **North**: The Lighthouse Church and School is located immediately to the north of the project site along 20th Street, and provides faith-based education for grades Kindergarten through 8 (K-8). Adjacent

further to the north of the Lighthouse Church and School is the retailer/pharmacy Walgreen's, located at the southwest corner of 20th Street and Wilshire Boulevard. One large commercial office building, currently occupied on the ground floor by Union Bank is located approximately 425 feet northeast of the project site at the intersection of 20th Street and Wilshire Boulevard. Additional commercial uses are located along Wilshire Boulevard. The City has designated land uses along Wilshire Boulevard as Mixed-Use Boulevard, which is served by a range of commercial services and neighborhood shopping nodes.

- **East**: A mix of multi-family residential uses and commercial uses are located east of 20th Street. Immediately across 20th Street (at the northeast corner of 20th Street and Arizona Avenue) is the four-story Ambrose Hotel. Two- to four-story multi-family residential developments are to the north of this hotel. A commercial building with a mix of restaurant, florist, and neighborhood pharmacy is located at the southeast corner of 20th Street and Wilshire Boulevard.
- **South**: Existing development located south of the project site along 20th Street generally consists of two- to three-story residential buildings and medical/healthcare related buildings. Directly south across the project site is an existing two-story multi-family residential building is located immediately across Arizona Avenue at the southwest corner of 20th Street and Arizona Avenue. Further south along the west side of 20th Street are multifamily residential buildings and healthcare and medical related buildings, including convalescent homes and rehabilitation centers. Medical office buildings as well as the PSJHC campus are located southeast of the project site, across Arizona Avenue. The PSJHC campus is expansive and extends from 20th Street to 23rd Street to the east and from Arizona Avenue to Santa Monica Boulevard to the south. The campus consists of one and multi-story medical buildings, a four-story parking structure, several surface level parking lots, and limited commercial uses along 20th Street. Southeast of the project site (diagonally across 20th Street) is a 5-story medical office building. Further south along the east side of 20th Street are the PSJHC Child and Family Development Center, a parking structure, and a 12-story medical office building.
- **West**: Single-family and multi-family residential buildings are located west of the project site across 19th Court alley. Further west across 19th Street is a church and Fire Station No. 3.

4.8.2 Relevant Plans, Policies, and Regulations

State

Senate Bill (SB) 375

The adoption of California's Sustainable Communities and Climate Protection Act SB 375 (Steinberg, Chapter 728, Statutes of 2008) on September 30, 2008, aligns with the goals of regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations (MPOs) such as SCAG to adopt a SCS or Alternative Planning

Strategy (Aps) within their regional transportation plan to demonstrate achievement of GHG reduction targets (please see Section 4.6 Greenhouse Gas Emissions for further discussion of SB 375). In compliance with SB 375, SCAG has adopted a SCS, which covers all of the City of Santa Monica as well as other cities and counties.

Regional

Southern California Association of Governments Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated Metropolitan Planning Organization for six Southern California counties (Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial), and is federally mandated to develop plans for transportation, growth management, hazardous waste management, and air quality. The City of Santa Monica is one of the many jurisdictions that fall under SCAG.

The 2020 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/ SCS), also known as Connect SoCal, was adopted in September 2020. The 2020 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2020 RTP/SCS charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians. The 2020 RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the SCAG counties (SCAG 2020).

Local

City of Santa Monica General Plan

The City of Santa Monica General Plan is the fundamental planning policy document of the City, providing the framework for decision-making regarding growth and development in the City. The purpose of the General Plan is to identify appropriate location of land uses, as well as basic design and function of circulation, open space, infrastructure, and public service needs. The General Plan consists of seven state mandated elements: Land Use and Circulation Element (2010); Housing Element (2013); Open Space Element (2001); Conservation Element (1975); Noise Element (1992); Safety Element (1995); and Historic Preservation Element (2002). Of these, the Land Use and Circulation Element (Revised 2017) provides land use transportation goals and policies that address the development of land uses in the City, and that are the focus of the consistency analysis below.

Land Use and Circulation Element (LUCE)

The LUCE was adopted July 6, 2010 (last amended in 2020) and is the planning document that establishes the City's land use, urban design, and transportation vision. The LUCE establishes Citywide Goals and Policies pertaining to linking land use and transportation, improving quality of life, neighborhoods, historic preservation, boulevards, sustainability and climate change, diversified and sustainable economy, community enrichment, and circulation, which are applicable to the proposed project. The proposed project is guided by the LUCE vision and would implement the following goals and policies related to Citywide Land Use Policies:

Conserving and Enhancing Neighborhoods

Policy LU1.3 Preserve neighborhood quality of life and protect neighborhoods against potential impacts related to development, traffic, noise, air quality and encroachment of commercial activities and establish standards that transition down the building envelope of commercial buildings adjacent to residential properties.

Linking Land Use and Transportation

Goal LU2 Integrate land use and transportation, carefully focusing new development on transit-rich boulevards and in the districts, to create sustainable active pedestrian-friendly centers that decrease reliance on the automobile, increasing walking, bicycling and transit use, and improve community quality of life.

Policy LU2.5 Achieve vehicle trip reduction through comprehensive strategies that designate land uses, establish development and street design standards, implement sidewalk, bicycle and roadway improvements, expand transit service, manage parking, and strengthen Transportation Demand Management programs that support accessibility by transit, bicycle and foot, and discourage vehicle trips at a district-wide level. Monitor progress using tools that integrate land use and transportation factors. Increase bicycle and pedestrian connectivity in transit districts and adjacent bus and shuttle services to ensure success of the transit system.

Policy LU2.6 Focus new development in defined districts to create active spaces that can support diverse local-serving retail and services, walkability, arts and culture. Require, whenever possible, new development to provide convenient and direct pedestrian and bicycle connections.

Policy LU 4.8 Utilize parking and TDM Districts to facilitate efficient use of parking resources, shared and reduced parking opportunities, and trip reduction goals.

Goal LU7 Support the continued vitality of the City's hospitals to meet the healthcare needs of the City and the larger region, and implement strategies to reduce vehicle trips.

Policy LU7.3 Encourage a variety of services and uses in the district, and in commercial districts throughout the City, to support the changing needs of the healthcare community and hospitals.

Policy LU7.4 Allow responsible expansion of hospitals and medical uses that is sensitive to the surrounding neighborhoods and coordinated with comprehensive TDM and trip reduction strategies.

Policy LU8.1 Require participation in TDM programs for projects above the base to encourage walking, biking, and transit, and to reduce vehicle trips. Engage existing development in TDM Districts and programs to encourage reduction of existing vehicle trips.

Improving Quality of Life

Goal LU12 Preserve buildings and features which characterize and represent the City's rich heritage.

Policy LU 12.2 Promote adaptive reuse of historic structures and sensitive alterations where changes are proposed. New construction or additions to historic structures shall be respectful of the existing historic resource.

Policy LU15.3 Require site and building design that is context sensitive and contributes to the City's rich urban character.

Policy LU15.4 Encourage new development to be open and inviting with visual and physical permeability, connections to the existing street and pedestrian network, and connections to the neighborhoods and the broader community.

Policy LU 15.8 Buildings façades should be well designed with appropriate articulation in the form of setbacks, offsets, projections and a mix of architectural materials and elements to establish an aesthetically pleasing pattern. Large areas of glass above the ground floor require special design consideration. Highly reflective materials are to be avoided, and dark or reflective glass is prohibited.

Policy LU15.9 Buildings should incorporate pedestrian-scaled elements with durable, quality materials and detailing located on the lower stories adjacent to the pedestrian.

Policy LU 15.10 Buildings should be designed with a variety of heights and shapes to create visual interest while maintaining a generally consistent overall street front. To achieve this goal, development standards should provide flexibility to encourage buildings with interesting silhouettes and skylines, and the primary building façade shall not be lower than the designated minimum street façade height.

Goal LU16 Assure that all buildings are sustainable, are environmentally sound, and contribute to the City's urban form.

Policy LU 19.1 Recognize the streets as a vital component of neighborhood, district and boulevard character. Develop street design standards that consider the mobility, open space, community life and methods to engage the surrounding uses.

Policy LU20.3 Encourage properties adjacent to the public right-of-way to contribute to the urban forest environment through on-site plantings and street tree care and maintenance.

Neighborhoods

Policy N1.5 Encourage and incentivize preservation or adaptive reuse of historic structures and older apartment buildings.

Historic Preservation

Goal HP1 Preserve and protect historic resources in Santa Monica through land use decision-making process.

Policy HP1.3 Ensure that that new development, alterations or remodeling on, or adjacent to, historic properties are sensitive to historic resources and are compatible with the surrounding historic context.

Santa Monica's Boulevards

Policy B1.12 Ensure that mixed-use areas contain a mix of local-serving retail (or healthcare uses within the Healthcare Specific Plan boundaries) and predominantly upper-level residential uses to create distinct neighborhood environments with 17 hours per day/7 days per week pedestrian activity.

Sustainability and Climate Change

Policy S3.1 Actively strive to implement the City's "zero net" electricity consumption goal by 2020 through a wide variety of programs and measures, including the generation of renewable energy in the City and energy efficiency measures.

Goal S5 Improve the environmental performance of buildings.

Policy S5.1 Continue to maintain a building code and prescriptive compliance options that meet or exceed state requirements for energy, water and other sustainability standards. Specifically, pursue California Energy Commission goals to achieve "zero net" energy buildings by 2020 for low-rise residential buildings and 2030 for commercial buildings and achieve a LEED equivalent local building code by 2020.

Diversified and Sustainable Economy

Goal E10 Support the responsible expansion of the City's existing hospitals and their ancillary support facilities that are requisite to their missions of serving the community.

Policy E10.3 Encourage development of a continuum of healthcare uses such as congregate care, senior housing with services, outpatient clinics and other uses consistent with modern medical facilities.

The LUCE establishes 17 land use designations that apply to every parcel in the City. Each land use designation has their own set of unique standards and regulations, which identify the desired future land uses and maximum development density. The LUCE designates the project site as lying within the HMU District.

The HMU District provides economic and community service opportunity within the City. This district incorporates two major healthcare institutions, Saint John's Health Care Center and Santa-Monica-UCLA Medical Center, with a variety of medical and ancillary uses surrounding them. The Healthcare District also includes the preservation and enhancement of the surrounding residential neighborhood. The HMU designation addresses the changing healthcare needs of the community and supports the continued viability of the two hospitals in the City: 1) Santa Monica-UCLA Medical Center; and 2) Providence Saint John's Health Center (PSJHC). The LUCE envisions new medical and ancillary facilities, open spaces, and additional community benefits to emerge over time within the Healthcare District. The HMU designation allows for a variety of uses that support the City's two hospitals, and ensures continued improvement and ongoing expansion, while being sensitive to the surrounding residential neighborhoods in ways that meet the healthcare needs of the City and the sub-region. Allowed uses within this land use designation include hospital and medical office uses, pharmacies, residential care, rehabilitation and outpatient clinics, affordable, workforce and market-rate housing targeted at hospital employees, extended stay lodging for patient families, and supporting retail uses. This land use designation is broadly categorized as an employment and commerce designation, which are areas of the City that provide space for continued employment activities to ensure the City continues to provide a high level of public service. The HMU District is viewed as one integrated campus that incorporates both the Santa Monica-UCLA Medical Center and the Providence Saint John's Health Center, and the variety of medical and ancillary uses surrounding them.

The LUCE establishes the following goals and policies to achieve the vision established for the HMU District:

Goal D28 Allow for continued improvement of the Healthcare District and the ongoing responsible expansion of the Saint John's Health Center (St. John's) and Santa Monica-UCLA Medical Center (SM-UCLA).

Policy D28.3 Consider the projected increase in outpatient services, diagnostic technology, and supportive care such as physical therapy and ancillary services in the amended HASP.

Policy D28.8 Encourage the development of comfortable, landscaped pedestrian environment including plazas and usable landscaped open spaces with all major renovations to hospital facilities.

Policy D28.9 Provide appropriate transitions and buffers between new hospital facilities and the existing residential neighborhoods.

Policy D29.5 Encourage the development of an enhanced pedestrian realm with improved sidewalks, landscaping and pedestrian amenities.

Goal D30 Ensure that new and remodeled buildings in the Healthcare District are compatible in scale and character with existing buildings and the surrounding residential neighborhoods.

Policy D30.1 Encourage the primary facades of buildings to face the street with the building face located at the property line or back side of the sidewalk along sidewalks or pedestrian ways. However, to encourage a lively streetscape with places for people to socialize, small landscaped gathering spaces and plazas are encouraged.

Policy D30.2 Scale buildings to the pedestrian to create an intimate sidewalk experience. Incorporate enhanced materials and detailing in ground floor façades where they will be in close proximity to passing pedestrians.

Policy D30.3 Design buildings with a variety of heights, architectural elements and shapes to create visual interest along the street. Incorporate meaningful combinations of materials and three-dimensional articulation to create shadow patterns to engage the eye.

The LUCE did not establish new development standards for the HMU District. Instead, development standards within the HMU District are as established within the Hospital Area Specific Plan (HASP) (LUCE, pp. 2.1-57 and 2.6-48). The LUCE further states that the HASP will be updated to adapt to changing conditions within the HMU District (City of Santa Monica 2017a).

City of Santa Monica Hospital Area Specific Plan

The HASP was adopted in 1988, and amended in 1993 and 1998, to guide and coordinate harmonious development of the area in accordance with existing and future needs. The HASP includes the Providence Saint John's Health Center, Santa Monica-UCLA, and surrounding neighborhoods and is generally bordered by Wilshire Boulevard to the north, Euclid Avenue to the west, Broadway to the south, and Chelsea Avenue to the east. The HASP specifies policies for development, the distribution, location and extent of land uses, including open space with the hospital and medical facility area, and provides a program of implementation. The HASP includes the following land use objectives that are applicable to the proposed project:

- Objective Number 1: Ensure that development in the hospital area balances the need for medical facilities and uses while protecting residential uses in the area.
- Objective Number 2: Preserve the residential character of the neighborhoods surrounding the hospitals.
- Objective Number 6: Support Land Use Element policies for residential districts, Wilshire Boulevard, and Santa Monica Boulevard. The HASP does not propose any changes to LUE policies for these areas.
- Objective Number 7: Encourage the use of architectural materials and design which will be compatible with surrounding uses in the hospital area.
- Objective Number 8: In conjunction with its review of development projects, the City should consider the influence of lighting on adjoining properties.
- Objective Number 9: New structures should provide covenants requiring that they be maintained in good conditions with attention to their appearance.
- Objective Number 10: Consideration should be given to development incentives/regulatory provisions to protect the potentially-architecturally significant building at 2125 Arizona Avenue.

The HASP has not been updated to reflect the current LUCE or Zoning Ordinance. The HASP update will occur concurrently with the master plans for both Providence Saint John's Health Center and Santa Monica-UCLA Medical Center to reflect the LUCE vision and boundaries, including portions of Santa Monica Boulevard, Wilshire Boulevard, Broadway and Colorado Avenue. With regard to the project site, the applicable development standards governing floor area, height, massing, etc. are contained within the Zoning Ordinance.

Santa Monica Zoning Ordinance

The City of Santa Monica Zoning Ordinance (Chapter 9.01 through Chapter 9.52) of the Santa Monica Municipal Code (SMMC) sets forth specific design guidelines, height limits, buildings density, building design and landscape standards, architectural features, sign regulations, and open space and setback

requirements. The Zoning Ordinance was comprehensively updated in 2015 to reflect the LUCE vision, goals, and policies. The Zoning Ordinance was last amended in July 2017 to reflect the adoption of the Downtown Community Plan.

The project site is zoned as HMU, which falls into the category of an "Employment" District. Pursuant to Section 9.13 (Employment Districts) of the SMMC, the purposes of the employment districts are as follows:

A. Provide appropriately located areas for continued employment activities to ensure a robust economy that is essential in order for the City to continue to provide the high level of public services that the community expects.

B. Continue to diversify Santa Monica's economic base by providing sites for incubator businesses, creative industries, technology-based businesses, research and development, and professional offices.

C. Provide a range of employment opportunities to meet the needs of current and future residents and take advantage of the City's location relative to regional roadway and transit systems.

D. Assure high-quality design and site planning of office and employment areas and support the adaptive reuse of industrial buildings that contribute to the character of the City as a whole.

E. Encourage the development of employment areas that create an opportunity to walk and bike between businesses, employment, and residences.

F. Ensure that new industrial and office development is designed to minimize traffic and parking, impacts on surrounding neighborhoods, and is appropriate to the physical characteristics of the site and the area where the project is proposed.

Specifically, the HMU Zoning District is intended to provide for the future orderly expansion of the City's hospitals and related healthcare facilities in order to meet the needs of both the community and region while protecting the integrity of the surrounding residential neighborhoods. The District fosters the evolving needs of the healthcare community with expanded medical office uses and outpatient services along with retail and non-medical services (City of Santa Monica 2017b).

The Zoning Ordinance includes zoning standards for the Employment District (Chapter 9.13), with development standards for the HMU District provided in Table 9.13.030 of the SMMC. For the HMU District, the Zoning Ordinance establishes a maximum Tier 2-With Provision of Community Benefits, FAR of 2.5 and height limit of 5 stories/47 feet. Community Benefits include affordable housing, a mix of unit sizes, payment of a transportation impact fee, provision of open space or payment of fees, and incorporation of transportation demand measures. Minimum setbacks include 5 feet from residential areas and a minimum upper-story stepback above the first story of 5 feet for street-facing façades. In addition, a daylight plane is required where adjacent to residential districts, starting at 25 feet in height directly above the abutting parcel line so as to permit daylight on adjacent residential properties (Zoning Ordinance Section 9.13.030C). Landscaping is required along setback areas adjoining streets and along interior parcel lines adjacent to a Residential or Mixed- Use District (Zoning Ordinance Section 9.13.030D).

4.8.3 Thresholds of Significance

The significance criteria used to evaluate the proposed project's impacts to land use and planning are based on the questions in Appendix G of the State CEQA Guidelines. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). The Appendix G questions are listed below and are used as the significance thresholds by the City in this section.

Would the project:

1. Physically divide an established community?
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Issues Not Further Analyzed

Question 1 was analyzed in the Initial Study (Appendix A) and impacts were determined to be less than significant. A summary of the analysis presented in the Initial Study for Question 1 is provided below.

Question 1 Division of an Established Community: The proposed project would not physically divide an established community. The proposed project would constitute infill development within an urban area, surrounded by residential and medical related uses within the HMU District. No new roads or design features would separate or otherwise divide existing land uses, and no roads or other access routes would be blocked or realigned. Therefore, Question 1 will not be further analyzed in this section.

Since the proposed project is subject to the City's LUCE, the Zoning Ordinance, and the HASP, the project requires further analysis. Question 2 will be further analyzed in Section 4.8.5, Impacts Analysis, below.

4.8.4 Methodology

The analysis of land use consistency impacts considers whether the proposed project would cause a significant environmental impact due to a conflict with regional and local plans and regulations that are applicable to the proposed project and project site. CEQA Guidelines Section 15125(d) requires that an EIR discuss potential inconsistencies with applicable adopted plans that the decision-makers should address. The rule of general plan consistency is that the project must at least be compatible with the objectives and policies of the general plan. (Sequoyah Hills Homeowners Assn. v. City of Oakland (1993) 23 Cal.App.4th 704, 717–718 [29 Cal. Rptr. 2d 182] (Sequoyah Hills); Friends of Lagoon Valley, supra, 154 Cal.App.4th at p. 817.) "[S]tate law does not require precise conformity of a proposed project with the land use designation for a site, or an exact match between the project and the applicable general plan. Instead, a finding of consistency requires only that the proposed project be 'compatible with the objectives, policies, general land uses, and programs specified in' the applicable plan. The courts have interpreted this provision

as requiring that a project be '"in agreement or harmony with"' the terms of the applicable plan, not in rigid conformity with every detail thereof." (San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656, 678 [125 Cal. Rptr. 2d 745] (San Franciscans)). To reiterate, the essential question is "whether the project is compatible with, and does not frustrate, the general plan's goals and policies." (Napa Citizens, supra, 91 Cal.App.4th at p. 378.) Consistent with the scope and purpose of this EIR, this discussion primarily focuses on those goals and policies that relate to avoiding or mitigating environmental impacts, and an assessment of whether any inconsistency with these standards creates a significant physical impact on the environment.

Consistency with adopted General Plan goals, policies, and standards, as well as adopted regional plans (e.g., SCAG's RTP/SCS [Connect SoCal]) are analyzed below. Elements of the proposed project that have the potential to conflict with a stated threshold, goal, policy, or standard are summarized in this section, along with related physical environmental consequences.

4.8.5 Impacts Analysis

Would the project cause a significant environment impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project would include the construction of a new 3-story Wellness Center building adjacent to the existing GKGM Building, which would be partially preserved in its current condition, and partially renovated/adaptively reused as part of the Wellness Center. Upon completion, the proposed project would consist of 54,000 sf of Research & Development uses, 18,812 sf of Clinic/Medical Office uses, and a five-level subterranean parking garage. Total floor area ratio (FAR) of the proposed project would be 1.5.

The analysis of land use consistency considers whether the proposed project would cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulations that are applicable to the proposed project. The following analysis focuses on goals and policies related to the 2020-2045 RTP/SCS, the City's LUCE, the Zoning Ordinance, and the HASP, which are applicable to the proposed project.

2020-2045 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/ SCS)

The 2020-2045 RTP/ SCS, known as Connect SoCal, was developed by SCAG, and includes goals to increase mobility and enhance sustainability for the region's residents and visitors. The City of Santa Monica is one of the many jurisdictions that fall under SCAG. Therefore, the following analysis discusses the proposed project's consistency with applicable goals and policies of the RTP/SCS. Table 4.8-1 demonstrates how the proposed project promotes consistency with the guiding principles and policies of the RTP/SCS.

Table 4.8-1
Consistency with RTP/SCS Goals and Policies

RTP/SCS Goal/ Policy Number	Definition of RTP/SCS Goal	Wellness Center Project Applicable Component (s)	Consistency Finding
RTP/SCS Goals			
Goal 1	Encourage regional economic prosperity and global competitiveness.	The proposed project would provide new medical office and Research & Development (R&D) uses as part of a Wellness Center that would be a state-of-the-art modern facility for medical research and related uses. The facility would advance medical research and knowledge and promote health and wellbeing.	The proposed project would be consistent with this goal.
Goal 2	Improve mobility, accessibility, and travel safety for people and goods.	The proposed project would provide new medical office and R&D uses near two Metro E Light Rail Stations (the 17th Street/SMC and 26th Street/Bergamot stations), located approximately 0.5 and 0.8 miles from the project site, respectively. In addition, the proposed project would implement a TDM program to reduce vehicle trips. The proposed project design elements such as large, transparent windows, publicly accessible open space, and landscaping improvements would encourage pedestrian accessibility. Additionally, the proposed project would provide an access plan to promote safe and efficient circulation of vehicles to and from the project site.	The proposed project would be consistent with this goal.
Goal 3	Enhance the preservation, security, and resilience of the regional transportation system.	The proposed project would provide new medical office and R&D uses near two Metro E Light Rail Stations (the 17th Street/SMC and 26th Street/Bergamot stations), located approximately 0.5 and 0.8 miles from the project site, respectively. Due to the proximity to rail and numerous bus transit options, the proposed project would facilitate opportunities to increase transit use, thereby enhancing the resiliency of the regional transportation system.	The proposed project would be consistent with this goal.
Goal 4	Increase person and goods movement and travel choices within the transportation system.	The proposed project would be accessible via a variety of travel choices. The project site is in proximity to light rail stations and bus stops. Additionally, the project site would be designed to encourage pedestrian accessibility and would include bicycle parking and storage, thereby encouraging walking and bicycling as transportation modes. The project site would also be accessible by vehicle and would be designed with sufficient on-site parking to accommodate peak demands. The project's access plan would allow for safe and efficient	The proposed project would be consistent with this goal.

Table 4.8-1
Consistency with RTP/SCS Goals and Policies

RTP/SCS Goal/ Policy Number	Definition of RTP/SCS Goal	Wellness Center Project Applicable Component (s)	Consistency Finding
		RTP/SCS Goals	
		circulation of vehicles to and around the site. As such, the proposed project would be designed to allow for a variety of travel choices and would be designed to promote efficient movement.	
Goal 5	Reduce greenhouse gas emissions and improve air quality.	As analyzed in Section 4.2, Air Quality, and Section 4.6, Greenhouse Gas Emissions, the project would incorporate design features that would reduce and minimize its greenhouse gas emissions, including a solar photovoltaic system, which would offset some of its energy demand. The project design characteristics and features, along with mitigation measures as applicable, would reduce and minimize air quality and greenhouse gas impacts of the proposed project to levels less than significant.	The proposed project would be consistent with this goal.
Goal 6	Support healthy and equitable communities.	The proposed project would introduce a state-of-the-art facility for medical research and related uses that would advance medical research/knowledge and promote the health and wellbeing of the community. The project would also be designed to promote pedestrian accessibility and would include bicycle parking and storage, contributing to a healthy, walkable, and bikeable community.	The proposed project would be consistent with this goal.
Goal 7	Adapt to a changing climate and support an integrated regional development pattern and transportation network.	As stated above, the project would incorporate design features that would reduce and minimize its greenhouse gas emissions (see Section 4.6, Greenhouse Gas Emissions). The project would include a solar photovoltaic system, which would offset some of its energy demand. The project would also foster an integrated transportation network by promoting the use of transit, walking, and bicycling as transportation modes. Furthermore, the project consists of infill development and would include uses that serve the surrounding neighborhoods and communities, thereby supporting an integrated development pattern in the project area.	The proposed project would be consistent with this goal.
Goal 8	Leverage new transportation technologies and data-driven solutions that result in more efficient travel	The proposed project would develop a Wellness Center and would not include development of new transportation technologies. The proposed project would not affect or otherwise hinder the leveraging of new transportation technologies or otherwise the efficiency of travel in the region.	Not Applicable

Table 4.8-1
Consistency with RTP/SCS Goals and Policies

RTP/SCS Goal/ Policy Number	Definition of RTP/SCS Goal	Wellness Center Project Applicable Component (s)	Consistency Finding
RTP/SCS Goals			
Goal 9	Encourage development of diverse housing types in areas that are supported by multiple transportation options	The proposed project would develop 54,000 sf of Research & Development Uses and 18,812 sf of Clinic/Medical Office uses, consistent with the goals and policies of the HMU District. Implementation of the proposed project would not affect or otherwise hinder the development of diverse housing in the area.	Not Applicable
Goal 10	Promote conservation of natural and agricultural lands and restoration of habitats	The proposed project would develop a Wellness Center in an urban area, consistent with the goals and policies of the HMU District. Implementation of the proposed project would not affect or otherwise hinder the conservation of natural or agricultural lands.	Not Applicable

Source: SCAG 2020

As shown on Table 4.8-1, the proposed project would be consistent with applicable goals and policies identified in the 2020 RTP/SCS.

City of Santa Monica General Plan Land Use and Circulation Element (LUCE)

The project site has a LUCE land use designation of Healthcare Mixed-Use (City of Santa Monica 2017a). The HMU designation addresses the changing healthcare needs of the community and supports the continued viability of the two hospitals in the City: 1) Santa Monica-UCLA Medical Center; and 2) Providence Saint John's Health Center (City of Santa Monica 2017a). The proposed project would contribute to the growth of medical-related facilities within the HMU district near consistent with the City's LUCE. Table 4.8-2 demonstrates how the proposed project promotes consistency with the guiding principles and policies of the LUCE.

Table 4.8-2
Consistency with LUCE Goals and Policies

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)	Consistency Finding
Conserving and Enhancing Neighborhoods			
Policy LU1.3: Quality of Life	Preserve neighborhood quality of life and protect neighborhoods against potential impacts related to development, traffic, noise,	The proposed project would not intrude into an existing residential neighborhood. The project would respect the neighborhood by incorporating	The proposed project would be consistent

Table 4.8-2
Consistency with LUCE Goals and Policies

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)	Consistency Finding
	air quality and encroachment of commercial activities and establish standards that transition down the building envelope of commercial buildings adjacent to residential properties.	setbacks adjacent to existing residential areas across 19th court alley. As analyzed in Sections 4.10, Transportation; 4.9, Noise; and 4.2, Air Quality, project design characteristics and features, along with mitigation measures, as applicable, would reduce and minimize traffic, noise, and air quality impacts of the proposed project.	with this policy.
Linking Land Use and Transportation Policy: Addressing Climate Change			
Goal LU2: Integrate Land Use and Transportation for Greenhouse Gas (GHG) Emission Reduction	Integrated land use and transportation, carefully focusing new development on transit-rich boulevards and in the districts, to create sustainable active pedestrian-friendly centers that decrease reliance on the automobile, increasing walking, bicycling and transit use, and improve community quality of life.	The project site is located along 20th Street in close proximity to Wilshire Boulevard. The proposed project would create a pedestrian-oriented design along the 20th Street frontage. The proposed project would be within 300 feet of the Wilshire/20th Street Big Blue Bus stop. In addition, the proposed project is approximately 0.5 miles from the 17th Street/SMC Metro E Light Rail Station. Thus, the project would encourage the use of public transportation, carpools, electric and natural gas vehicles, bicycles, and walking to minimize the number of vehicle trips. Additionally, the proposed project would provide ample on-site bicycle storage facilities for employees, patrons, and visitors.	The proposed project would be consistent with this goal.
Policy LU2.5: Vehicle Trip Reduction	Achieve vehicle trip reduction through comprehensive strategies that designate land uses, establish development and street design standards, implement sidewalk, bicycle and roadway improvements, expand transit service, manage parking, and strengthen	The project site is located along 20th Street in close proximity to Wilshire Boulevard. The proposed project would create a pedestrian-oriented design along the 20th Street frontage. The proposed project would be within 300 feet of the Wilshire/20th Street Big Blue Bus stop. In addition, the	The proposed project would be consistent with this policy.

Table 4.8-2
Consistency with LUCE Goals and Policies

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)	Consistency Finding
	Transportation Demand Management programs that support accessibility by transit, bicycle and foot, and discourage vehicle trips at a district-wide level. Monitor progress using tools that integrate land use and transportation factors. Increase bicycle and pedestrian connectivity in transit districts and adjacent bus and shuttle services to ensure success of the transit system.	proposed project would provide new medical office and R&D uses near two Metro E Light Rail Stations (the 17th Street/SMC and 26th Street/Bergamot stations), located approximately 0.5 and 0.8 miles from the project site, respectively. Thus, would encourage the use of public transportation, carpools, electric and natural gas vehicles, bicycles, and walking to minimize the number of vehicle trips.	
Policy LU2.6: Active Spaces	Focus new development in defined districts to create active spaces that can support diverse local-serving retail and services, walkability, arts and culture. Require, whenever possible, new development to provide convenient and direct pedestrian and bicycle connections	The proposed project would provide new medical office and R&D uses within an established portion of the City in close proximity to Wilshire Boulevard, an active boulevard within the City. The project site is located approximated 300 feet from the Wilshire/20th Street Big Blue Bus stop and 0.5-miles from the 17th Street/SMC Metro E Light Rail Station. Thus, providing new development that provides direct pedestrian, bicycle, and transit connections.	The proposed project would be consistent with this policy.
Policy LU4.8: Parking and Transportation Demand and Management Districts	Utilize parking and TDM Districts to facilitate efficient use of parking resources, shared and reduced parking opportunities, and trip reduction goals.	The proposed project would prepare a TDM plan that satisfies the City's TDM Ordinance as a requirement for project approval. Specific strategies required in the TDM plan would be determined by the City during the project approval process and may include transit pass subsidy, parking cash out, ridesharing, bicycle facilities, priority carpool parking, etc.	The proposed project would be consistent with this policy.

Table 4.8-2
Consistency with LUCE Goals and Policies

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)	Consistency Finding
Goal LU7: Hospital Area	Support the continued vitality of the City's hospitals to meet the healthcare needs of the City and the larger region, and implement strategies to reduce vehicle trips.	The proposed project would involve the development of a new Wellness Center located within the Healthcare District of the City. The proposed R&D, clinical/medical office, and ancillary meeting uses would meet the needs of the healthcare community. Therefore, the proposed project would contribute to the vitality of medical facilities within the City.	The proposed project would be consistent with this goal.
Policy LU7.3: Supportive Uses	Encourage a variety of services and uses in the district, and in commercial districts throughout the City, to support the changing needs of the healthcare community and hospitals.	The proposed project would develop a new Wellness Center with R&D, clinical/medical office, and ancillary meeting uses that would meet the needs of the healthcare community.	The proposed project would be consistent with this policy.
Policy LU7.4: Responsible Expansion	Allow responsible expansion of hospitals and medical uses that is sensitive to the surrounding neighborhoods and coordinated with comprehensive TDM and trip reduction strategies.	The proposed project would develop a new Wellness Center with design elements that would contribute to the existing neighborhood and create a pedestrian-oriented design along the 20th street frontage. Additionally, the proposed project would prepare a TDM plan that satisfies the City's TDM Ordinance as a requirement for project approval. Specific strategies required in the TDM plan would be determined by the City during the project approval process and may include transit pass subsidy, parking cash out, ridesharing, bicycle facilities, priority carpool parking, etc	The proposed project would be consistent with this policy
Policy LU8.1: Transportation Demand Management	Require participation in TDM programs for projects above the base to encourage walking, biking, and transit, and to reduce	The proposed project would prepare a TDM plan that satisfies the City's TDM Ordinance as a requirement for project approval. Specific	The proposed project would be consistent

Table 4.8-2
Consistency with LUCE Goals and Policies

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)	Consistency Finding
	vehicle trips. Engage existing development in TDM Districts and programs to encourage reduction of existing vehicle trips.	strategies required in the TDM plan would be determined by the City during the project approval process and may include transit pass subsidy, parking cash out, ridesharing, bicycle facilities, priority carpool parking, etc.	with this policy
Improving Quality of Life			
Goal LU12: Encourage Historic Preservation Citywide	Preserve buildings and features which characterize and represent the City's rich heritage.	Under the proposed project, the GKGM Building would be partially preserved in its current condition and partially renovated/adaptively reused as part of the Wellness Center. Thus, implementation of the proposed project would preserve a historic structure on site.	The proposed project would be consistent with this goal.
Policy LU12.2: Preservation Programs	Promote adaptive reuse of historic structures and sensitive alterations where changes are proposed. New construction or additions to historic structures shall be respectful of the existing historic resource.	Under the proposed project, the GKGM Building would be partially preserved in its current condition and partially renovated/adaptively reused as part of the Wellness Center. Thus, implementation of the proposed project would preserve a historic structure on site.	The proposed project would be consistent with this policy.
Policy LU15.3: Context-Sensitive Design	Require site and building design that is context sensitive and contributes to the City's rich urban character.	The proposed project would be designed in accordance with development standards established for the Healthcare District. As compared to the existing site conditions, which does not positively contribute to the character of the area, the proposed project would improve the character of the existing area.	The proposed project would be consistent with this policy.
Policy LU15.4: Open and Inviting Development	Encourage new development to be open and inviting with visual and physical permeability, connections to the existing street and pedestrian network, and connections	The proposed design of the Wellness Center project creates a pedestrian-oriented design along the 20th Street frontage. As such, the visual character of 20th Street would be enhanced, and would be	The proposed project would be consistent with this policy.

Table 4.8-2
Consistency with LUCE Goals and Policies

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)	Consistency Finding
	to the neighborhoods and the broader community.	more open and connected with Wilshire Boulevard and other surrounding uses. Enhanced pedestrian-oriented design features including widened walkways, outdoor seating and public use areas.	
Policy LU15.9: Pedestrian-Oriented Design	Buildings should incorporate pedestrian-scaled elements with durable, quality materials and detailing located on the lower stories adjacent to the pedestrian.	The frontage of 20th Street would incorporate pedestrian-scale elements. They also would provide design elements such as large, transparent windows, publicly accessible open space, and thoughtful landscaping improvements to create a continuous and pleasant pedestrian experience between Wilshire Boulevard and Santa Monica Boulevard.	The proposed project would be consistent with this policy.
Policy LU 15.5 Pedestrian and Bicycle Connectivity	Encourage the design of sites and buildings to facilitate easy pedestrian- and bicycle-oriented connections and to minimize the separation created by parking lots and driveways.	The project site is located along 20th Street in close proximity to Wilshire Boulevard. The project construction is designed as an irregular-shaped building with a strategic carve-out of massing at the southeastern orientation, where the building interacts most with both the existing GKGM Building and the street level pedestrian experience along 20th Street. The strategic carve-out of massing (see Figure 4.1-6 in Section 4.1, Aesthetics) would allow for easy pedestrian and bicycle access to the building and site. In addition, below-grade parking would be constructed for the project and vehicular access would be provided from the alley to the immediate southwest of the site. The provision of below-grade parking and access design would maximize pedestrian- and bicycle-oriented connections to the site by	The proposed project would be consistent with this goal.

Table 4.8-2
Consistency with LUCE Goals and Policies

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)	Consistency Finding
		minimizing site separation (and potential pedestrian and bicycle conflicts) associated with typical parking lots and driveways.	
Policy LU19.1: Streets Integrated with Land Use	Recognize the streets as a vital component of neighborhood, district and boulevard character. Develop street design standards that consider the mobility, open space, community life and methods to engage the surrounding uses.	The new construction is designed as a three-story rectangular-shaped building with a strategic carve-out of massing at the southeastern orientation, where the building interacts most with both the existing GKGM Building and the street level pedestrian experience. There are a series of stepped semi-public terraces, which serve to further set back the perceived height of the upper stories, as well as to activate the 20th Street façade with human activity at every level. At the ground level, the opening is experienced as a secondary plaza and gathering place between the two buildings; the first being the original open space area at the corner of Arizona and 20th Street.	The proposed project would be consistent with this policy.
Policy LU20.3: Maintaining an Urban Forest	Encourage properties adjacent to the public right-of-way to contribute to the urban forest environment through on-site plantings and street tree care and maintenance.	There are on-site trees and off-site street trees on the City sidewalk along the boundaries of the project site. The off-site public street trees are part of the City's Urban Forest and not native originating (natural to the location). There are approximately nine existing City street trees, including six on 20th Street and three on Arizona Avenue. In coordination with the City's Urban Forestry manual, all of the street trees would be evaluated to either remain or be substituted during project implementation. Pursuant to the Santa Monica Municipal Code (SMMC) Chapter 7.40,	The proposed project would be consistent with this policy.

Table 4.8-2
Consistency with LUCE Goals and Policies

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)	Consistency Finding
		Tree Code, no street trees shall be removed without having first obtained a City permit authorizing such work.	
Neighborhoods			
Policy N1.5	Encourage and incentivize preservation or adaptive reuse of historic structures and older apartment buildings.	Under the proposed project, the GKGM Building would be partially preserved in its current condition and partially renovated/adaptively reused as part of the Wellness Center. Thus, implementation of the proposed project would preserve a historic structure on site.	The proposed project would be consistent with this policy.
Historic Preservation			
Goal HP1	Preserve and protect historic resources in Santa Monica through land use decision-making process.	Under the proposed project, the GKGM Building would be partially preserved in its current condition and partially renovated/adaptively reused as part of the Wellness Center. Therefore, the proposed project would preserve and protect historic resources in the City.	The proposed project would be consistent with this goal.
Policy HP1.3	Ensure that that new development, alterations or remodeling on, or adjacent to, historic properties are sensitive to historic resources and are compatible with the surrounding historic context.	Conceptually, the new construction is currently proposed with limestone panels, to be compatible but distinct from the existing GKGM Building. The final architectural design and materials are still under review and will be subject to final review and approval by the City's Architectural Review Board and subject to Mitigation Measures (MM-) CUL-1 and MM-CUL-2 (see Section 4.4, Cultural Resources, of this EIR) to ensure the design is compatible with the GKGM Building and consistent with the Secretary of the Interior Standards for the Treatment of Historic Properties.	

Table 4.8-2
Consistency with LUCE Goals and Policies

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)	Consistency Finding
Sustainability and Climate Change			
Policy S3.1	Actively strive to implement the City's "zero net" electricity consumption goal by 2020 through a wide variety of programs and measures, including the generation of renewable energy in the City and energy efficiency measures.	The proposed project would implement high-energy efficiency measures efficient HVAC systems, light-emitting diode (LED) lighting, and lighting controls, such as occupancy sensors.	The proposed project would be consistent with this policy.
Diversified and Sustainable Economy			
Goal E10	Support the responsible expansion of the City's existing hospitals and their ancillary support facilities that are requisite to their missions of serving the community.	The proposed project would develop a new Wellness Center with Research and Development and Clinical/Medical Office uses that would meet the needs of the community. Additionally, the proposed project would offer educational and community-oriented programs on topics of healthcare and wellness.	The proposed project would be consistent with this goal.
Policy E10.3	Encourage development of a continuum of healthcare uses such as congregate care, senior housing with services, outpatient clinics and other uses consistent with modern medical facilities.	Implementation of the proposed project would result in the construction of a Wellness Center in the Healthcare District. The proposed project would provide space for medical research activities, laboratory modules, specialized equipment, medical archives, and office space.	The proposed project would be consistent with this policy.
Healthcare District			
Goal D28	Allow for continued improvement of the Healthcare District and the ongoing responsible expansion of the Saint John's Health Center (St. John's) and Santa Monica-UCLA Medical Center (SM-UCLA).	The proposed project would involve partial adaptive reuse of the GKGM Building and construction of a new Wellness Center located within the Healthcare District of the City. Therefore, the proposed project would allow for the continued improvement of the Healthcare District.	The proposed project would be consistent with this policy.

Table 4.8-2
Consistency with LUCE Goals and Policies

LUCE Goal or Policy Number	Stated LUCE Goal or Policy	Wellness Center Project Applicable Component (s)	Consistency Finding
Policy 29.5	Encourage the development of an enhanced pedestrian realm with improved sidewalks, landscaping and pedestrian amenities.	The new construction is designed as a three-story building with a strategic carve-out of massing at the southeastern orientation, where the building adjoins the existing GKGM Building. At the ground level, the opening is experienced as a secondary plaza providing the main pedestrian entry and gathering place between the two buildings.	The proposed project would be consistent with this policy.
Goal D30	Ensure that new and remodeled buildings in the Healthcare District are compatible in scale and character with existing buildings and the surrounding residential neighborhoods	The final architectural design and materials are still under review and will be subject to final review and approval by the City's Architectural Review Board to ensure compatibility with surrounding residential areas.	The proposed project would be consistent with this goal.
Community Enrichment			
Policy CE6.1	Foster relationships with the healthcare community and community at large to promote the well-being of all residents and make community health a priority.	The proposed project would involve the development of a new Wellness Center located within the Healthcare District of the City. The proposed R&D, clinical/medical office, and ancillary meeting uses would meet the needs of the healthcare community and promote residents' access to cutting edge medical research and services.	The proposed project would be consistent with these policies.
Policy CE6.2	Encourage uses and programs that expand residents' access to healthy living services that offer a diverse array of preventative card and medical services to all residents while specifically addressing underserved populations.		

Source: City of Santa Monica 2017a

As shown on Table 4.8-2, the proposed project would be consistent with all applicable goals and policies, identified in the LUCE and would not result in an adverse physical impact on the environment.

Santa Monica Zoning Ordinance

The City of Santa Monica Zoning Ordinance (Chapter 9.01 through Chapter 9.52) of the Santa Monica Municipal Code (SMMC) sets forth specific permitted land uses and development standards for zoning districts. According to the Zoning District Map, the project site is zoned as a Healthcare Mixed-Use (HMU) District (City of Santa Monica 2017b). This zoning district is intended to provide for the future orderly expansion of the City's hospitals and related healthcare facilities in order to meet the needs of both the community and region while protecting the integrity of the surrounding residential neighborhoods (City of Santa Monica 2017b). Table 4.8-3 demonstrates how the proposed project is consistent with the site's zoning of Healthcare Mixed-Use district.

Table 4.8-3
Consistency with Santa Monica Municipal Code

SMMC Article 9 Planning and Zoning	Regulation:	Wellness Center Project Applicable Component (s)	Consistency Finding
Section 9.13.020: Permitted Uses	Permitted Uses include: Medical and Dental, Offices, Research and Development	The proposed project would develop a Wellness Center with Research and Development uses and Clinical/Medical Office uses. All these uses are permitted uses in the HMU district.	The proposed project would be consistent with this purpose in the SMMC.
Section 9.13.030: Maximum FAR	Tier 1 –FAR 1.5 Tier 2 – With community benefits FAR 2.5	The proposed project has a FAR of 1.5. Therefore, the project is considered a Tier 1 project.	The proposed project would be consistent with this purpose in the SMMC.
Section 9.13.030: Maximum Building Height	Tier 1 – Height (3 stories/45 feet) Tier 2 – Height (5 stories/70 feet)	The maximum building height of the project would be 45 feet, not including parapets and roof appurtenances; therefore, the project is considered a Tier 1 project.	The proposed project would be consistent with this purpose in the SMMC.
Section 9.13.030 Minimum Setbacks	15 foot minimum for Interior Side and Rear Adjacent to a Residential District	The proposed project would provide a 15-foot setback from the alley centerline.	The proposed project would be consistent with this purpose in the SMMC.

Note:
FAR= floor area ratio; NA= not applicable

As shown on Table 4.8-3, the proposed project would be consistent with the zoning standards for HMU District, as set forth in the SMMC.

City of Santa Monica Hospital Area Specific Plan

The proposed project involves construction of a Wellness Center with medical research activities, providing spaces for laboratory modules, specialized equipment, medical archives, and both private and collaborative office spaces for staff. Medical clinic and office functions such as outpatient care are also anticipated, and would require flexible spaces for patient treatment and administration. To accommodate educational and community-oriented programming on topics of healthcare and wellness, there will also be flexible meeting and gathering spaces throughout. Therefore, the proposed project would not conflict with the any updated proposed for the HASP.

Summary

Based on consistency with the applicable goals and policies of the RTP/SCS, the City's LUCE, the Zoning Ordinance, and the HASP, the proposed project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. Therefore, the proposed project would not cause a significant environmental impact due to a land use conflict, and impacts would be **less than significant**. No mitigation is required.

4.8.6 Cumulative Impacts

The geographic scope for the cumulative land use analysis includes the City, in terms of the General Plan land use goals and policies, as well as greater Los Angeles County in terms of planning for regional transportation and sustainability. The proposed project in combination with other cumulative projects (either approved, pending, under construction, or recently completed) in the City would support LUCE and SCAG goals of encouraging new housing and supporting commercial uses near transit, improving the pedestrian environment, and providing uses near the Metro E Light Rail Line that connects the City of Santa Monica with the greater Los Angeles region. This integrated land use-transportation approach would maximize opportunities for the use of public transit and decrease the distance between new housing, jobs, and transportation services, and therefore, would minimize increases in City traffic, vehicle miles traveled per capita, peak-hour congestion, and the generation of greenhouse gas emissions.

The proposed project involves development of a wellness center with R&D and clinic/medical office uses that is consistent with the HMU District and implements the City's LUCE goals, including those addressing high-quality architectural design, sustainable building design, pedestrian orientation, publicly accessible open space and green space, vehicle trip reductions through transportation demand management, and other community benefits. The implementation of a medical wellness facility in close proximity to the Providence Saint John's Health Center and Santa Monica-UCLA Medical Center supports the type of development within the HMU District that the LUCE envisions. The Wellness Center would be an employment center within the City with easy access to transit, thus promoting connections between Santa Monica and the greater Los Angeles area. Therefore, the proposed project would be consistent with the

LUCE and the RTP/SCS's goals of focusing land use changes in areas near transit and within urban areas to preserve the City's existing residential neighborhoods.

The proposed project would be consistent with the policies and standards identified within the LUCE and Zoning Ordinance applicable to the project site. Additionally, with respect to other cumulative projects, the City actively monitors growth and evaluates development for consistency with its regulations and their potential for physical environmental impacts in accordance with CEQA. Therefore, cumulative impacts associated with a significant environmental impact due to a land use conflict would be **less than significant**. No mitigation is required.

4.8.7 Mitigation Measures

No mitigation measures are required.

4.8.8 Level of Significance After Mitigation

All impacts would be **less than significant**.

4.8.9 References

City of Santa Monica. 2017a. 2010 Land Use and Circulation Element. Last Amended March 10, 2020. https://www.smgov.net/Departments/PCD/Plans/2010-Land-Use-and-Circulation-Element-(LUCE)/.

City of Santa Monica. 2017b. Santa Monica Municipal Code Article 9 Planning and Zoning. Last updated October 24, 2017. Accessed December 2017. http://www.qcode.us/codes/santamonica/view.php?topic=9&frames=on.

SCAG (Southern California Association of Governments). 2020. *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy - Connect SoCal*. Adopted September 3, 2020. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx.

4.9 NOISE

This section describes the existing noise setting in the vicinity of the project site, identifies the associated regulatory framework, evaluates the potential noise impacts of the proposed project by estimating future noise and vibration levels of the project, and identifies mitigation measures related to implementation of the proposed project.

4.9.1 Fundamentals of Noise and Vibration

Noise Characteristics

The following is a brief discussion of fundamental noise concepts. The basic terminology and concepts of noise are described as follows, with technical terms defined in Appendix F.

Sound, Noise, and Acoustics

Sound is a vibrational energy that consists of three components: the sound source, the sound path, and the sound receiver. All three components must be present for sound to exist. Without a source to produce sound, there is no sound. Similarly, without a medium to transmit sound pressure waves, there is no sound. Finally, sound must be received; a hearing organ, sensor, or object must be present to perceive, register, or be affected by, sound. In most situations, there are many different sound sources, paths, and receptors rather than just one of each. Acoustics is the field of science that deals with the production, propagation, reception, effects, and control of sound. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired.

Sound Pressure Levels and Decibels

The amplitude of a sound determines its loudness. Loudness of sound increases with increasing amplitude. Sound pressure amplitude is measured in units of micronewtons per square meter, also called micropascals. One micropascal is approximately one-hundred billionth (0.00000000001) of normal atmospheric pressure. The pressure of a very loud sound may be 200 million micropascals, or 10 million times the pressure of the weakest audible sound. Because expressing sound levels in terms of micropascals would be very cumbersome, sound pressure level in logarithmic units is used instead to describe the ratio of actual sound pressures to a reference pressure squared. These units are called bels. To provide a finer resolution, a bel is subdivided into 10 decibels, abbreviated dB.

A-Weighted Sound Level

Sound pressure level alone is not a reliable indicator of loudness. The frequency, or pitch, of a sound also has a substantial effect on how humans will respond. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited not only in the range of audible frequencies but also in the way it perceives the sound in that range. In general, the healthy human ear is most sensitive to sounds between 1,000 hertz (Hz) and 5,000 Hz, and it perceives a sound within that range as more intense than a sound of higher or lower frequency with the same magnitude. To approximate the frequency response of the human ear, a series of sound level adjustments is usually applied to the sound measured by a sound level meter. The adjustments (referred to as a weighting network) are frequency-dependent.

The A-scale weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments about the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special situations (e.g., B-scale, C-scale, D-scale), but these scales are rarely used in conjunction with most environmental noise. Noise levels are typically reported in terms of A-weighted sound levels. All sound levels discussed in this report are A-weighted; however, increases and decreases are expressed in decibels. Examples of typical sound levels for common indoor and outdoor activities are depicted in Table 4.9-1.

Table 4.9-1
Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet fly-over at 300 meters (1,000 feet)	100	
Gas lawn mower at 1 meter (3 feet)	90	
Diesel truck at 15 meters (50 feet), at 80 kilometers/hour (50 miles per hour)	80	Food blender at 1 meter (3 feet), garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime Gas lawn mower at 30 meters (100 feet)	70	Vacuum cleaner at 3 meters (10 feet)
Commercial area Heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban daytime	50	Large business office, dishwasher next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural nighttime	20	Bedroom at night, concert hall (background)
	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013a.
Notes: dBA = A-weighted decibel.

Human Response to Changes in Noise Levels

Under controlled conditions in an acoustics laboratory, the trained, healthy human ear is able to discern changes in sound levels of 1 dB when exposed to steady, single-frequency signals in the mid-frequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dB in normal environmental noise. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dB. A change of 5 dB is readily perceptible, and a change of 10 dB is perceived as twice or half as loud. Because the dBA scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. As discussed previously, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a road) would result in a barely perceptible change in sound level).

Noise Descriptors

Additional units of measure have also been developed to evaluate the long-term characteristics of sound. The equivalent sound level (L_{eq}) is also referred to as the time-averaged sound level. It is the equivalent steady-state sound level that in a stated period of time would contain the same acoustical energy as the time-varying sound level during the same time period. The 15-minute A-weighted equivalent sound level, L_{eq}, is the energy average of the A-weighted sound levels occurring during a 15-minute period and is the basis for the noise ordinance criteria for the City of Santa Monica (City of Santa Monica 2004).

People are generally more sensitive to and annoyed by noise occurring during the evening and nighttime hours. Thus, another noise descriptor used in community noise assessments is termed the community noise equivalent level (CNEL). The CNEL scale represents a time-weighted, 24-hour average noise level based on the A-weighted sound level. The CNEL accounts for the increased noise sensitivity during the evening hours (7:00 p.m. to 10:00 p.m.) and nighttime hours (10:00 p.m. to 7:00 a.m.) by adding 5 dB and 10 dB, respectively, to the average sound levels occurring during the nighttime hours.

Sound Propagation

Sound propagation (i.e., the passage of sound from a noise source to a receiver) is influenced by several factors. These factors include geometric spreading, ground absorption, and atmospheric effects, as well as shielding by natural and/or built features.

Sound levels are attenuated at a rate of approximately 6 dB per doubling of distance from an outdoor point source due to the geometric spreading of the sound waves. Additional sound attenuation can result from man-made features, such as intervening walls and buildings, as well as from natural features such as hills and dense woods. Atmospheric conditions such as humidity, temperature, and wind gradients can temporarily either increase or decrease sound levels. In general however, the greater the distance the receiver is from the source, the greater the sound attenuation.

Vibration Characteristics

Vibration is an oscillatory motion through a medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earthmoving equipment.

Several different methods are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square amplitude (RMS) is most frequently used to describe the effect of vibration on the human body and is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration (Caltrans 2013b).

High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of vibration can damage fragile buildings (such as historic buildings) or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible (Caltrans 2013b).

The general human response to different levels of ground-borne vibration velocity levels is described below in Table 4.9-2, Human Response to Different Levels of Groundborne Vibration.

Table 4.9-2
Human Response to Different Levels of Groundborne Vibration

Human Response	Transient (in/sec)	Continuous (in/sec)
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.9	0.1
Severe/Disturbing	2	0.4

Source: Caltrans 2013b.
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

The structural effects related to different levels of ground-borne vibration velocity levels are shown below in Table 4.9-3, Vibration Thresholds for Potential Structural Damage.

Table 4.9-3
Vibration Thresholds for Potential Structural Damage

Structure and Condition	Transient (in/sec)	Continuous (in/sec)
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1	0.5
Modern industrial/commercial buildings	2	0.5

Source: Caltrans 2013b.

4.9.2 Existing Conditions

Noise and Vibration Sensitive Receptors in the Project Area

Noise-sensitive land uses are in locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas are considered noise-sensitive areas and may warrant unique measures for protection from intruding noise. The closest existing noise sensitive receptor to the project site is the Lighthouse Church and School located approximately 10 feet to the north along 20th Street.[1] Furthermore, there are single-family and multi-family residences located approximately 20 feet to the west across 19th Court alley and multi-family residences and the Ambrose Hotel located approximately 75 feet to the northeast and more multi-family residences south along 20th Street. Additionally, the Providence Saint John's Child and Family Development Center is located approximately 370 feet to the southeast along 20th Street. Convalescent homes/rehabilitation centers are also located to the south along 20th Street.

Vibration-sensitive receptors include residential uses, historic buildings that are more fragile to vibration, and hospital/medical uses, particularly those with surgical suites and imaging equipment. Nearby vibration sensitive uses include the residential uses identified above, as well as the medical uses within the Saint John's Medical Plaza (1301 20th Street) to the east at the southeast corner of 20th Street/Arizona Avenue. These sensitive receptors represent the nearest land uses with the potential to be impacted by the proposed project's noise and vibration. Additional sensitive receptors are located farther from the project site in the surrounding community and would be less impacted by noise and vibration levels.

[1] Although the City is at an angle (i.e., streets are northwest or southwest), directions will be referred to as north, south, east, and west. 20th Street will be referred to as east, Arizona Avenue will be referred to as south, and so forth.

Existing Noise in Project Area

The project site consists of an approximately 45,009-square-foot (sf) property that is currently occupied by a restaurant (the "Tartine") housed in the former Gates, Kingsley, & Gates Funeral Home (referred to as the GKGM Building), which is a 2-story Tudor Revival-style structure with a connected 4-car garage, and a surface parking lot. The project site is also developed with two 2-story structures (one 7-unit building and one 3-unit building) currently leased as office space (formerly used as residential), as well as surface parking spaces adjacent to the buildings. The ambient noise in the project area is primarily dominated by vehicular traffic noise on nearby roadways. Other secondary noise sources include heating, ventilation, and air conditioning (HVAC) systems, landscaping maintenance noise, distant aircraft, loading/delivery trucks, refuse collection, sirens from emergency vehicles (ambulances), birds, and barking dogs.

Ambient Noise Monitoring

A noise measurement survey was conducted in and around the project area in order to characterize the existing noise environment and to document existing on-site activity noise levels. Noise measurements were conducted using a SoftdB Piccolo integrating sound-level meter equipped with 0.5-inch pre-polarized condenser microphone with pre-amplifier. The sound-level meter meets the current ANSI standard for a Type 2 (General Purpose) sound-level meter. The sound-level meter was calibrated before and after the measurements, and the measurements were conducted with the microphone positioned five feet aboveground and covered with a windscreen.

Short-term noise measurements were conducted at five locations on May 16, 2018[2], as depicted on Figure 4.9-1, Noise/Vibration-Sensitive Land Uses and Measurement/Modeling Locations. As is customary for ambient community noise measurements, the measurements were conducted under typical mid-week conditions, during mid-day hours (i.e., not during morning or evening rush-hour conditions). Each of the noise measurements was 15 minutes in duration. Site ST1 was located on-site, adjacent to 20th Street; site ST2 was located east of the project site, adjacent to residences along the eastern side of 20th Street; site ST3 was located west of the project site, adjacent to residences; site ST4 was located north of the project site at the existing church and school; and site ST5 was located south of the project site, at the residences located along the south side of Arizona Avenue. The measured average noise levels ranged from approximately 60 dBA L_{eq} at site ST3 to 71 dBA L_{eq} at site ST1, as shown in Table 4.9-4. The detailed noise measurement field notes are provided in Appendix F.

[2] Because the ambient noise measurements were conducted prior to the restaurant and offices which partially occupy the site under current conditions, the existing noise levels provided here are conservative, in that they are representative of the site with no on-site uses. As such, differentials between existing and proposed noise conditions may be less than what is shown in this analysis.

Table 4.9-4
Measured Noise Levels

Site	Description	Start / End Time	L_{eq}	L_{max}	L_{min}
ST1	On-site, adjacent to 20th Street, north of Arizona Avenue	10:46 AM / 11:01 AM	70.5	83.2	56.1
ST2	East of project site, adjacent to residences on 20th Street, north of Arizona Avenue	11:21 AM / 11:36 AM	67	76.1	55.1
ST3	West of project site, adjacent to residences on 19th Court alley, north of Arizona Avenue	11:44 AM / 11:59 AM	60.4	74.4	53.4
ST4	North of project site, at Lighthouse Church and School on 20th Street, north of Arizona Avenue	1:31 PM / 1:46 PM	70.2	89	55.8
ST5	South of project site, adjacent to residences on Arizona Avenue, west of 20th Street	12:05 PM / 12:20 PM	68.3	79.6	57.3

Notes:
L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum noise level; L_{min} = minimum noise level.

Estimated Vehicular Noise

The existing 24-hour, time-weighted (CNEL) traffic noise levels were modeled using the Federal Highway Administration's (FHWA) Traffic Noise Model (TNM), version 2.5 (FHWA 2004) and existing traffic volumes from the *1242 20th Street Wellness Center Project – Non-CEQA Traffic Analysis Memorandum* (Fehr and Peers 2020). Traffic noise levels were modeled at representative on-site and off-site noise-sensitive receivers. The receivers, which represent noise-sensitive receivers with the most potential to be impacted by project-related traffic noise, are shown in Figure 4.9-1. As shown in Figure 4.9-1, site ST1 represents the proposed (medical offices) project site and sites ST2 through ST5 represent existing off-site receivers.

The results of the traffic modeling for the existing conditions at the above receiver locations and locations M1 through M3[3] are summarized in Table 4.9-5 (Traffic Noise – Existing), and the traffic noise modeling data is shown in Appendix F. As shown in Table 4.9-5, the existing modeled traffic noise levels range from approximately 55 dBA CNEL at receiver ST3 to 67 dBA CNEL at receiver ST4.

Table 4.9-5
Traffic Noise - Existing

Modeled Receiver	Description	Existing (dBA CNEL)
ST1	On-site, adjacent to 20th Street, north of Arizona Avenue	66
ST2	East of project site, adjacent to residences on 20th Street, north of Arizona Avenue	66

[3] Receivers M1 through M3 are modeled-only locations, intended to supplement the analysis of potentially affected noise-sensitive land uses, whereas ST1 through ST5 are measured and modeled locations.

Table 4.9-5
Traffic Noise - Existing

Modeled Receiver	Description	Existing (dBA CNEL)
ST3	West of project site, adjacent to residences on 19th Court alley, north of Arizona Avenue	55
ST4	North of project site, at Lighthouse Church and School on 20th Street, north of Arizona Avenue	67
ST5	South of project site, adjacent to residences on Arizona Avenue, west of 20th Street	66
M1	West of project site, adjacent to residences on 17th Street, north of Arizona Avenue	61
M2	Northwest of project site, adjacent to residences on 17th Street, north of Wilshire Boulevard	62
M3	Southwest of project site, adjacent to residences on 17th Street, south of Arizona Avenue	64

Notes: ST = measured and modeled locations; M = modeled-only locations
Source: Appendix F.

Existing Groundborne Vibration Levels

Typically, groundborne vibration generated by man-made activities (i.e., rail and roadway traffic, mechanical equipment, and typical construction equipment) diminishes rapidly as the distance from the source of the vibration become greater. Some common sources of groundborne vibration are trains, buses on rough roads, and construction activities, such as blasting, pile-driving, and operating heavy earth-moving equipment.

Within the project area, no major sources or uses that generate substantial levels of groundborne vibration exist. Loaded trucks traveling along the nearby major arterials could generate groundborne vibration velocity levels of 86 VdB (approximately 0.076 PPV in/sec) at 25 feet, where trucks pass over bumps in the road.

4.9.3 Relevant Plans, Policies, and Regulations

Federal

No federal noise requirements or regulations apply to the proposed project. However, federal regulations influence the audible landscape where federal funding is involved. The Federal Highway Administration provides traffic noise analysis guidance and modeling methodologies through rules in the Code of Federal Regulations (23 CFR Part 772), as well as construction noise modeling (the Roadway Construction Noise Model). Additionally, the U.S. Department of Transportation's Federal Transit Administration (DOT) provides comprehensive guidance in the analysis and assessment of groundborne vibration impacts from mass transit projects in its *Transit Noise and Vibration Impact Assessment* (DOT 2018) handbook. This

guidance is used by project sponsors seeking funding from FTA to evaluate these impacts during the environmental review process. The focus is on noise and vibration impacts during operations, but construction impacts are also covered.

State

California General Plan Guidelines

California Government Code Section 65302(f) requires each county and city in the state to prepare and adopt a comprehensive long-range General Plan for its physical development, with Section 65302(g) requiring a noise element to be included in its General Plan. The California General Plan Guidelines, published by the Governor's Office of Planning and Research, provides guidance for the acceptability of specific land use types within areas of specific noise exposure. Table 4.9-6 presents the guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. Governor's Office of Planning and Research guidelines are advisory in nature.

Table 4.9-6
Land Use Compatibility for Community Noise Environments

	Community Noise Exposure (dBA CNEL)			
	Normally Acceptable[a]	***Conditionally Acceptable[b]***	***Normally Unacceptable[c]***	***Clearly Unacceptable[d]***
Residential-low density, single-family, duplex, mobile homes	50–60	55–70	70–75	75–85
Residential – multiple-family	50–65	60–70	70–75	70–85
Transit lodging – motel, hotels	50–65	60–70	70–80	80–85
Schools, libraries, churches, hospitals, nursing homes	50–70	60–70	70–80	80–85
Auditoriums, concert halls, amphitheatres	N/A	50–70	N/A	65–85
Sports arenas, outdoor spectators sports	N/A	50–75	N/A	70–85
Playgrounds, neighborhood parks	50–70	N/A	67.5–77.5	72.5–85
Golf courses, riding stables, water recreation, cemeteries	50–70	N/A	70–80	80–85
Office buildings, business commercial and professional	50–70	67.5–77.5	75–85	N/A
Industrial, manufacturing, utilities, agriculture	50–75	70–80	75–85	N/A

Source: OPR 2003.
Notes: dBA = A-weighted decibel; CNEL = community noise equivalent level; N/A = not applicable

[a] Normally acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
[b] 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 have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.
[c] Normally unacceptable: New construction or development should be discouraged. If new construction of development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.
[d] Clearly unacceptable: New construction or development should generally not be undertaken.

State of California Building Standards Code (Title 24)

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Code, Part 2, and the California Building Code. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structures have been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

Local

City of Santa Monica General Plan

The City of Santa Monica's General Plan Noise Element contains goals, policies, and actions to address noise within the City. The City's General Plan Noise Element provides guidance about acceptable exterior and interior noise levels based on land use categories. The guidance is based on the State guidelines for assessing compatibility of proposed new land uses with the noise environment. The Noise Element provides generally acceptable noise level in CNEL for specific land uses classified into four categories: (1) "clearly compatible," (2) "compatible with mitigation," (3) "normally incompatible," and (4) "clearly incompatible." The Land Use/Noise Compatibility Matrix shown in Table 4.9-7 (Table 1 of the Santa Monica General Plan Noise Element (City of Santa Monica 1992)) is used to identify project opportunities and constraints. Table 4.9-8 (Table 2 of the Santa Monica General Plan Noise Element) shows exterior noise levels of 60 dBA CNEL and lower are "clearly compatible" for residential uses that include single family, duplex, and multiple family residences, while exterior noise levels of up to 70 dBA CNEL are "compatible with mitigation." Exterior noise levels of 70 dBA CNEL and lower are "clearly compatible" for commercial uses, while exterior noise levels up to 80 dBA CNEL are "compatible with mitigation." "Clearly compatible" is defined as the highest noise that should be considered for the construction of new buildings that incorporate conventional construction techniques, but without any special noise insulation requirements. "Compatible with mitigation" includes the

highest noise levels that should be considered only after detailed analysis of the noise reduction requirements are made and needed noise insulation features are determined.

Table 4.9-7
Land Use Noise Compatibility Guidelines

Land Use Category	Community Noise Exposure (Ldn or CNEL dBA)			
	Normally Acceptable[a]	***Conditionally Acceptable[b]***	***Normally Unacceptable[c]***	***Clearly Unacceptable[d]***
Residential-low density single family, duplex, mobile home	<60	55–70	70–75	75+
Residential-multiple family	<65	60-70	70–75	75+
Transient lodging, motel, hotel	<65	60–70	70–80	80+
School, library, church, hospital, nursing home	<70	60–70	70–81	0+
Auditorium, concert hall, amphitheater		<70	65+	
Sports arenas, outdoor spectator sports		<75	70+	
Playground, neighborhood park	<70		67.5–75	72.5+
Golf courses, stable, water recreation, cemetery	<75		70–80	80+
Office building, business commercial and professional	<70	67.5–77.5	75+	
Industrial, manufacturing, utilities, agriculture	<75	70–80	75+	

Source: City of Santa Monica 1992

Notes: L_{dn} = day/night average noise level; CNEL = community noise equivalent level; dBA = A-weighted decibel.

a Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

b New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

c New construction or development should generally 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. Outdoor areas must be shielded.

d New construction or development should generally not be undertaken.

Table 4.9-8
Land Use/Noise Compatibility Matrix

Proposed Land Use Categories		Compatible Land Use Zones						
Categories	***Uses***	***CNE L>55***	***55–60***	***60–65***	***65–70***	***70–75***	***75–80***	***CNE L>80***
Residential	Single-family, duplex, multiple-family	A	A	B	B	C	D	D
Residential	Mobile home	A	A	B	C	C	D	D
Commercial Regional, District	Hotel, motel, transient lodging	A	A	B	B	C	C	D

Table 4.9-8
Land Use/Noise Compatibility Matrix

Proposed Land Use Categories		Compatible Land Use Zones						
Categories	***Uses***	***CNE L>55***	***55–60***	***60–65***	***65–70***	***70–75***	***75–80***	***CNE L>80***
Commercial Regional, Village District, Special	Commercial retail, bank, restaurant, movie theater	A	A	A	A	B	B	C
Commercial **Industrial** **Institutional**	Office building, research and development, professional offices, city office building	A	A	A	B	B	C	D
Commercial Recreation **Institutional** Civic Center	Amphitheatre, concert hall, auditorium, meeting hall	B	B	C	C	D	D	D
Commercial Recreation	Children's amusement park, miniature golf course, go-cart track, equestrian center, sports club	A	A	A	B	B	D	D
Commercial General, Special **Industrial** **Institutional**	Automobile service station, auto dealership, manufacturing, warehousing, wholesale, utilities	A	A	A	A	B	B	B
Institutional General	Hospital, church, library, school classrooms, daycare	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
Open Space	Golf course, cemeteries, nature centers/wildlife reserves, wildlife habitat	A	A	A	A	B	C	C
Agriculture	Agriculture	A	A	A	A	A	A	A

Notes: CNEL = community noise equivalent level.
Interpretation:

Zone A **Clearly compatible**	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
Zone B **Compatible with mitigation**	New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice. Note that residential uses are prohibited with Airport CNEL greater than 65.
Zone C **Normally incompatible**	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

Zone D **Clearly incompatible**	New construction or development should generally not be undertaken

City of Santa Monica Municipal Code

The City of Santa Monica Municipal Code includes the City's Noise Ordinance (Chapter 4.12 of the SMMC), which incorporates specific exterior noise standards and vibration regulations to control noise levels within the City. Exterior noise standards are based on designated noise zones. Section 4.12.050 designates noise zones, as follows: residential districts as Noise Zone I, commercial districts as Noise Zone II, and manufacturing/industrial districts as Noise Zone III. The Project Sites are situated in Noise Zone II.

Section 4.12.050 – Designated Noise Zones

Noise Zone I. All property in any residential distinct established by Municipal Code Subchapter 9.04.04 or any revisions thereto. In addition, property zoned Low Density Multiple Residential Beach District (R2B), Medium Density Multiple Family Coastal Residential District (R3R), Ocean Park Single Family Residential District (OP1), OP Duplex Ocean Park Duplex Residential District (OP-Duplex) OPD, Ocean Park Low Multiple Residential District (OP2), Ocean Park Medium Multiple Residential District (OP3), and Ocean Park High Multiple Residential District (OP4) shall be included in this noise zone. [4] The Santa Monica Pier shall be excluded from this noise zone.

Noise Zone II. All property in any commercial district established by Municipal Code Subchapter 9.04.04 or any revisions thereto. In addition, property zoned Beach Parking District (BPD), Civic Center (CC), Bayside Commercial District (BSCD) and the Santa Monica Pier shall be included in this noise zone.

Noise Zone III. All property in any manufacturing or industrial district as established by Municipal Code Subchapter 9.04.04 or any revisions thereto. In addition, property zoned Light Manufacturing and Studio District (LMSD) shall be included in this noise zone. (Added by Ord. No. 2115CCS § 1 (part), adopted 2/24/04)

Section 4.12.060 – Exterior Noise Standards

(a) The following noise standards (Table 4.9-9), unless otherwise specifically indicated, shall apply to all property with a designated noise zone during the times indicated:

[4] Note: Zoning districts cited within the Noise Ordinance have since changed as a result of the comprehensive update of the Zoning Ordinance in March 2017. For the purposes of determining noise zones, the City applies all residentially zoned properties as Noise Zone I, commercial zoned properties as Noise Zone II, and Industrial Conservation (IC) zoned properties as Noise Zone III.

Table 4.9-9
City of Santa Monica Exterior Noise Standards

Noise Zone	Time Interval	Allowable L_{eq}	
		15-Minute Continuous Measurement Period	***5-Minute Continuous Measurement Period***
I	**Monday—Friday**		
	10 p.m. to 7 a.m.:	50 dBA	55 dBA
	7 a.m. to 10 p.m.:	60 dBA	65 dBA
	Saturday and Sunday		
	10 p.m. to 8 a.m.:	50 dBA	55 dBA
	8 a.m. to 10 p.m.:	60 dBA	65 dBA
II	**All Days of Week**		
	10 p.m. to 7 a.m.:	60 dBA	65 dBA
	7 a.m. to 10 p.m.:	65 dBA	70 dBA
III	**Anytime**	70 dBA	75 dBA

L_{eq} = equivalent continuous sound level; dBA = A-weighted sound level.

(b) For each Noise Zone, the allowable exterior equivalent noise level shall be reduced by five dBA for impulsive or simple tone noise, or for noises consisting of speech or music. If the ambient noise level exceeds the allowable exterior noise level standard, the ambient noise level shall be the standard.

(c) Except as provided for in this Chapter, no person shall at any location within the City create any noise or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes:

(1) The equivalent noise level to exceed the noise standards established in subsection (a) of this Section for the noise zone where the measurement is taken; or

(2) A maximum instantaneous A-weighted, slow sound pressure level to exceed the decibel limits established in subsection (a) of this Section for the noise zone where the measurement is taken plus twenty dBA for any period of time.

(d) If any portion of a parcel is located within one hundred feet of a noise zone with higher noise standards as compared to the noise standards for the noise zone in which the parcel is located, then the maximum allowable exterior equivalent noise level for the entire parcel shall be the average of the noise standards of the two noise zones. However, any noise level measurement must be taken at least twenty-five feet from the parcel line of the source of the noise.

(e) Construction activity shall be subject to the noise standards set forth in Section 4.12.110.

Section 4.12.070 – Vibration

Notwithstanding other Sections of this Chapter, it shall be unlawful for any person to create, maintain or cause any ground vibration that is perceptible without instruments at any point on any property. For the purpose of this Chapter, the perception threshold shall be presumed to be more than 0.05 inches per second RMS velocity. The vibration caused by construction activity, moving vehicles, trains, and aircraft shall be exempt from this Section. (Added by Ord. No. 2115CCS § 1 (part), adopted 2/24/04).

Section 4.12.110 – Restrictions on Demolition, Excavation, Grading, Spray Painting, Construction, Maintenance or Repair of Buildings

(a) No person shall engage in any construction activity during the following times anywhere in the City:

(1) Before 8 a.m. or after 6 p.m. on Monday through Friday, except that construction activities conducted by employees of the City of Santa Monica or public utilities while conducting duties associated with their employment shall not occur before 7 a.m. or after 6 p.m. on Monday through Friday;

(2) Before 9 a.m. or after 5 p.m. on Saturday;

(3) All day on Sunday;

(4) All day on New Year' s Day, Martin Luther King' s Birthday, President' s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, as those days have been established by the United States of America.

(b) Except as set forth in subsection (d) of this Section, the noise created by construction activity shall not cause:

(1) The equivalent noise level to exceed the noise standards specified in Section 4.12.060 of this Chapter, for the noise zone where the measurement is taken, plus 20 dBA, or

(2) A maximum instantaneous A-weighted, slow sound pressure level to exceed the decibel limits specified in Section 4.12.060 of this Chapter for the noise zone where the measurement is taken plus 40 dBA, for any period of time.

(c) Prior to the issuance of a building permit, all development projects located within five hundred feet of any residential development or other noise sensitive land uses must submit a list of equipment and activities required during construction. In particular, this list shall include the following:

(1) Construction equipment to be used, such as pile drivers, jackhammers, pavement breakers or similar equipment;

(2) Construction activities such as 24-hour pumping, excavation or demolition;

(3) A list of measures that will be implemented to minimize noise impacts on nearby residential uses;

(d) Any construction that exceeds the noise levels established in subsection (b) of this Section shall occur between the hours of 10 a.m. and 3 p.m., Monday through Friday.

(e) A permit may be issued authorizing construction activity during the times prohibited by this Section whenever it is found to be in the public interest. The person obtaining the permit shall provide notification to persons occupying property within a perimeter of five hundred feet of the site of the proposed construction activity prior to commencing work pursuant to the permit. The form of the notification shall be approved by the City and contain procedures for the submission of comments prior to the approval of the permit. Applications for such permit shall be in writing, shall be accompanied by an application fee and shall set forth in detail facts showing that the public interest will be served by the issuance of such permit. Applications shall be made to the Building Officer. No permit shall be issued unless the application is first approved by the Director of Environmental and Public Works Management, the Building Officer, the Chief of Police and the Director of Planning and Community Development. The City Council shall establish by resolution fees for the filing and processing of the application required by this subsection (e) and any required compliance monitoring. This fee may be revised from time to time by resolution of the City Council. (Added by Ord. No. 2115CCS § 1 (part), adopted 2/24/04)

Section 4.12.120 – Posting of Construction Signs

(a) There shall be displayed at every site covered by this Chapter where work activities requiring a City permit are being conducted, a sign in English and Spanish reading substantially as follows: "Attention All Employees and Subcontractors. Santa Monica construction/demolition work times are: Monday through Friday, 8:00 a.m. until 6:00 p.m.; Saturday 9:00 a.m. until 5:00 p.m.; Sundays and holidays, no work permitted." In addition, the sign shall indicate the City telephone numbers where violations of this Section can be reported, the location of the job site, and the permit number issued authorizing the work.

(b) Signs required by this Section shall be continually placed prominently at the primary entrance to the work site so that they are clearly visible to the public and to all employees, contractors, subcontractors and all other persons performing work at the site, so long as activity covered by this Section is occurring.

(c) Each sign required to be displayed pursuant to this Section shall be obtained from the Building and Safety Division. The Building and Safety Division shall charge for each sign a fee equal to the City's cost of printing the sign.

(d) Each Department or agency of the City that is required to inspect the work site is directed only to inspect sites that comply with this Section.

(e) This Section shall apply to construction pursuant to any building permit issued after the effective date of the ordinance codified in this Chapter. (Added by Ord. No. 2115CCS § 1 (part), adopted 2/24/04)

Section 4.12.130 – Location, Screening and Noise Measurements of Mechanical Equipment

All development project applications must demonstrate compliance with or contain the following information:

(a) A list of all permanent mechanical equipment to be placed outdoors and all permanent mechanical equipment to be placed indoors which may be heard outdoors. All such equipment shall require a noise analysis to demonstrate compliance with Section 4.12.060 prior to the issuance of a building permit for the development project.

(b) Mechanical equipment shall not be located on the side of any building which is adjacent to a residential building on the adjoining lot unless it can be shown that the noise will comply with the requirements of Section 4.12.060. Roof locations may be used when the mechanical equipment is installed within a noise attenuating structure.

(c) Final approval of the location of any mechanical equipment will require a noise test to demonstrate compliance with Section 4.12.060. Equipment for the test shall be provided by the owner or contractor and the test shall be conducted by the owner or contractor. A copy of noise test results on mechanical equipment shall be submitted to the Community Noise Officer for review to ensure that noise levels do not exceed maximum allowable levels for the applicable noise zone. (Added by Ord. No. 2115CCS § 1 (part), adopted 2/24/04)

4.9.4 Thresholds of Significance

Appendix G of the State CEQA Guidelines provides a set of screening questions that address impacts related to noise. Specifically, the Guidelines state that a proposed project may have a significant impact related to noise if the project would:

1. Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
2. Result in the generation of excessive groundborne vibration or groundborne noise levels.
3. Result in the exposure of people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.

Issues Not Further Analyzed:

Prior to the December 2018 adoption of the recently revised CEQA checklist questions, Question 3 consisted of two separate questions: Questions 5 (pertaining to airports) and Question 6 (pertaining to airstrips). Questions 5 and 6 were analyzed in the Initial Study (Appendix A) and impacts were determined

to be less than significant. A summary of the analysis presented in the Initial Study for Questions 5 and 6 is provided below.

Question 5 and 6 Airport/Airstrip Noise (now Question 3): The proposed project is not located within an airport land use plan (Los Angeles County 2004). The nearest airport is Santa Monica Municipal Airport, located approximately 1.9 miles south of the project site. Based upon the County of Los Angeles Comprehensive Land Use Plan, the project site is not within the Santa Monica Municipal Airport's Influence Area (Los Angeles County Airport Land Use Commission 2004). The proposed project would not expose people residing or working in the project area to excessive noise levels from the airport. The proposed project is not located in the vicinity of a private airstrip (Airnav.com 2018). Therefore, the environmental topics related to airport/airstrip noise are not required to be evaluated in this EIR as no impacts would occur.

Significance Criteria

For the analysis of noise impacts, the City utilizes the noise standards of the Noise Ordinance discussed previously in this section as thresholds of significance:

Temporary or Permanent Noise Increase in Excess of Standards

Construction Noise (Temporary or Periodic Increase in Noise Levels)

The City's Noise Ordinance establishes noise standards for construction, which vary based on the zone in which a project site is located and the time period. The project site is situated in, and surrounded by, Noise Zone I. In accordance with the Noise Ordinance (Chapter 4.12 of the SMMC), project construction activities would be permitted to occur only between 8 a.m. and 6 p.m. on Monday through Friday, and 9 a.m. to 5 p.m. on Saturday, unless otherwise permitted under an afterhours permit. The analysis of construction noise is based on criteria in the City's Noise Ordinance.

The proposed project would have a potentially significant impact due to noise construction if:

- **NOISE-1:** On-site construction activities cause the resultant noise level of any " to exceed the exterior noise standards defined in Section 4.12.060 (refer to Table 4.9-9) or the existing ambient noise level (refer to Table 4.9-4), if higher than the exterior noise standards plus 20 dBA (average hourly equivalent noise level) or 40 dB (maximum noise level) at the noise-sensitive receptors between 8 a.m. to 10 a.m. or 3 p.m. to 6 p.m. on Monday through Friday, or between 9 a.m. to 10 a.m. or 3 p.m. to 5 p.m. on Saturday.

The above significance criterion from the SMMC recognizes that the timing of noise impacts is an important factor in determining significance of construction noise - noise sensitivity is the lowest during the midday as opposed to early morning/evening hours when low noise levels are expected for sleep. In any urban area, construction noise is a common occurrence during normal working hours on weekdays and abbreviated

periods on Saturdays. Therefore, the City does not consider construction noise levels consistent with the SMMC noise level standards (which permit heightened noise levels between 10 am and 3 pm on weekdays) to constitute a significant noise impact.

Operational Noise (Permanent Increase in Ambient Noise Levels)

The City does not have established criteria levels at which permanent increases in ambient noise are considered potentially significant. As discussed previously, a noise level increase of 3 dBA is barely perceivable to most people, a 5 dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness. Therefore, the following thresholds of significance are applied to determine the operational noise impacts of the proposed project.

The proposed project would have a significant impact from operations if:

- **NOISE-2:** Project-related roadway noise sources would cause existing exterior ambient noise levels to increase 5 dB from existing noise levels. An increase or decrease in noise level of at least 5 dB is required before a noticeable change in community response would be expected. Therefore, a clearly perceptible increase (+5 dB) in noise exposure of sensitive receptors could be considered significant.
- **NOISE-3:** Project-related on-site noise sources would cause existing exterior ambient noise levels to exceed the noise standards defined in Section 4.12.060 of the SMMC.

Groundborne Vibration

Section 4.12.070 of the SMMC establishes a vibration perception threshold of more than 0.05 in/sec RMS velocity. The City of Santa Monica exempts vibration caused by construction activity as well as moving vehicles from the requirements of Section 4.12.070. For the purposes of providing recognized thresholds for vibration, the vibration impacts analysis for the proposed project references the Caltrans vibration standards for human annoyance and building damage summarized in Section 4.9.1. Thus, the Caltrans criteria described above is used to evaluate potential impacts related to project construction and operation to determine the potential for implementing mitigation measures.

The proposed project would have a potential impact due to vibration if:

- **NOISE-4**: Project construction and operation activities cause groundborne vibration levels to exceed the applicable thresholds summarized in Tables 4.9-2 and 4.9-3 in Section 4.9.1 (Caltrans).

4.9.5 Methodology

Construction Noise/Vibration

For the analysis of construction noise, the FHWA's Roadway Construction Noise Model (RCNM) (FHWA 2008) was used to estimate construction noise levels at adjacent noise-sensitive land uses. Although the model was funded and promulgated by the Federal Highway Administration, the RCNM is often used for non-roadway projects, because the same types of construction equipment used for roadway projects are also used for other project types. To analyze construction noise levels from the project, information regarding the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (i.e., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver are inputted into the RCNM. No topographical or structural shielding was assumed in the modeling of construction noise.

Potential vibration impacts from proposed project construction were assessed using methodologies recommended by the U.S. Department of Transportation's Federal Transit Administration (DOT 2018) and thresholds recommended by Caltrans (Caltrans 2013b), as detailed in Section 4.9.1 (Vibration Characteristics).

Operational Noise/Vibration

Operational noise from the project would consist of project-related vehicular traffic and on-site stationary noise sources such as mechanical equipment, the parking garage, and truck deliveries/loading.

The potential noise effects from project-related traffic were assessed using FHWA's Traffic Noise Model (TNM), version 2.5 (FHWA 2004). Consistent with the traffic impact study, the modeled traffic scenarios included the Existing (i.e., baseline conditions), Existing plus Project, Future (Year 2025), and Future plus Project traffic volumes and speeds. Noise levels were modeled at representative on-site and off-site noise-sensitive receivers. Noise from operations-related traffic was assessed using information provided in the traffic noise memorandum prepared for the proposed project (Appendix F). Operational on-site noise (including from stationary noise sources) was assessed by using information provided by the project applicant and applying standard acoustical formulas for attenuation of noise from distance and structural shielding. The resulting noise levels at the nearby noise-sensitive land uses were then estimated using standard propagation equations for the attenuation of noise with distance (i.e., a decrease of 6 decibels per doubling of distance as for a point source). Operational vibration from the proposed project is addressed qualitatively.

4.9.6 Impacts Analysis

Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction Noise (Potential Temporary Increases)

As indicated in Chapter 3, Project Description, construction of the proposed project (including demolition of several on-site structures, adaptive reuse of a portion of the GKGM Building , and the construction of a new three-story building with subterranean parking) would occur over an estimated 23-month period, anticipated to begin in March 2021, ending in January 2023. Project construction would include approximately 1 month for demolition, approximately 8 to 9 months for excavation and shoring, approximately 13 to 14 months for building construction, and approximately 2 months for finishing.

The types of construction equipment that would be used to construct the proposed project include standard equipment that would be employed for any routine construction project of this scale, such as excavators, graders, trenchers, cranes, rubber-tired bulldozers, generators, and paving equipment. Construction equipment with substantially higher noise-generation characteristics (such as pile drivers, rock drills, blasting equipment) would not be necessary.

Construction noise is difficult to quantify because of the many variables involved, including the specific equipment types, size of equipment used, percentage of time each piece is in operation, condition of each piece of equipment, and number of pieces that would operate on the site. The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is depicted in Table 4.9-10. The noise values represent maximum noise generation, or full- power operation of the equipment. As an example, a loader and two dozers, all operating at full power and relatively close together, would generate a maximum sound level of approximately 90 dBA at 50 feet from their operations. As the distance between equipment or separation of areas with simultaneous construction activity increases, dispersion and distance attenuation reduce the effects of the separate noise sources added together. In addition, typical operating cycles may involve two minutes of full-power operation, followed by three to four minutes at lower levels. The average noise level during construction activities is generally lower (typical levels of approximately 88 dBA L_{eq} at a distance of 50 feet), because maximum noise generation may only occur up to 50% of the time. Noise levels from construction operations decrease at a rate of approximately 6 dB per doubling of distance from the source.

Table 4.9-10
Typical Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Air compressor	81
Backhoe	80
Compactor	82
Concrete mixer	85
Concrete pump	82
Concrete vibrator	76
Crane, mobile	83
Dozer	85
Generator	81
Grader	85
Impact wrench	85
Jackhammer	88
Loader	85
Paver	89
Pneumatic tool	85
Pump	76
Roller	74
Saw	76
Truck	88

Source: DOT 2018.

Construction activities would occur in close proximity to the following noise-sensitive receivers: the Lighthouse Church and School, with a playground located approximately 10 feet from the project site and a patio and structure located approximately 40 feet from the project site; residences located approximately 20 feet west of the project site; residents located approximately 75 feet northeast and south of the project site; and the Ambrose Hotel across 20th Street. The closest noise-sensitive receivers are located approximately 100 feet from the acoustic center of construction activity (the idealized point at which the energy sum of all construction activity noise, near and far, would be centered). Thus, the distance to construction activities for the closest noise-sensitive uses (residences, church, and school staff, students and visitors) would be as close as 10 feet, but would typically be approximately 100 feet away. Other nearby single-family and multi-family residences are located at distances ranging from approximately 50 feet to several hundred feet away.

The Federal Highway Administration's RCNM was used to estimate construction noise levels at these noise-sensitive land uses. Within the analysis, all construction equipment was assumed to operate simultaneously with an estimated usage factor at the construction area located closest to the potentially affected noise sensitive receptors (at the fence line). These assumptions represent a worst-case noise scenario as all construction equipment used in a given phase would not typically operate concurrently and

at full power, and the location of activities is routinely spread across the construction site, rather than concentrated close to the nearest noise-sensitive receptors. The worst-case, hourly average noise levels (dBA L_{eq}) from the proposed construction activities are summarized in Table 4.9-11. Also provided in Table 4.9-11 are the respective significance thresholds for the nearby noise-sensitive land uses, which are derived either from the exterior noise standards in SMMC Section 4.12.060 (Table 4.9-9 above) plus 20 dBA or the existing ambient noise levels presented in Table 4.9-4 plus 20 dBA (whichever is higher). The worst-case, maximum noise levels (dBA L_{max}) from the proposed construction activities are summarized in Table 4.9-12. Also provided in Table 4.9-12 are the respective significance thresholds for the nearby noise-sensitive land uses, which are derived either from the exterior noise standards in SMMC Section 4.12.060 (Table 4.9-9 above) plus 40 dBA or the existing ambient noise levels presented in Table 4.9-4 plus 40 dBA (whichever is higher). The complete set of RCNM input and output data for construction noise is provided in Appendix F.

Based upon the construction noise analysis, the City's hourly average noise standards (shown in Table 4.9-11) would be exceeded during several construction phases of the proposed project at the Lighthouse Church School playgrounds, and at the residences to the west, located west of 19th Court Alley. As shown in Table 4.9-12, the proposed project would not generate maximum noise levels that are more than 40 dBA greater than the exterior noise levels. The proposed project could potentially exceed SMMC construction noise standards if construction is conducted outside of the hours from 10 a.m. to 3 p.m. Monday through Friday. Implementation of mitigation measure **MM-NOI-1** (see Section 4.9.8) is, therefore, required to reduce the potential impact to a level of **less than significant with mitigation incorporated**.

Table 4.9-11
Construction Noise Modeling Summary Results (Hourly Average Noise Levels (dBA L_{eq}))

Nearby Noise-Sensitive Land Uses	Significance Threshold [1]	Construction Phase				
		Demolition	***Grading / Shoring***	***Building Construction***	***Paving***	***Architectural Coating***
Lighthouse Church School (Playground)	90	**98**	82	**93**	**98**	88
Lighthouse Church School (Patio and Structure)	90	87	85	84	87	76
Residences to West	80	**93**	**90**	**88**	**92**	**82**
Residences to Northeast & South	87	82	80	79	82	70

Table 4.9-11
Construction Noise Modeling Summary Results (Hourly Average Noise Levels (dBA L_{eq}))

Nearby Noise-Sensitive Land Uses	Significance Threshold [1]	Construction Phase				
		Demolition	***Grading / Shoring***	***Building Construction***	***Paving***	***Architectural Coating***
Providence St John's Child and Family Development Center	80	68	66	66	68	56

[1] The significance threshold is the exterior noise standards in SMMC Section 4.12.060 (Table 4.9-9 above) or the existing ambient noise levels presented in Table 4.9-4 (whichever is higher) plus 20 dBA

Bolded numbers = significance threshold exceeded

Table 4.9-12
Construction Noise Modeling Summary Results (Maximum Noise Levels (dBA L_{max}))

Nearby Noise-Sensitive Land Uses	Significance Threshold [1]	Construction Phase				
		Demolition	*Grading / Shoring*	*Building Construction*	*Paving*	*Architectural Coating*
Lighthouse Church School (Playground)	110	104	84	95	99	92
Lighthouse Church School (Patio and Structure)	110	92	86	84	87	80
Residences to West	100	98	91	87	91	86
Residences to Northeast & South	107	86	81	80	81	74
Providence St John's Child and Family Development Center	100	72	67	67	67	60

Notes:

[1] The significance threshold is the exterior noise standards in SMMC Section 4.12.060 (Table 4.9-9 above) or the existing ambient noise levels presented in Table 4.9-4 (whichever is higher) plus 40 dBA

Bolded numbers = significance threshold exceeded

Operational Noise (Potential Long-Term Increases)

Potential operational noise impacts from the proposed project would consist of off-site project-related traffic and on-site stationary noise sources such as the mechanical equipment parking garage, and truck deliveries/loading.

Off-Site Traffic Noise Levels. The proposed project would generate traffic along nearby arterial roadways and connector roads, including Arizona Avenue, 20th Street, the 19th Court Alley, and 17th Street. The proposed project is expected to generate a net increase of approximately 1,287 daily vehicle trips, including 94 AM peak hour trips and 105 PM peak hour trips.

The potential noise effects from project-related traffic were assessed using FHWA's Traffic Noise Model (TNM), version 2.5 (FHWA 2004). Consistent with the traffic impact study, the modeled traffic scenarios included the Existing (i.e., baseline conditions), Existing plus Project, Future (Year 2025), and Future plus Project traffic volumes[5] and speeds. Noise levels were modeled at representative on-site and off-site noise-sensitive receivers. The receivers, which represent noise-sensitive receivers with the most potential to be impacted by project-related traffic noise, are shown in Figure 4.9-1. As shown in Figure 4.9-1, site ST1 represents the proposed (medical offices) project site and sites ST2 through ST5 and M1 through M3[6] represent the existing off-site receivers.

The results of the traffic modeling for Existing and Existing plus Project are summarized in Table 4.9-13 (Traffic Noise – Existing and Existing plus Project), and the traffic noise modeling data is shown in Appendix F. As shown in Table 4.9-13, with the exception of site ST3, the project-related traffic would result in a noise level increase of less than 1 decibel (dB) CNEL (rounded to whole numbers) along the roadways in the project area. At site ST3, the additional traffic entering and exiting the project site from the alleyway would result in an increase of 2 dB (from 55 dBA CNEL in the existing scenario to 57 dBA CNEL in the existing plus project scenario). None of the modeled receivers would exceed the "Clearly Compatible" 60 dBA CNEL noise standard (City of Santa Monica 1992) for residences as a result of the increase in project-related traffic. Additionally, noise increases would be less than the 3 dB threshold at which the change in community noise level would be audible (Caltrans 2013a). Therefore, traffic related to the proposed project would not exceed any noise standards and would not substantially increase the existing noise levels in the project vicinity, and operational traffic-related noise impacts would be **less than significant**.

5 Traffic noise modeling was conducted with a version of the traffic impact study which has since been revised. Estimated trip volumes have decreased subsequent to this earlier version of the traffic study. The analysis presented in this section is based on trip volumes that are approximately 3 to 4 percent higher than what is currently estimated. As such, the results presented herein are conservative.

6 Receivers M1 through M3 are modeled-only locations, intended to supplement the analysis of potentially affected noise-sensitive land uses, whereas ST1 through ST5 are measured and modeled locations.

Table 4.9-13
Traffic Noise - Existing and Existing plus Project

Modeled Receiver	Description	Existing (dBA CNEL)	Existing plus Project (dBA CNEL)	Noise Level Increase (dB)
ST1	On-site, adjacent to 20th Street, north of Arizona Avenue	66	66	0
ST2	East of project site, adjacent to residences on 20th Street, north of Arizona Avenue	66	66	0
ST3	West of project site, adjacent to residences on 19th Court alley, north of Arizona Avenue	55	57	2
ST4	North of project site, at Lighthouse Church and School on 20th Street, north of Arizona Avenue	67	67	0
ST5	South of project site, adjacent to residences on Arizona Avenue, west of 20th Street	66	66	0
M1	West of project site, adjacent to residences on 17th Street, north of Arizona Avenue	61	61	0
M2	Northwest of project site, adjacent to residences on 17th Street, north of Wilshire Boulevard	62	62	0
M3	Southwest of project site, adjacent to residences on 17th Street, south of Arizona Avenue	64	64	0

Source: Appendix F

The noise level increases associated with project-related traffic volumes under future (year 2025) without project traffic conditions and future with project traffic conditions are summarized in Table 4.9-14 (Traffic Noise – Future and Future with Project). With the exception of site ST3, the project-related traffic would result in a noise level increase of less than 1 decibel (dB) CNEL (rounded to whole numbers) along the roadways in the project area. At site ST3, the additional traffic entering and exiting the project site from the alleyway would result in an increase of 2 dB (from 55 dBA CNEL in the future scenario to 57 dBA CNEL in the future plus project scenario). None of the modeled receivers would exceed the 60 dBA CNEL noise standard as a result of the increase in project-related traffic. The noise level increases associated with the project under future traffic conditions would be less than 3 dB. Therefore, traffic related to the proposed project would not exceed any noise standards and would not substantially increase the existing noise levels in the project vicinity. Operational traffic-related noise impacts would be **less than significant**.

Table 4.9-14
Traffic Noise – Future and Future with Project

Modeled Receptor	Description	Future (dBA CNEL)	Future plus Project (dBA CNEL)	Noise Level Increase (dB)
ST1	On-site, adjacent to 20th Street, north of Arizona Avenue	66	66	0
ST2	East of project site, adjacent to residences on 20th Street, north of Arizona Avenue	66	66	0
ST3	West of project site, adjacent to residences on 19th Court alley, north of Arizona Avenue	55	57	2
ST4	North of project site, at Lighthouse Church and School on 20th Street, north of Arizona Avenue	67	67	0
ST5	South of project site, adjacent to residences on Arizona Avenue, west of 20th Street	66	66	0
M1	West of project site, adjacent to residences on 17th Street, north of Arizona Avenue	60	60	0
M2	Northwest of project site, adjacent to residences on 17th Street, north of Wilshire Boulevard	63	63	0
M3	Southwest of project site, adjacent to residences on 17th Street, south of Arizona Avenue	63	63	0

Source: Appendix F.

On-Site Stationary Noise

Mechanical Equipment

Stationary on-site noise associated with proposed project operations would consist of mechanical noise from HVAC equipment, as well as a standby emergency generator. This mechanical equipment would be located on the rooftop. Information provided by the applicant indicates that there would be three 100-ton and two 20-ton HVAC units installed, each with a dimensionless sound power level of 108, dBA and 92 dBA, respectively.[7] As stated in Section 4.12.130 of the SMMC, all project mechanical equipment would be required to be designed with appropriate noise control devices, such as sound attenuators, acoustic louvers, and/or sound screens/parapet walls to comply with noise limitation requirements provided in Section 4.12.060 of the SMMC.

The nearest noise-sensitive land uses (the Lighthouse Church School playground)) would be located approximately 65 feet[8] from the HVAC units, while the Lighthouse Church School's nearest patio and

[7] Equipment specifications and stationary noise calculations are provided in Appendix F.
[8] Distances based upon provided Roof Plan (Sheet A1-90), Neil M. Denari Architects, Inc. November 10, 2018.

structure would be located approximately 95 feet from the HVAC units. The next-nearest noise-sensitive land uses (residences to the west, on the west side of 19th Court Alley) would be located approximately 70 feet from the HVAC units. These noise-sensitive land uses would be acoustically screened from a direct view of the mechanical equipment by the building's side and parapet wall. The third-nearest noise-sensitive land uses (residences to the east, across 20th Street) would be located approximately 110 feet from the HVAC units. These residences would also be acoustically screened. Accounting for the source-receiver distance and the noise reduction provided by the intervening structure, the resultant noise levels (with all units operating) at the nearest noise-sensitive land uses is summarized in Table 4.9-15. As shown, the mechanical noise at the church school playground and church school patio and structure is estimated to be approximately 55 and 59 dBA L_{eq}, respectively. The noise at the residences to the east would be approximately 56 dBA L_{eq}. At the next-nearest residences, the HVAC noise is also estimated to be approximately 56 dBA L_{eq}. The noise level from HVAC equipment would not exceed the City's Municipal Code noise standard of 60 dBA L_{eq} during the hours of 7 a.m. to 10 p.m., which are the hours that the HVAC system is anticipated to be in full operation.

Table 4.9-15
On-Site Mechanical Noise (dBA L_{eq})

Noise-Sensitive Land Use	HVAC Noise	Applicable Noise Standard Exceeded? (60 dBA L_{eq})
Lighthouse Church School playground	54.5	No
Lighthouse Church School patio and structure	59.1	No
Residences to the west	56.4	No
Residences to the east	55.8	No

Source: Appendix F.

The standby emergency generator would only be in operation in the event of a power outage, or for routine testing (generally conducted one or two times per month, during daytime hours). Based upon information from the applicant, the generator (anticipated to be a Generac SD300 or equivalent) would create a noise level of approximately 77 dBA at a distance of 23 feet with a Level 1 acoustic enclosure. Accounting for the distances to the nearest and next-nearest residences and noise reduction from the intervening structure, the resultant noise levels would be approximately 45 dBA L_{eq} and 48 dBA L_{eq}, respectively. With both the HVAC equipment and the emergency generator operating simultaneously, the combined noise level at the nearest residences would be approximately 56 dBA L_{eq}; at the next-nearest residences the combined mechanical noise level would be approximately 59 dBA L_{eq}. The combined noise level from HVAC equipment and the emergency generator would not exceed the City's Municipal Code noise standard of 60 dBA L_{eq} during the hours of 7 a.m. to 10 p.m., which are the hours during which the equipment is anticipated to be used. Therefore, on-site noise impacts from mechanical equipment would be **less than significant**.

Parking Garage and Truck Deliveries Noise

The proposed on-site parking garage would consist of five subterranean parking levels and would provide approximately 275 vehicular parking spaces. The upper two subterranean levels, P1 and P2, would provide both self-park and valet services for patrons and visitors, as well as a mix of ancillary uses, such as building operational and storage spaces, trash and recycling rooms, bicycle parking and storage, employee locker and shower facilities, and maintenance functions. The lower three parking levels, P3, P4, and P5, would provide additional visitor and employee parking spaces. Because the parking garage would be completely below-ground, noise impacts from parking structure noise would be contained and would be minimal. The noise would be largely contained within the parking structure; thus noise impacts from the parking garage and truck deliveries would be **less than significant**.

Commercial deliveries, including medical and office supplies, would also occur from the alley side (19th Court), from a loading area on the ground floor off 19th Court Alley. Any medical waste hauling operations would be accommodated through specialized, licensed operators from on-site inspected facilities. The project site is within 100 feet of a residential zoned property and as such, project loading activities would occur in accordance with the City's Noise Ordinance (Section 4.12.15) which prohibits businesses from engaging in loading activities outside of an enclosed building between the hours of eleven p.m. to six a.m. Furthermore, the loading area would be generally enclosed on three sides, which would provide for noise attenuation. Therefore, noise from loading activities would be **less than significant.**

Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction

Construction activities that might expose persons to excessive groundborne vibration or groundborne noise could cause a potentially significant impact. Groundborne vibration is typically attenuated over short distances. The heavier pieces of construction equipment, such as large bulldozers and caisson drill rigs, would have PPVs of approximately 0.089 inches per second or less at a distance of 25 feet (DOT 2018), as shown in Table 4.9-16. According to the Caltrans guidance (refer to Table 4.9-3), vibration levels exceeding 0.5 inches/second would have the potential to cause damage to historic and some old buildings, and older residential structures for transient sources. Vibration levels exceeding 0.2 inches/second would have the potential to cause damage to fragile buildings. Based upon the Caltrans guidance for human response (refer to Table 4.9-2), vibration levels of approximately 0.24 inches/second would be distinctly perceptible, and vibration levels of approximately 0.035 inches/second would be barely perceptible.

Table 4.9-16
Vibration Source Levels for Construction Equipment

Construction Equipment	Approximate PPV (in/sec) at 25 feet	Approximate RMS (VdB) at 25 feet
Caisson Drilling	0.089	87
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: DOT 2018.

At the nearest existing off-site noise/vibration-sensitive land uses (the Lighthouse Church School playground, patio, and structure), construction activities could take place within approximately 10 feet of the playground, and within approximately 40 feet of the patio and structure. The nearest existing residences (located to the west of 19th Court Alley) would be located approximately 20 feet from the nearest construction activities. At the next-nearest residences, located on the east side of 20th Street, construction activities would occur within approximately 70 feet. For the Providence Saint John's Medical Plaza at the southeast corner of 20th/Arizona Avenue, construction activities for the new building would occur approximately 250 feet away. In addition, the rear garage portion of the existing on-site GKGM Building would be demolished, and construction/grading activities for the new Wellness Center building would take place within 2-3 feet of the GKGM Building.

Using the guidance and methodologies developed by the U.S. Department of Transportation's Federal Transit Administration (DOT 2018), the maximum vibration levels (i.e., assuming that construction activities with the highest vibration levels take place at the edge of the project site) were estimated at the nearest noise- and vibration-sensitive land uses. The results are summarized in Table 4.9-17. As shown in Table 4.9-17, the maximum vibration levels would exceed the thresholds for potential for structural damage at the GKGM Building; the structural damage threshold would be exceeded up to a distance of 15 feet from heavy equipment, such as a large bulldozer or caisson drill rigs. Nearby off-site structures would not exceed the applicable vibration damage thresholds. The thresholds for potential human annoyance would be exceeded at the school playground. The human annoyance threshold at the church school would be exceeded up to a distance of 15 feet from heavy equipment. The potential vibration impacts would be reduced by the implementation of mitigation measure **MM-NOI-1**. In addition, implementation of mitigation measure **MM-NOI-2** is required to reduce vibration impacts directly. With the implementation of these mitigation measures, impacts regarding building damage and annoyance effects of vibration would be **less than significant with mitigation incorporated**.

Table 4.9-17
Groundborne Vibration Levels

Vibration-Sensitive Land Use	Approximate Vibration Level PPV (in/sec)	Applicable Vibration Threshold PPV (in/sec) - Structural Damage	Structural Damage Vibration Threshold Exceeded ?	Approximate Vibration Threshold RMS (VdB) - Human Annoyance	Human Annoyance Vibration Threshold Exceeded ?
Lighthouse Church School playground	0.352	n/a	n/a	0.24	**Yes**
Lighthouse Church School patio and structure	0.044	0.5	No	0.24	No
Residences to the west	0.124	0.5	No	0.24	No
Residences to the east across 20th Street	0.019	0.5	No	0.24	No
GKGM Building	2.141	0.2	**Yes**	n/a	n/a
Saint John's Medical Plaza	0.003	0.5	No	0.035	No

Operation

Upon completion of project construction, vibration from the proposed project would be similar to that of a typical commercial/office structure. The primary anticipated source of vibration from operation of the proposed project would be on-site and off-site vehicular trips. Passenger vehicle trips are unlikely to result in perceptible or structural damage-inducing vibration levels at nearby uses. Similarly, vibration from delivery trucks would be unlikely to cause significant levels of vibration. Mechanical equipment would be isolated from the ground by virtue of being located at rooftop levels and (typically) would include vibration-absorbing mounts. Therefore, groundborne vibration during operation would be **less than significant**.

4.9.7 Cumulative Impacts

Projects considered in the cumulative scenario consisted of those listed in Table 4-1 of Section 4.0, Environmental Analysis. Of the listed cumulative projects, the majority are located a mile or more from the project site. The following projects are located approximately 0.2 mile from the project site: 1) the pending Providence Saint John's Phase II Master Plan project, which includes the property at 1339 20th Street; 2) a 3-unit condominium project located at 1136 18th Street (under construction); 3) a mixed artist studio and office project located at 1347 19th Street (under construction); 4) a medical office project located at 1419 19th Street (pending); 5) a mixed-use project located at 1802 Santa Monica Boulevard (pending); 6) a mixed

use residential project at 2225 Broadway (approved); and 7) a mixed use residential project at 1450 Cloverfield Boulevard (approved).

Temporary or Permanent Noise in Excess of Standards

Construction Noise

Generally, noise impacts are limited to the area directly surrounding the noise source, as noise attenuates with distance at a higher rate in proximity to the source, and only has the potential to combine with other noise sources occurring simultaneously in the immediate vicinity. The proposed project would result in temporary noise increases during the construction period, as discussed in Section 4.9.5. Cumulative noise impacts would occur if the proposed project's construction period overlap with other projects' construction processes. The nearest project is the Providence Saint John's Phase II project, which includes the property at 1339 20th Street, located approximately 500 southeast from the proposed project site. This pending project would not be constructed concurrently as the proposed project. Therefore, cumulative noise impacts would not occur as a result of this cumulative project.

The remainder of the nearby cumulative projects are recently completed, under construction or located at a sufficient distance from the proposed project site and separated by intervening development. Therefore, cumulative construction noise effects would not occur from these projects.

Additionally, the proposed project would comply with construction mitigation measure **MM-NOI-1**, which would reduce noise impacts to a less than significant level. Additionally, all projects would be required to comply with the City of Santa Monica's Municipal Code Noise Ordinance to limit noise hours during construction. The mitigation measures as described in Section 4.9.8, along with the requirement to comply with the City's noise regulations, the decrease in noise levels with distance and the presence of physical barriers (i.e., intervening buildings), would reduce the project's incremental effect, ensuring that impacts are not cumulatively considerable. No additional mitigation is required.

Operational Noise

Off-Site Traffic Noise. The above traffic noise analysis takes into account cumulative increases in vehicular traffic, including those from future cumulative projects. As addressed in Section 4.9.6, the proposed project would result in a net increase in traffic noise of 0 dB, (when rounded to whole numbers) at all modeled receivers except at site ST3 (representing the residences south of the alleyway immediately adjacent to the proposed project site), where the noise level incease would be approximately 2 dB. However, the noise level increase would be less than 3 dB and the resultant noise level at site ST3 would not exceed the City's noise standard of 60 dBA CNEL. Because the proposed project would not result in significant impacts related to traffic noise, and because the sole "roadway" associated with an increase in noise consists of the alleyway adjacent to the project site, the incremental effect of the proposed project on off-site traffic noise is not cumulatively considerable. The cumulative impacts associated with off-site traffic noise would be **less than significant**.

Stationary Sources. Long-term operational noise would result from operation of the proposed project, such as noise from the HVAC equipment and a standby emergency generator, as addressed above under Section 4.9.6. A cumulative impact could result if noise produced during operation of the proposed project were to combine with noise produced from the operation of the related projects to create a cumulatively significant permanent increase in ambient noise levels. However, the nearest cumulative projects would be located approximately 800 feet to 1,000 feet from the proposed project site. As such, the potential for stationary noise sources from the related projects to combine with those of the proposed project is minimal. Additionally, the proposed project's operations and those of the cumulative projects would be subject to the City's Noise Control Ordinance, which limits the exterior noise levels at residences. Similarly, cumulative projects would be required to comply with the City's noise standards. Compliance with the City's Noise Ordinance would reduce the proposed project's operational noise so that its incremental effect is not cumulatively considerable. The cumulative impacts to ambient noise levels from stationary sources would be **less than significant**.

Groundborne Vibration

Construction-related vibration from the proposed project was addressed above under Section 4.9.6. The proposed project's construction period would have the potential to overlap with the related projects' construction. Vibration levels during construction were determined to be relatively low, but could be perceptible at the nearest noise-/vibration-sensitive land uses. The proposed project would implement mitigation measure **MM NOI-1**, which would require the project contractor would be required to provide contact information in the event citizens wish to report a noise- or vibration-related complaint. The proposed project would also implement mitigation measure **MM NOI-2**, which would require the project contractor to limit the use of heavy equipment in proximity to the project boundaries. Other foreseeable projects within the vicinity of the project site would similarly be required to adhere to the City of Santa Monica's standards for construction activities, and as stated previously, the nearest pending project (Providence Saint John's Phase II) would not be constructed concurrently with the proposed project. Additionally, groundborne vibration from construction activities dissipates in relatively short distances from the source. Therefore, the cumulative impacts associated with excessive groundborne vibration would be **less than significant**.

4.9.8 Mitigation Measures

MM-NOI-1 The applicant and its contractor(s) shall adhere to the following measures for all phases of the proposed project as a condition of approving the grading permit:

i. The project contractor shall, to the extent feasible, schedule construction activities to avoid the simultaneous operation of construction equipment so as to minimize noise levels resulting from operating several pieces of high-noise-level-emitting equipment.

ii. All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers. Enforcement shall be accomplished by random field inspections by City personnel during construction activities.

iii. A temporary construction noise barrier shall be erected at the southeasterly project boundary between the adjacent residences and the project site. The construction noise barrier shall be a minimum of 10 feet in height, have a surface density of at least 4 pounds per square foot, and be free of gaps or openings.

iv. Construction noise reduction methods such as shutting off idling equipment, maximizing the distance between construction equipment staging areas and adjacent residences, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.

v. During construction, stationary construction equipment shall be placed such that emitted noise is directed away from or shielded from sensitive receptors.

vi. As specified in Section 4.12.120 of the City's Municipal Code, signage shall be posted at the project site entrance with permitted construction work hours, telephone numbers where violations can be reported, the location of the job site, and the permit number issued authorizing the work.

MM-NOI-2 The applicant and its contractor(s) shall implement the following vibration-reduction measures:

i. In order to protect the character defining features of the on-site Tudor Revival building, the following mitigation measure shall be implemented at the project site: To avoid or minimize potential construction vibration damage, a pre-construction condition survey report and post-construction damage assessment survey report shall be prepared by a qualified independent structural engineer with qualifications in completed historic preservation projects that conformed to the U.S. Secretary of the Interior (SOI) Standards. These reports shall be submitted to the City for review and approval prior to initiating any type of construction work activity on site (pre-construction vibration survey report) and upon completion of such work (post-construction damage assessment survey report).

Specifically, the structural engineer shall investigate the existing condition of the foundation and the structure along the north elevation (i.e., the side facing the proposed project construction). Any required test excavations shall be performed only in the presence of the structural engineer. If protective barriers, underpinning and/or shoring is determined to be necessary, appropriate designs shall be prepared. The structural engineer shall prepare a report of findings,

recommendations and any related design modifications necessary to retain the structural integrity of the Tudor Revival building.

ii. The qualified structural engineer shall perform the following vibration mitigation: Prior to commencement of construction activities, measure and document the existing ground vibration environment in the vicinity of the Tudor Revival style building, to establish baseline vibration conditions. The vibration measurements shall be performed during hours of the day consistent with the project's construction hours. At each site, ground vibration levels shall be measured in the vertical direction for a period of a minimum of 15 minutes. The vibration measurement equipment shall be capable of recording vibration velocity levels in PPV (Peak Particle Velocity) and RMS (Root-Mean-Square) values in the unit of inch/ second, over the frequency range of 1 Hz to 100 Hz. Measured vibration data shall be submitted to the City and shall include; description of measurement location, measurement time and recorded values (maximum, minimum and mean levels during the measurement period). After establishing the baseline vibration conditions of the project site, develop and implement a vibration monitoring program capable of documenting the construction-related groundbourne vibration levels in the vicinity of the Tudor Revival style building.

iii. During construction, the contractor shall install and maintain at least two continuously operational automated vibrational monitors on the Tudor Revival style building. The monitors must be capable of being programmed with two predetermined vibratory velocities levels: a first-level alarm equivalent to a 0.15 inches per second at the face of the building and a regulatory alarm level equivalent to 0.2 inches per second at the face of the building[9]. The monitoring system must produce real-time specific alarms (via text message and/or email to on-site personnel) when velocities exceed either of the predetermined levels. In the event of a first-level alarm, feasible steps to reduce vibratory levels shall be undertaken, including but not limited to halting/staggering concurrent activities and utilizing lower-vibratory techniques. In the event of an exceedance of the regulatory level, work in the vicinity shall be halted and the building visually inspected for damage. Results of the inspection must be logged. If in the opinion of the structural engineer, in consultation with the historic preservation architect, substantial adverse impacts to historic resources related to construction activities are found during construction, the

[9] Note that the 0.2 inches per second threshold is a conservative one, based upon the assumption that the historic structure is of a non-engineered timber and masonry construction. If the qualified independent structural engineer determines that this threshold is not appropriate based upon the building's construction and condition, this threshold may be revised accordingly, at the independent structural engineer's direction and in coordination with the City.

monitoring team shall so inform the project sponsor or sponsor's designated representative responsible for construction activities.

iv. The project applicant shall adhere to the monitoring team's recommendations for corrective measures, including halting construction in situations where construction activities would imminently endanger historic resources. The historic preservation officer shall establish the frequency of monitoring and reporting. The project applicant shall respond to any claims of damage by inspecting the affected property promptly, but in no case more than five working days after the claim was filed and received by the project sponsor's designated representative. Any new cracks or other changes in the former funeral home and chapel shall be compared to pre-construction conditions and a determination made as to whether the proposed project could have caused such damage. In the event that the proposed project is demonstrated to have caused any damage, such damage shall be repaired to the pre-existing condition. Site visit reports and documents associated with claims processing shall be provided to the City of Santa Monica's Historic Preservation Officer.

4.9.9 Level of Significance After Mitigation

Implementation of mitigation measures **MM-NOI-1** and **MM-NOI-2** is required to help ensure that temporary noise impacts are reduced during construction activities. With the incorporation of mitigation measures **MM-NOI-1** and **MM-NOI-2**, impacts associated with construction noise would be **less than significant**.

4.9.10 References

Airnav.com. 2018. "KSMO: Santa Monica Municipal Airport." FAA information. Accessed November 1, 2018. http://airnav.com/airport/KSMO.

Caltrans (California Department of Transportation). 2013a. *Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol*. Caltrans Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. September 2013.

Caltrans. 2013b. *Transportation and Construction Vibration Guidance Manual*. Sacramento, California: Caltrans Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. September 2013.

City of Santa Monica. 1992. Final, Noise Element of the General Plan for the City of Santa Monica. July 21, 1992.

City of Santa Monica. 2004. Santa Monica Municipal Code. Chapter 4.12, Noise.

DOT (U.S. Department of Transportation). 2018. Transit Noise and Vibration Impact Assessment Manual. DOT, Federal Transit Administration. September 2018.

Fehr and Peers. 2020. *1242 20th Street Wellness Center Project – Non-CEQA Traffic* Analysis. Memorandum. November 25, 2020. Prepared by Fehr and Peers for the City of Santa Monica.

FHWA (Federal Highway Administration). 2004. FHWA Traffic Noise Model, Version 2.5. Office of Environment and Planning. Washington, DC. February.

FHWA. 2008. Roadway Construction Noise Model (RCNM), Software Version 1.1. Washington, DC: U.S. Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center, Environmental Measurement and Modeling Division. December 8, 2008.

Los Angeles County Airport Land Use Commission. 2004. Los Angeles County Airport Land Use Plan. December 1, 2004. Accessed November 1, 2018. http://planning.lacounty.gov/assets/upl/data/pd_alup.pdf

OPR (Governor's Office of Planning and Research). 2003. *State of California, General Plan Guidelines*. October 2003.



SOURCE: Bing Maps 2018; Los Angeles County 2017

FIGURE 4.9-1

Noise / Vibration-Sensitive Land Uses and Measurement / Modeling Locations

20th Street Wellness Center Project EIR

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0 200 400 Feet

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4.10 TRANSPORTATION

This section describes the existing transportation/circulation setting of the project site, identifies associated regulatory framework, evaluates the potential transportation impacts of the proposed project, and identifies potential mitigation measures as necessary. This section is based on the Transportation Impact Study (TIS) for the 1242 20th Street Wellness Center, November 2020 prepared by Fehr & Peers (see Appendix G of this EIR).

4.10.1 Environmental Setting

A. Project Site

The project site is located at the northwest corner of 20th Street and Arizona Avenue, approximately one mile east of downtown Santa Monica in the Healthcare Mixed Use district of the City. The project site is bounded by an alley (19th Court) to the west, 20th Street to the east, a church/private school to the north, and Arizona Avenue to the south. The project area includes an urban mix of medical office, hospital/healthcare, institutional, retail/restaurant, and residential uses. A network of streets and sidewalks serving all modes of transportation supports trip circulation throughout the city, intermixing automobiles, buses, and people walking/bicycling.

The project site consists of an approximately 45,009-sf lot comprised of two parcels. The 1925 Arizona Avenue parcel is currently occupied with a restaurant (the "Tartine") housed in the former Gates, Kingsley, & Gates Funeral Home Building (GKGM Building), which is a 2-story Tudor Revival-style structure with a connected 4-car garage, and a surface parking lot. The 1234-1242 20th Street parcel is developed with two 2-story structures (one 7-unit building and one 3-unit building) currently leased as office space (formerly used as residential), as well as surface parking spaces adjacent to the buildings. The existing restaurant opened for operation in March 2020, after issuance of the project's Notice of Preparation (NOP). Additionally, the two two-story structures were vacant at the time of the NOP but have since been partially occupied with commercial office uses. The rear (north) portion of the project site is occupied by a paved surface parking lot, which abuts the sidewalk along 20th Street and the backside (east) of 1242 20th Street. The surface parking lot is striped to provide 13 parking stalls and 6 parking lanes. Two driveways on 20th Street provide for entry and exit to the parking lot. The paved surface parking is currently available to the general public for a fee.

B. Area Plan

The project site is located within the Hospital Area Specific Plan (HASP) adopted in 1988, and amended in 1993 and 1998.The HASP area is generally bordered by Wilshire Boulevard, Euclid Avenue, Broadway Avenue, and Chelsea Avenue. Existing uses in the HASP includes the Providence Saint John's Health Center Campus, UCLA Hospital, medical office, pharmacies, residential care, rehabilitation and outpatient

clinics, affordable workforce and market-rate housing targeted at hospital employees, extended stay lodging for patient families, and supporting retail uses.

C. Existing Transportation System

i. Existing Freeway and Street System

The Santa Monica Freeway, Interstate (I) 10 provides east/west access across the City of Santa Monica to the City of Los Angeles, and also connects to the San Diego Freeway (I-405) and Pacific Coast Highway (PCH). The nearest I-10 freeway access ramp to the project site is at 20th Street (eastbound off-ramp and westbound on-ramp) and at Cloverfield Boulevard (westbound off-ramp and eastbound on ramp). Other nearby I-10 access ramp locations include Lincoln Boulevard to the west and Centinela Avenue to the east.

The LUCE defines the street system according to its use by various modes including walking, biking, transit, and automobile. These street types include Boulevard, Major Avenue, Secondary Avenue, Minor Avenue, Neighborhood Street, and Alley. The city streets surrounding the proposed project are described below and include the following street types:

- Boulevard – Boulevards are regional transportation corridors with continuous mixed-use and commercial land uses. Boulevards provide access for all forms of transportation but emphasize transit and walking. Regional auto traffic is accommodated here in order to minimize regional traffic on parallel local streets. Wilshire Boulevard, Santa Monica Boulevard, and Pico Boulevard are classified as boulevards near the study site. Boulevards typically provide two vehicle lanes in each direction, often have metered on-street parking, and typically do not have bicycle lanes although bicycle routes or "sharrows" may be posted.
- Avenue: Major – These streets serve regional automobile trips and provide access for all modes of transportation. They are designed to discourage regional auto traffic from using Secondary or Minor Avenues. Major Avenues in the study area include Cloverfield Boulevard south of Santa Monica Boulevard, 26th Street south of Broadway, and Centinela Avenue south of Olympic Boulevard. These streets typically do not allow on-street parking or stopped vehicles.
- Avenue: Secondary – These streets distribute auto trips onto Minor Avenues and Neighborhood Streets, often serving regional bicycle trips. Secondary Avenues in the study area include Broadway west of 26th Street, Colorado Avenue, 20th Street, 26th Street north of Broadway, and Centinela Avenue north of Olympic Boulevard. These streets are generally a single vehicle lane in each direction. These streets may include on-street parking, such as along Broadway.
- Avenue: Minor – These streets serve local auto and bicycle trips. Minor Avenues in the study area include Stewart Street, Nebraska Avenue, and Broadway east of 26th Street. These streets typically provide a single vehicle lane in each direction and typically provide on-street parking for residents, visitors and loading zones. All three of these streets provide bicycle lanes.

- Avenue: Industrial – These are minor streets that serve industrial areas. Pennsylvania Avenue is classified as an Industrial Avenues in the study area. These streets typically provide a single vehicle lane in each direction and typically provide on-street parking for visitors and loading zones.
- Neighborhood Street – These streets provide access primarily to abutting uses. Autos travel slowly enough to stop for people in the street. 17th Street is a Neighborhood Street in the study area. These streets provide a single vehicle lane in each direction and typically have on-street parking for residents, visitors, and loading zones.
- Alley – Alleys provide local property access. North-south alleys are located on most blocks in the area around the project site. East-west alleys are located along commercial corridors of Wilshire Boulevard and Santa Monica Boulevard.

East/West Streets

- Montana Avenue is designated a Secondary Avenue within the study area, with one travel lane in each direction, on-street parking provided on both sides of the street and left-turn pockets at major intersections.
- Wilshire Boulevard is designated a Boulevard within the study area, with two travel lanes in each direction, on-street parking provided on both sides of the street and left-turn pockets at most intersections.
- Arizona Avenue is designated a Minor Avenue from 14th Street to 23rd Street and a Neighborhood Street east of 23rd Street, with one travel lane and a bike lane in each direction and on-street parking provided on both sides of the street throughout the study area.
- Santa Monica Boulevard is designated a Boulevard within the study area, with two travel lanes in each direction and on-street parking provided on one or both sides of the street through most of the study area. Left-turn pockets are present at signalized intersections.
- Broadway is designated a Secondary Avenue within the study area, with one travel lane and a green-painted bicycle lane in each direction, as well as on-street parking provided on both sides of the street. Left-turn pockets are present at major intersections.
- Colorado Avenue is designated a Secondary Avenue within the study area, with one travel lane in each direction, separated by at-grade tracks for the Expo Line, which run along the center of the street west of 17th Street. East of 17th Street, Colorado Avenue has two travel lanes in each direction and on-street parking on one or both sides of the street throughout most of the study area.
- Olympic Boulevard is designated a Parkway within the study area, with two travel lanes in each direction separated by a wide, tree-lined median. On-street parking is provided on both sides of the street, and left-turn pockets are present at most signalized intersections.
- Pico Boulevard is designated a Boulevard within the study area, with two travel lanes in each direction, on-street parking provided on both sides of the street and left-turn pockets at most intersections.

North/South Streets

- 14th Street is designated a Minor Avenue within the study area with one travel lane in each direction with bike lanes and on-street parking on each side of the street. Left-turn pockets are present at intersections.
- 17th Street is designated a Neighborhood Street within the study area, with one travel lane and a bike lane in each direction, as well as on-street parking provided on both sides of the street. Left-turn pockets are present at major intersections.
- 20th Street is designated a Secondary Avenue within the study area, with one travel lane and painted bike sharrows in each direction north of Wilshire Boulevard and two travel lanes and painted bike sharrows in each direction south of Wilshire Boulevard. On-street parking is provided on one or both sides of the street through most of the study area. Right- and/or left-turn pockets are present at major intersections. Raised medians separate northbound and southbound travel lanes at each approach to the signalized Expo Line crossing.
- 23rd Street is designated a Neighborhood Street within the study area, with one travel lane in each direction and on-street parking provided on both sides of the street.
- Cloverfield Boulevard is designated a Major Avenue within the study area, with two travel lanes in each direction north of Colorado Avenue. South of Colorado Avenue, Cloverfield Boulevard has three travel lanes in the southbound direction and two travel lanes in the northbound direction. Two left-turn lanes are present at the northbound approach to Colorado Avenue, both northbound and southbound approaches to Olympic Boulevard, and at the southbound approach to the I-10 eastbound on-ramp. Single left-turn pockets are present at most other intersections. A tree-lined median separates the northbound and southbound travel lanes between Olympic Boulevard and Michigan Avenue. There is no on-street parking permitted on Cloverfield Boulevard in the study area.
- 26th Street is designated a Secondary Avenue within the study area, with one travel lane and painted bike sharrows in each direction and a center turn lane. Left-turn pockets are provided at signalized intersections, and on-street parking is provided on both sides of the street throughout the study area.

ii. Existing Transit System

The study area is well-served by public transit, including Santa Monica's Big Blue Bus, Los Angeles County Metropolitan Transportation Authority (Metro) buses, and the Metro Expo Line, as shown in Figure 4.10-1, Existing Transit Service Near Project Site. The project site is accessible by bus transit from most of Santa Monica and much of the Los Angeles metropolitan area including Downtown Los Angeles, UCLA/West Los Angeles, Century City, Venice, and Culver City. As a result of the availability of transit services, the project site is designated as being within a Transit Priority Area (TPA) and a High Quality Transit Area (HQTA) per the Southern California Association of Governments (SCAG)'s 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the Connect SoCal, the 2020-2045 RTP/SCS,

updated as of June 2019. A HQTA is within one-half mile from major transit stops and from high quality transit corridors and developed based on the language in Senate Bill 375. Major transit stop is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (CA Public Resource Code Section 21064.3).

All transit service descriptions provided below reflect pre-COVID-19 conditions.

Metro Exposition Light Rail

The project site is located approximately 0.7-mile walking distance from the 17th Street/Santa Monica College station of the Metro E light rail (formerly Expo LRT) which runs along Colorado Avenue between downtown Santa Monica and downtown Los Angeles. The Expo Line started operation in Santa Monica in May 2016 and provides service every 6 minutes during weekday peak periods and every 12 minutes during weekday off-peak periods and on weekends.

Public Buses

Figure 4.10-1 shows the existing transit services within ½ mile radius of the project site. There are six fixed-route bus routes with stops within ¼-mile of the project site:

- Big Blue Bus Line 1 (Santa Monica Boulevard) – Line 1 runs from Marina Del Rey and Venice through downtown Santa Monica to UCLA. Service headways of about 10 minutes are provided during weekday peak periods and about 15 minutes during weekday off-peak periods and on weekends. The stop closest to the project site is at 20th Street and Santa Monica Boulevard.
- Big Blue Bus Line 2 (Wilshire Boulevard) – Line 2 runs from downtown Santa Monica to UCLA. Service headways of about 15 minutes are provided during weekday peak periods and about 20 minutes during weekday off-peak periods and on weekends. The stop closest to the project site is at 20th Street and Wilshire Boulevard.
- Metro Line 4 (Santa Monica Boulevard) – Line 4 provides local service on Santa Monica Boulevard between Santa Monica and Downtown Los Angeles. It serves the study area only during the early morning and late night hours (not during peak hours) with off-peak headways of about 20 minutes. The stop closest to the project is at 20th Street and Santa Monica Boulevard.
- Big Blue Bus Rapid 10 (Downtown LA Freeway Express) – Rapid 10 provides express service via the Santa Monica Freeway from Santa Monica to downtown Los Angeles. This line operates with headways of approximately 15 minutes during the peak hours. The bus stop closest to the project is on is 20th Street and Santa Monica Boulevard, which is less than 0.25-mile walking distance from the project.

- Metro Line 20 (Wilshire Boulevard) – Line 20 provides local service on Wilshire Boulevard between Santa Monica and Downtown Los Angeles. It serves the study area only during the early morning and late night hours (not during peak hours) with off-peak headways of about 15 minutes. The stop closest to the project is at 20th Street and Wilshire Boulevard.
- Big Blue Bus Lines 41 and 42 (20th Street) – Lines 41 and 42 offer loop service clockwise and counterclockwise, respectively, on 17th Street and 20th Street between the 17th Street Expo Line Station and the Montana shopping district north of downtown Santa Monica. Service headways of about 15 minutes are provided during peak periods and every 25 or 35 minutes during off-peak periods on both weekdays and weekends. The stop closest to the project site is on 20th Street near Arizona Avenue.

There are seven rapid, express, or on-demand bus routes that operate within a two-mile radius of the project site, including the Big Blue Bus Rapid 10 described above:

- Big Blue Bus Rapid 3 (Lincoln Boulevard) – Rapid 3 runs from the Metro Green Line/Aviation Station along Lincoln Boulevard to downtown Santa Monica via Lincoln Boulevard. Headways are approximately 10 to 15 minutes during weekday peak periods and 20 minutes during the weekend peak. The stop closest to the project is at 4th Street and Colorado Boulevard.
- Big Blue Bus Rapid 7 (Pico Boulevard) – Rapid 7 runs from 7th/Olympic in Downtown Santa Monica to Rimpau Transit Center via Pico Boulevard. Rapid 7 provides service with 7- to 12-minute headways during weekday peak hours and 25 to 30 minutes on weekends. The stop closest to the project is on 7th Street and Olympic Boulevard.
- Metro Line 534 (Malibu Express) – Line 534 runs from Malibu through to Santa Monica via PCH. The stop closest to the project is 7th Street and Olympic Boulevard, which is the beginning of the line.
- Metro Line 704 (Santa Monica Boulevard) – Line 704 offers limited service on Santa Monica Boulevard between Santa Monica and downtown Los Angeles. Buses run at 10- to 15-minute headways during peak weekday hours. The stop closest to the project is at 20th Street and Santa Monica Boulevard, which is less than 0.25-mile walking distance from the project.
- Metro Line 720 (Wilshire Boulevard) – Line 720 offers limited service on Wilshire Boulevard, continuing to an eastern terminus in the City of Commerce. Buses run at up to 8-minute headways during peak weekday hours. The stop closest to the project is at Lincoln Boulevard and Wilshire Boulevard.
- Blue @ night – Blue at Night is an on-demand service provided to and from the 17th Street/SMC Expo Line Station from 8:00 PM – 3:00 AM Friday and Saturday, serving a radius of approximately two miles around the station.

iii. Existing Bicycle and Pedestrian Facilities

Bicycle Facilities

The City of Santa Monica is one of the most bikeable communities in the Southern California region. The City has a dense and growing network of bicycle facilities including some immediately adjacent to the project site. The project area is connected to an extensive bicycle network, including bicycle lanes on Arizona Avenue and Broadway that connect downtown Santa Monica to West Los Angeles and bicycle lanes on several north/south streets in the vicinity of the project. The existing bicycle facilities near the project site are identified below and shown in Figure 4.10-2, Existing Bicycle Facilities Near Project Site.

The following streets near the project have marked bicycle lanes that separate bicyclists from vehicles:

- Arizona Avenue from Ocean Avenue east into West Los Angeles
- Broadway from 5th Street east into West Los Angeles
- 17th Street between Arizona Avenue and Pico Boulevard
- 14th Street between California Avenue and Ashland Avenue

Additional bike routes – which offer signage and markings, such as sharrows, to indicate to all street users that bicyclists are expected to share the motor vehicle lanes – are designated within the vicinity of the study area, including 16th Street, 20th Street, Michigan Avenue, and 26th Street. Future bicycle lanes and routes with buffered bike lanes or shared lane markings are identified in the City's Bicycle Action Plan.

A review of existing bicycle counts at study intersections shows that cycling activity is highest at intersections on 20th Street, Cloverfield Boulevard, and 14th Street, where hourly bicycle volumes exceed 50 bicyclists per hour in at least one peak hour. The intersection at 20th Street and Pico Boulevard has the highest number of bicyclists in the study area, with 60 bicyclists in the AM peak hour and 70 bicyclists in the PM peak hour.

Bicycle Parking

Some bicycle parking is available throughout the study area, including on-street racks and at public and private facilities.

Bike Share

The City also has a citywide Bike Share service (to be privately operated beginning October 2020), which allows residents, visitors, and employees to ride a public bicycle for their travel needs within the City. The bikeshare program makes several hundred "smart" bicycles available at more than 80 stations citywide and

in Venice in the City of Los Angeles. There is an existing bikeshare hub on the sidewalk at the southeast corner of 20th Street & Arizona Avenue.

Pedestrian Facilities

Pedestrian activity is high in the vicinity of the project site, and sidewalks are present on all streets throughout the study area. A review of existing pedestrian counts shows that pedestrian activity is highest at the following intersections, where hourly pedestrian counts range between 200 and 400 in the AM and/or PM peak hour:

- 14th Street & Wilshire Boulevard
- 20th Street & Arizona
- 20th Street & Santa Monica Boulevard
- 20th Street & Pico Boulevard
- Cloverfield Boulevard & Broadway
- Cloverfield Boulevard & Colorado Avenue
- 26th Street & Santa Monica Boulevard

Adjacent to the project site, the sidewalks on 20th Street and Arizona Avenue average approximately five feet in width.

Signalized intersections throughout the study area have marked or textured crosswalks and pedestrian countdown signals. There is an unsignalized mid-block pedestrian crossing on Broadway between 20th Street and 21st Street. It is equipped with yellow warning signs, continental crosswalk markings, curb extensions, and advanced yield markings. Signalized pedestrian walk signals are either automatic at the intersections or actuated by pedestrians by push buttons. Recently, as a result of the COVID19 pandemic, the City has temporarily placed all pedestrian walk signals in the City as automatic pedestrian recall mode. All intersections have accessible curb ramps.

Other Transportation Choices

Shared Mobility Technologies

The growth of privately-operated Transportation Network Companies (TNCs) like Lyft and Uber has also changed the way people move in and around the City. TNC's provide app-based platforms to connect passengers with drivers who use personal, non-commercial vehicles. Lyft and Uber have become the most recognized and ubiquitous forms of shared mobility. Research around the nation in recent years suggests that usage of Lyft and Uber is generating an increase in vehicle traffic (Pangilinan 2019). Other research

has suggested this result is in part because many users are making trips they would not have made previously, and in some cases replacing transit trips.

In late 2017, the City saw a burgeoning of dockless mobility devices, including electric scooters (e-scooters), on City streets. These dockless mobility devices become increasingly popular in the City. Dockless systems allow scooters and bicycles to be left in any location. In response to these dockless mobility devices, the City has provided "drop zones" on wide sidewalks, where users are encouraged to park when they finish a trip, to reduce sidewalk clutter and prevent obstructions to the sidewalk, which can significantly impact the Americans with Disabilities Act (ADA) provisions for providing clear path of travel. The City also worked with permitted operators to designate sensitive high-pedestrian areas as "no-ride" zones, including the Third Street Promenade and Palisades Park.

Based on the City's November 19 council staff addressing these mobility devices, four companies (Bird, Lime, Lyft, and Jump) provided riders with a total of 2,673,819 trips from October 2018 to October 2019 (City of Santa Monica 2019). The average trip duration was 14 minutes and length was 1.3 miles, and ridership peaked during the spring and summer months but was strong throughout the year. Today, Bird and Lyft are the remaining two companies providing e-scooters and e-bikes in the City. The e-scooters are included in existing count data as bicycles, but no assumption of changes to mobility behavior are included in the analysis given the new and rapidly changing circumstances as well as lack of available data.

4.10.2 Regulatory Framework

i. State

AB 32 and Senate Bill (SB) 375

With the passage of Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, the State of California committed itself to reducing statewide greenhouse gas (GHG) emissions to 1990 levels by 2020. The California Air Resources Board (CARB) is coordinating the response to comply with AB 32. The proposed LUCE pro-actively incorporates strategies for integrated land use and transportation planning that achieve per capital GHG reduction, per capita VMT reduction, and trip reduction that would further the City's efforts to meet the state-wide policy intent of this legislation.

In 2007, CARB adopted a list of early action programs that could be put in place by January 1, 2010. In 2008, VRB defined its 1990 baseline level of emissions, and by 2011 it completed its major rule making for reducing GHG emissions. Rules on emissions, as well as market-based mechanisms like the proposed cap and trade program, took effect January 1, 2012.

On December 11, 2008, California ARB adopted its Proposed Scoping Plan for AB 32. This scoping plan included the approval of Senate Bill (SB) 375 as the means for achieving regional transportation-related

GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32.

There are five major components to SB 375. First, SB 375 addresses regional GHG emissions targets. California ARB's Regional Targets Advisory Committee will guide the adoption of targets to be met by 2020 and 2035 for each Metropolitan Planning Organization (MPO) in the state. These targets, which MPOs may propose themselves, will be updated every 8 years in conjunction with the revision schedule of housing and transportation elements.

Second, MPOs are required to create a Sustainable Communities Strategy (SCS) that provides a plan for meeting regional targets. The SCS and the Regional Transportation Plan (RTP) must be consistent with each other, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details an alternative plan to meet the target.

Third, SB 375 requires that regional housing elements and transportation plans be synchronized on 8 year schedules. In addition, Regional Housing Needs Assessment (RHNA) allocation numbers must conform to the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within 3 years.

Fourth, SB 375 provides CEQA streamlining incentives for preferred development types. Certain residential or mixed-use projects qualify if they conform to the SCS. Transit-oriented developments (TODs) also qualify if they (1) are at least 50 percent residential, (2) meet density requirements, and (3) are within 0.5 mile of a transit stop. The degree of CEQA streamlining is based on the degree of compliance with these development preferences.

Finally, MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the CTC. Regional Transportation Planning Agencies, cities, and counties are encouraged, but not required, to use travel demand models consistent with the CTC guidelines.

Senate Bill 743

To further the state's commitment to the goals of SB 375, AB 32, and AB 1358, Governor Brown signed SB 743 on September 27, 2013. SB 743 adds Chapter 2.7, Modernization of Transportation Analysis for Transit-Oriented Infill Projects, to Division 13 (Section 21099) of the Public Resources Code. The project site qualifies as a Transit Priority Area (TPA), and therefore key provisions of SB 743, including reforming aesthetics and parking CEQA analyses for urban infill projects would apply to the project site. Under SB 743, the focus of transportation analysis shifted from driver delay to reduction of GHG emissions, creation of multimodal networks, and promotion of a mix of land uses.

Specifically, SB 743 required the OPR to amend the CEQA Guidelines (Title 14 of the California Code of Regulations sections and following) to provide an alternative metric to LOS for evaluating transportation

impacts. The CEQA Guidelines were amended to include alternative criteria; therefore, auto delay (as measured by LOS) is no longer considered a significant impact under CEQA. Particularly for areas served by transit (TPAs) such as the City of Santa Monica, those alternative criteria must "promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses." (New Public Resources Code Section 21099(b)(1).) Measurements of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated." (Ibid.) OPR also has discretion to develop alternative criteria for areas that are not served by transit, if appropriate. (Id. at subd. (c).)

Pursuant to SB743, Section 15064.3 of the CEQA Guidelines was added by the Office of Planning and Research on December 28, 2018, and states that vehicles miles traveled (VMT) is the appropriate measure of transportation impacts. Section 15064.3(c) also states that the provisions of this section shall apply prospectively (i.e., only applicable to new projects after date of adoption) and were implemented statewide by July 1, 2020.

Parking Cash Out

Parking Cash Out, Assembly Bill (AB) 2109, requires employers of 50 or more employees who lease their parking and subsidize any part of their employee parking to offer their employees the opportunity to give up their parking space and rideshare to work instead. In return for giving up their parking space, the employer pays the employee the cost of the parking space. The City of Santa Monica is the first city in the nation to implement a mandatory Parking Cash-Out Program.

ii. Regional

Southern California Associations of Governments Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) 2020 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/ SCS), also known as Connect SoCal, was adopted in September 2020. The 2020 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2020 RTP/SCS charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians. The 2020 RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the SCAG counties (SCAG 2020).

As stated in the Connect SoCal, SB 375 requires SCAG and other Metropolitan Planning Organizations (MPO) throughout the State to develop a Sustainable Communities Strategy to reduce per capita greenhouse gas (GHG) emissions through integrated transportation, land use, housing, and

environmental planning (SCAG 2020). Within the Connect SoCal, the overarching strategy includes plans or High Quality Transit Areas (HQTA), Livable Corridors, and Neighborhood Mobility Areas as key features of a thoughtfully planned, maturing region in which people benefit from increased mobility, more active lifestyles, increased economic opportunity, and an overall higher quality of life. HQTAs are described as generally walkable transit villages or corridors that are within 0.5-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. Local jurisdictions are encouraged to focus housing and employment growth within HQTAs, and the project site is located within an HQTA (SCAG 2020).[1]

Please refer to Section 4.8, Land Use/Planning, for a detailed discussion of the applicable provisions of the Connect SoCal that apply to the project. As demonstrated therein, the project would be consistent with applicable goals and principles set forth in the Connect SoCal RTP/SCS.

iii. Local

Santa Monica Municipal Code (SMMC) Article 9, Chapter 9.28, Section 140, Bicycle Parking

The SMMC requires all new development to provide a minimum number of bicycle parking spaces based on the primary uses of the site. Bicycle spaces must be provided for both short-term and long-term parking needs. This section of the SMMC also requires bicycle parking to be provided in a safe, secured, well-lit, and accessible location on the project site with adequate signage.

SMMC Article 9, Chapter 9.53, Transportation Demand Management (TDM)

The purpose of the City's TDM Ordinance is to proactively manage traffic congestion, reduce automobile dependence, and enhance transportation choices by requiring trip reduction plans. The ordinance applies to employers with 10 employees or more and developers of projects with 7,500 sf of floor area 16 units, or mixed-use project with 16 units or more. Under the City's TDM Ordinance, employers and developers shall strive to achieve an Average Vehicle Ridership (AVR) of 1.5 prior to January 1, 2016. After January 1, 2016, employers and developers shall strive to achieve the AVR for their respective land use designation. The rates for non-industrial districts ranges from 1.75 to 2.2, depending upon location. Within the Health Care Mixed Use District, the target AVR is 2.0, which the project would be required to comply with.

Under the City's TDM Ordinance, employers with 10 to 49 employees are required to provide each of their employees with information about carpooling/vanpooling, transit, air pollution, bicycle routes and facility, walking and pedestrian safety, and alternatives to driving alone to work every day. Employers of 50 or more employees are required to prepare and submit an Emission Reduction Plan, which shall include the option of 1) purchase of mobile source emission reduction credits or 2) preparation and implementation of

[1] Metro, High Quality Transit Areas – Southeast Quadrant, Map.

Employee Trip Reduction Plan to achieve the applicable AVR target. Additionally, developers of projects are required to prepare and implement a TDM plan that would include physical and programmatic elements to reduce single occupancy vehicle trips and achieve the targeted AVR. Annual monitoring is a requirement of the developer TDM Plan. The project would be required to prepare a TDM Plan is described in Section 3.0. Project Description.

SMMC Article 9, Chapter 9.28, Parking, Loading, and Circulation

The SMMC also includes relevant guidance on the location and characteristics of parking driveways. "Required off-street parking and loading spaces shall be located on the same parcel as the use they serve, except as otherwise provided in this Chapter. Entrances to off-street parking and loading should be located on a non-primary façade, except as described below. Where a parcel contains more than 1 street frontage, the parking entrance should be located on the secondary street or alley. All efforts should be made to eliminate the impacts of parking entrances on main thoroughfares and transit-oriented streets. …" (SMMC Section 9.28.070)

"Loading spaces shall be accessible from an alley, or if no alley is adjacent to the site, a minor roadway." (SMMC Section 9.28.080 F. 5)

"The design, location or position of any parking layout, entry, driveway, approach or access way from any street or alley shall be approved by the Director." (SMMC Section 9.28.120 A)

"Alley Access. Access to parking areas shall be from alleys. Curb cuts are prohibited except where a project site meets at least one of the following criteria:

- The site has no adjacent side or rear alley having a minimum right-of-way of 15 feet. Corner parcels with no adjacent side or rear alley must take access from the side street.
- The average slope of a multi-unit residential parcel is at least 5 percent.
- The Director determines that a curb cut is appropriate due to traffic, circulation, or safety concerns.
- Commercial properties may have nonresidential parking access from side streets." (SMMC Section 9.28.120 B.3)

"Hazardous Visual Obstructions … no person shall permit any obstruction, including, but not limited to, any fence, wall, hedge, tree, or landscape planting to obscure or block the visibility of vehicles entering or exiting an alley, driveway, parking lot, street intersection, or other vehicle right-of-way or to constitute an unreasonable and unnecessary hazard to persons lawfully using an adjacent pedestrian or vehicle right-of-way. In addition, no obstruction shall be located less than 5 feet from the intersection of the street-facing parcel line with a driveway or garage door, or the intersection of parcel lines adjacent to street or alley intersections unless the obstruction is either less than 24 inches above the adjacent vehicle right-of-way or is authorized pursuant to subsection (B). In addition, unless authorized pursuant to subsection (B), no

obstruction shall be located less than 5 feet from the intersection of the alley-facing parcel line with a driveway or garage door, and this area must be paved in accordance with Section 9.28.120(I).” (SMMC Section 9.21.180)

SMMC Article 9, Chapter 9.73, Transportation Impact Fee

Article 9, Chapter 9.73 of the City’s Municipal Code is intended to ensure that new development projected through the year 2030 to pay its fair share of the costs of providing transportation infrastructure necessary to implement the policies and achieve the No Net New PM Peak Hour trips goals of the LUCE. The new development is required to fund transportation improvements such as new sidewalks, crosswalks, traffic signal upgrades, transit, and bicycle facilities that are necessitated by the new trips associated with land use change. The transportation impact fees are based on residential units or commercial square footage. The fee is charged prior to issuance of building permits, unless state law requires the City to accept later fee payments.

City of Santa Monica General Plan Land Use and Circulation Element

The LUCE, adopted in July 2010, provides a framework to integrate land use and transportation to reduce vehicle trips; encourage walking, bicycling, and transit use; and create active pedestrian-oriented neighborhoods. The LUCE establishes the goal of achieving No Net New PM Peak Hour vehicle trips generated within Santa Monica. To achieve this goal, a primary strategy in the LUCE is vehicle trip reduction. The LUCE proposes the creation of a comprehensive multi-modal transportation system that builds on the City’s investment in transit and the opportunity offered by the coming of the Expo LRT line. The LUCE identifies local strategies that manage trips, with aggressive requirements for trip reduction, transit enhancements, pedestrian and bike improvements, and shared parking. Further, the LUCE requires projects above the established base height to provide Transportation Demand Management (TDM) trip reduction measures that reduce automobile travel demand and incentivize alternative modes such as carpool, vanpools, and shuttles, walking, bicycling, and shared parking are all encouraged.

Many policies within the LUCE relate to transportation/circulation. The most pertinent polices are listed and analyzed for project consistency in the 4.10.7. Impacts Analysis.

Santa Monica Bike Action Plan

The City of Santa Monica adopted a Bike Action Plan in October 2011. The Bike Action Plan outlines community priorities that will guide and coordinate implementation of bicycle programs and the LUCE bicycle network, and encourage residents, employees, and visitors to make bicycling their transportation of choice. It provides both a 20-year vision and a 5-year implementation strategy for further integrating bicycles into the City of Santa Monica (City of Santa Monica 2011).

Santa Monica Pedestrian Action Plan

The City of Santa Monica also adopted a Pedestrian Action Plan in 2016. The plan provides a comprehensive approach to pedestrian policy in Santa Monica using a multi-disciplined approach to making physical, operational and educational improvements that prioritize pedestrians. The goals, policies and actions in the Pedestrian Action Plan address the input gathered from the community, stake holders and key professionals such as public safety personnel, transportation planners and engineers, while aligning a vision with data analysis to develop strategies that prioritize actions for the short- and long-terms. The Plan introduces a Vision Zero program which envisions zero fatalities from pedestrian crashes. Components of the program include prioritizing and organizing community safety goals and facilitating the systematic implementation of current and future actions that support safer walkability for people of all ages and abilities. Figure 5.1, Proposed Projects: 5, 10, and 15 Year Map, of the City of Santa Monica Pedestrian Action Plan, identifies Wilshire Boulevard and 20th Street as part of the Citywide 10 Year Projects. Potential improvements along Wilshire Boulevard and 20th Street include bike lanes, curb extensions, crosswalks and yield lines at unsignalized intersections with median islands (City of Santa Monica 2016).

4.10.3 Thresholds of Significance

Appendix G of the 2020 State CEQA Guidelines provides a set of questions that address transportation impacts. These questions are listed below:

Would the project:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
2. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment)?
4. Result in inadequate emergency access?

With regard to questions 1, 2, 3, and 4 above, the project would result in significant transportation impacts if it would result in exceedance of the significance thresholds set forth below:

Conflict with a Program, Plan, Ordinance, Policy addressing the Circulation System

The analysis of consistency with circulation plans, programs, ordinances, and policies reviews the Project and determines whether the Project would obstruct or conflict with the applicable plans, programs, ordinance, and policies listed in the Regulatory Framework.

Conflict or Be Inconsistent with CEQA Guidelines Section 15064.3 Subdivision (b)

VMT

Section 15064.3 of the revised CEQA Guidelines was adopted by the Office of Planning and Research on December 28, 2018, and states that vehicles miles traveled (VMT) is the appropriate measure of transportation impacts. Section 15064.3(c) also states that the provisions of this section shall apply prospectively (i.e., only applicable to new projects after date of adoption) and must be implemented statewide by July 1, 2020. In June 2020, the City adopted new VMT screening criteria and significance thresholds pursuant to Section 15064.3. These adopted screening criteria and significance thresholds, which are outlined as follows, are applied to the proposed project.

Screening Criteria for VMT Analysis

As a first step in the transportation review of projects, the City has adopted screening criteria that can be used to "screen" out projects from VMT analysis. Projects meeting the VMT screening criteria are deemed to have a less than significant impact and no further VMT analysis would be necessary. The tier screening criteria are provided as follows:

Table 1. Land Uses Screened from VMT Analysis

- 200 residential dwelling units or less
- 100% affordable housing
- 50,000 sf or less of commercial floor area by land use typet[1]
- New construction of educational facilities/institutions (such as increased classrooms, gym/recreational space, and other supportive areas) provided that there would be no student enrollment increase or if student enrollment is increased, 75% of the student body comes from within 2.0 miles of the school
- Expansions of civic/government use (such as fire and police stations) and utility facilities less than 50,000 sf or replacement of such uses/facilities (in same or another location) to serve the community
- Local serving Parks and Recreational facilities, as determined by City Staff

[1] Commercial uses covered under this screening criteria include retail, restaurant, movie theater, gym/fitness, grocery store/market, hotel, medical office, office, and hospital uses less than 50,000 sf. Excludes museums, amusement parks, and other large regional trip attractors as may be determined by City Staff.

Tier 1: Does the project include the development of the following land uses, which are screened out from further analysis?

If yes, no further analysis. If no, move to Tier 2.

For a mixed use project, the individual components of the project should be evaluated to determine if each can be screened out. For example, a mixed use project with 150 units and 75,000 sf of office area cannot be screened out at the Tier 1 level and would be required to move to Tier 2.

Tier 2: Is the project located within 0.5 mile walking distance of an Expo LRT station or 0.25 walking distance of Rapid BRT stop?[1]

If no, conduct VMT analysis. If yes, move to Tier 3.

Tier 3: Would the project provide more parking than required by Code (or if located in the Downtown, exceed parking maximums)?

If no, no further analysis. If yes, conduct VMT analysis.

Additionally, for a land use project, a less than significant impact would also result if:

- A project decreases [total] vehicle miles traveled in the project area compared to existing conditions or
- A redevelopment project replaces existing VMT generating land uses with new uses that result in a net overall decrease in VMT.

Projects that are screened out based on the criteria above are presumed to have a less than significant impact on transportation and as such, no VMT analysis is required.

VMT Significance Thresholds

For projects that are not screened out, a VMT analysis is required. The VMT estimates of the proposed project must be compared against the City's adopted VMT significance thresholds. The City has adopted two sets of VMT thresholds, both of which would be applied to land use projects:

- Threshold 1: VMT per capita: A project's VMT per capita must not exceed the existing Citywide average VMT per capita for that particular land use.[2]

City of Santa Monica VMT Significance Threshold 1

Land Use	Proposed Threshold
Residential	No greater than existing Citywide average VMT/capita
Commercial Employee	No greater than existing Citywide average VMT/capita
Retail	Any net increase in total City VMT

[2] As of this writing, the existing citywide average VMT for residents is 9.0 per capita and for commercial employee is 19.2 per employee.

- Threshold 2: Total VMT: The project's combined total VMT for residents and commercial employees must be at least 16.8% below existing Citywide "business as usual" VMT per capita. Business as Usual VMT is defined as what the calculated VMT for the project would be if the project were generating VMT per capita at the existing citywide average.

Example: City of Santa Monica VMT Threshold 2 Calculation

		Example Calculation			
	Project VMT	***Existing City Average VMT/capita***	***Project Population***	***Business as Usual (BAU) VMT***	**Proposed Threshold**
Residential	A	9.0	D	= (9.0 x D)	
Commercial Employee	B	19.2	E	= (19.2 x E)	
	Total Resident + Employee VMT (A +B)			**Total BAU VMT**	**Is Total Resident + Employee VMT at least 16.8% lower than Total BAU VMT?**

Projects exceeding one or both of these thresholds are considered to have a significant transportation impact on the environment. These City-specific thresholds reflect a local consideration to the City's existing transportation conditions as well as State and local land use and sustainability goals. This strategic approach would also ensure that new development will not hinder the City's progress towards reducing GHG emissions, improving mobility options, and implementation of the LUCE.

Hazardous Design Features

The analysis evaluates whether the project would result in hazards due to design features by determining whether the Project would include curved streets with inadequate view distances, unsafe separation of vehicles and pedestrians or bicyclists, and not provide adequate pedestrian crosswalks at intersections.

Emergency Access

The emergency access analysis evaluates whether the project would comply with City emergency access requirements including those imposed by the Santa Monica Fire Department regarding adequate turning radii on streets, response distances to buildings, etc.

Methodology for VMT Calculation

The City of Santa Monica developed a VMT Calculator tool to assess the VMT impacts of proposed development projects within the City. The VMT Calculator also assesses the effectiveness of selected TDM measures proposed for a project based on available research.

The VMT Calculator is specific to the City and utilizes land use and transportation data from the Santa Monica Travel Demand Forecast Model (TDFM), which is calibrated to local vehicle count collected in and around the City. The Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA states that travel demand models, sketch models, spreadsheet models, research, and data can all be used to calculate and estimate VMT). The guidance states:

> "To the extent possible, lead agencies should choose models that have sensitivity to features of the project that affect VMT. Those tools and resources can also assist in establishing thresholds of significance and estimating VMT reduction attributable to mitigation measures and project alternatives. When using models and tools for those various purposes, agencies should use comparable data and methods, in order to set up an "apples-to-apples" comparison between thresholds, VMT estimates, and VMT mitigation estimate." (Appendix G).

The VMT Calculator utilizes trip generation rates derived from the TDFM, which vary depending upon area of the City and proximity to transit. The trip length distribution is calibrated based on the cell phone probe data and Household Travel Survey. Detailed Census employment and demographic data is used to estimate the existing VMT rates per capita or per employee.

The VMT Calculator estimates VMT for a wide variety of potential land uses, including the medical office uses proposed as part of the project. Analysis was conducted for the project using the City's VMT analysis procedures, however since the project was screened out, it did not require using the VMT Calculator.

4.10.4 Impacts Analysis

Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Section 4.8, Land Use and Planning, provides an analysis of the project's consistency with relevant goals and plans, including those that address circulation such as 2016 RTP/SCS and the City of Santa Monica LUCE. As summarized, the project site and surrounding area is served by several transit facilities and services. The project site is located approximately 0.7 mile by foot from the 17th Street/Santa Monica College station of the Metro E Light Rail Line and is well-served by bus transit service, including Big Blue Bus and Metro buses. The bus stops closest to the project site are on 20th Street southbound and at the Wilshire Boulevard/20th Street intersection. The proposed project would continue to support employment opportunities near transit. Furthermore, the proposed project would not physically impede, alter, or remove existing or planned transit facilities.

As described in the existing setting above, the project area is connected to an extensive bicycle network on Arizona Avenue and Broadway that connect downtown Santa Monica to West Los Angeles and bicycle lanes

on several north/south streets. The proposed project includes features that aim to improve mobility and support bicycling/walking such as short-term and long-term bicycle parking. In accordance with the City's TDM Ordinance, the project applicant would implement a TDM plan designed to achieve a 2.0 AVR target.

Adequate pedestrian facilities such as continuous, paved sidewalks constructed along both sides of 20th Street and Arizona Avenue. Furthermore, proposed project improvements along 20th Street and Arizona Avenue frontages would improve pedestrian access to the project site and activate the sidewalk.

Table 4.10-1. Project Consistency with Transportation Policies of LUCE

LUCE	
Policy LU2.5: Vehicle Trip Reduction. Achieve vehicle trip reduction through comprehensive strategies that designate land uses, establish development and street design standards, implement sidewalk, bicycle, and roadway improvements, expand transit service, manage parking, and strengthen TDM programs that support accessibility by transit, bicycle, and foot, and discourage vehicle trips at a district-wide level. Monitor progress using tools that integrate land use and transportation factors. Increase bicycle and pedestrian connectivity in transit districts and adjust bus and shuttle services to ensure success of the transit system.	**Consistent.** The Project would integrate land use and transportation and reduce vehicle trips by providing new development near transit. The project site is located approximately 0.7 mile by foot from the 17th Street/Santa Monica College station of the Expo Light Rail Line and is well-served by bus transit service, including Big Blue Bus and Metro buses. The bus stops closest to the project site are on 20th Street southbound and at the Wilshire Boulevard/20th Street intersection. The proposed project would continue to support employment opportunities near transit. Furthermore, a TDM program would be implemented to manage parking and reduce vehicle trips.
Policy LU7.4: Allow responsible expansion of the hospitals and medical uses that is sensitive to the surrounding residential neighborhoods and coordinated with a comprehensive TDM and trip reduction strategies.	**Consistent.** The project would develop medical and R&D uses related to health/wellness that would be compatible with other surrounding uses. In accordance with the City's TDM Ordinance, the project applicant would implement a TDM plan designed to achieve a 2.0 AVR target, and the project applicant must agree to yearly monitoring, reporting and enforcement if needed. The TDM plan for the project would establish trip reduction measures, including on-site transportation information, and transit pass subsidies.
Policy LU8.1: Transportation Demand Management. Require participation in TDM programs for projects above the base to encourage walking, biking, and transit, and to reduce vehicle trips. Engage existing development in TDM Districts and programs to encourage reduction of existing vehicle trips.	

Table 4.10-1. Project Consistency with Transportation Policies of LUCE

LUCE	
LU15.1 Create Pedestrian-Oriented Boulevards. Orient the City's auto-dependent boulevards to be inviting avenues with wider sidewalks, improved transit, distinctive architecture, landscaping, trees, planted medians and neighborhood–friendly services—defining a new sense of place where local residents will be attracted to shop, work, live and play.	**Consistent.** The project would provide new and more attractive streetscapes to improve the pedestrian-orientation of the adjacent streets. New landscaping would be planted along the street frontages of 20th Street and Arizona Avenue to create an attractive pedestrian realm.
Circulation Element	
Policy T8.4: Design buildings to prioritize pedestrian access from the street, rather than from a parking lot.	**Consistent.** The project would remove an existing surface parking lot and rear apartment buildings to construct a new wellness center with primary pedestrian access provided on the ground floor along the street frontages of 20th Street and Arizona Avenue.
Policy T15.1: Reduce automobile trips starting or ending in Santa Monica, especially during congested periods, with the goal of keeping peak period trips at or below 2009 levels.	**Consistent.** See Policy LU2.5
Policy T15.7*:* Monitor and coordinate construction activity to minimize disruption on the transportation system.	**Consistent**. A Construction Impact Mitigation Plan would be prepared to address traffic impacts from demolition, site preparation, and ongoing construction activities. Components of the plan would include measures to address vehicular and pedestrian safety, notification of local business, identification of construction parking, construction traffic and route design, and construction scheduling. The Construction Impact Mitigation Plan would be subject to approval by the City prior to issuance of a building permit. The approved mitigation plan would be posted and available at the project site for the duration of construction and would be produced upon request.
Policy T19.2*:* Impose appropriate Transportation Demand Management (TDM) requirements for new development.	**Consistent**. In accordance with the City's TDM Ordinance, the project's applicant would implement a TDM plan designed to achieve a 2.0 AVR target. The TDM plan for the project would establish trip reduction strategies, including on-site transportation information, and transit pass subsidies.
Policy T21.3: TDM program requirements shall be triggered for new development consistent with the LUCE performance standards.	**Consistent**. See discussion for Policy T19.2.
Policy T25.2*:* Require that parking be accessed only from alleys, where alley access is available.	**Consistent**. Primary vehicular site access to the subterranean garages for the project would be provided off 19th Court. In response to concerns from neighboring properties, this EIR also analyzed the transportation impacts if access was provided off of 20th Street.

Table 4.10-1. Project Consistency with Transportation Policies of LUCE

LUCE	
***Policy T25.3**:* Minimize the width and number of driveways at individual development projects.	**Consistent.** The project would remove the existing driveway curbcuts on 20th Street that currently serve the existing parking lot.

Source: City of Santa Monica 2017

Bike Action Plan: The project would not conflict with the City's Bike Action Plan. As an infill project located entirely within parcel boundaries, the project would not interfere or conflict with existing or planned bicycle facilities. The placement of the project's driveway in the alley would also not interfere with existing or planned bicycle routes. Furthermore, the project would also not conflict with the City's goals/policies to increase bicycling in the City. Rather, the project would encourage employees to bike through implementation of a TDM plan and the provision of on-site bicycle amenities such as bike parking.

Pedestrian Action Plan: The project would not conflict with the Pedestrian Action Plan. The project would include landscaped sidewalks and setbacks to improve the pedestrian realm along Arizona Avenue and 20th Street. The project would also not conflict with the City's goals/policies to increase walking in the City. Rather, the project would encourage employees to walk to the site through implementation of a TDM plan.

Santa Monica Municipal Code: The proposed project would be required to comply with the standards and requirements set forth in the SMMC. Specifically, the project would provide at least the minimum number of off-street vehicle parking spaces, bicycle parking, bicycle storage/lockers, EV vehicle charging spaces as required by the SMMC. Furthermore, the project Applicant would be required to provide transportation impact fees to fund for City transportation improvements plans and projects. Therefore, the proposed project would not conflict with the SMMC such that a significant adverse impact to transportation would occur.

The proposed project would not conflict or physically preclude implementation of any circulation policies, plans, ordinances or programs. Therefore, impacts would be **less than significant**.

Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

VMT Screening

The proposed project was reviewed against the City's VMT screening criteria system to determine if a VMT analysis would be required.

> Tier 1: Does the project include the development of the land uses in Table 1, which are screened out from further analysis? (If yes, no further analysis is required. If no, move to Tier 2)

The proposed project was reviewed against the City's VMT screening criteria system to determine if a VMT analysis would be required. The proposed project consists of approximately 54,000 square feet of research and development space and 18,812 square feet of clinical/medical office space. The proposed clinical/medical office floor area is less than 50,000 square feet and is therefore screened out. However, the research and development space floor area exceeds the City's Tier 1 screening criteria of 50,000 sf. The project was therefore reviewed against the City's Tier 2 screening criteria (proximity to transit).

> Tier 2: Is the project located within 0.5-mile walking distance of an Expo LRT station or 0.25 walking distance of Rapid BRT stop? (If no, conduct VMT analysis. If yes, move to Tier 3)

While the proposed project is located more than 0.5 miles from the 17th Street/Santa Monica College station for the Metro E LRT, it is located less than 0.25 miles from the Big Blue Bus Rapid 10 and Metro Rapid 704 bus stop at the corner of Santa Monica Boulevard & 20th Street, meeting the Tier 2 screening criteria. The proposed project was therefore reviewed against the City's Tier 3 screening criteria (parking).

> Tier 3: Would the project provide more parking than required by Code (or if located in the Downtown, exceed parking maximums)? (If no, no further analysis is required. If yes, conduct VMT analysis.)

The proposed project would provide approximately 272 parking stalls in a subterranean parking garage consisting of five levels. According to the City's Municipal Code, 272 parking stalls are required to serve the medical office, research and development, and restaurant space. Because the proposed project would not exceed the amount of parking allowed by the Municipal Code, the Tier 3 screening criteria is met. As such, the proposed project is not required to conduct a VMT analysis and it is determined to have a less-than-significant impact on transportation.

As discussed above, the proposed project is screened out from further VMT analysis based on the City's tiered screening system and therefore, is deemed to have a less than significant VMT impact. Further VMT analysis and comparison of the proposed project against the significance thresholds are not required.

Therefore, project's impact related to CEQA Guidelines section 15064.3, subdivision (b) would be **less than significant.**

Would the 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 proposed project involves adaptive reuse of the existing former funeral home/chapel and construction of a new adjacent three-story building with a subterranean parking structure to construct a new Wellness Center. Vehicular access is proposed from 19th Court alley with pedestrian access from 20th Street. The

proposed driveway to the garage would be designed in accordance with all applicable design standards, including those addressing ADA accessibility, adequate width, and adequate turning radius. No other hazardous design features such as sharp curves, dangerous intersections or curb cuts/driveways, or incompatible land uses are proposed. In addition, all site plans would be reviewed (at the time of building permit issuance) by the City's Mobility Division and Traffic Engineering Division for adequate line-of-sight provision at driveways, so no structures or landscaping block the views of vehicles entering and exiting the site. Specifically, the proposed project would be subject to the SMMC, Section 9.04.10.08.060 (d), which states, "the design, location or position of any parking layout, entry, driveway, approach, or access from any street or alley shall be approved by the Parking and Traffic Engineer." Site plan approval from the City's Mobility Division would ensure that site access provides sufficient egress for trucks and emergency vehicles prior to approval. Therefore, impacts associated with hazardous geometric design features or incompatible uses would be **less than significant**.

Would the project result in inadequate emergency access?

As discussed above, the project site is accessible via 20th Street, Arizona Avenue and 19th Court. The project site would continue be accessible to emergency responders via these streets including SMFD during construction and operation of the proposed project. As a result, the proposed project would comply with all applicable local requirements related to emergency vehicle access and circulation. Project-related increase in traffic within the project site and on surrounding roadways would not be sufficient to affect emergency response in the area. The maximum number of PM peak hour trips (110 vehicle trips) would be distributed throughout the roadway network at different times and would not be substantial to block emergency access. Emergency response is routinely facilitated, particularly for high priority calls, through use of sirens to clear a path of travel, driving in lanes of opposing traffic, use of alternative routes, and multiple station response. Therefore, impacts associated with emergency access would be **less than significant**.

4.10.5 Cumulative Impacts

The proposed project's impacts related to consistency with circulation policies, plans, ordinances and programs; CEQA Guidelines section 15064.3, subdivision (b) hazardous design features; and emergency access would be less than significant. As such, cumulative impacts would also be **less than significant**.

4.10.6 Mitigation Measures

No mitigation measures are required.

4.10.7 Level of Significance After Mitigation

No mitigation measures are required. Impacts would be less than significant.

4.10.8 References

City of Santa Monica, Municipal Code. Accessed September 2018 http://www.qcode.us/codes/santamonica/.

City of Santa Monica. 2011. *Santa Monica Bike Action Plan*. November 2011. Accessed February 12, 2018. https://www.smgov.net/uploadedFiles/Departments/PCD/Plans/Bike-Action-Plan/Bicycle-Action-Plan.pdf.

City of Santa Monica. 2016. *Santa Monica Pedestrian Action Plan*. Adopted February 23, 2016. Accessed February 12, 2018. https://www.smgov.net/uploadedFiles/Departments/PCD/Plans/Pedestrian-Action-Plan/PAP%20Final%208-10-16%20optimized.pdf.

City of Santa Monica. 2017. "2010 Land Use and Circulation Element." Revised June 24, 2017. Accessed January 17, 2018. https://www.smgov.net/Departments/PCD/Plans/2010-Land-Use-and-Circulation-Element-(LUCE)/.

City of Santa Monica. 2019. Council Staff Report November 19. http://santamonicacityca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=1196&MediaPosition=&ID=3615&CssClass=P angilinan, Chris. "Learning more about how our roads are used today". *Medium.com* August 5, 2019 https://medium.com/uber-under-the-hood/learning-more-about-how-our-roads-are-used-today-bde9e352e92chttps://drive.google.com/file/d/1FIUskVkj9lsAnWJQ6kLhAhNoVLjfFdx3/view

SCAG (Southern California Association of Governments). 2020. *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy - Connect SoCal*. Adopted September 3, 2020. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx.

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Legend *Leyenda*

Big Blue Bus Routes
Rutas de Big Blue Bus

- 1 Main St & Santa Monica Blvd
- 2 Wilshire Blvd
- 3 Lincoln Blvd
- rapid 3 Lincoln Blvd Rapid
- 5 Olympic Blvd – Century City
- 7 Pico Blvd
- rapid 7 Pico Blvd Rapid
- 8 UCLA/Westwood & Ocean Park Blvd
- 9 Pacific Palisades
- rapid 10 Downtown LA Freeway Express^
- rapid 12 UCLA/Westwood & Overland Ave
- 14 Bundy Dr & Centinela Ave
- 15 Barrington Ave
- 16 Wilshire Blvd/Bundy Dr - Marina del Rey^
- 17 UCLA – VA Medical Center – Palms
- 18 UCLA - Abbot Kinney - Marina del Rey
- 41 17th St Station – SMC – Montana
  41 Clockwise
  41 Dextrorso
  42 Counterclockwise
  42 Sinistrórsum
- 43 SMC – 26th St – San Vicente Blvd^
- 44 17th St Station – SMC – Ocean Park^

^ Monday-Friday Service Only
Servicio sólo de lunes a viernes

Rapid Routes: Limited-Stop Service
Ruta Rapid: Servicio de paradas limitadas

- Metro Rail Station
  Estación de Metro Rail
- Future Metro Rail Station
  Futura Estación de Metro Rail
- Metro Rail Line
  Línea de Metro Rail
- Future Metro Rail Line
  Futura Línea de Metro Rail
  – Crenshaw/LAX Line
  – Purple Line Extension
  – Regional Connector

LINC

Bus-only lane on Route 3 & Rapid 3 weekdays from 7am-9am (NB) & 4pm-7pm (SB).
Carril de autobús para la Ruta 3 y Rapid 3. Entre semana de 7am-9am (hacia el norte) y 4pm-7pm (hacia el sur).

Blue @ night

On-demand service 8pm-3am Friday & Saturday only to/from 17th Street/ SMC Station.
Servicio por solicitud de 8pm a 3am sólo el viernes y sábado hacia/desde la Estación 17th Street/SMC.

Other Symbols *Otros Símbolos*

- 1 2 3 Terminus
  Terminal de Línea
- Freeway Service
  Servicio de Carretera
- Select Trips Only
  Viajes Designados
- Park
  Parque
- Airport
  Aeropuerto
- University/College
  Universidad
- Hospital/Medical Center
  Hospital/Centro Medico
- Shopping/Commercial Area
  Centro Comercial
- Civic Center
  Centro Cívico
- Point of Interest
  Punto de Interés

SOURCE: Fehr & Peers 2020

FIGURE 4.10-1
Existing Transit Service Near Project Site
20th Street Wellness Center Project EIR

DUDEK

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Legend

- Project Site
- Bike Path
- Bike Lane
- Bike Lane in Direction of Arrows (Sharrows in Opposite Direction)
- Bike Route (with Sharrows)
- Breeze Bike Share Hub ($ includes payment kiosk)
- Major Bus Stops
- Expo Light Rail and Stations (Bike parking available)
- Bike Shop (Repairs)
- Bike Shop (Repairs and Rentals)
- Shopping Districts
- Public Schools
- Car Share

SOURCE: Fehr & Peers 2020

FIGURE 4.10-2

Existing Bicycle Facilities Near Project Site

20th Street Wellness Center Project EIR

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4.11 TRIBAL CULTURAL RESOURCES

This section describes the existing cultural resources of the project site, identifies associated regulatory requirements, evaluates potential impacts on tribal cultural resources related to implementation of the proposed project.

4.11.1 Existing Conditions

The proposed project would involve the development of a Wellness Center dedicated to medical research and development and medical office and outpatient services located at 1925 Arizona Avenue and 1242 20th Street in the City of Santa Monica. The proposed project would include the construction of a new 3-story building adjacent to an existing historic Tudor-style building, which would be partially preserved in its current condition, and partially renovated/adaptively reused as part of the Wellness Center. The proposed Wellness Center would provide medical-related research & development (R&D) uses and clinical/medical office space in the City of Santa Monica's Healthcare Mixed Use (HMU) District.

The project site is located in the Mid-City neighborhood of the City, north of Santa Monica Boulevard within the HMU District. Specifically, the project site is located at the northwest corner of Arizona Avenue and 20th Street. The approximately 45,009-sf (1.03-acre) project site includes two parcels addressed as 1925 Arizona Avenue and 1242 20th Street. The Assessor Parcel Numbers (APN) associated with these two parcels are 4276-013-033 and 4276-013-032, respectively.

Prehistory

There is evidence for human occupation of mainland southern California for as long as 13,000 years or possibly more. Although past development and sediment deposition may have obscured prehistoric sites, no prehistoric sites are known within the project area. Prehistoric human occupation and cultures within coastal Southern California evolved significantly over more than 10,000 years based on changes in climate, food availability, and utilization and changes in population densities and cultural characteristics.

The City of Santa Monica is situated within that has been ethnographically mapped as the Tongva or Gabrielino traditional use area. The Tongva received the name of Gabrielinos from the Spanish after their association with the San Gabriel Mission. The total Gabrielino territory covered more than 1,500 square miles (mi^2) and included the watersheds of the Los Angeles River, San Gabriel River, Santa Ana River, and Rio Hondo. The Gabrielino also occupied the islands of Santa Catalina, San Clemente, and San Nicolas.

The Gabrielino arrived around 500 B.C. and exhibited a complex culture, social organization, religious beliefs, and art and material production. The Gabrielino were known for excellent artisanship in the form of pipes, ornaments, cooking implements, inlay work, and basketry. Although few specifics are known of Gabrielino life, their economic system severed to manage food reserves (i.e., storage and processing), provide a market to exchange goods, and distribute resources. The development of the large coastal and littoral territorial

villages of the Gabrielino/Tongva recorded in ethnohistoric accounts has fueled speculation about the achievement of a completely sedentary type of settlement. Temporary seasonal camps appear to have been utilized even in coastal areas where large village sites were located close to one another. Population estimates gleaned from historic reports indicate there were possibly more than 100 mainland villages; Spanish reports suggest village populations ranged from 50 to 200 people (Bean and Smith 1978). Prior to Spanish migration, the Gabrielino population had been decimated by diseases, probably European diseases spread via coastal stopovers by early Spanish maritime explorers (Moratto 1984).

Due to the relatively long history of urban development, the full extent and density of Gabrielino or other prehistoric culture occupation of the City is difficult to accurately characterize. However, the known presence of the Gabrielino village at Kuruvungna Springs located less than 2 miles from the project site. This springs is also known by multiple names: Serra Springs after Father Junipero Serra, who reportedly said mass on the site in 1770 (COHP 2020), Tongva Sacred Springs after the Gabrielino Tongva peoples who resided at the site, and the name that the Gabrieleno Tongva people gave to both springs and the village site, Kuruvungna Springs, meaning "a place where we are in the sun" (Eargle and Dodsworth 2008). The springs are a designated California State Historical Landmark (No. 522). According to information about the springs on the City of Los Angeles website, in the 1800s the spring served as the water supply for the City.

CHRIS Records Search

On July 16, 2018, Dudek completed a search of the CHRIS at the SCCIC for the proposed project site and surrounding 0.5 mile. This search included mapped prehistoric, historical, and built-environment resources; State of California Department of Parks and Recreation Series 523 Forms (DPR forms) site records; technical reports; archival resources; and ethnographic references. Additional consulted sources included historical maps of the proposed project site, the NRHP, the CRHR, the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility.

Previously Conducted Cultural Resource Studies

Results of the records search for cultural resources studies indicated that 16 previous cultural resource studies have been conducted within a 0.5-mile radius of the proposed project site. None of these studies intersect, overlap, or are adjacent to the proposed project site. Details from the cultural resources studies records search are included in Table 4.11-1.

Table 4.11-1
Previously Conducted Cultural Resources Studies Within 0.5 Mile of the Project Site

SCCIC Report No.	Title of Study	Author(s) and Date	Proximity to Project Site
LA-01975	Cultural Resource Survey and Clearance Report for the Proposed American Telephone and Telegraph Los Angeles Airport Central Office to the Santa Monica Central Office Fiber-optic Communication Route	N.J. Neuenschwander 1989	Outside
LA-03402	Archaeological Reconnaissance at 1436-1444 16th Street, Santa Monica, California	King, Chester 1996	Outside
LA-04450	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 416-03, in the County of Los Angeles, California	Duke, Curt 1999	Outside
LA-05038	Cultural Resource Assessment for AT&T Wireless Services Facility Number R325, County of Los Angeles, Ca	Lapin, Philippe	Outside
LA-06126	Acquisition of Two Parcels for the Future Demolition of Two Commercial Structures Located at 2601-2615 Santa Monica Boulevard Santa Monica	Maki, Mary K.	Outside
LA-06498	Highway Project Involving Upgrading of Intersection Within the City of Santa Monica Located Between San Vicente Blvd. (north; Ocean Park (south); 9th Street (west); and 30th Street (east)	McKenna, Jeanette A.	Outside
LA-06503	Environmental Assessment for Federal Emergency Management Agency (FEMA) Funding Under the Seismic Hazard Mitigation Program for Hospitals (SHMP) of the Santa Monica-UCLA Medical Center Facilities Reconstruction Project 1250 16th St. Santa Monica, Ca 90404	Bissell, Ronald M.	Outside
LA-06506	Cultural Resource Assessment for AT&T Wireless Services Facility Number, R322.1 County of Los Angeles, California	Duke, Curt	Outside
LA-06884	Cultural Resource Assessment Cingular Wireless Facility No. Sm 250-01 Santa Monica, Los Angeles County, California	Harper, Caprice D.	Outside
LA-07248	A Cultural Resources Investigation and Architectural Evaluation of the Property Located at 1253 18th St., Santa Monica, Los Angeles County, California	McKenna, Jeanette A.	Outside
LA-09453	Exposition Corridor Transit Project Phase 2 Archaeological Survey Report	Ehringer, Candice and Strauss, Monica	Outside
LA-11005	Westside Subway Extension Historic Property Survey Report and Cultural Resources Technical Report	Unknown, Mr./Mrs.	Outside
LA-11184	Exposition Corridor Project Phase 2 (FTA 070320A), Request for Concurrence--Detailed Reconnaissance Survey	Born, Monica	Outside
LA-11305	Historical Resources Evaluation Report for the Exposition Corridor Transit Project Phase 2, Los Angeles County, California	Meiser, M.K.	Outside

Table 4.11-1
Previously Conducted Cultural Resources Studies Within 0.5 Mile of the Project Site

SCCIC Report No.	Title of Study	Author(s) and Date	Proximity to Project Site
LA-11793	Addendum to the Historical Resources Evaluation Report and Archeological Survey Report for Project Changes and Design Options the Exposition Corridor Transit Project Phase 2, Los Angeles County, California	Meiser, M.K.	Outside
LA-11908	A Phase I Cultural Resources Investigation and Architectural Evaluation of the 1802 Santa Monica Boulevard Mixed Use Project Area in the City of Santa Monica, Los Angeles County, California	McKenna, Jeanette	Outside

Source: Appendix C (confidential)

Previously Recorded Cultural Resources

Results of the cultural resources records search indicated that eight previously recorded resources were identified within a 0.5-mile radius of the proposed project site. No cultural resources were identified within the proposed project site. Details from the cultural resources records search are included in Table 4.11-2.

Table 4.11-2
Previously Recorded Cultural Resources Within 0.5 Mile of the Project Site

Primary Number	Trinomial	Resource Description	Recorded By/Year	NRHP/CRHR Eligibility Status	Proximity to Project Site
P-19-187968		Historic: Wilshire Theater; OHP Property Number - 158640	L. Heumann 1993	5S1 (Individual property that is listed or designated locally)	Outside
P-19-188708	—	Historic: Santa Monica Public Schools Thematic District constructed 1924–1948	L. Heumann 1993	5D1 (District listed locally)	Outside
P-19-188709	—	Historic: McKinley Grammar School	L. Heumann 1993	5D1 (District listed locally)	Outside
P-19-189261	—	Historic: HP06 (1-3 story commercial building)	Unknown 2010	3S & 3CS (eligible for NR and CR as an individual property through survey evaluation)	Outside
P-19-189754	—	Historic: 1804 Colorado Ave	M. K. Meiser 2008	6Z (Found ineligible for NR, CR or Local designation through survey evaluation)	Outside

Table 4.11-2
Previously Recorded Cultural Resources Within 0.5 Mile of the Project Site

Primary Number	Trinomial	Resource Description	Recorded By/Year	NRHP/CRHR Eligibility Status	Proximity to Project Site
P-19-189756	—	Historic: 1625 20th St	M. K. Meiser 2008	6Z (Found ineligible for NR, CR or Local designation through survey evaluation)	Outside
P-19-190893	—	Historic: 1311 16th St; OHP Property Number - 120358	L. Heumann 1999	5S3 (Appears to be individually eligible for local listing or designation through survey evaluation)	Outside
P-19-190894	—	Historic: Les Kelley Clinic; OHP Property Number - 120359	L. Heumann 1999	5S3 (Appears to be individually eligible for local listing or designation through survey evaluation)	Outside

Source: Appendix C (confidential)

Native American Resources

Native American Heritage Commission Sacred Lands File Search

As part of the process of identifying cultural resources within or near the proposed project site, Dudek contacted the NAHC to request a review of the SLF on July 17, 2018. The NAHC emailed a response on July 25, 2018, which stated that the SLF search did not identify the presence of Native American cultural resources in the immediate project vicinity. Because the SLF search does not include an exhaustive list of Native American cultural resources, the NAHC suggested contacting 16 Native American individuals and/or tribal organizations who may have direct knowledge of cultural resources in or near the proposed project site.

Dudek prepared and sent letters to 15 tribal representatives listed on the NAHC consultation list on August 1, 2018, requesting information about cultural sites and resources in or near the proposed project site (Table 4.11-3). One of the contacts did not have a current mailing address or email listed with the NAHC and was, therefore, not contacted. These letters provided a brief description of the proposed project, a summary of the CHRIS records search and SLF search results, and reference maps. Recipients were asked to reply within 30 days of receipt of the letter should they have any knowledge of cultural resources in the area. Dudek has received two responses to date, including one from a representative of the Gabrielino Band of Mission Indians Kizh Nation, who requested to consult with the lead agency, and a representative of the San Manuel band of Mission Indians who stated that the proposed project site was located outside of Serrano ancestral territory, and therefore, did not request any consultation in regards to the proposed project. This outreach was conducted for informational purposes only and did not constitute formal

government-to-government consultation as specified by AB 52, which is discussed in detail in the following section. Documents related to the NAHC SLF search are included in Appendix C to this EIR.

Table 4.11-3
Tribal Outreach Results for Native American Heritage Commission-Listed Contacts

Native American Tribal Representatives	Method of Notification/Date	Response Received
Charles Alvarez, Councilman Gabrielino Tongva Tribe	Standard Mail; August 1, 2018	None to date
Eleanor Arrellanes Barbareno/Ventureno Band of Mission Indians	Standard Mail; August 1, 2018	None to date
Raudel Jo Banuelos, Jr. Barbareno/Ventureno Band of Mission Indians	Standard Mail; August 1, 2018	None to date
Linda Candelaria, Chairperson Gabrielino-Tongva Tribe	No current address on file with NAHC; not notified.	N/A
Lee Clauss, Director of Cultural Resources San Manuel Band of Mission Indians	Standard Mail; August 1, 2018	Via email, August 8, 2018, stating that the proposed project site is outside of Serrano territory
Delia Dominguez, Chairperson Kitanemuk & Yowlumne Tejon Indians	Standard Mail; August 1, 2018	None to date
Sandonne Goad, Chairperson Gabrielino-Tongva Nation	Standard Mail; August 1, 2018	None to date
Kenneth Kahn, Chairperson Santa Ynez Band of Mission Indians	Standard Mail; August 1, 2018	None to date
Anthony Morales, Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians	Standard Mail; August 1, 2018	None to date
Joseph Ontiveros, Cultural Resource Department Soboba Band of Luiseno Indians	Standard Mail; August 1, 2018	None to date
Rudy Ortega, Jr., President Fernandeno Tataviam Band of Mission Indians	Standard Mail; August 1, 2018	None to date
Robert Robinson, Chairperson Kern Valley Indian Council	Standard Mail; August 1, 2018	None to date
Andrew Salas, Chairperson Gabrieleno Band of Mission Indians – Kizh Nation	Standard Mail; August 1, 2018	Via email on August 8, 2018 requesting consultation
Patrick Tumamait Barbareno/Ventureno Band of Mission Indians	Standard Mail; August 1, 2018	None to date

Table 4.11-3
Tribal Outreach Results for Native American Heritage Commission-Listed Contacts

Native American Tribal Representatives	Method of Notification/Date	Response Received
Julie Lynn Tumamait-Stennslie, Chair Barbareno/Ventureno Band of Mission Indians	Standard Mail; August 1, 2018	None to date
Lynn Valbuena, Chairwoman San Manuel Band of Mission Indians	Standard Mail; August 1, 2018	None to date

Assembly Bill 52 Tribal Consultation

A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (PRC Section 21084.2). Under AB 52, a tribal cultural resource must have tangible, geographically defined properties that can be impacted by project implementation. The proposed project is subject to compliance with AB 52.

The City sent tribal consultation request letters for the proposed project on January 22, 2019, to 8 California Native American tribal representatives that have requested project notifications from the City pursuant to AB 52 and/or that are on file with the NAHC as being traditionally or culturally affiliated with the geographic area. These letters included a project description inquiring if the tribe would like to consult to discuss the project and the potential to impact any tribal cultural resources. AB 52 allows tribes 30 days after receiving notification to request consultation. If a response is not received within the allotted 30 days, it is assumed that consultation is declined. On January 30, 2019 the City received a phone call from one tribal member (Robert Dorame of the Gabrielino Tongva Indians of California Tribal Council) seeking further information. In response the City emailed over the additional information, and followed up with a second email. However, no responses were received as of the date of this publication. To date, no other responses have been received from the tribal contacts regarding tribal cultural resources or other concerns about the project. Table 4.11-4 summarizes the results of the AB 52 process for the proposed project. The confidential record of AB 52 consultation is included as Appendix C.

Table 4.11-4
Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribal Representatives	Date of Notification	Response to City Notification Letters
Andrew Salas, Chairperson Gabrieleno Band of Mission Indians – Kizh Nation	Sent January 22, 2019	None to date
Anthony Morales, Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians	Sent January 22, 2019	None to date

Table 4.11-4
Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribal Representatives	Date of Notification	Response to City Notification Letters
Sadonne Goad, Chairperson Gabrielino/Tongva Nation	Sent January 22, 2019	None to date
Robert Dorame, Chairperson Gabrielino Tongva Indians of California Tribal Council	Sent January 22, 2019	Mr. Dorame requested the results of the NAHC SLF search and the CHRIS record search.
Rudy Ortega, Jr., President Fernandeno Tataviam Band of Mission Indians	Sent January 22, 2019	None to date
Charles Alvarez, Councilman Gabrielino-Tongva Tribe	Sent January 22, 2019	None to date
Jairo Avila Fernandeno Tataviam Band of Mission Indians	Sent January 22, 2019	None to date
Donna Yocum San Fernando Band of Mission Indians	Sent January 22, 2019	None to date

4.11.2 Relevant Plans, Policies, and Regulations

State

Assembly Bill 52

The proposed project is subject to compliance with Assembly Bill (AB) 52 (California Public Resources Code (PRC) 21074), which requires consideration of impacts to "tribal cultural resources" as part of the California Environmental Quality Act (CEQA) process. AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1.

In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe and requires the CEQA lead agency for a proposed project to conduct a formal consultation process with California Native American Tribes. PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

Because AB 52 is a government-to-government process, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the lead agency. PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

4.11.3 Thresholds of Significance

The significance criteria used to evaluate project impacts to tribal cultural resources are qualitative and directly based on Appendix G of the CEQA Guidelines. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). Based on Appendix G of the State CEQA Guidelines, impacts on tribal cultural resources would be considered significant if the proposed project would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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 PRC 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.11.4 Methodology

The analysis of impacts on tribal cultural resources is based on a review of existing cultural resources; technical data; and applicable laws, regulations, and guidelines. This section of the Draft EIR documents the results of the California Historical Resources Information System (CHRIS) records search of the proposed project site and a 0.5-mile radius, a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF), tribal consultation completed by the lead agency, the City of Santa Monica (City), pursuant to California Assembly Bill (AB) 52, and a pedestrian survey of the proposed project site.

4.11.5 Impacts Analysis

Would the 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)?

As described under Section 4.11.4, a CHRIS records search was conducted at the SCCIC on July 16, 2018, for the proposed project site and within a 0.5-mile buffer around the site. The CHRIS search included a review of mapped prehistoric, historical, and built-environment resources; Department of Parks and Recreation site records; technical reports; archival resources; and ethnographic references. Additional consulted sources included historical maps of the project site, the NRHP, the CRHR, the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility. No previously recorded tribal cultural resources listed in the CRHR or a local register were identified within the proposed project site. Further, no tribal cultural resources have been identified by California Native American tribes as part of the City's AB 52 notification and consultation process. As such, impacts to tribal cultural resources would be **less than significant impact**. No mitigation is required.

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 shall consider the significance of the resource to a California Native American tribe?

As discussed previously, there are no resources on the proposed project site that have been determined by the City to be significant pursuant to the criteria set forth in PRC Section 5024.1. Further, no tribal cultural resources were identified in the proposed project site by California Native American tribes as part of the City's AB 52 notification and consultation process.

On January 22, 2019, the City mailed tribal consultation request letters to 8 tribes identified by the NAHC as tribes with traditional lands or cultural places located within the project area. One response to AB 52 outreach letters to tribal contacts was received by the City. Robert Dorame, Chairman for the Gabrielino Tongva Indians of California Tribal Council, responded via phone call. In the response, Chairman Dorame requested the results of the NAHC SLF search and the CHRIS records search. To date, no other response letters from the Native American community have been received as part of the AB 52 tribal consultation

effort. The AB 52 government-to-government consultations initiated by the City have not resulted in the identification of a geographically defined tribal cultural resource within or near the proposed project area. As such, no tribal cultural resources have been identified that could be impacted by the proposed project.

As no information regarding tribal cultural resources has been received by the City, the City has determined that no tribal cultural resources are present in the proposed project site. However, there is still a low potential for unknown subsurface tribal cultural resources to be impacted by the proposed project, which could result in a potentially significant impact. Therefore, protocols for the inadvertent discovery of tribal cultural resources are included as mitigation measure **MM-TCR-1**, which when implemented, will reduce the potentially significant impact to a **less than significant impact with mitigation incorporated**.

4.11.6 Cumulative Impacts

The geographic scope of the cumulative tribal cultural resources analysis is the Gabrieleno Territory region. Ongoing development and growth in the broader project area may result in a cumulatively significant impacts to tribal cultural resources due to the continuing disturbance of undeveloped areas, which could potentially contain significant, buried tribal cultural resources, or effects to previously undiscovered resources that are uncovered during ground disturbance. However, the proposed project would be constructed on a developed and disturbed site that has been subject to previous ground-disturbing activities, which reduces the potential for buried, unrecorded cultural resources to underlay the proposed project site. Nonetheless, mitigation measure **MM-TCR-1** is required to help to ensure that, in the event of an unanticipated find of a significant tribal cultural resource, the resource is protected, researched, and potentially preserved (if subsequently deemed warranted) to maintain integrity and significance.

The cumulative impacts analysis on tribal cultural resources considers whether the impacts of the proposed project and other related cumulative projects, when taken as a whole, substantially diminish the number of tribal resources within the same or similar context or property type. As discussed throughout this section, the proposed project could have significant impacts to unknown tribal cultural resources, and mitigation would be required to reduce adverse impacts to levels less than significant. It is anticipated that tribal cultural resources that are potentially affected by related projects would also be subject to the same requirements of CEQA as the proposed project and mitigate for their impacts, if applicable. The determinations of significance would be made on a case-by-case basis, and the effects of cumulative development on cultural resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, the proposed project would not contribute to a cumulatively considerable impact associated with tribal cultural resources due to the fact that project impacts to tribal cultural resources would be mitigated to a less than significant level. Cumulative impacts would be **less than significant with mitigation incorporated**.

4.11.7 Mitigation Measures

The following mitigation measure will be adhered to during construction of the proposed project to mitigate potential impacts related to unanticipated tribal cultural resources:

MM-TCR-1 While no tribal cultural resources have been identified that may be affected by the project, the following approach for the unanticipated discovery of tribal cultural resources has been prepared to reduce potential impacts to unanticipated resources. Should a potential tribal cultural resource be unanticipatedly encountered, construction activities near the potential tribal cultural resource shall be temporarily halted within 50 feet of the potential tribal cultural resource and the City notified. The City will notify Native American tribes that have been identified by the Native American Heritage Commission (NAHC) to be traditionally and culturally affiliated with the geographic area of the project. If the unanticipated resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in mitigation measure **MM-CUL-3** (see Section 4.4.7). If the County determines that the potential resource is a tribal cultural resource (as defined by Public Resources Code, Section 21074), tribes consulting under AB 52 would be provided a reasonable period of time, typically five days from the date a new discovery is made, to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered tribal cultural resources. A qualified archaeologist shall implement a plan for the treatment and disposition of any discovered tribal cultural resources based on the nature of the resource and considering the recommendations of the tribe(s). All activities shall be conducted in accordance with regulatory requirements. If human remains are found within the project site, remains would be handled pursuant to applicable regulatory requirements.

4.11.8 Level of Significance After Mitigation

With adherence to mitigation measure **MM-TCR-1**, impacts to tribal cultural resources as a result of implementing the proposed project would be **less than significant with mitigation incorporated**.

4.11.9 References

Bean, Lowell J., and Charles R. Smith. 1978. Gabrielino. In *California,* edited by Robert F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

COHP (California Office of Historic Preservation). 2020, “NO. 522 Serra Springs” in Los Angeles. http://ohp.parks.ca.gov/default.asp?page_id=21427. Accessed December 08, 2020.

Eargle, Dolan H. and Fred Dodsworth, 2008. Native California: An Introductory Guide to the Original Peoples From the Earliest to Modern Times. Trees Company Press, San Francisco, California.

Moratto, Michael J. 1984. *California Archaeology*. Academic Press, New York.

4.12 UTILITIES AND SERVICE SYSTEMS

This section describes the existing utilities and service systems (potable water, wastewater (sewer), storm drain, electrical power, natural gas, and telecommunications) serving the project site, identifies associated regulatory framework, and evaluates potential impacts on the utilities infrastructure due to implementation of the proposed project.

4.12.1 Existing Conditions

4.12.1.1 Water Lines

The City of Santa Monica Water Resources Division is a retail water agency providing water service throughout the City, including to single- and multi-family residential, commercial, and industrial customers, and for landscape and fire protection supply. The City distributes water to approximately 18,000 customer accounts through a 250-mile network of water lines ranging from 4 to 36 inches in diameter. The City's distribution system has been built and maintained over the course of many years. The variation of pipe materials reflects the different approaches to pipeline construction and repair that were popular in the various years in which the system was built or maintained. The diameters of pipelines in the system varies as well, as pipes were sized based on the flow that those pipes were expected to carry under various demand scenarios. Pipelines that act as supply or transmission lines either from tanks to a pressure zone, or between zones, typically are larger diameter, to help ensure adequate hydraulic capacity (Kennedy/Jenks Consultants 2014).

Water is supplied to the project site via laterals connected to an existing 8-inch water main within 19th Court Alley. This 8-inch water main connects to a 24-inch water main in Arizona Avenue.

4.12.1.2 Wastewater

Wastewater Collection

The City of Santa Monica Water Resources Division manages the City's wastewater collection and pumping system, which contains approximately 152 miles of sewer pipe, ranging in diameter from 6 inches to 72 inches, two flow-monitoring and sampling stations, and one 26 million gallons per day (mgd) pumping station. Sewage enters Santa Monica from the City of Los Angeles through one metered location and from three unmetered locations, and leaves Santa Monica for treatment at the City of Los Angeles' Hyperion Wastewater Treatment Plant (HTP), located to the southeast in Playa del Rey. The City's 72-inch-diameter Coastal Interceptor Sewer System connection to the City of Los Angeles was designed for the "sunset" year of 2090, and has a capacity of approximately 52 mgd (City of Santa Monica 2015). For the period May 2013 through February 2014, the maximum peak instantaneous flow approached 32.665 mgd with the average yearly flows of approximately 14.54 mgd (City of Santa Monica 2015). Presently the 14.54 mgd average flow at the CIS terminus represents approximately 28.1% of its capacity. Based

on the current long-term estimates of population density and sewer demand at maximum buildout, the Coastal Interceptor Sewer System will have adequate capacity to meet anticipated wastewater flows (City of Santa Monica 2015).

The existing sewer lines in the project vicinity are shown in Figure 4.12-1, Existing Sewer Infrastructure. The project site is served by a 15-inch diameter sewer main, consisting of a vitreous clay pipe, located at the intersection of Arizona Avenue and 19th Court (City of Santa Monica 2018a). This sewer main carries flows southeasterly beneath 19th Court, connecting to a 21-inch sewer main in Broadway. The wastewater in this line flows westward eventually to the City's Coastal Interceptor Sewer System and ultimately to the HTP.

Wastewater Treatment

Wastewater from the City is collected through the sewer system and is treated at the HTP in the City of Los Angeles in the community of Playa del Rey, located under 8 miles south-southeast of the project site. The HTP is one plant within the Hyperion Treatment Conveyance System that is owned and operated by the Los Angeles Department of Public Works. Treatment capacity for HTP is sized to accommodate wastewater flows from the City of Los Angeles and twenty-two other agencies besides the City of Santa Monica. The HTP receives an average of 275 mgd of wastewater on a dry-weather day. Because the amount of wastewater entering the HTP was designed to accommodate both dry- and wet-weather days, the plant can accommodate a maximum daily flow of 450 mgd, and a peak wet-weather flow of 800 mgd (City of Los Angeles Bureau of Sanitation 2020). With an average dry water flow of approximately 275 mgd, approximately 175 mgd of remaining treatment capacity is available at the HTP. The City of Santa Monica's daily average of 14.54 mgd of wastewater contributes a minimal portion of the HTP's treatment capacity (i.e., 5% or less).

The HTP has two outfalls that discharge into Santa Monica Bay (a one-mile outfall pipeline and five-mile outfall pipeline). Both outfalls are 12 feet in diameter. The one-mile outfall pipeline is 50 feet deep and is only used on an emergency basis or when repairs are being completed on the five-mile outfall. The five-mile outfall pipeline is 187 feet deep and is used to discharge secondary treated effluent on a daily basis. HTP effluent is required to meet the Los Angeles Regional Water Quality Control Board's (RWQCB) requirements for a recreational beneficial use, which imposes performance standards on water quality that are more stringent than the standards required under the Clean Water Act permit administered under the system's National Pollution Discharge Elimination System permit. Accordingly, HTP effluent to Santa Monica Bay is continually monitored by the City of Los Angeles Environmental Monitoring Division to ensure that it meets or exceeds prescribed standards. The Los Angeles County Department of Health Services also monitors flows into the Santa Monica Bay.

4.12.1.3 Electric Power, Natural Gas, and Telecommunication

Electrical service in the City is provided by Southern California Edison, which installs electrical service both aboveground and underground. Electrical power lines are located overhead on 19th Court alley. Natural gas

service is provided by Southern California Gas Company. Telecommunication facilities are installed in the City by a variety of private utility companies, including Frontier Communications and Spectrum (Santa Monica Public Works, Civil Engineering 2020).

4.12.2 Relevant Plans, Policies, and Regulations

Federal

National Pollutant Discharge Elimination System (NPDES)

The Clean Water Act was amended in 1972 to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. The NPDES program in the southern California – Los Angeles region (which includes the project area) is administered by the Los Angeles RWQCB.

Regulations (Phase II Rule) that became final on December 8, 1999, expanded the existing NPDES Program to address stormwater discharges from construction sites that disturb land equal to or greater than 1.0 acre and less than 5.0 acres (small construction activity). The project site is 1.03 acre. The regulations also require that stormwater discharges from small municipal separate storm sewer systems (MS4s) be regulated by an NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ. The Construction General Permit (CGP) requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which describes Best Management Practices (BMPs) the discharger would use to protect stormwater runoff. The SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Routine inspection of all BMPs is required under the provisions of the CGP. On September 2, 2009, the SWRCB issued a new NPDES General Permit for Storm Water Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002), that became effective July 1, 2010.

State

Protection of Underground Infrastructure

California Government Code, Section 4216 et seq., requires an excavator to contact a regional notification center (e.g., Underground Service Alert (USA) or Dig Alert) at least 2 days prior to excavation of any subsurface installations. Any utility provider seeking to begin a project that could damage underground infrastructure can call USA Southern California, the regional notification center for Southern California. USA

will notify the utilities that may have buried lines within 1,000 feet of a project site. Representatives of the utilities, once notified, are required to mark the specific locations of their facilities within the work area prior to the start of project activities.

Local

Santa Monica Municipal Code

Section 5.20 – Industrial Wastewater Control

Section 5.20 sets forth provisions to ensure that the highest and best use of publicly owned treatment facilities is for the collection, treatment, and disposal of domestic wastewater, and that the highest and best use of the storm drain system is for the collection and disposal of stormwater.

Section 7.08.050 – Sewer Allocation Permit

Section 7.08.050 requires that applications for a sewer allocation permit be issued only if the City sewer system has sufficient capacity to accommodate the net increase in wastewater created by the project. Sections 7.04.460 and 7.04.490 require the payment of capital facility fees to the City and permit review by the City as part of the permitting process.

Section 7.04.460 – Wastewater Capital Facility Fee

Section 7.04.460 requires developers to pay the City a wastewater capital fee prior to obtaining a permit to develop a building or a certificate of occupancy.

City of Santa Monica Water Neutrality Ordinance

The City adopted on May 23, 2017, a water neutrality ordinance (Section 7.16.050 of the Santa Monica Municipal Code). Under the water neutrality ordinance, new development must offset all increases in average five-year historical water use at a ratio of 1:1, except for 100% affordable housing projects which must offset water demand at a ratio of 0.5:1. The water offsets shall be achieved with on-site water efficiency measures. If on-site efficiency measures cannot be reasonably achieved on-site, the applicant may achieve off-set requirements by payment of in-lieu fees or performing/undertaking the requirements at an off-site location.

4.12.3 Thresholds of Significance

The significance criteria used to evaluate project impacts to utilities and service systems are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely

sanctioned by the courts (although such use is not mandatory). According to Appendix G of the State CEQA Guidelines, a significant impact related to infrastructure could occur if the project would:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
2. Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitment.

Issues Not Further Analyzed

A portion of Question 1, related to storm water drainage, was analyzed in the Initial Study (Appendix A), in the Hydrology and Water Quality section, and impacts were determined to be less than significant. Similarly, Question 2 was analyzed in the Initial Study, in the Utilities and Service Systems section, and impacts were determined to be less than significant. A summary of the analyses presented in the Initial Study for these issues is provided below.

Question 1 Storm Water Drainage. Implementation of this project would replace existing primarily impervious surface areas with new impervious surface areas in the form of a new Wellness Center Building. Thus, implementation of the project would not increase the amount of impervious areas on the project site. In accordance with the City's Urban Runoff Pollution Ordinance, the proposed project would include appropriate on-site design measures to store and use (for non-potable purposes), infiltrate, or evapotranspire project-generated runoff during a 0.75-inch storm event or alternatively pay a fee. Furthermore, the City's Department of Public Works would have final review and approval of all project site plans to ensure that adequate drainage would be provided to accommodate the project's stormwater flows. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded storm water drainage facilities. This issue does not require consideration in the analysis below.

Question 2 Water Supply. Development of the proposed project would be considered infill redevelopment and the City's water supplies would be sufficient to meet project demand for a number of reasons. The City's 2015 Urban Water Management Plan (UWMP) analyzes the reliability of the City's water resources to meet water demand for normal, single-dry and multiple-dry year scenarios though 2040, taking into account growth projected to occur under the City's LUCE. The UWMP projects that the City would have adequate water supply to meet its demand, and in fact would have substantially more supply than demand, through at least the 2040 planning horizon of the UWMP. Therefore, since the proposed project is consistent with and represents a small portion of LUCE anticipated growth, adequate water supplies exist to serve the proposed project.

Furthermore, since the adoption of the UWMP, the City has undertaken aggressive water conservation plans and programs including adoption of the City's Water Neutrality Ordinance, which requires new development to offset net increases in water usage. The project would be required to comply with the City's Water Neutrality Ordinance (Appendix H, Water Use Memorandum), which was last amended on January 18, 2019. As a result, the City's future water demand would likely be less than that projected in the 2015 UWMP, resulting in greater water supplies available.

Furthermore, MWD meets the demand for water through assessments of future supply-and-demand, which are presented in MWD's Regional Urban Water Management Plan (UWMP), the most recent being for 2015. This plan addresses the future of MWD's water supply-and-demand through 2040. Evaluations are prepared for average-year conditions, single dry-year conditions, and multiple dry-year conditions. Data in the Regional UWMP show that the MWP can provide reliable water supplies under both the single driest year and multiple dry-years through 2040 (MWD 2016). Therefore, the City's existing and future water supply would be sufficient to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. As a result, Question 2, regarding water supply, does not require consideration in the analysis below.

4.12.4 Methodology

Water Facilities

For the assessment of whether the project would result in the relocation or construction of new or expanded water facilities (the construction of which would result in significant effects), the analysis is based on a review of the Sustainable Water Master Plan (Kennedy/Jenks Consultants 2014) and subsequent update (City of Santa Monica 2018b), which summarizes the results of a hydraulic evaluation of the City's future water distribution system.

Wastewater Collection Facilities

The analysis of whether the proposed project would require or result in the construction of new wastewater collection facilities (the construction of which would result in significant effects) is based on a review of the project's plans for sewer infrastructure improvements. Additionally, the analysis estimates the net new wastewater generation from the proposed project using the City of Los Angeles Bureau of Sanitation sewage generation rates and reviews the adequacy of the existing wastewater infrastructure to serve the proposed project.

To ensure the adequacy of sewer line capacity to serve existing and proposed development, the City reviews sewer lines based on specific sewer design and operations criteria. Sewer pipes have a flow capacity based on the diameter of the pipe and the slope of the pipeline. Per this criteria, sewers should be sized so the depth (d) of the Peak Dry Weather Flow (PDWF) projected for the design period, with PDWF no more than 50 percent of the pipe diameter (D) for sewer lines less than 15 inches (i.e., d/D less than

50%). As part of the 2017 Sanitary Sewer System Master Plan (SSSMP), a sewer model was developed to evaluate the capacity of the City's existing sanitary sewer system under current conditions and to plan for the capacity required by future conditions associated with anticipated development projects. Anticipated project wastewater flows were inputted into the City's sewer model by the City of Santa Monica Public Works to determine if the existing sewer lines that would serve the proposed project would have adequate capacity (i.e., d/D less than 50%).

Wastewater Treatment

For the assessment of whether the project would result in the relocation or construction of new or expanded wastewater treatment facilities (the construction of which would result in significant effects), information was gathered from the Bureau of Sanitation website. In addition, the anticipated project-related increase in wastewater generation was compared to remaining available capacity at the HTP.

Electric Power, Natural Gas, and Telecommunication Facilities

For the assessment of whether the project would result in the relocation or construction of new or expanded electric power, natural gas, and telecommunication facilities (the construction of which would result in significant effects), it was assumed that upgrades would likely be required for these facilities, based on the change in land use (i.e., higher density and increase in onsite technology).

4.12.5 Impacts Analysis

Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water Facilities

The proposed project would include new lateral connections to the City's existing water system. A hydraulic evaluation of the City's future water distribution system was performed, based on future water demand projections, in the City Sustainable Water Master Plan and subsequent update (Kennedy/Jenks Consultants 2014; City of Santa Monica 2018b). The City's land area is built out and changes in water demand are anticipated primarily due to development in the form of revitalization of outdated or underserved areas, and redevelopment of specific properties that will increase density, such as the proposed project. A hydraulic model was used to evaluate performance of the future distribution system for water pressure, velocity, and head loss. The future system evaluated included the entire existing system, with localized pipelines recommended for replacement upsized accordingly.

Under the future demand conditions and with the future system recognizing replacements of pipelines failing in various criteria under existing demands, the system showed no new deficiencies. Pressure at all demand junctions was adequate, with inadequate pressures observed at some junctions near storage facilities and on transmission pipelines. The only additional system improvement under future demand conditions is the need to further increase the pumping capacity of the Arcadia Booster Pump Station, located within the 350 Pressure Zone, which includes the project site and most of the City. Modeling indicated only a minimal number of undersized pipes. No recommended pipeline replacement projects are recommended in the vicinity of the project site (Kennedy/Jenks Consultants 2014). As a result, the project would not directly require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. Upgrades to the Arcadia Booster Pump Station would be completed under separate CEQA review. The 2014 hydraulic evaluation prepared was based on water flow data available at the time; therefore, to further ensure that the proposed project's water demand would be adequately accommodated based on the most current water flow data at the time of building permit issuance, mitigation measure **MM-UT-1** is proposed. With mitigation measure **MM-UT-1**, impacts would be less than significant.

Wastewater Collection Facilities (Sewer Lines)

With regard to existing sewer lines, wastewater flows from the proposed project would be carried via existing and/or new on-site sewer laterals with connection to the existing 15-inch within 19th Court. Based on the City's sewer model, a preliminary review of the project's wastewater flows for this sewer line indicates that the existing line is adequate to serve the proposed project's flows (Banuelos, pers. comm. 2019). Therefore, impacts would be **less than significant**. No mitigation is required.

Wastewater Treatment Facilities

The proposed project would construct research & development and clinical/medical office uses, which would result in a net increase in wastewater flows. Wastewater flows from the City are treated at the HTP, which has a dry-weather capacity of approximately 450 mgd processed through full secondary treatment and an 800 mgd wet-weather capacity (City of Los Angeles Bureau of Sanitation 2020). Project wastewater discharges would be typical of the wastewater already generated at nearby properties; it would not include large quantities of unusual industrial/hazardous discharges that can interfere with the ability of a treatment plant meeting the water quality requirements for its discharges. Furthermore, medical waste disposal is heavily regulated, and the Los Angeles RWQCB, in connection with the NPDES permit, have imposed requirements on the treatment of wastewater. Wastewater produced by the proposed project would meet these requirements through treatment at the HTP.

The anticipated increase in wastewater generation from the proposed project was estimated using the City of Los Angeles Bureau of Sanitation sewage generation rates. Table 4.12-1 estimates that the proposed project would generate 18,203 gpd of wastewater, which is equivalent to approximately 20.4 AFY. The wastewater demand factors provided by the City of Los Angeles Bureau of Sanitation are based on the

historical average of similar land uses throughout its service area, and are considered conservative estimates because the California Building Code requires new construction to meet minimum standards for water conservation in plumbing fixtures. Furthermore in compliance with the City's Water Neutrality Ordinance, the proposed project would include a number of water conservation features including, low-flow plumbing equipment (including waterless urinals, two flush toilets, and automated restroom faucets) that have demonstrated substantial water savings over traditional water fixtures. These water conservation measures would in turn reduce the amount of wastewater flows generated by the project.

Table 4.12-1
Summary of Proposed Project Wastewater Generation

Land Uses	Square Feet	Wastewater Demand Factor[1]	Wastewater Generation (gpd)
Proposed Uses			
Research and Development	54,000	250 gpd/1,000 gsf	13,500
Clinical/ Medical Office	18,812	250 gpd/1,000 gsf	4,703
		Total Proposed	**18,203**

Source: Dudek, 2020.
Notes:
[1] Based on sewage generation rates from the City of Los Angeles Bureau of Sanitation. All calculations rounded to the nearest whole. Parking uses are considered to have negligible water demand.
gpd = gallons per day
gsf = gross square feet

As shown in Table 4.12-1, the anticipated wastewater generation would be approximately 20.4 AFY. In the context of the total volume of water supplied by the City, and the wastewater conveyed to HTP, this amount is not substantial.

Depending on the wastewater discharge from clinical/medical office uses, there could be requirements to pre-treat sanitary sewer discharges. However, these pre-treatment devices would be small and distributed and would not consist of major construction or consist of what is commonly considered as a "facility." Because there is adequate wastewater treatment capacity at HTP, the project would not directly require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects. Therefore, impacts would be **less than significant**. No mitigation is required.

Electric Power, Natural Gas, and Telecommunication

Upgrades would likely be required with respect to electric power and telecommunication facilities, based on the change in land use (i.e., higher density and increase in onsite technology). Natural gas line upgrades may also be similarly required. However, such upgrades would be confined to the lateral connections to the project site and not any centralized facilities. Upgrades would be coordinated with appropriate service providers (such as SCE, SoCal Gas, etc.) to minimize disruptions on service and

would likely be completed by either trenchless technology or completion of open trenching, to the depth of the underground utilities. Trenching would result in temporary stockpiling of soil, which in turn could result in temporary soil erosion. However, as described in the Initial Study (Appendix A), project construction would occur in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit (Order No. 99-08-DWQ) and the City of Santa Monica Urban Runoff Pollution Ordinance (Chapter 7.10 of the Santa Monica Municipal Code). In accordance with the ordinance, BMPs and pollutant control measures would be employed during project construction to minimize pollutants and reduce runoff to levels that comply with applicable water quality standards.

In addition, as previously discussed, this significance criterion is generally applicable to projects that are not already served by municipal utilities, or for large specific plans or greenfield developments, because it is those projects that either need to construct new electrical power, natural gas, and telecommunication centralized facilities, or that would tax existing infrastructure. As a result, impacts associated with upgrades of electric, natural gas, and telecommunication lateral connections to the project site would be **less than significant**. No mitigation is required.

Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitment?

As previously discussed, the anticipated wastewater generation would be approximately 20.4 AFY. In the context of the total volume of water supplied by the City, and the wastewater conveyed to HTP, this amount is not substantial. Because there is adequate wastewater treatment capacity at HTP, the project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitment. Therefore, impacts would be **less than significant**. No mitigation is required.

4.12.6 Cumulative Impacts

The geographic extent for the analysis of cumulative impacts associated with utilities infrastructure consists of the City, because local jurisdictions or districts provide utilities. Section 15130(b)(1)(A) of the CEQA Guidelines (14 CCR 15000 et seq.) allows for the preparation of a list of past, present, and reasonably anticipated future projects as a viable method of determining cumulative impacts. This analysis includes a discussion of the cumulative effects that the proposed project may have on utilities and service systems based on a review of the Cumulative Projects List, Table 4-1, provided in Section 4.0. Consistent with CEQA, this discussion is guided by the standards of practicality and reasonableness.

Water Lines

As previously discussed, a hydraulic evaluation of the City's future water distribution system was performed, based on future water demand projections. The City's land area is built out and changes in water demand are anticipated primarily due to development in the form of revitalization of outdated or underserved areas, and redevelopment of specific properties that will increase density, such as the proposed project. A hydraulic model was used to evaluate the entire existing water distribution system, with localized pipelines recommended for replacement upsized accordingly. With project demand conditions and with the future system recognizing replacements of pipelines failing in various criteria under existing demands, the system showed no new deficiencies. The only additional system improvement under with project demand conditions is the need to further increase the pumping capacity of the Arcadia Booster Pump Station. Modeling indicated only a minimal number of undersized pipes. The 2014 hydraulic evaluation prepared was based on water flow data available at the time; therefore, to further ensure that the proposed project's water demand would be adequately accommodated based on the most current water flow data at the time of building permit issuance, mitigation measure **MM-UT-1** is proposed. With mitigation measure **MM-UT-1**, impacts would be less than significant.

Wastewater Conveyance

The closest cumulative projects that could affect the local sewer system in the project area are the pending Providence Saint John's Master Plan Phase II (hospital/medical uses) project, and the approved 2225 Broadway (15 units) and 1450 Cloverfield (34 units) projects. These projects will likely need new connections for sewer service. Based on a review of the sewer system, these cumulative projects would discharge directly into other sewer lines and would not affect the existing 15-inch sewer line in 19th Court alley. However, based on a review of the City's sewer model (which was developed as part of the City's 2017 Sanitary Sewer System Master Plan), future wastewater flows from the proposed project and these cumulative projects could confluence and affect sewer lines located downstream. Specifically, nearby pending and future development projects (such as the Providence Saint John's Master Plan) could contribute to increased flows. Therefore, to further ensure that the proposed project's wastewater generation would be adequately accommodated based on the most current flow data at the time of building permit issuance, mitigation measure **MM-UT-1**is proposed. With mitigation measure **MM-UT-1**, impacts would be less than significant. Therefore, cumulative impacts would be **less than significant**.

The proposed project would have less-than-significant impacts with regard to wastewater treatment capacity. Wastewater produced by the proposed project would meet wastewater requirements through treatment at the HTP, which currently meets applicable water quality standards as set forth by the NPDES, and with continued monitoring and planning would be able to do so in the future. The proposed project and other new development occurring within the City would contribute increased cumulative demand for wastewater treatment at the HTP. However, all City development would be subject to permitting under Santa Monica Municipal Code protections that require the collection of fees and availability of treatment capacity for newly permitted projects.

The City contributes a small increment of wastewater to the regional wastewater discharges conveyed and treated at the HTP. The current treatment capacity of the HTP is 450 mgd. Monitoring of wastewater flows and identification of the needs for future treatment capacity for all of the development in the entire service area is an on-going activity of LADWP. Such monitoring evaluates long-term needs based upon updated demographic projections by SCAG. Considering that the proposed project and cumulative projects in the vicinity would be subject to requirements of the Los Angeles RWQCB, cumulative impacts would be **less than significant**. No mitigation is required.

Electric Power, Natural Gas, and Telecommunication

As previously discussed, the City's land area is built out and upgrades in electrical power, natural gas, and telecommunication capabilities are anticipated primarily due to development in the form of revitalization of outdated or underserved areas, and redevelopment of specific properties that will increase density and require more sophisticated technology, such as the proposed project. However, such upgrades would generally be confined to the lateral connections to the individual project sites and not any centralized facilities. Upgrades to centralized power, natural gas, and telecommunication facilities would be determined by the City Public Works Department and private utilities, as build-out continues within the City. Environmental impacts associated with such upgrades would be evaluated under separate CEQA review. As a result, cumulative impacts associated with upgrades of electric, natural gas, and telecommunication facilities would be **less than significant**. No mitigation is required.

4.12.7 Mitigation Measures

The following mitigation measure would reduce potential project impacts related to infrastructure to **less than significant**.

MM-UT-1 Prior to the issuance of the building permit, the applicant will be required to submit a water study and a sewer study to the City of Santa Monica Public Works Department that demonstrate the City's water and sewer system can accommodate the proposed project's water demand and wastewater flows based on current flows. The applicant will be responsible for upgrading any downstream deficiencies, to the satisfaction of the Public Works Department, if calculations show that the project will cause such mains to receive greater demand than can be accommodated. Improvement plans will be submitted to and approved by the City's Engineering Division.

4.12.8 Level of Significance After Mitigation

With implementation of the mitigation measure, impacts to utilities infrastructure would be **less than significant**.

4.12.9 References

Banuelos, R. 2019. Personal communication. City of Santa Monica Public Works Department, Civil Engineering Division. Transmitted via City comments on the Administrative Draft Environmental Impact Report.

City of Los Angeles Bureau of Sanitation. 2020. "Hyperion Water Reclamation Plant." Accessed November 12, 2020. https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=erpm2icrv_5&_afrLoop=11642440990470059#!.

City of Santa Monica. 2015. City of Santa Monica Sewer System Management Plan. Revised June 2015. https://www.smgov.net/uploadedFiles/Departments/Public_Works/Water/SSMP_2015_Full(2).pdf.

City of Santa Monica. 2018a. "Sewer Map - existing 15 inch sewer in 19th Court." Map. Provided by the City on February 21, 2018.

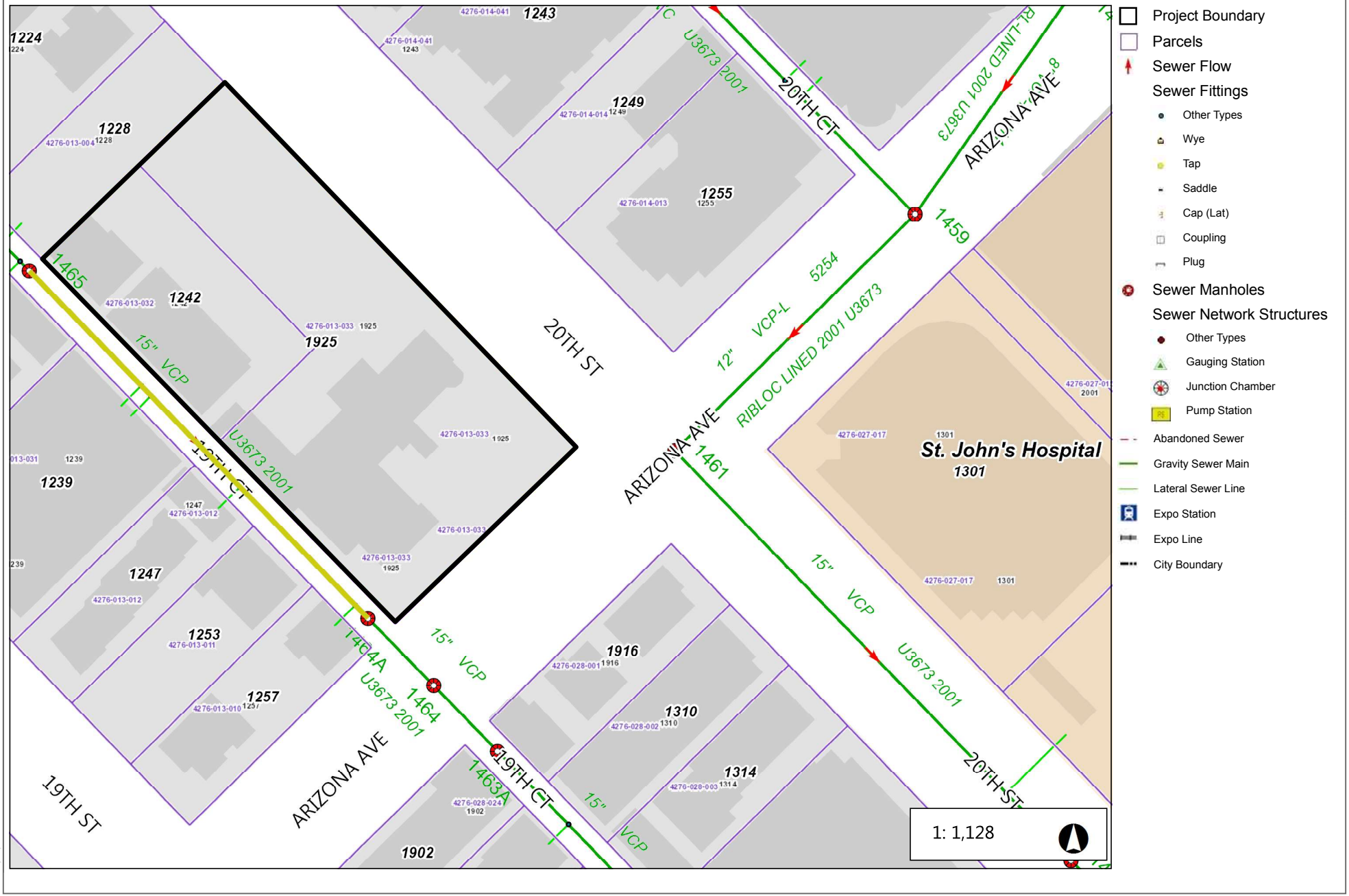
City of Santa Monica. 2018b. *Sustainable Water Master Plan Update.* December 2018. Accessed November 12, 2020. https://www.smgov.net/departments/publicworks/water.aspx.

Kennedy/Jenks Consultants. 2014. *Sustainable Water Master Plan*. Prepared for the City of Santa Monica, Water Resources Division, December 2014. Accessed April 19, 2018. https://www.smgov.net/uploadedFiles/Departments/Public_Works/Water/SWMP.pdf.

MWD (Metropolitan Water District). 2016. 2015 Urban Water Management Plan. March 2016. http://www.mwdh2o.com/PDF_About_Your_Water/2015_UWMP.pdf.

Santa Monica Public Works, Civil Engineering. 2020. "Utility Information" Accessed November 12, 2020. https://www.smgov.net/Departments/PublicWorks/ContentCivEng.aspx?id=8907.

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SOURCE: City of Santa Monica 2018

FIGURE 4.12-1

Existing Sewer Infrastructure

20th Street Wellness Center Project EIR

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4.13 UTILITIES AND SERVICE SYSTEMS – SOLID WASTE

This section describes the existing solid waste facilities serving the project site, identifies associated regulatory framework, and evaluates potential impacts related to solid waste due to implementation of the proposed project. The focus of this section is on municipal (non-hazardous) solid waste. For a discussion of hazardous waste (such as medical waste, sharps, biological waste, etc.), please see Section 4.7, Hazards and Hazardous Materials, of this EIR.

4.13.1 Existing Conditions

4.13.1.1 Solid Waste

Waste Collection and Transport

The City of Santa Monica Resource Recovery & Recycling Division, as part of the Department of Public Works, is charged with protecting the environment and safeguarding public health by collecting municipal solid waste (refuse) and recycling, providing street sweeping and cleaning services, and providing waste transfer and transport services. The City collects, transfers, and disposes of trash, processes green waste and food scraps for compost, recycles single-stream commingled recyclables, and provides a State-authorized e-waste collection facility. The City sorts and sends disposed items to reuse and recycling facilities instead of landfills whenever possible, which is a solid waste management approach otherwise known as diversion. The City provides pick-up for all residential waste, some commercial waste, and residential recycling. Businesses in Santa Monica can also request that the City pick up recyclable materials. There are also some private waste haulers that pick up commercial waste (City of Santa Monica 2020a).

Landfills

Solid waste that is not hazardous is transported to municipal landfills. Approximately 76% of solid waste generated in the City is diverted through waste prevention, recycling, and composting, and the remainder is disposed in landfills or waste-to-energy facilities (City of Santa Monica 2019a).

In 2019, the City of Santa Monica disposed of 72,532 tons of solid waste (CalRecycle 2020a). In 2019, 13 landfills received and 1 transfer station / processing facility disposed of solid waste from the City. Of these 13, the most commonly used were the Chiquita Canyon Sanitary Landfill (about 64%) and the Sunshine Canyon City/County Landfill (about 24%). Table 4.13-1 lists the most commonly used landfills along with their distance and direction from the proposed project site, waste types accepted, and an estimate of their remaining capacity.

Table 4.13-1
Solid Waste Disposal Facilities Used by the City of Santa Monica

Destination Facility	Solid Waste Information System No.	Distance and Direction from Project Site	Disposal Volume from Santa Monica in 2017 (tons)	Waste Types Accepted	Remaining Capacity
Solid Waste Landfills					
Chiquita Canyon Sanitary Landfill	19-AA-0052	28 miles north	46,256	Mixed municipal, Green Materials, Construction/ demolition, Industrial, Inert	45,306,000tons
Sunshine Canyon City/County Landfill	19-AA-2000	20 miles north	17,452	Construction/demolition, Green Materials, Industrial, Inert, Mixed municipal	58,425,000tons
Antelope Valley Public Landfill	19-AA-5624	42 miles northeast	1,721	Agricultural, Asbestos, Construction/demolition, Contaminated soil, Green Materials, Industrial, Inert, Mixed municipal	13,433,419tons
Olinda Alpha Sanitary Landfill	30-AB-0035	37 miles east-southeast	1,770	Agricultural, Industrial, Construction/demolition, Mixed municipal, Tires, Wood waste	25,650,000tons
Lancaster Landfill and Recycling Center	19-AA-0050	53 miles northeast	80	Agricultural, Construction/demolition, Industrial, Mixed municipal, Tires, Inert, Green Materials, Asbestos, Sludge (BioSolids), Contaminated soil	10,885,986 tons
Simi Valley Landfill & Recycling Center	56-AA-0007	25 miles northwest	2,123	Agricultural, Asbestos, Construction/demolition, Contaminated soil, Green Materials, Industrial, Inert, Mixed municipal, Sludge (BioSolids), Tires	62,216,155tons

Table 4.13-1
Solid Waste Disposal Facilities Used by the City of Santa Monica

Destination Facility	Solid Waste Information System No.	Distance and Direction from Project Site	Disposal Volume from Santa Monica in 2017 (tons)	Waste Types Accepted	Remaining Capacity
Frank R. Bowerman Sanitary Landfill	30-AB-0360	49 miles southeast	706	Mixed municipal, Industrial, Construction/ demolition	153,750,000 tons
El Sobrante Landfill	33-AA-0217	60 miles southeast	1,506	Construction/ demolition, Contaminated soil, Mixed municipal, Tires	107,982,878 tons
McKittrick Waste Treatment Site	15-AA-0105	100 miles northwest	71	Contaminated soil, Industrial, Other	577,343 tons
Mid-Valley Sanitary Landfill	36-AA-0055	60 miles east	230	Agricultural, Construction/ demolition, Contaminated soil, Green Materials, Industrial, Inert, Mixed municipal, Tires, Wood waste	45,914,533 tons
Prima Deshecha Landfill	30-AB-0019	63 miles southeast	23	Construction/demolition, Industrial, Mixed municipal, Sludge (BioSolids), and Wood waste	100,725,000 tons
Victorville Sanitary Landfill	36-AA-0045	78 miles northeast	1	Agricultural, Ash, Construction/demolition, Green Materials, Industrial, Mixed municipal, Sludge (BioSolids), Tires, Wood waste	61,132,500 tons
Inert Landfills					
Azusa Land Reclamation Co. Landfill	19-AA-0013	32 miles east	593	Asbestos, Asbestos, friable, Contaminated soil, Inert, Tires	38,634,151tons

Table 4.13-1
Solid Waste Disposal Facilities Used by the City of Santa Monica

Destination Facility	Solid Waste Information System No.	Distance and Direction from Project Site	Disposal Volume from Santa Monica in 2017 (tons)	Waste Types Accepted	Remaining Capacity
Transfer Stations / Processing Facilities					
Southeast Resource Recovery Facility	19-AK-0083	24 miles south-southeast	1,543	Other hazardous, Mixed municipal, Green Materials	2,240 Tons/day maximum permitted throughput

Source: CalRecycle 2020a, 2020b.
Notes:
1 Converted landfill capacity in cubic yards to tons, using an average of 1,500 pounds per cubic yard. (CalRecycle conversion calculations: https://www.calrecycle.ca.gov/swfacilities/cdi/tools/calculations.)

Waste disposal in the City of Santa Monica is classified by sector: single family residential (8%), multifamily residential (25%), commercial (48%), and self-haul[1] (19%) (Santa Monica, 2018e). Waste disposal rates for the City are estimated at approximately 5 pounds per person per day (City of Santa Monica 2019b).

Recycling Programs and Facilities

The various recycling activities that have been implemented by the City include the following (City of Santa Monica 2020b):

- Provision of organics, recycling, and trash containers in most City facilities
- Provision of organics in addition to recycling and trash collection to reduce the amount of waste produced by residents and businesses
- Paper shredding and electronics recycling events
- Used oil filter recycling
- City-hosted repair events and yard sale events

Historically, the City has sorted and delivered recyclable materials to a contractor (Allan Company), who processes and markets the recyclables to domestic and overseas mills for further manufacturing uses. The City used to receive revenue from the contractor for the recyclables collected and marketed. However, in 2017, China enacted their National Sword policy banning certain types of foreign recyclables. This policy caused a disruption in the global recycling industry that has affected the City. Although the City continue its

[1] Self-haul - construction and demolition (C&D) debris and additional materials that were disposed by private companies or individuals.

curbside recycling collection for residential and commercial customers, the crash in the market for recyclables means that the City must consider alternative strategies including more public education.

4.13.2 Relevant Plans, Policies, and Regulations

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Assembly Bill (AB) 939), administered by the California Integrated Waste Management Board, regulates nonhazardous solid waste. The law provides a solid waste management system to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible and in an efficient and cost-effective manner to conserve natural resources, to protect the environment, and to improve landfill safety. Local agencies are required to establish recycling programs, reduce paper waste, purchase recycled products, and implement integrated waste management programs that conform to the state's requirements (California Public Resources Code, Section 40000 et seq.). AB 939 specifically required that each city and county in California divert 25% of its waste stream by 1995 and 50% by 2000. The bill also required each state agency to develop and adopt an integrated waste management plan, in consultation with the Waste Management Board, before July 1, 2000.

State Agency Model Integrated Waste Management Act of 1999

AB 75 was passed in 1999, and the State Agency Model Integrated Waste Management Act (Chapter 764, Statutes of 1999, Strom-Martin) took effect on January 1, 2000. The State Agency Model Integrated Waste Management Act mandated that state agencies develop and implement an integrated waste management plan. The act also mandated that community service districts providing solid waste services report disposal and diversion information to the city, county, or regional agency in which the community service district is located. Provisions of the act require all state agencies and large state facilities to divert at least 50% of solid waste from landfills after 2004 and that each state agency and large facility submit an annual report to the California Department of Resources Recycling and Recovery summarizing its yearly progress in implementing waste diversion programs.

Assembly Bill 341

AB 341 builds from the goals and requirements of AB 939. AB 341 establishes a statewide policy goal of diverting a minimum of 75% of solid waste from landfills through source reduction, recycling, or composting by 2020. The bill also required the California Department of Resources Recycling and Recovery to issue a report by January 1, 2014, that included strategies, methods, and recommendations that would enable the state to reach the 75% waste diversion goal by 2020.

Assembly Bill 1826 – Organic Recycling

Effective April 1, 2016, AB 1826 requires businesses that generate more than four cubic yards of organic waste (food, green and non-hazardous wood waste) per week, and multi-family properties with five units or

more, to provide separate recycling bins for organic waste, and requires that local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses. Furthermore:

a) Effective April 1, 2016, all businesses that generate eight cubic yards of organic waste per week shall arrange for organic waste recycling services.

b) Effective January 1, 2017, all businesses that generate four cubic yards of organic waste per week shall arrange for organic waste recycling services.

c) Effective January 1, 2019, all businesses that generate four cubic yards or more of commercial solid waste per week shall arrange for organic waste recycling services.

d) Effective January 1, 2020, if statewide disposal of organic waste has not been reduced to 50 percent of the level of disposal during 2014, all businesses that generate two cubic yards or more of commercial solid waste per week shall arrange for organic waste recycling services.

Regional

Los Angeles County Integrated Waste Management Plan

The Los Angeles County Countywide Integrated Waste Management Plan (CoIWMP), approved in 1999 by the Los Angeles County Department of Public Works, provides a regional approach to solid waste management. The CoIWMP recognizes that managing the County's solid waste stream should involve new approaches to address source reduction, recycling, composting, and alternative technology. In addition, the CoIWMP ensures that the waste management practices of cities and other jurisdictions in Los Angeles County are consistent with the solid waste diversion goals of AB 939. To provide an annual update on the CoIWMP, the County of Los Angeles Department of Public Works prepares the CoIWMP annual report, which addresses solid waste management for a 15-year planning period. The CoIWMP annual report analyzes solid waste disposal and estimated future remaining capacity at County of Los Angeles landfills. The 2017 ColWMP Annual Report is the most recent report available (County of Los Angeles 2019).

Local

Santa Monica Municipal Code

Section 5.08.400 – Solid Waste Diversion

Section 5.08.400 establishes direction for characterizing and reducing solid waste production within the City. The requirements are a furtherance of state-mandated diversion criteria, and are based, in large part, on the Waste Characterization Study for the Source Reduction and Recycling Element that the City completed in 1992.

Section 8.108.010, Subpart C – Construction and Demolition Ordinance

Pursuant to Section 8.108.010, applicants for construction or demolition permits must complete and submit a Waste Management Plan as part of the application packet for the construction or demolition permit. Construction and demolition refuse in the City is sent to approved recycling facilities. The ordinance requires a Waste Management Plan whenever a construction, demolition, or alteration project has a permit valuation of $50,000 or more or is larger than 1,000 square feet. The City requires that any project meeting these criteria meet a diversion rate of 70%.

Santa Monica General Plan

Land Use and Circulation Element

The Santa Monica General Plan Land Use and Circulation Element includes policies that promote water conservation and sustainability. Below are the Santa Monica Land Use and Circulation Element policies that relate to solid waste (City of Santa Monica 2017):

Goal S8 Reduce the amount of solid waste citywide

Policy S8.1 Expand solid waste diversion strategies such as increased commercial recycling collection and outreach, expanded food waste collection, and waste to energy conversion programs.

Policy S8.2 Develop a Zero-Waste Strategic Plan with an aggressive target for waste diversion by 2030.

Policy S8.3 Continue to implement the ban on non-recyclable plastic food containers and continue to pursue a ban on plastic bags.

Santa Monica's Zero Waste Plan

In 2014, the City adopted the Zero Waste Strategic Operations Plan (Zero Waste Plan), providing a roadmap for achieving a 95% diversion of waste by 2030 or a disposal rate of 1.1 pounds per person per day by 2030.[2] The Zero Waste Plan included tasks for reviewing existing programs, compiling waste generation data, identifying program and infrastructure options, and analyzing program impacts. In 2019, the City prepared the Zero Waste Plan Update to assess the City's Zero Waste goal status, examine the implementation outcomes of the waste reduction and diversion strategies identified in the 2014 Zero Waste Plan, ensure the strategies are consistent with the City's Climate Action and Adaptation Plan, and recommend Zero Waste priority actions for the next five years. The plan provides a roadmap for achieving

[2] The City's timeline for achieving zero waste goals has been extended due to reduced City budgets resulting from the COVID-19 pandemic.

the City's sustainability goals related to waste in light of the dramatically-altered dynamics in the global recycling market triggered by China's National Sword policy of 2017. The City's pursuit of Zero Waste is supported by four pillars (City of Santa Monica 2019a):

- Continuing to actively advocate for strengthened federal and state environmental requirements for extended producer responsibility and adequate support for ensuring the recycling industry can economically convert currently unusable materials as the City cannot successfully tackle the global waste problem on its own;
- Implementing the priority actions identified in the 2019 Zero Waste Plan Update, which highlight the need for the City to undertake bold local environmental policies and programs and invest in public education to drive behavior change;
- Securing contracts for recyclable materials transferring and processing; and
- Continuing to develop community recycling options.

4.13.3 Thresholds of Significance

The significance criteria used to evaluate project impacts to solid waste systems are qualitative and directly based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). According to Appendix G of the State CEQA Guidelines, a significant impact related to solid waste could occur if the project would:

1. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
2. Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

4.13.4 Methodology

The analysis of impacts involved estimating the solid waste generated by the proposed project is based on a review of available data from sources such as the CalRecycle and City programs. There are no waste generation or disposal factors specific to medical office uses and research & development uses. However, to provide a range of the potential solid waste generation, the analysis estimates waste generation by 1) applying the City's estimated average disposal rate of 5 pounds per person per day and 2) applying standard generation factors for commercial uses. The analysis of solid waste then compares the projected increase in solid waste generation associated with the proposed project to the existing and future capacity of landfills that serve the City.

The analysis also addresses the proposed project's consistency with policies and programs related to reduce solid waste and increase the recycling of materials in support of sustainability/green growth. Applicable policies and programs are summarized, and their goals and standards are noted. The project's characteristics are considered as part of the consistency review.

The focus of this section is on municipal (non-hazardous) solid waste. Please see Section 4.7, Hazards and Hazardous Materials, of this EIR for analysis of hazardous solid waste (such as medical waste, sharps, biological materials, etc.).

4.13.5 Impacts Analysis

Would the 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

Construction and demolition activities for the proposed project are likely to produce appreciable quantities of debris that would need to be disposed of. Existing structures on-site to be demolished consist of the existing rear parking garage along 19th Court, the two former apartment structures, and the surface parking lot, which would collectively generate approximately 937 cubic yards of waste (such as concrete, stucco, sheetwall). In addition to demolition debris, an estimated 58,000 cubic yards of soil would be excavated with shoring of sidewalls inside the property line. Furthermore, as described in Section 4.7, Hazards and Hazardous Materials, an on-site survey has determined that some of the structures on-site have asbestos containing material (ACM) and lead containing material (LCM). Therefore, solid waste disposal needs for the proposed project consists of construction and demolition (C&D) material, soils, and hazardous materials. The asbestos survey found that 1,766 square feet of flooring (i.e., tiles, coating, flooring), 24,484 square feet of exterior stucco and wall plaster finish, and 102 linear feet of pipes and putty contained > 0.1% asbestos. Ceramic wall tiles and a porcelain sink were found to contain lead in detectable quantities. Hazardous waste would be disposed of in accordance with state regulations.

The proposed project must also comply with Santa Monica Municipal Code Chapter 8.108, requiring submission of a waste management plan (WMP) and requiring 70% of all construction and demolition material generated by the proposed project to be diverted. A number of methods can be used to comply with the C&D diversion requirements. On–site reuse is allowed on a case by case basis, as approved in the WMP. Materials that are source separated on site, such as wood, concrete, or asphalt, can be sent to an approved C&D facility for reuse or recycling. All mixed C&D materials are required to be sent to an approved mixed C&D recycling facility. The WMP must provide an estimate of the volume of C&D material to be generated, how much of that volume can be feasibly diverted via reuse or recycling, identify the facilities to receive C&D materials, and commit to using City-approved haulers. No building or demolition

permit shall be issued for the proposed project unless the appropriate City staff has reviewed and approved the WMP. In compliance with City, County, and State regulations pertaining to solid waste diversion and management, these C&D requirements would substantially reduce solid waste associated with the proposed project's C&D activities.

The remaining C&D material would be disposed of at a solid waste facility with available capacity. Table 4.13-1 lists the most commonly used landfills along with their distance and direction from the proposed project site, waste types accepted, and an estimate of their remaining capacity. Based on the range of waste types accepted, the number of landfills available in the region, and their remaining capacity, there is sufficient capacity to accommodate the proposed project's waste disposal needs. Many of the landfills listed in Table 4.13-1 can accept the 58,000 cubic yards (60,900 tons) of construction soil and/or fill material and can either use it as alternative cover or process it for resale to other construction projects.

Regionally, Los Angeles County has adequate landfill capacity to accommodate waste disposal needs for the next 15 years (County of Los Angeles 2019). Solid waste generated during construction of the proposed project would result in a nominal reduction of the remaining capacities of the Class III municipal landfills and refuse-to-energy facilities.

Therefore, solid waste generated during construction would not be 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. Impacts would be **less than significant**. No mitigation is required.

Operation

The development of medical office and research & development uses would result in a net increase in solid waste generation. Solid waste generated would include paper materials, glass, metal, electronics, plastic, other organic, inert materials, standard household hazardous waste, and special medical related waste. Section 4.7, Hazards and Hazardous Materials, evaluates hazardous and medical waste disposal needs. As is typical for land uses that require special disposal needs, the site operator would contract with a hazardous waste management company approved by the City to schedule regular pickups of waste and transport it to authorized disposal facilities, many of which are listed in Table 4.13-1.

Solid waste other than medical and hazardous waste would have disposal needs similar to other commercial uses in the City, and would be collected and disposed of by the City consistent with current operations (as described in Section 4.13.1.4). There are no specific waste generation or disposal factors for medical office uses and research & development uses. However, using the City's estimated disposal rate of 5 pounds per person per day would yield 188 tons per year of solid waste generated. Alternatively, applying the standard generation factors for commercial uses, the proposed project could generate approximate 491 lbs/day or 90 tons per year (Table 4.13-2).

The proposed project's increase in anticipated solid waste disposal would be minimal when compared to the typical yearly volume of waste handled by the City in a single year (see Table 4.13-1). As indicated above, Los Angeles County has adequate landfill capacity to accommodate waste disposal needs for the next 15 years (County of Los Angeles 2019).

Table 4.13-2
Operational Solid Waste Generation

Use	Amount (sf)	Solid Waste Generation Rate (day)[a]	Solid Waste Generation
Research & Development	54,000	0.007 lbs/sf	378 lbs/day
Medical Office	18,812	0.006 lbs/sf	113 lbs/day
		Total	**491 lbs/day or 90 tons/year**

As adequate daily surplus capacity exists at the receiving landfill(s), development of the proposed project would not significantly affect current operations or the expected lifetime of the landfills serving the project area.

In addition, the City has achieved significant waste reduction targets and continues to strive for additional reductions in solid waste. The City's Zero Waste Plan Update identifies policies, programs, and infrastructure that support the City's disposal rate goal of 1.1 pounds per person per day by 2030 (City of Santa Monica 2019a). These efforts will further reduce per capita waste generation in the future, thereby reducing existing waste generation in the City, including by the proposed project. As a result, solid waste generated during operations would not be 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. Impacts would be **less than significant**. No mitigation is required.

Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

All collection, transportation, and disposal of municipal solid waste would continue and occur in accordance with all applicable federal, state, and local statues and regulations. Under AB 939 and AB 341, the City is required to develop source reduction, reuse, recycling, and composting programs to reduce the amount of solid waste entering landfills. The City has achieved this diversion of solid waste through the City's Zero Waste Plan, with goal of a 1.1 pounds per person per day disposal rate by 2030 (City of Santa Monica 2013, 2019a).

As stated under the previous criterion, during construction, the proposed project would comply with waste diversion standards contained within Santa Monica Municipal Code Chapter 8.108. This includes submittal of a WMP for C&D waste as part of the application packet for demolition permits. Consistent with City requirements and State goals for reducing solid waste, trash and recycling collection bins would be provided within enclosures along 19th Court, as required by the Santa Monica Municipal Code. Medical-related waste, in the event it is generated, would be stored on-site per regulatory and industry procedures and transported off-site by qualified vendors in accordance with applicable regulations.

Therefore, the proposed project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Impacts associated with solid waste management and reduction regulations would be **less than significant**. No mitigation is required.

4.13.6 Cumulative Impacts

Section 15130(b)(1)(A) of the CEQA Guidelines (14 CCR 15000 et seq.) allows for the preparation of a list of past, present, and reasonably anticipated future projects as a viable method of determining cumulative impacts. This discussion uses the following approach: an initial list and description of all cumulative projects is presented, followed by a discussion of the effects that the proposed project may have on the environmental category of concern (i.e., utilities and service systems). Consistent with CEQA, this discussion is guided by the standards of practicality and reasonableness. A list of past, present, and reasonably foreseeable future projects that the City determined were most relevant to the proposed project are provided in Table 4-1, Cumulative Projects List, in Chapter 4 of this EIR.

The geographic extent for the analysis of cumulative impacts associated with utilities and service systems consists of the County since the landfills receive solid waste countywide. County planning for future landfill capacity addresses expected cumulative demand over 15-year planning increments, with the current CIWMP covering the 2016-2031 planning horizon. The amount of solid waste generated by the project and disposed of in nearby landfills during operation of the proposed project is expected to be within the permitted capacity of the landfills, as discussed in Section 4.13.5, Impacts Analysis. In addition, all foreseeable construction and demolition projects would need to submit a waste management plan and comply with City standards and programs related to solid waste management/reduction regulations (such as provision of on-site recycling containers). Furthermore, the City's Zero Waste Plan Update identifies policies, programs, and infrastructure that support the City's disposal rate goal of 1.1 pounds per person per day by 2030 (City of Santa Monica 2019a). These efforts to be implemented by the City will further reduce per capita waste generation in the future. As such, cumulative impacts related to solid waste management/reduction regulations would be less than significant.

In summary, cumulative impacts to utilities and service systems would be **less than significant**. No mitigation is required.

4.13.7 Mitigation Measures

Impacts related to solid waste management and reduction regulations would be **less than significant**. No mitigation measures are required.

4.13.8 Level of Significance After Mitigation

No mitigation measures would be required because impacts to solid waste management and reduction regulations would be **less than significant**.

4.13.9 References

CalRecycle (California Department of Resources Recycling and Recovery). 2020a. Jurisdiction Disposal By Facility, Disposal during 2019 for Santa Monica. Disposal Reporting System (DRS) Report. Accessed December 7, 2020. https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility.

CalRecycle. 2020b. Solid Waste Information System Facility/Site Summary Details. Accessed December 7, 2020. http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx.

City of Santa Monica. 2013. Zero Waste Strategic Operations Plan. January 2013. https://www.smgov.net/uploadedFiles/Departments/Public_Works/Solid_Waste/ZW%20Strategic%20Plan.pdf.

City of Santa Monica. 2017. Santa Monica General Plan 2010 Land Use and Circulation Element. Last Amended 2017. https://www.smgov.net/Departments/PCD/Plans/2010-Land-Use-and-Circulation-Element/.

City of Santa Monica. 2019a. City of Santa Monica, Staff Report 3891. "Adoption of Zero Waste Plan Update and Strategic Direction for Recycling Services." November 12, 2019. Accessed December 7, 2020. http://santamonicacityca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=1196&MediaPosition=&ID=3891&CssClass=.

City of Santa Monica. 2019b. Zero Waste Plan Update. Final Report. September 23, 2019. https://www.smgov.net/Departments/PublicWorks/ContentRecycling.aspx?id=45134.City of Santa Monica. 2020a. Santa Monica Public Works – Resource Recovery and Recycling. Webpage. Accessed November 3, 2020. https://www.smgov.net/departments/publicworks/recycling.aspx.

City of Santa Monica. 2020b. Santa Monica's Plan for Zero Waste. Webpage. Accessed December 7, 2020. https://www.smgov.net/Departments/PublicWorks/ContentRecycling.aspx?id=45134.

County of Los Angeles. 2019. County of Los Angeles Countywide Integrated Waste Management Plan, 2017 Annual Report. April 2019. https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=11230&hp=yes&type=PDF.

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4.14 ENERGY

This section describes the existing energy setting, identifies relevant regulatory framework, and evaluates potential impacts on energy resources related to implementation of the proposed project). This section focuses on the following three energy resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). This section evaluates the demand for energy resources attributable to the project during construction and operation and makes a determination regarding the project's use and conservation of energy resources. This section also demonstrates whether the current and planned electrical, natural gas, and petroleum-based fuel supplies and distribution systems are adequate to meet the project's forecasted energy consumption.

4.14.1 Existing Conditions

The project site is currently occupied with a 2-story funeral home/chapel structure (part of which is occupied by a restaurant), a 4-car garage connected to the funeral home/chapel structure, two 2-story former multi-family residential structures (currently leased as offices), and a surface parking lot. The existing funeral home and chapel was formerly used as Gates, Kingsley, & Gates Mortuary (GKGM Building). The funeral home and chapel ceased operation in 2016. The Tartine Restaurant now occupies a portion of the building, but the remaining administrative areas are vacant. Additionally, the residential units have been vacant since 2016 but are being leased as offices and are currently partially occupied.

The environmental setting for the project site related to electricity, natural gas, and petroleum, including associated service providers, supply sources, and estimated consumption, is discussed below. In summary, in 2016 (the latest calendar year for which data is uniformly available for all three types of energy sources), California's estimated annual energy use included the following:

- Approximately 257,268 gigawatt hours of electricity (EIA 2019a)
- Approximately 2,110,829 million cubic feet of gas (MMcf) (EIA 2019b)
- Approximately 16 billion gallons of gasoline (CEC 2017)

Electricity

Supply/Demand

Electricity usage in California varies substantially by the types of uses in a building, types of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita has remained stable for more than 30 years, while the national average has steadily increased (CEC 2011). Based on recent energy supply-and-demand projections in California, statewide annual peak electricity demand is projected to grow an average of 1,043 megawatts per year for the next decade, or 1.6% annually, and consumption per capita is expected to remain relatively constant at 7,300–7,900 kWh per person (CEC 2018a).

Before May 1, 2019, Southern California Edison (SCE) was the electricity service purchasers and provider for all residential and commercial customers in the City of Santa Monica. SCE provides electric services to 15 million customers in a 50,000-square-mile service area that includes Fresno, Kern, Madera, Riverside, Tuolumne, Imperial, Kings, Mono, San Bernardino, Tulare, Inyo, Los Angeles, Orange, Santa Barbara, and Ventura Counties. As shown in Table 4.14-1, customers consumed approximately 86 billion kilowatt-hours (kWh) of electricity in 2019 (CEC 2019a).

Table 4.14-1
Southern California Edison Electricity Consumption

Sector	Energy Consumption by Sector in kilowatt-hours (kWh)
Agricultural & Water Pump	2,788.41
Residential	27,324.32
Commercial Buildings	30,406.83
Commercial Other	4,413.49
Industry	13,088.20
Mining & Construction	2,359.29
Streetlight	532.19
Total Consumption	**80,912.73**

Source: CEC 2019a.

SCE generates electric power from a variety of sources, including hydropower, coal, gas, nuclear sources, and renewable resources, such as wind, solar, and geothermal sources. According to the California Public Utilities Commission's (CPUC's) 2018 Renewable Portfolio Standard (RPS) Annual Report to the Legislature, 36% of SCE's power came from eligible renewable energy sources in 2017, including biomass/waste, geothermal, small hydroelectric, conduit hydroelectric, solar, and wind sources (CPUC 2019a). In support of the State's requirements to increase the RPS and reduce statewide greenhouse gas emissions, SCE proposes to double the use of carbon-free electricity from 40 percent today to 80 percent by 2030. In 2019, SCE's total retail electricity sales in the SCE service area was estimated to be 80,913 GWh (CEC 2019a).

Since May 2019 for all customers, Clean Power Alliance became the new electricity supplier for Santa Monica. Clean Power Alliance is a Joint Powers Authority (JPA) made up of public agencies across Los Angeles and Ventura counties working together to bring clean, renewable power to Southern California. With the recent switch in energy supplier, Clean Power Alliance purchases clean power and SCE delivers it to customers. Electricity customers in Santa Monica are automatically defaulted to have 100% renewable energy serving their electricity needs. Alternatively, customers can opt to have their electricity power consisting of 50% renewable content or 36%, or opt out of the Clean Power Alliance to remain with SCE as their energy supplier.

Natural Gas

Natural gas is used for cooking, space heating, water heating, electricity generation, and as an alternative transportation fuel. The CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. California's existing gas supply portfolio is regionally diverse and includes supplies from California sources (onshore and offshore), Southwestern U.S. supply sources (the Permian, Anadarko, and San Juan basins), the Rocky Mountains, and Canada (CPUC 2019b). In 2018, the Statewide supply was 6,104 MMcf/day, consisting of 87 MMcf/day from California utility sources, 4,886 MMcf/day from out-of-state utility sources, and 1,131 MMcf/day from non-utility served load[1] (California Gas and Electric Utilities 2018).

The majority of California's natural gas customers are residential and small commercial customers (core customers). These customers accounted for approximately 32% of the natural gas delivered by California utilities in 2017. Large consumers, such as electric generators and industrial customers (noncore customers), accounted for approximately 68% of the natural gas delivered by California utilities in 2017 (EIA 2019b). Under an average-temperature condition and a normal hydro year, gas demand for the state is projected to average 5,871 MMcf/day in 2018 decreasing to 5,381 MMcf/day by 2035, a decline of 0.5 percent per year (California Gas and Electric Utilities 2018).

The City of Santa Monica, including the project site, is served by SoCal Gas. SoCal Gas serves 21.6 million customers in a 20,000 square-mile service area from San Luis Obispo in the north to the Mexican border in the south. The service includes over 500 communities and covers most of the region's heavily populated areas with the exception of the city of Long Beach and San Diego County (SoCal Gas 2018). In 2017 (the most recent year for which data is available), SoCal Gas had delivered 2,504 MMcf/day, with the majority going to residential uses (California Gas and Electric Utilities 2018).

Demand for natural gas can vary depending on factors such as weather, price of electricity, the health of the economy, environmental regulations, energy efficiency programs, and the availability of alternative renewable energy sources. SoCalGas projects total gas demand to decline at an annual rate of 0.74 percent from 2018 to 2035. The decline in throughput demand is due to modest economic growth, CPUC-mandated energy efficiency standards and programs, tighter standards created by revised Title 24 Codes and Standards, renewable electricity goals, the decline in commercial and industrial demand, and conservation savings linked to Advanced Metering Infrastructure. From 2018 to 2035, residential demand is expected to decline from 236 billion cubic feet (Bcf) to 186 Bcf. The decline is 1.4 percent per year, on average (California Gas and Electric Utilities 2018).

[1] Consists of California production and deliveries by El Paso, Kern/Mojave and TGN pipelines to industrial, EOR Cogen, EOR steaming and powerplant customers, and gas consumption at Elk Hills power plant.

As previously indicated, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available through existing delivery systems, thereby increasing the availability and reliability of resources. As shown in Table 4.14-2, customers consumed approximately 5,425 million therms of natural gas in 2019 (CEC 2019b).

Table 4.14-2
SoCal Gas Natural Gas Consumption

Sector	Consumption by Sector in millions of therms
Agricultural & Water Pump	72.53
Residential	2,418.62
Commercial Buildings	947.85
Commercial Other	81.93
Industry	1,684.43
Mining & Construction	219.36
Total Consumption	**5,424.72**

Source: CEC 2019b.

Petroleum

There are more than 35 million registered vehicles in California, and those vehicles consume an estimated 16 billion gallons of petroleum (fuel such as diesel and gasoline) each year (CEC 2020; DMV 2019). Petroleum currently accounts for approximately 92% of California's transportation energy consumption (CEC 2020). However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and greenhouse gas (GHG) emissions, and reduce vehicle miles traveled. Market forces have driven the price of petroleum products steadily upward over time, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, and availability of other alternative fuels/energy sources has increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend may likely continue and accelerate. Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state.

4.14.2 Relevant Plan, Policies, and Regulations

Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, CARB prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focus on increasing energy efficiencies and the use of renewable resources and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources. Additional information on AB 32 and SB 32 is provided in Section 4.6, Greenhouse Gas Emissions, of this Environmental Impact Report (EIR).

Title 24, California Building Standards

Title 24 of the California Code of Regulations (CCR) was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code, Section 25402(b)(1)). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402(d)) and cost effectiveness (California Public Resources Code, Sections 25402(b)(2) and (b)(3)). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The current Title 24 standards are the 2019 Title 24 Building Energy Efficiency Standards, which became effective January 1, 2020. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018b). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018b).

As set forth in Section 110.10, Mandatory Requirements for Solar Ready Buildings, states that low-rise and high-rise multi-family buildings, hotels, and nonresidential buildings must include a "solar zone", which is a section of the roof designated and reserved for the future installation of a solar electric or solar thermal system. The solar zone for these uses must be located on the roof or overhang of the building (or on the roof or overhang of another structure located within 250 feet of the building) or on covered parking installed with the building, and must have a total area no less than 15 percent of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed-occupancy. See the 2019 standards for additional requirements regarding the azimuth, shading, interconnection pathways, and electrical service panels of solar zones.

Integrated Energy Policy Report

CEC is responsible for preparing integrated energy policy reports, which identify emerging trends related to energy supply, demand, conservation, public health and safety, and maintenance of a healthy economy. The CEC's 2015 Integrated Energy Policy Report discusses the state's policy goal to require that new residential construction be designed to achieve zero net energy (ZNE) standards by 2020 and that new non-residential construction be designed to achieve ZNE standards by 2030, which is relevant to this EIR. Refer to Section 4.6 of this EIR for additional information on the state's ZNE objectives and how the state's achievement of its objectives would serve to beneficially reduce the proposed project's GHG emissions profile and energy consumption.

State Vehicle Standards

In a response to the transportation sector accounting for more than half of California's carbon dioxide (CO_2) emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009–2012 standards resulted in a reduction in approximately 22% GHG emissions compared to emissions from the 2002 fleet, and the 2013–2016 standards resulted in a reduction of approximately 30%.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards called Advanced Clean Cars. By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global warming gases and 75% fewer smog-forming emissions (CARB 2011).

Although the focus of the state's vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

Local

City of Santa Monica General Plan Land Use and Circulation Element

The City of Santa Monica General Plan Land Use and Circulation Element is the fundamental planning policy document of the City, providing the framework for decision making regarding growth and development. The City's LUCE includes various goals and policies related to reducing energy consumption (City of Santa Monica 2017). Applicable policies include the following:

Land Use and Circulation Element

Goal LU16.1 Assure that buildings are sustainable, are environmentally sound and contribute to the City's urban form.

Policy S3.1 Actively strive to implement the City's "zero net" electricity consumption goal by 2020 through a wide variety of programs and measures, including the generation of renewable energy in the City and energy efficiency measures.

Policy S3.2 Consider a requirement for all new residential buildings to use net zero energy by 2020 and all new commercial buildings by 2030.

Goal S4 Increase the use of renewable energy in the City.

Goal S5 Improve the environmental performance of buildings.

Policy S5.1 Continue to maintain a building code and prescriptive compliance options that meet or exceed state requirements for energy, water and other sustainability standards. Specifically, pursue California Energy Commission goals to achieve "zero net" energy buildings by 2020 for low-rise residential buildings and 2030 for commercial buildings and achieve a LEED equivalent local building code by 2020.

Policy S5.2 Require all new municipal construction to achieve LEED Gold certification and all existing municipal facilities to achieve LEED 0certification wherever feasible.

Policy S5.5 Encourage shade trees on south- and west-facing sides of all new buildings to reduce building energy loads

Policy S5.6 Encourage cool roofs or green roofs on new buildings.

Policy S5.7 Encourage cool paving on new plazas and parking lots.

Policy S5.8 Encourage installation of electrical outlets in loading zones and on the exterior of new buildings to reduce emissions from gas-powered landscape maintenance and operating refrigeration for delivery trucks.

Policy T4.1 Manage the City's transportation system to meet overall CO_2 and Vehicle Miles Traveled reduction goals.

Santa Monica Sustainable City Plan

The Santa Monica City Council initially adopted the Santa Monica Sustainable City Plan in September 1994, with updates occurring three times most recently in January 2014. It was designed to help the City and community think, plan and act more sustainability. The Santa Monica Sustainable City Plan includes goals and strategies, for the City and community to conserve and enhance local resources, safeguard human health and the environment, maintain a healthy and diverse economy, and improve the livability and quality of life for all community members in the City. In order to assess progress on meeting citywide goals, nine different target areas were identified: Resource Conservation, Environmental and Public Health, Transportation, Sustainability Local Economy, Open Space and Land Use, Housing, Community Education and Civic Participation, Human Dignity, and Arts and Culture. For each target area, numerical indicators were developed to help the City achieve each goal by 2020.

The SCP 2014 update includes targets of reducing GHG emissions by 20 percent below 1990 levels Citywide by 2020, by 30 percent below 1990 levels for corporate operations by 2020, and by 80 percent below 1990 levels by 2050. For the 2030 target, this equates to an emissions level of 647,005 MTCO2e. The SCP anticipates most reductions will come from increased energy efficiency, increased renewable energy production, and reduced transportation-related emissions through increased use of alternative transportation.

Santa Monica Municipal Code: Chapter 8.36 Energy Code

The City recently updated its Energy Code to provide local amendments to Title 24 Part 6 of the California Energy Code and Title 24, Part 11 of the California Green Building Standards Code. The local amendments are part of the City's efforts to achieve carbon neutrality. The revised Energy Code, which is effective on January 1, 2020, requires new buildings in Santa Monica to achieve one of two design pathways for complying with the City's Energy Code: all-electric design or mixed-fuel design. However, as an incentive to design all-electric buildings, a higher level of energy efficiency would be required for mixed-fuel buildings. All-electric buildings would not be subject to higher levels of energy efficiency and may be built to the State's standard design requirements. All-electric buildings powered by a combination of on-site solar and 100 percent Green Power from CPA are effectively Zero-Emission Buildings. The energy requirements for new building types are as follows:

For new single-family, duplex, and multi-family residential buildings up to three stories:

- All-Electric Building shall be designed to code established by the 2019 CEC.
- Mixed-Fuel Building shall be designed to CalGreen Tier 1 established by the 2019 CEC. CalGreen Tier 1 buildings have additional integrated efficiency and on-site renewable energy sufficient to achieve a Total Energy Design Rating of 10 or less.

For new multi-family buildings, four stories and greater, and new hotels and motels:

- All new buildings shall have a solar photovoltaic system with a minimum rating of 2 watts per square foot of the building's footprint.
- All-Electric Building shall be designed to code established by the 2019 CEC.
- Mixed-Fuel Building shall be designed to be 5 percent more efficient than the code established by the 2019 CEC. (A change from the current Energy Reach Code, which requires these buildings to be 10 percent more efficient is the result of the cost-effectiveness study.)

For all other new non-residential buildings:

- All new buildings shall have a solar photovoltaic system with a minimum rating of 2 watts per square foot of the building's footprint.
- All-Electric Building shall be designed to code established by the 2019 CEC.
- Mixed-Fuel Building shall be designed to be 10 percent more efficient than the code established by the 2019 CEC.

Santa Monica Municipal Code: Chapter 8.106 Green Building Standards Code

Chapter 8.106 of the SMMC establishes the City's Green Building Standards Code. This code adopts by reference the CalGreen 2016 requirements with local amendments that require solar pool heating and solar PV installations. Under the City's Green Building Standards:

- For new pool construction (if the pool is to be heated), renewable energy shall be used for such heating provided that:
    - (i) The surface area of the solar collectors used to generate such renewable energy is equal to or greater than 70 percent of the surface area of the pool; or (ii) Renewable energy provides at least 60 percent of the total energy necessary for heating purpose.
- New single-family dwellings are required to install a solar electric PV system, with a minimum total wattage of 1.5 times the square footage of the dwelling (1.5 watts per square foot). That means a 2,000-square-foot home would need a 3 kilowatt system, which is a typical size already seen in many homes.
- New multi-family dwellings (3 stories or less) are required to install a solar electric PV system. The required installation of the PV system shall be implemented by installing a solar PV system with a minimum total wattage 2.0 times the square footage of the building footprint (2.0 watts per square foot). That means a four-story building with a building footprint of 10,000 square feet would need a 20 kilowatt system.

- Non-residential, high-rise residential, hotel, and motel buildings are required to install a solar electric PV system. The required installation of the PV system shall be implemented by installing a solar PV system with a minimum total wattage 2.0 times the square footage of the building footprint (2.0 watts per square foot). That means a four-story building with a building footprint of 10,000 square feet would need a 20 kilowatt system.
- For new non-residential buildings, 5% of the parking spaces provided shall be dedicated to electric vehicles. Each parking space shall have a raceway installed from the service or distribution panel and stubbed-up at the midline of each parking space. The minimum size of the raceway shall be one-inch nominal.

Santa Monica Municipal Code: Chapter 9.28.160 Electric Vehicle Charging Stations:

This chapter of the SMMC requires that new development with 25 to 49 parking spaces shall provide a minimum of 1 charging station. For new development with 50 to 99 parking spaces a minimum of 2 charging stations, plus one additional charging station per every 50 parking spaces above 99 spaces.

Santa Monica Electric Vehicle Action Plan

The City of Santa Monica adopted the Electric Vehicle Action Plan (EVAP) in November 2017. The City's vision is to wholly decarbonize their transportation system by replacing non-electrical vehicle use with walking, bicycling, transit, and electric vehicles when driving. The overarching goal of the EVAP is to implement policies, projects and programs to accelerate the adoption of electric vehicles within the City.

4.14.3 Thresholds of Significance

The significance criteria used to evaluate project impacts to energy are qualitative and directly based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). According to Appendix G of the State CEQA Guidelines, a significant impact on energy could occur if the project would:

1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

4.14.4 Methodology

The analysis of the project's impacts on energy resources includes estimating the proposed project's anticipated electricity, natural gas, and petroleum consumption during construction and operation. In the determination of whether the project's energy consumption would be considered wasteful, or inefficient and

whether the project with conflict with a plan for renewable energy/energy efficiency, the analysis takes consideration the following, to the extent relevant and applicable:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak and base period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- The effects of the project on energy resources.
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives

Construction

Construction of the proposed project would consume energy resources as a result of the use of small power tools/equipment, heavy-duty construction equipment, on-road trucks, and workers commuting to and from the project site. Construction of the proposed project would be conducted in one phase.

CalEEMod, version 2016.3.2, was utilized to estimate the project's petroleum consumption during construction. The petroleum consumption calculations are based on the inputs of anticipated construction equipment mix as described in the Section 4.2 Air Quality of this EIR and the project construction schedule. Electricity consumption was not calculated using CalEEMod, because electricity consumption during construction would be limited to the use of electrically powered hand tools and/or small equipment, as-necessary nighttime lighting, and potentially, for a small construction trailer that could be located on-site, and thus would be negligible. No natural gas would be required during construction. The conservative estimate for project construction is an estimated 23 months beginning as early as March 2021 and ending in January 2023.

Operation

Operation of the proposed project would consume energy resources for the building's heating, ventilation, and air conditioning (HVAC) system, water demand, wastewater treatment, and other Wellness Center activities. CalEEMod, version 2016.3.2, was used to estimate the project's electricity, natural gas, and petroleum usage. Notably, the City's Energy Code requires new non-residential buildings to be all-electric or mixed-fuel. Mixed-fuel non-residential buildings must have a 10 percent compliance margin as demonstrated on the Title 24 Certificate of Compliance. Within CalEEMod, default values for electricity and natural gas consumption for the proposed general office, medical office, research and development, enclosed parking structure, and other

non-asphalt surface land uses at the project site were applied, which is conservative (CAPCOA 2017). The first full year after buildout of the proposed project was assumed to be 2024.

The electricity and natural gas use for the project's buildings is calculated in CalEEMod using energy intensity value (electricity or natural gas use per square foot per year) assumptions, which were based on the California Commercial End-Use Survey database (CEC 2006). CalEEMod 2016.3.2 uses the 2016 version of Title 24 as a basis for energy modeling; however, the 2019 standards became effective January 1, 2020. New nonresidential buildings will use about 30% less energy versus those built under the 2016 standards. Therefore, the default values in CalEEMod were adjusted to meet the 2019 Title 24 standards.

CalEEMod was used to estimate vehicle miles travelled (VMT) and the associated daily emissions from proposed vehicular sources. CalEEMod default data, including temperature, trip characteristics, variable start information, emissions factors, and trip distances, were used for the model inputs. The trip generation rates were updated according to the land uses (Clinical/Medical Office, Research and Development) provided in the *1242 20th Street Wellness Center Project – Non-CEQA Traffic Analysis Memorandum* (Fehr and Peers 2020) for the proposed project. The proposed project would result in 1,287 weekday trips. Notably, trip generation for the proposed project accounts reductions from LUCE TDM measures. Because weekend trip generation rates were not provided in the Non-CEQA Traffic Analysis Memorandum, CalEEMod default weekend trip generation rates were adjusted based on weekday trip generation rates per land use type. Emission factors representing the vehicle mix and emissions for 2024 (the first full year of operation) were used to estimate emissions associated with full buildout of the proposed project. As described below, fuel consumption was estimated by converting the total CO_2 emissions from each land use type to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel.

Additional information and model results for each of the analyses previously described are presented in Appendix B.

Applicable Project Design Features

As described in Section 4.6 Greenhouse Gas Emissions, the proposed project would implement the following project design features to reduce GHG emissions and energy use:

PDF-GHG-1 **Transportation Demand Management**. The project is required to implement a Transportation Demand Management (TDM) Plan per the City of Santa Monica TDM Ordinance (Chapter 9.53 of the Santa Monica Municipal Code) that would include physical and programmatic elements to reduce single occupancy vehicle trips and achieve the targeted average vehicle ridership (AVR) of 2.0 for the Healthcare Mixed Use District.

The project would be required to provide each employee with information about carpooling/vanpooling, transit, air pollution, bicycle routes and facility, walking and pedestrian safety, and alternatives to driving alone to work every day. Furthermore, the

project would be required to prepare an Emission Reduction Plan, which shall include the option of 1) purchase of mobile source emission reduction credits or 2) preparation and implementation of Employee Trip Reduction Plan to achieve the applicable AVR target of 2.0. Annual monitoring is a requirement of the developer TDM Plan.

PDF-GHG-2 **Green Building Standards.** The proposed project would be required to meet or exceed the City's Green Building Standards and the Energy Reach Code requirements (Sections 8.106, 8.108, and 8.36.030 of SMMC). This includes the installation of solar electric photovoltaic systems with a minimum total wattage 2.0 times the square footage of the building footprint (2.0 watts per square foot).

4.14.5 Impacts Analysis

Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Electricity

Construction

The amount of electricity used during project construction would be minimal because typical electricity demand would be limited to electrically powered hand tools and/or small equipment, as-necessary nighttime lighting, and potentially, for a small construction trailer that could be located on-site. The electricity used for construction activities would be temporary and minimal; therefore, impacts would be **less than significant**. No mitigation is required.

Operation

At full build-out, the proposed project's operational phase would require electricity for building operation (appliances, lighting, etc.). The proposed project would be required to comply with the City's Energy Code standards or the most recent standards at the time of building issuance. The estimated operational electricity consumption associated with the proposed project in 2024 is shown in Table 4.14-3. Details of the calculations are provided in Appendix B.

Table 4.14-3
Estimated Electrical Demand – Operation

Land Use Type[a]	Estimated Electrical Demand (kWh per year)
Medical Office Building	202,407
Research and Development	546,950

Table 4.14-3
Estimated Electrical Demand – Operation

Land Use Type[a]	Estimated Electrical Demand (kWh per year)
Enclosed Parking with Elevator	499,240
Other Non-Asphalt Surfaces[b]	-16,000
Water/Wastewater	302,427
Total	**1,551,024**

Source: Appendix B.
Notes:
kWh = kilowatt-hour;
[a] Land use type was taken from the CalEEMod modeling and represents the closest land use to what is in the proposed project.
[b] The negative electrical demand for other non-asphalt surfaces represents a net decrease in energy demand associated with the installation of a solar PV panels.

As shown in Table 4.14-3, the proposed project is estimated to have a total electrical demand of approximately 1,551,024 kWh per year, which is based on CalEEMod (Appendix B).

The proposed project would implement a TDM Plan per the City of Santa Monica TDM Ordinance, that would include physical and programmatic elements to reduce single occupancy vehicle trips and achieve the targeted AVR of 2.0 (PDF-GHG-1). The proposed project would be required to meet or exceed the City's Green Building Standards and the Energy Reach Code requirements (PDF-GHG-2). The proposed project would also be required to install solar electric PV systems, as required by the City's Green Building Standards Code, to minimize the demand for electricity as supplied by a provider. Therefore, because the proposed project would implement sustainability features and would meet the City's Energy Code (which is more restrictive than current State standards), the proposed project's electricity consumption would not result in a wasteful and inefficient use of energy resources. Additionally, as described above, the City's default electricity service provider is Clean Power Alliance, which provides electricity consisting of renewable resources. Santa Monica customers served by Clean Power Alliance (which include the project) are defaulted to receive its electricity consisting of 100% renewables. Therefore, it is likely that the proposed project's electricity demand would be met by renewable resources. Impacts related to operational electricity use would be **less than significant**. No mitigation is required.

Natural Gas

Construction

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the following subsection, Petroleum. Any minor amounts of natural gas that may be consumed as a result of proposed project construction would be temporary and negligible and would not have an adverse effect; therefore, impacts would be **less than significant**. No mitigation is required.

Operation

Natural gas would be directly consumed throughout operation of the proposed project, primarily for building heating. As previously described and consistent with electricity use, the proposed project's natural gas use was estimated using CalEEMod and is considered conservative.

Table 4.14-4 shows the estimated natural gas use (in therms per year) for the proposed project during operation.

Table 4.14-4
Estimated Natural Gas Demand – Operation

Land Use Type[a]	Estimated Natural Gas Demand (therms per year)
Medical Office Building	1,393
Research and Development	7,563
Enclosed Parking with Elevator	0
Other Non-Asphalt Surfaces	0
Total	**8,956**

Source: Appendix B.
[a] Land use type was taken from the CalEEMod modeling and represents the closest land use to what is in the proposed project.

As presented in Table 4.14-4, the proposed project is estimated to use approximately 8,956 therms of natural gas per year. By comparison, in 2019, SoCal Gas supplied 5.4 billion therms of natural gas to customers (CEC 2019b).

However, as described previously, the proposed project would include various sustainability features to comply with the City's Energy Code. As the proposed project would achieve greater than required energy efficiency, it would not result in the wasteful, inefficient, and unnecessary consumption of natural gas. Therefore, natural gas consumption impacts would be **less than significant**. No mitigation is required.

Petroleum

Construction

Petroleum would be consumed throughout construction of the proposed project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and vehicle miles traveled associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities, and haul trucks involved in moving dirt around the project site, would rely on diesel fuel. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed that construction workers would travel to and from the project site in gasoline-powered vehicles.

Heavy-duty construction equipment of various types would be used during each phase of construction. CalEEMod was used to estimate construction equipment usage, and results are included in Appendix B. Based

on that analysis, over all phases of construction, diesel-fueled construction equipment would operate for an estimated 10,133 hours, as summarized in Table 4.14-5.

Table 4.14-5
Hours of Operation for Construction Equipment

Phase	Hours of Equipment Use
Demolition	209
Grading 1	1,932
Grading 2	400
Building Construction 1	5,880
Building Construction 2	1,120
Building Construction 3	352
Paving	150
Architectural Coating	90
Total	**10,133**

Source: Appendix B.

Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2020). The estimated diesel fuel use from construction equipment is shown in Table 4.14-6.

Table 4.14-6
Construction Equipment Diesel Fuel Demand

Phase	Pieces of Equipment	Equipment CO_2 (MT)	kg CO_2/Gallon	Gallons
Demolition	3	6.21	10.21	608.23
Grading 1	2	51.63	10.21	5,056.46
Grading 2	1	20.69	10.21	2,025.97
Building Construction 1	4	147.98	10.21	14,494.05
Building Construction 2	1	10.33	10.21	1,011.44
Building Construction 3	2	4.14	10.21	405.57
Paving	5	2.48	10.21	242.51
Architectural Coating	1	1.91	10.21	187.55
			Total	**24,031.79**

Sources: Appendix B (pieces of equipment and equipment CO_2); The Climate Registry 2020 (kg/CO_2/gallon).
CO_2 = carbon dioxide; kg = kilogram; MT = metric ton

Fuel consumption from worker and vendor trips is estimated by converting the total CO_2 emissions from each construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline-fueled, and vendor/hauling vehicles are assumed to be diesel-

fueled. Calculations for total worker, vendor, and hauler fuel consumption are provided in Tables 4.14-7, 4.14-8, and 4.14-9, respectively.

Table 4.14-7
Construction Worker Vehicle Gasoline Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Demolition	152	0.73	8.78	82.72
Grading 1	1,288	6.15	8.78	700.97
Grading 2	0	0	8.78	0.00
Building Construction 1	21,840	100.95	8.78	11,497.79
Building Construction 2	0	0	8.78	0.00
Building Construction 3	0	0	8.78	0.00
Paving	210	0.96	8.78	109.37
Architectural Coating	240	1.06	8.78	121.23
			Total	**12,512.08**

Sources: Appendix B (construction worker CO_2); The Climate Registry 2020 (kg/CO_2/gallon).
CO_2 = carbon dioxide; kg = kilogram; MT = metric ton

Table 4.14-8
Construction Vendor Truck Diesel Fuel Demand

Phase	Trips	Vehicle CO_2 (MT)	kg/CO_2/Gallon	Gallons
Demolition	0	0	10.21	0
Grading 1	644	7.86	10.21	769.98
Grading 2	0	0	10.21	0
Building Construction 1	9,520	115.28	10.21	11,291.08
Building Construction 2	0	0	10.21	0
Building Construction 3	0	0	10.21	0
Paving	0	0	10.21	0
Architectural Coating	0	0	10.21	0
			Total	**12,061.06**

Sources: Appendix B (construction worker CO_2); The Climate Registry 2020 (kg/CO_2/gallon).
CO_2 = carbon dioxide; kg = kilogram; MT = metric ton

Table 4.14-9
Construction Haul Truck Diesel Fuel Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Demolition	164	6.12	10.21	599.70
Grading 1	11,600	433.09	10.21	42,417.78
Grading 2	0	0	10.21	0
Building Construction 1	0	0	10.21	0
Building Construction 2	0	0	10.21	0
Building Construction 3	0	0	10.21	0
Paving	0	0	10.21	0
Architectural Coating	0	0	10.21	0

Table 4.14-9
Construction Haul Truck Diesel Fuel Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
			Total	**43,017.47**

Sources: Appendix B (construction worker CO_2); The Climate Registry 2020 (kg/CO_2/gallon).
CO_2 = carbon dioxide; kg = kilogram; MT = metric ton

As shown in Tables 4.14-7 through 4.14-9, the proposed project is estimated to consume approximately 91,622 gallons of petroleum during the construction phase. As analyzed in Section 4.2 Air Quality, the proposed project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. Therefore, the proposed project's construction fuel usage would not be wasteful or inefficient, impacts would be **less than significant**. No mitigation is required.

Operation

During operation of the proposed project, the majority of fuel consumption would involve the use of motor vehicles traveling to and from the project site. Petroleum fuel consumption associated with the proposed project is a function of the vehicle miles traveled as a result of proposed project operation. As discussed in Sections 4.2 Air Quality, 4.5 Greenhouse Gas Emissions, and 4.11 Transportation and Circulation, the analysis has estimated the number of trips associated with the proposed project, which would result in additional fuel consumption and energy use associated with transportation. The proposed project would result in a total of 2,212,379 VMT per year.

Similar to construction worker and vendor trips, fuel consumption was estimated by converting the total CO_2 emissions from each land use type to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Based on the annual fleet mix provided in CalEEMod, 92.5% of the fleet range from light-duty to medium-duty vehicles and motorcycles were assumed to run on gasoline. The remaining 7.5% of vehicles represent medium-heavy duty to heavy-duty vehicles and buses/recreational vehicles, which were assumed to run on diesel.

Calculations for annual mobile-source fuel consumption are provided in Table 4.14-10, Mobile Source Fuel Consumption – Operation. Mobile sources from the proposed project would result in approximately 103,038 gallons of gasoline fuel consumed per year and approximately 7,343 gallons of diesel fuel consumed per year, beginning in 2024. By comparison, California as a whole consumes approximately 19.3 billion gallons of petroleum per year (EIA 2019c).

Table 4.14-10
Mobile Source Fuel Consumption – Operation

Fuel	Vehicle MT CO_2	kg CO_2/Gallon	Gallons
Gasoline	833.59	8.78	94,941.48
Diesel	67.34	10.21	6,595.85

Table 4.14-10
Mobile Source Fuel Consumption – Operation

Fuel	Vehicle MT CO_2	kg CO_2/Gallon	Gallons
		Total	**101,537.34**

Sources:
[a] Appendix B.
[b] The Climate Registry 2020.
CO_2 = carbon dioxide; kg = kilogram; MT = metric ton

Over the lifetime of the proposed project, the fuel efficiency of the vehicles being used by employees and visitors is expected to increase due to state regulations addressing fuel economy as well as the change in fleet vehicle mix from increase of electric vehicles. As such, operation of the proposed project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy.

The proposed project's estimate of transportation-fuel consumption would not represent a substantial use in the State's supply of petroleum and would not increase the need for new fuel supplies. As an urban infill project located in proximity to a number of transit options, the proposed project would minimize vehicle trips and VMT and support State/local goals to reduce transportation energy use. Additionally, as described in Chapter 3, Project Description, a Transportation Demand Management (TDM) plan that satisfies the City's TDM Ordinance is a requirement for project approval. The TDM plan for the proposed project would include trip reduction strategies paid for and implemented by the applicant. Specific strategies required in the TDM plan would be determined by the City during the project approval process and may include transit pass subsidy, parking cash out, ridesharing, bicycle facilities, priority carpool parking, etc. The applicant would be required to achieve Average Vehicle Ridership (AVR) target of 2.0, as established in the City's TDM Ordinance.

In summary, although the proposed project would increase petroleum use during operation, the project is an infill employment development in proximity to existing transit and bike infrastructure and would incorporate sustainability features. As such, the proposed project would be considered a transportation energy-efficient project. Given these considerations, petroleum consumption associated with the proposed project would not be considered inefficient or wasteful and would result in a **less-than-significant impact.** No mitigation is required.

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The proposed project would include various sustainability features and would comply with the City's Energy Code and Green Building Standards. Thus, the project would be designed to be all-electric or mixed-fuel. Mixed-fuel non-residential buildings must have a 10 percent compliance margin as demonstrated on the Title 24 Certificate of Compliance. In addition, the project would include the installation a solar electric

photovoltaic system. Furthermore, with the City's switch to the Clean Power Alliance, the project would consume electricity from renewable sources. With these features, the proposed project would provide opportunities for improved energy efficiency that would support state and local plans for increasing renewable energy efficiency. Furthermore, the project is an infill employment development in proximity to transit and bike infrastructure and would incorporate sustainability features including implementation of a TDM plan in accordance with the City's TDM ordinance. For the reasons stated, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficient, and impacts would be **less than significant**. No mitigation is required.

4.14.6 Cumulative Impacts

Consumption of Energy Resources

Potential cumulative impacts on energy would result if the proposed project, in combination with past, present, and future projects, would result in the wasteful or inefficient use of energy. This could result from development that would not incorporate sufficient building energy efficiency features, would not achieve building energy efficiency standards, or would result in the unnecessary use of energy during construction and/or operation.

As previously described, the proposed project would not result in wasteful, inefficient, or unnecessary use of energy since it would incorporate various design features and project characteristics to minimize energy consumption. The proposed project would include various sustainability features and is an urban infill project located in proximity to transit and bike facilities. Therefore, the proposed project would not contribute to a cumulative impact to the wasteful, unnecessary consumption, or inefficient use of energy resources.

The cumulative projects within the areas serviced by the energy service providers could cumulatively increase the use of energy resources. Projects that include development of large buildings or other structures that would have the potential to consume energy in an inefficient manner would have the potential to contribute to a cumulative impact. Projects that would mostly include construction, such as transportation infrastructure, could also contribute to a cumulative impact; however, the impact of these projects would be limited because they would typically not involve substantial ongoing energy use. Other development projects within the region would result in incremental increases in long-term energy consumption similar to the proposed project through the introduction of new population to the region. Each of these projects, however, would be required to comply with local and state regulations for reducing energy consumption and increasing energy efficiency during operation.

Conflict With or Obstruct A State or Local Plan for Renewable Energy or Energy Efficiency

Similar to the proposed project, cumulative projects would be subject to CALGreen (or stricter local regulations such as the City's Energy Code), which provides energy efficiency standards for commercial

and residential buildings. CALGreen would implement increasingly stringent energy efficiency standards that would require the proposed project and the cumulative projects to minimize the wasteful and inefficient use of energy. In addition, cumulative projects would be required to meet or exceed the Title 24 building standards, further reducing the inefficient use of energy. Future development would also be required to meet even more stringent requirements, including the objectives set forth in the AB 32 Scoping Plan (CARB 2017), which would seek to make all newly constructed residential homes zero net energy consumers by 2020, and all new commercial buildings ZNE consumers by 2030. Furthermore, various federal and state regulations, including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program, would serve to reduce the transportation fuel demand of cumulative projects.

In summary, with adherence to the increasingly stringent building and vehicle efficiency standards, and with implementation of the proposed project's design features that would reduce energy consumption, the proposed project would not contribute to a cumulative impact to the wasteful or inefficient use of energy. As such, the proposed project would not result in a cumulatively considerable contribution to a potential cumulative impact. Cumulative impacts would be **less than significant**. No mitigation is required.

4.14.7 Mitigation Measures

Proposed project impacts would be less than significant, and therefore, no mitigation is required.

4.14.8 Level of Significance After Mitigation

Impacts to energy consumption as a result of implementing the proposed project would be **less than significant**. Therefore, no mitigation is required.

4.14.9 References

77 FR 62624–63200. Final Rule: "2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards." July 5, 2018.

California Gas and Electric Utilities. 2018. 2018 California Gas Report. https://www.sdge.com/sites/default/files/regulatory/2018%20California%20Gas%20Report.pdf

CAPCOA (California Air Pollution Control Officers Association). 2017. *California Emissions Estimator Model (CalEEMod) User's Guide*. Version 2016.3.2. Prepared by BREEZE Software, a Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. November 2017. Accessed July 2018. http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6.

CARB (California Air Resources Board). 2011. *Facts About the Advanced Clean Cars Program*. Revised November 9, 2011. Accessed July 2018. https://www.arb.ca.gov/msprog/zevprog/factsheets/advanced_clean_cars_eng.pdf.

CARB. 2017. *The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target*. January 20, 2017. Accessed December 2017. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

CEC (California Energy Commission). 2006. *California Commercial End-Use Survey*. Consultant Report. CEC-400-2006-005. Prepared by Itron Inc. March 2006. http://www.energy.ca.gov/2006publications/CEC-400-2006-005/CEC-400-2006-005.PDF.

CEC. 2011. "What is Your Home Energy Rating?" Updated 2011. Accessed October 12, 2016.

CEC. 2017. *California Energy Demand Updated Forecast, 2017–2027*. CEC-200-2014-009-CMF. January 2017. Accessed 2019. http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR-05/TN215745_20170202T125433_FINAL_California_Energy_Demand_Updated_Forecast_20172027.pdf.

CEC. 2018a. California Energy Demand 2018–2030 Revised Forecast April 2018.

CEC. 2018b. 2019 Building Efficiency Standards Fact Sheet. March 2018. Accessed January 2020. https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf.

CEC. 2019a. Electricity Consumption by Entity: Southern California Edison Company 2016. Accessed July 2018. http://www.ecdms.energy.ca.gov/elecbyutil.aspx

CEC. 2019b. Gas Consumption by Entity: Southern California Gas Company 2016. Accessed July 2018. http://www.ecdms.energy.ca.gov/gasbyutil.aspx

CEC. 2020. "Diesel Fuel Data, Facts, and Statistics." Accessed October 2020. http://www.energy.ca.gov/almanac/transportation_data/diesel.html.

City of Santa Monica. 2017. 2010 Land Use and Circulation Element. Last Amended 2017. https://www.smgov.net/Departments/PCD/Plans/2010-Land-Use-and-Circulation-Element/.

CPUC (California Public Utilities Commission). 2019a. 2018 Renewable Portfolio Standard Annual Report to the Legislature. November 2018. http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/Renewables%20Portfolio%20Standard%20Annual%20Report%202018.pdf

CPUC. 2019b. "Natural Gas and California." Accessed February 2019. http://www.cpuc.ca.gov/natural_gas/.

DMV (California Department of Motor Vehicles). 2019. *Statistics for Publication, January through December 2018.* March 2019. https://www.dmv.ca.gov/portal/uploads/2020/06/2019-Statistic-for-Publication-1.pdf.

EIA (U.S. Energy Information Administration). 2019a. "California Electricity Profile 2017." EIA, Electricity. Released January 8, 2019. https://www.eia.gov/electricity/state/california/index.php.

EIA. 2019b. "Natural Gas Consumption By End Use (California, 2017)." EIA, Natural Gas. Released January 31, 2019.

EIA. 2019c. "California State Profile and Energy Estimates – Table F16: Total Petroleum Consumption Estimates, 2017." Accessed January 2020. https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA.

Fehr and Peers. 2020. *1242 20th Street Wellness Center Project – Non-CEQA Traffic* Analysis. Memorandum. November 25, 2020. Prepared by Fehr and Peers for the City of Santa Monica.

SoCal Gas (Southern California Gas). 2018. Company Profile. Accessed July 2018. https://www.socalgas.com/about-us/company-profile.

The Climate Registry. 2020. Default Emission Factors. May 1. Accessed April 2020. https://www.theclimateregistry.org/wp-content/uploads/2020/04/The-Climate-Registry-2020-Default-Emission-Factor-Document.pdf.

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CHAPTER 5
OTHER CEQA CONSIDERATIONS

The California Environmental Quality Act (CEQA) Guidelines (14 California Code of Regulations (CCR) Sections 15126 and 15128) requires that an Environmental Impact Report (EIR) address specific environmental topics not covered within other chapters of the EIR. This chapter includes the following other considerations that are required in an EIR:

- Significant and Unavoidable Environmental Impacts (Section 5.1)
- Irreversible Environmental Effects (Section 5.2)
- Growth-Inducing Impacts (Section 5.3)
- Effects Found Not to Be Significant (Section 5.4)

5.1 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

The State CEQA Guidelines Section 15126.2(b) requires that an EIR describe any significant impacts that cannot be avoided, even with implementation of feasible mitigation measures. Specifically, Section 15126.2(b) states:

> Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.

As indicated in Chapter 4, Environmental Impact Analysis, of this EIR, the proposed project would not result in significant and unavoidable impacts. All impacts were determined to be less than significant or can be mitigated below a level of significance through feasible mitigation measures.

5.2 IRREVERSIBLE ENVIRONMENTAL EFFECTS

The State CEQA Guidelines Section 15126.2(c) mandates that an EIR address any significant irreversible environmental changes that would result from a project should it be implemented. Significant irreversible environmental changes/impacts would include the following (14 CCR 15126(c)):

- Primary and secondary impacts that would generally commit future generations of people to similar uses.
- Irreversible damage that can result from environmental accidents.
- Uses of nonrenewable resources where a large commitment of such resources makes removal or nonuse thereafter likely.

- Irretrievable commitments of resources where such consumption is not justified (e.g., the project results in wasteful use of energy).

Determining whether the proposed project may result in significant and irreversible effects requires a determination of whether key resources would be adversely degraded or destroyed in such a way that there would be little possibility of restoring them.

Commitment to Future Uses

The project site is currently occupied with a 2-story funeral home/chapel structure (part of which is occupied by a restaurant) with a connected 4-car garage, two 2-story former residential structures (currently leased as offices), and a surface parking lot. The existing funeral home and chapel ceased operation in 2016. The residential units have been vacant since that same time but are now leased as offices. However, portions of the structures on site remain vacant. Given the high land value of the project site and economic development pressures within the HMU District, it is unlikely that the project site would remain in its current state. Therefore, the project site would be developed with uses that are allowed within the HMU District, as is the proposed project. Since the project site is located within an area surrounded by existing healthcare and medical facility-related uses, the proposed project would not result in a land use change that would commit future generations to uses that are not prevalent in the project area.

Environmental Accidents

Potential environmental accidents of concern include those events that would adversely affect the environment or public due to the type or quantity of materials released and the receptors exposed to that release. Demolition and construction activities associated with the proposed project would involve some risk of environmental accidents. However, these activities would be conducted in accordance with all applicable federal, state, and local regulations, and would follow professional industry standards for safety. The potential release of hazardous materials during demolition or renovation of older buildings and ground-disturbing activities would be reduced from compliance with applicable regulations and incorporation of the mitigation measures outlined in Section 4.7, *Hazards and Hazardous Materials*.

Routine operation of the proposed project would include the use of various hazardous materials, including chemical reagents, solvents, fuels, paints, and cleaners. These materials would be used for building, grounds, and vehicle maintenance. Many of the hazardous materials used would be considered household hazardous wastes, common wastes, and/or universal wastes by the U.S. Environmental Protection Agency, which regards these types of wastes to be common to businesses and households and to pose a lower risk to people and the environment than other hazardous wastes when they are properly stored, transported, used, and disposed of.

With regard to medical waste, the proposed project would generate medical waste similar to the types of medical waste currently generated within the vicinity of the project site, at the nearby medical campuses (namely, Providence Saint John's Health Center and Santa Monica-UCLA Medical Center). Medical wastes are regulated by a state laws that set forth specific requirements for handling, treating, storing, and disposing of medical waste. Pursuant to the California Medical Waste Management Act of 1990, the proposed project would be required to prepare a medical waste management plan (MWMP) for submittal to the California Department of Public Health's Medical Waste Management Program, in the event that the Wellness Center generates medical wastes. The MWMP must describe the types and amounts of medical waste generated and how the waste would be disposed. Additionally, California Health and Safety Code, Division 20, Chapter 6.95, requires the preparation of a hazardous materials business plan (HMBP) for any business using 55 gallons (liquid) or 500 pounds (solid) or more of hazardous materials. HMBPs would contain information on hazardous materials inventory, inspections, training, recordkeeping, and reporting and is submitted electronically through the California Environmental Reporting System. Compliance with applicable regulations involving hazardous materials and potentially hazardous medical materials during operation would ensure that such materials are transported, used, stored, and disposed in a manner that minimizes the potential for upset and accident conditions resulting in the release of a hazardous material into the environment.

Use of Nonrenewable Resources

Construction of each of the proposed project's components would result in the use of nonrenewable resources, including energy sources such as electricity and petroleum. Temporary electric power for lighting and electronic equipment (such as computers inside temporary construction trailers and heating, ventilation, and air conditioning) would be provided by Southern California Edison. As discussed in Section 4.14, *Energy Consumption*, the amount of electricity used during construction would be minimal because demand from the use of several construction trailers by managerial staff and from electrically powered hand tools would only be during the hours of construction activities. Natural gas is not anticipated to be required during construction of the proposed project. The majority of the energy used during construction would be from petroleum. Fuel consumed by construction equipment and associated with the transportation of construction materials and construction worker commutes would be the primary energy resource expended during construction.

In addition, a variety of resource materials would be used during project construction, including steel, wood, concrete, and fabricated materials. Once these materials and fuels are used for construction, the commitment of such materials and fuels would be considered irreversible. The consumption of these resources would be spread out through the construction period. Consumption of these resources would occur with any development in the region and are not unique to the proposed project.

Operation of the proposed project would require commitment of nonrenewable resources related to energy consumption. At full build-out, the proposed project's operational phase would require electricity for operating the various buildings. Natural gas would be directly consumed throughout operation of the proposed project, primarily through building heating. The proposed project would also result in petroleum fuel consumption from motor vehicles traveling to and from the project site.

Although consumption of resources would necessarily occur, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of resources. Based on the analysis in Section 4.14, *Energy Consumption*, the proposed project is estimated to consume approximately 91,622 gallons of petroleum during the 23-month construction period. By comparison, California as a whole consumes approximately 19.3 billion gallons of petroleum per year (EIA 2019).The proposed project would be required to comply with the California Air Resources Board's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. Therefore, because petroleum use during construction would be temporary and minimal, the proposed project would not result in the excessive use of nonrenewable resources.

Additionally, the proposed project would include various sustainability features such as a photovoltaic system; an energy-efficient HVAC system that meets or exceeds the Santa Monica Municipal Code requirements; light-emitting diode (LED) lighting; low-flow plumbing equipment (including waterless urinals, two flush toilets, and automated restroom faucets); an Energy Management System to control the lighting and HVAC systems; occupancy sensors to control the lighting and HVAC systems; lighting and HVAC systems capable of demand response; Electronically Communicated Motors (ECM) for small HVAC units; and waste recycling. Additionally, as required by the City's Transportation Demand Ordinance, the proposed project will include a robust Transportation Demand Management (TDM) plan that will incorporate trip reduction strategies paid for and implemented by the project applicant. Therefore, the proposed project would not contribute to the wasteful, unnecessary consumption, or inefficient use of energy resources.

5.3 GROWTH-INDUCING IMPACTS

State CEQA Guidelines Section 15126.2(d) requires a discussion of a proposed project's potential to foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. New employees from commercial or industrial development and new residents from housing developments represent direct forms of growth. These direct forms of growth may have secondary physical effects on the environment.

A project could also indirectly induce growth by reducing or removing barriers to growth such as the extension of new public services, utilities, and roads into areas that have previously been undeveloped. The extension of such infrastructure into a non-serviced area can represent the elimination of a growth-limiting factor, thereby inducing growth. Increases in the population may tax existing community service facilities, requiring construction of new facilities and ultimately resulting in an increase in the pace of

development or the density of the existing surrounding development. Indirect growth-inducing impacts also occur when a new development increases the job growth in an area such that there is an increased demand for housing, facilities, and services.

The proposed project would involve the development of a new Wellness Center with research & development (R&D) and clinical/medical office uses. Although the exact number of employees is undetermined at this time, it is anticipated that project employees would be drawn from the existing regional and/or local labor force. Any indirect population growth would be minimal relative to the existing City residential population of approximately 92,000 (California Department of Finance 2002). Growth inducing impacts as a result of an increase in employees on site would be **less than significant**.

The proposed project would also generate short-term employment opportunities during construction, which would draw workers from the existing regional work force. The increased employment opportunities in the construction field could potentially result in increased permanent population and demand for housing in the vicinity of the project site. However, the employment patterns of construction workers in Southern California are such that it is not likely that they would relocate their households as a consequence of the construction employment generated by the proposed project.

Further, the proposed project would be located within a fully urbanized area of Santa Monica, which is well served by existing infrastructure. Major improvements to water, sewer, and circulation systems and drainage connection infrastructure would not be needed. The proposed project constitutes redevelopment within an urbanized area and does not involve development of major infrastructure through undeveloped areas, which would further induce population growth. Therefore, project implementation would not remove an obstacle to growth. Accordingly, it is not expected that this project would induce growth that would result in a significant impact.

5.4 ECONOMIC AND SOCIOECONOMIC IMPACTS

Section 15382 of CEQA Guidelines defines “significant effect on the environment” as a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the project including land, air, water minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.” CEQA Guidelines Section 15064(e) provides that economic and social changes resulting from a project shall not be treated as significant effects on the environment (see also CEQA Guidelines Sections 15358(b) and 15382). However, a social or economic change related to a physical change may be considered in determining whether a physical change is significant. As a result, social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment are not significant impacts that require analysis under CEQA.

The proposed project would result in the removal of existing on-site rent control apartment units (which have been vacant since 2016). Social and economic concerns related to the project’s contribution to the decline of the City’s supply of rent control units and housing affordability are policy issues rather than environmental issues required to be analyzed under CEQA. The existing on-site rent control units have been vacant since

2016 and the project Applicant has withdrawn the units from the rental market in accordance with the Ellis Act. Given the passage of time, former tenants have moved and relocated to other housing; and therefore, the demolition of the former rent control units as proposed by the project would not result in physical adverse effects on the environment. Changes to the physical environment as a result of the proposed project are addressed in the appropriate environmental topics in this EIR and the accompanying Initial Study.

5.5 EFFECTS FOUND NOT TO BE SIGNIFICANT

The State CEQA Guidelines Section 15128 requires that an EIR briefly describe potential environmental effects that were determined not to be significant, and therefore, were not discussed in detail in the EIR. The environmental issues discussed in the following sections were analyzed in the Initial Study (see Appendix A) and determined to not be significant as summarized below:

5.5.1 Aesthetics

Scenic Vista Effects

The City is largely urbanized and features a variety of natural and built visual resources. The urbanized and industrial nature of the project site and the immediate surrounding area limit opportunities for views to scenic resources. Therefore, **no impact** to scenic vistas would occur.

Scenic Resource within a State Scenic Highway

There are no designated scenic roadways within the City of Santa Monica. The nearest eligible (not designated) state scenic highway is Pacific Coast Highway located approximately 1.2 miles from the project site. Therefore, no impact to scenic resources within a state scenic highway would occur.

5.5.2 Agricultural and Forestry Resources

The project site is located in an urbanized area. According to the California Department of Conservation's California Important Farmland Finder, most of Los Angeles County is not mapped under the Farmland Mapping and Monitoring Program, and, thus, does not contain Prime Farmland, Unique Farmland, or Farmland of State Importance (collectively "Important Farmland") (DOC 2017). In addition, the Los Angeles County Williamson Act 2015/2016 Map designates the project site and surrounding land as non-Williamson Act Land (DOC 2016). Further, the project site is zoned HMU and would not conflict with existing zoning for timberland or timberland zoned Timberland Production. Implementation of the proposed project would not directly or indirectly result in the conversion of farmland or forest lands. **No impact** to agricultural or forest resources, and no cumulative impacts to agricultural resources would occur.

5.5.3 Biological Resources

The City of Santa Monica is largely urbanized. In general, suitable habitat for sensitive species, or special-status species, does not occur within the City The project site is not located in riparian habitat or a sensitive natural community. Additionally, the project site does not support any aquatic resources regulated by the U.S. Army Corps of Engineers or California Department of Fish and Wildlife as jurisdictional wetlands, waters of the United States, or waters of the state. No migratory wildlife corridors or native wildlife nursery sites occur on the project site. There are no habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans that apply to the City. **No impact** on biological resources, and cumulative impacts on biological resources would occur.

5.5.4 Geology and Soils

Landslide

The likelihood of a landslide is low due to the relatively flat topography at the project site. Additionally, there are no significant hillsides or unstable slopes within the vicinity of the project site. According to the Seismic Hazards Zone Map for the Beverly Hills Quadrangle, the project site is not identified as susceptible to landslides (CGS 2018). Similarly, the site is not located within a City-designated High Landslide Potential Area (City of Santa Monica 1995). Due to these site conditions, the proposed project would not expose people or structures to adverse risks associated with landslides. Therefore, impacts associated with landslides would be **less than significant**.

Soil Erosion or Loss of Topsoil

Temporary erosion could occur during grading and excavation of the project. However, since the proposed project is greater than 1 acre, the construction contractor is required to prepare and comply with a Storm Water Pollution Prevention Plan, which would provide erosion-control measures. Additionally, Section 7010.060 of the Santa Monica Municipal Code requires construction-phase erosion-control measures to reduce erosion-related impacts (City of Santa Monica 2018). Therefore, impacts related to soil erosion or loss of topsoil would be **less than significant**.

Septic Tanks or Alternative Wastewater Disposal Systems

The project site is served by the existing municipal sewer system. The City has established utility services, and no septic systems would be required to serve the proposed project. As a result, there would be **no impact**.

5.5.5 Hazards and Hazardous Materials

Hazards due to proximity to Airport or within an Airport Land Use Plan Area

The Santa Monica Municipal Airport is located approximately 1.8 miles south of the project site. However, the project site is not located within the boundaries of the Airport Influence Area for this airport (County of Los Angeles 2019). The Santa Monica Municipal Airport is governed by the Santa Monica Airport Code and the Los Angeles Regional Planning Commission/Airport Land Use Commission's Airport Land Use Compatibility guidelines. Normal airport operations that comply with applicable regulations would not pose a safety hazard to the surrounding areas, including the project site. Furthermore, the proposed project would not introduce structures to the project site having the potential to interfere with aircraft, resulting in a safety hazard. Furthermore, the City and the Federal Aviation Administration signed a settlement agreement that will lead to the eventual closure of the Santa Monica Municipal Airport after 2028 (FAA 2017). Therefore, the proposed project would not expose people working in the project area to airport safety hazards. Impacts would be **less than significant**.

Wildland Fire Risks

The project site is located in an urbanized area and is not located adjacent to, or in the vicinity of, wildland areas. There are no wildland fire risks to the project site. Therefore, the proposed project would have **no impact**.

5.5.6 Hydrology and Water Quality

Violate Water Quality Standards or Waste Discharge Requirements and Substantially Degrade Water Quality

Project construction would occur in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit (Order No. 99-08-DWQ) and the City of Santa Monica Urban Runoff Pollution Ordinance (Chapter 7.10 of the Santa Monica Municipal Code. In accordance with the ordinance, Best Management Practices (BMPs) and pollutant control measures would be employed during project construction to minimize pollutants and reduce runoff to levels that comply with applicable water quality standards.

During operation of the project, the project applicant would be required to implement good housekeeping practices to minimize polluted runoff and prepare an Urban Runoff Mitigation Plan in accordance with the City's Urban Runoff Pollution Ordinance. BMP provisions set forth in the Urban Runoff Mitigation Plan would be implemented throughout the operational life of the proposed project to reduce the discharge of polluted runoff from the project site. Therefore, impacts related to violation of water quality standards and waste discharge requirements would be **less than significant**.

Deplete Groundwater Supplies or Interfere with Groundwater Recharge

Because the City is largely urbanized and the project site has been previously developed, the proposed project will not materially change the runoff or permeability characteristic of the project site. Water used during construction for cleaning, dust control, and other uses would be nominal. Operations of the proposed project could increase the demand for water in the City. However, the City's anticipated groundwater supplies from Metropolitan are considered reasonably certain for planning and CEQA purposes, and are sufficient to serve the City demand under the proposed LUCE through 2030 (City of Santa Monica 2010). Therefore, construction and operation of the proposed project would result in a **less than significant impact** to groundwater supply and groundwater recharge.

Alter Existing Drainage Pattern

Implementation of the proposed project would replace existing primarily impervious surface areas with new impervious surface areas in the form of a new Wellness Center Building. Site-generated surface water runoff would continue to flow into nearby municipal drains and/or catch basins. In addition, as previously stated, an Urban Runoff Mitigation Plan would be in place throughout the operational life of the project to reduce erosion, siltation, or flooding effects.

The proposed project would replace existing primarily impervious surface areas with new impervious surface areas. Thus, implementation of the project would not increase the amount of impervious areas on the project site. Additionally, the City's Department of Public Works would have final review and approval of all project site plans to ensure that adequate drainage would be provided to accommodate the project's stormwater flows. Therefore, the proposed project would not create or contribute to runoff water that would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be **less than significant**.

Seiche, Tsunami, or Mudflow

A seiche is a standing wave occurring in an enclosed or partially enclosed body of water, such as a lake, reservoir, or bay. There are no enclosed or partially enclosed bodies of water near the project site. Therefore, the potential for inundation from a seiche is considered remote. **No impact** relative to a seiche would occur.

A tsunami is a large ocean wave caused by a significant undersea disturbance such as earthquakes. Areas susceptible to a tsunami in the City include areas below the Palisades Bluff and approximately ¼ mile from the ocean. The project site is located approximately 1.5 mile inland (east) of the Pacific Ocean. Therefore, inundation risk from a tsunami is considered very low. **No impact** would occur.

Mudflows (also called debris flows) result from the downslope movement of soil and/or rock under the influence of gravity. The project sites and surrounding vicinity is characterized by relatively flat topography.

Given the absence of any steep slopes nearby, the project site would not be at risk from inundation by mudflow. **No impact** would occur.

Groundwater Management Plan

The proposed project would comply with regional and local regulations requiring BMPs, and would not obstruct existing water quality control plans or groundwater sustainable management plans. In addition, the proposed project is entirely developed and would not introduce impervious areas over a significant groundwater recharge zone. Therefore, impacts associated with conflict with a water quality control plan or sustainable groundwater management plan would be **less than significant.**

Cumulative Hydrology and Water Quality Impacts

As analyzed above, the proposed project would experience a less than significant impact related to all hydrology and water quality issue areas. Considering the proposed project would not impact water quality, groundwater supplies, the existing drainage pattern, stormwater drainage systems, 100-year hazard flood areas (FEMA 2008), levees or dams, or result in inundation by seiche, tsunami, or mudflow, the proposed project would not combine with cumulative projects resulting in a significant impact to hydrology and water quality. Therefore, impacts to the proposed project would not be cumulatively considerable. Impacts would be **less than significant**.

5.5.7 Land Use and Planning

Division of an Existing Community

The proposed project would constitute infill development within an urban area, surrounded by residential and medical-related uses within the HMU District. No new roads or design features would separate or other divide existing land uses, and no roads or other access routes would be blocked or realigned. Development of the proposed project would not divide a currently established community. Therefore, the proposed project would result in **no impact**.

5.5.8 Mineral Resources

The project site has been developed and operating as an urbanized use. Additionally, the project site is not designated as an existing mineral extraction area by the State of California (DOC 2018). Development of the proposed project would not result in the loss of the availability of a known mineral resource that would be of value locally, regionally, or to the State of California. Therefore, construction and operation of the proposed project would not result in the loss availability of a known mineral resource or a mineral resource recovery site. Since the proposed project would experience **no impact** related to mineral resources, no cumulative impacts would occur.

5.5.9 Neighborhood Effects

Effects on Residential Neighborhoods

The project site is located in the HMU District of Santa Monica as defined by the LUCE. Allowed uses within this land use designation include hospital and medical office uses, pharmacies, residential care, rehabilitation and outpatient clinics, affordable, workforce and market-rate housing targeted at hospital employees, extended stay lodging for patient families, and supporting retail uses. The proposed project involves the construction of a new Wellness Center within the HMU District, which would serve to meet the evolving needs to the healthcare community and the City's residential neighborhoods. The project design is intended to provide substantial and meaningful community and project benefits that are aligned with the LUCE. Therefore, the proposed project's impact on residential neighborhoods and cumulative neighborhood effects would be **less than significant**.

5.5.10 Noise

Excessive Noise Near a Private Airstrip or a Public Airport

The project site is not located within the vicinity of a private airstrip, and the proposed project would not expose people to excessive noise levels from a private airstrip. The Santa Monica Airport is approximately 1.8 miles south of the project site. However, the project site is not located within the boundaries of the Airport Influence Area for this airport (County of Los Angeles 2019). According to the Airport Influence Area Map, the project site is located outside of the 65 CNEL Airport Land Use Noise Contour. Furthermore, the City of Santa Monica and the Federal Aviation Administration signed a settlement agreement that will allow for the eventual closure of the Santa Monica Municipal Airport after 2028 (FAA 2017). Therefore, there is little potential to expose people working in the project area to excess noise levels from a nearby airport. Impacts would be less than significant.

5.5.11 Population and Housing

The proposed project does not propose residential uses and as such, would not directly induce unplanned population growth. The proposed project consists of the development of a Wellness Center with R&D and clinical/medical office uses. Although the exact number of employees is undetermined at this time, it is anticipated that project employees could total approximately 206 and would be drawn from the existing regional and/or local labor force. Any indirect population growth would be minimal relative to the existing City residential population of 92,000 (California Department of Finance 2002). Further, the project does not involve development of major infrastructure, which would further induce unplanned population growth. Additionally, although the project site contains two structures formerly containing a total of residential 10 units, the units were withdrawn from the rental market under the Ellis Act and have been vacant since 2016; therefore, the proposed project would not displace people. Prior to demolition of the apartment structures, the project applicant would be required to obtain a removal permit from the City's Rent Control Board to

remove the existing rent control units in accordance with the City's Rent Control Ordinance. Since those units have been vacant since 2016, the proposed project would not substantially displace housing or people, necessitating the construction of replacement housing elsewhere. Social and economic concerns related to the project's contribution to the decline of the City's supply of rent control units and housing affordability are policy issues rather than environmental issues required to be analyzed under CEQA. Therefore, a **less than significant impact** associated with population/housing would occur.

5.5.12 Public Services

Fire Protection

The Santa Monica Fire Department operates four stations throughout the City. The proposed project would be served by Station 3 (132 19th Street), located approximately 260 feet south of the project site (City of Santa Monica 2018). The proposed project would result in new medical-related uses that would generate an incremental demand for fire protection services provided by SMFD. However, the proposed project would not result in unusually high fire risks such as those associated with mechanical fires, medical emergencies, or structural fires. Furthermore, the proposed project would comply with the applicable Fire Code and Building Code. Therefore, impacts on fire protection and emergency services would be **less than significant**.

Police Protection

The Santa Monica Police Department serves the proposed project site. The Santa Monica Police Department is located at 333 Olympic Drive, approximately 1.3 mile southwest of the project site. While the proposed project would not generate a residential population that would increase the demand for SMPD services, the proposed project would result in an increase in employees on the project site. However, the project's demand for SMPD services is not anticipated to be substantial given the medical office/R&D uses proposed and security measures proposed. Overall, the project would not generate the need for new or expanded police facility would be expected to be required. Therefore, impacts to police protection services would be **less than significant**.

Schools

Public education in the City of Santa Monica is provided by the Santa Monica-Malibu Unified School District. Implementation of the proposed project would result in medical-related facilities. Although the exact number of employees is undetermined at this time, it is anticipated that project employees would be drawn from the existing regional and/or local labor force. Any indirect population growth would be minimal and would not generate students, such that impacts to schools would occur. Therefore, impacts on schools would be **less than significant**.

Parks

The City of Santa Monica provides a number of recreation and park facilities to its residents. City residents and visitors have access to 32 public parks located throughout the City. The proposed project would not generate a residential population that would increase the demand for parks. While the proposed project would generate an increase in employees working on-site, the demand for parks and recreational services by employees is anticipated to be negligible since these employees do not typically recreate near their place of work (but rather their place of residence). Further, The proposed project would not generate a residential population that would increase the demand for parks. Therefore, the proposed project would have a **less-than-significant impact** to parks.

Other Public Facilities

The City of Santa Monica Montana Branch Library at located at 1704 Montana Avenue is the closest library to the project site. The proposed project would not generate a residential population that would increase the demand for libraries since these employees do not typically utilize libraries near their place of work. Therefore, impacts to other public facilities would be **less than significant**.

Cumulative Public Services Impacts

As analyzed above, the proposed project would experience less than significant impacts related to all public services areas. Considering the proposed project would not impact fire and police protection services, schools, parks, and other public facilities, the proposed project would not combine with cumulative projects resulting in a significant impact to public services. Therefore, impacts to the proposed project would not be cumulatively considerable. Impacts would be **less than significant**.

5.5.13 Recreation

As previously noted, the proposed project would not generate a residential population that would increase the demand for neighborhood parks and recreational facilities. As such, the proposed project would not result in a significant increased use of the existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur, or that the construction or expansion of such facilities would be required. Impacts would be **less than significant**, and impacts would not be cumulatively considerable.

5.5.14 Utilities-Infrastructure

Storm Water Drainage

Under the existing conditions, the project site is currently occupied with a 2-story funeral home/chapel structure (part of which is occupied by a restaurant) with a connected 4-car garage, two 2-story former residential structures (currently leased as offices), and a surface parking lot. Implementation of this project

would replace existing primarily impervious surface areas with new impervious surface areas in the form of a new Wellness Center Building. Thus, implementation of the project would not increase the amount of impervious areas on the project site. In accordance with the City's Urban Runoff Pollution Ordinance, the proposed project would include appropriate on-site design measures to store and use (for non-potable purposes), infiltrate, or evapotranspire project-generated runoff during a 0.75-inch storm event or alternatively pay a fee. Furthermore, the City's Department of Public Works would have final review and approval of all project site plans to ensure that adequate drainage would be provided to accommodate the project's stormwater flows. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded storm water drainage facilities. Impacts associated with storm water drain infrastructure would be **less than significant**.

Water Supply

Water used during construction for cleaning, dust control, and other uses would be nominal. Operations of the proposed project would increase the demand for water in the City as compared to the existing vacant uses on the project site. However, the proposed project would be subject to the City's Water Neutrality Ordinance, which would require new development to offset all increases in average five-year historical water use with on-site water efficiency measures, pay in-lieu fees, or perform/undertake the requirements at an off-site location. Furthermore, given that the project is consistent with the LUCE, such increase in water usage that could occur has been generally accounted for within the City's 2015 UWMP, which incorporates expected citywide growth through 2040. As analyzed in the City's UWMP, the City would have substantial surplus water capacity in 2020 and 2040 (as well as in 2041) under normal, single-dry, and multiple dry scenarios. Development of the proposed project would be considered infill or redevelopment and consistent with the LUCE, and therefore, water supplies would be sufficient to meet the project's water demand. Therefore, project construction- and operation-related water demand could be accommodated by the City's existing and future water supply and impacts to the City's water supply would be **less than significant**.

Cumulative Storm Water Drainage and Water Supply Impacts

For the reasons above, the proposed project would not require the construction of new stormwater drainage facilities or the expansion of existing facilities. Other projects in the vicinity of the proposed project would need to be evaluated on an individual basis with regard to stormwater drainage facilities. There are existing stormwater conveyance facilities in the area, and combined with other projects, the proposed project is not expected to cause a significant impact related to stormwater runoff because all projects would be designed to meet stormwater capacity. The proposed project would not substantially change total surface runoff and would not combine with surrounding projects to contribute to significant cumulative impacts.

Furthermore, the total cumulative water demand calculated in the UWMP was done prior to the adoption of the City's Water Neutrality Ordinance which requires all new development to offset its increase in water demand. Therefore, the City's future water demand would likely be less than

projected in the UWMP. The City will continue to undertake ambitious and aggressive efforts to increase water supply reliability and reduce water usage with new water conservation programs, regulations, and projects such as, the City's Sustainable Water Infrastructure Project. These efforts will enable the City to achieve its Citywide goal of 100% water self sufficiency, even as development occurs in the City. Impacts would be **less than significant**.

5.5.15 Wildfire

According to Cal Fire's Fire Hazard Severity Zone Viewer, the project site and surrounding area is not located in a very high fire hazard severity zone (VHFHSZ) (CAL FIRE 2020). The project site is located within a fully developed area and is not located adjacent to, or in the vicinity of, wildland areas. There are no designated open space areas surrounding the project site. As such, prevailing winds and other factors would not create or exacerbate wildfire risks. Land uses surrounding the project site encompass a mix of medical-related, healthcare, residential, and commercial land uses. The project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may create or exacerbate a fire risk or that may result in temporary or ongoing impacts to the environment. The project would not 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 project would not impair an adopted emergency response plan or emergency evacuation plan. **No impact** related to wildfire, and no cumulative impacts related to wildfires would occur.

5.6 REFERENCES

CAL FIRE (California Department of Forestry and Fire Protection). 2020. "FHSZ Viewer." Accessed November 12, 2020. http://egis.fire.ca.gov/FHSZ/.

California Department of Finance 2002. January Population and Housing Estimates. E-1 Cities, Counties and the State Population Estimates with Annual Percentage Change. Accessed December 7, 2020. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/

City of Santa Monica. 1995. City of Santa Monica General Plan Safety Element. Adopted January 1995. Accessed May 2017. https://www.smgov.net/uploadedFiles/Departments/PCD/Plans/General-Plan/Safety-Element/Adopted-Safety-Element-1995.pdf.

City of Santa Monica. 2010. *City of Santa Monica Land Use and Circulation Element Final Environmental Impact Report*. Adopted April 2010. Accessed July 2018. https://www.smgov.net/uploadedFiles/Departments/PCD/Environmental-Reports/2010-Land-Use-and-Circulation-Element-Final-Environmental-Impact-Statement.pdf.

City of Santa Monica. 2018. "Construction and Demolition Waste FAQs." Accessed July 25, 2018. https://www.smgov.net/Departments/PublicWorks/ContentSolidWaste.aspx?id=8137.

CGS (California Geological Survey). 2018. The Alquist-Priolo Earthquake Fault Zoning (AP) Map. Released January 11, 2018. http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/BEVERLY_HILLS_EZRIM.pdf.

County of Los Angeles. 2019. A-Net Web Mapping Application (Airport Land Use Commission Interactive Map) by the Los Angeles County Airport Land Use Commission. http://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=acf2e87194a54af9b266bf07547f240a.

DOC (Department of Conservation). 2016. "Los Angeles County Williamson Act FY 2015/2016." Accessed July 2018. ftp://ftp.consrv.ca.gov/pub/dlrp/wa/LA_15_16_WA.pdf.

DOC. 2017. Los Angeles County Important Farmland 2016. Published July 2017. ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/los16.pdf.

DOC. 2018. California Geological Survey Aggregate Sustainability in California. Updated 2018. Accessed July 24, 2018. http://www.conservation.ca.gov/cgs/Documents/MS52_California_Aggregates_Map.201807.pdf.

EIA (U.S. Energy Information Administration). 2019. "California State Profile and Energy Estimates – Table F16: Total Petroleum Consumption Estimates, 2017." Accessed January 2020. https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA.

FAA (Federal Aviation Administration). 2017. "Settlement Agreement/Consent Decree between the Federal Aviation Administration and the City of Santa Monica." Signed January 2017. Accessed November 2020. https://www.faa.gov/airports/airport_compliance/santa_monica_settlement/.

FEMA (Federal Emergency Management Agency). 2008. "Flood Insurance Rate Map (06037C1590F)." Accessed May 2017. http://map1.msc.fema.gov/idms/IntraList.cgi?displ=wsp/item_06037C1590F.txt.

CHAPTER 6
ALTERNATIVES TO THE PROPOSED PROJECT

6.1 INTRODUCTION

The California Environmental Quality Act (CEQA) and State CEQA Guidelines requires that environmental impact reports (EIRs) include the identification and evaluation of a reasonable range of alternatives that would avoid or reduce the significant environmental impacts of the project, while still attaining most of the basic project objectives. This section of the EIR provides an analysis of the alternatives to the project.

6.2 CEQA REQUIREMENTS

The CEQA Guidelines states:

> "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." (14 CCR 15126(a))."

The alternatives selected for detailed review must avoid or substantially lessen one or more of the significant effects of the project "*even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly*" (14 CCR 15126.6(b)). Because the proposed project would not result in any significant and unavoidable effects to the environment, the range of alternatives that was selected for analysis in this EIR includes those that would result in reduced impacts when compared to those of the proposed project, even though those impacts have been identified as less than significant.

An EIR need not consider every conceivable alternative to a project. Rather, the State CEQA Guidelines direct that the selection of alternatives be governed by "*a rule of reason*." The selection of alternatives and their discussion must "*foster informed decision making and public participation*" (14 CCR 15126(a)). Among the factors that may be considered when addressing the feasibility of alternatives are: site suitability, economic viability, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the project proponent can reasonably acquire, control, or otherwise have access to an alternative site.

The State CEQA Guidelines require the analysis of a "no project" alternative and, depending on the circumstances, evaluation of alternative location(s) for the project, if feasible. Based on the alternatives analysis, an environmentally superior alternative is to be designated. In general, the environmentally superior alternative is the alternative with the least adverse impacts on the environment. If the environmentally superior alternative is the no project alternative, the EIR shall also identify another environmentally superior alternative among the other alternatives (14 CCR 15126.6(e)(2)).

Section 15126.6(d) of the State CEQA Guidelines states that alternatives analysis need not be presented in the same level of detail as the assessment of the proposed project. Rather, the EIR is required to provide sufficient information to allow meaningful evaluation, analysis and comparison with the proposed project. If an alternative would cause one or more significant impacts in addition to those of the proposed project, analysis of those impacts is to be discussed, but in less detail than for the proposed project.

As required by CEQA, this chapter identifies potential alternatives to the proposed project and evaluates their comparative environmental impacts.

6.3 PROJECT OBJECTIVES

Section 15124(b) of the State CEQA Guidelines requires a project description to contain a statement of a project's objectives and Section 15124(b) requires that the statement of objectives include the underlying purpose of the project. Chapter 3, Project Description, of this EIR identifies the applicant's objectives for the proposed project, which are also outlined below:

- **Historic Resource Preservation:** Implement a project that will preserve the historic character of the existing Gates, Kingsley, & Gates Funeral Home (GKGM) Building by adaptively reusing a significant portion of the structure for new uses on-site, in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.
- **Medical Research Advancement and Community Wellbeing:** Develop a state-of-the-art modern facility for medical research and related uses that would advance medical research/knowledge and promote the health and wellbeing of the community.
- **LUCE Consistency and Implementation**: Develop a transit-oriented and pedestrian-oriented medical wellbeing project that is consistent with the Healthcare Mixed Use (HMU) district and implements the City's Land Use and Circulation Element (LUCE), including high-quality architectural design, sustainable building design, pedestrian orientation, publicly accessible open space and green space, vehicle trip reductions through transportation demand management, and other community benefits.
- **Pedestrian Oriented Design**: Enhance the pedestrian realm of the existing neighborhood and create a pedestrian-oriented design along the 20th Street frontage. Provide design elements such as large, transparent windows, publicly accessible open space, and thoughtful landscaping improvements to create a continuous and pleasant pedestrian experience between Wilshire Boulevard and Santa Monica Boulevard.
- **Mobility and Circulation**: Provide an access plan that would promote safe and efficient circulation of vehicles to and around the site with sufficient on-site parking to accommodate the peak needs of the complementary combination of uses. Minimize the number of vehicle trips to the site by encouraging use of public transportation, carpools, alternative mobility options, bicycles, and walking. Provide ample on-site bicycle storage facilities for employees, patrons, and visitors.

- **Architectural Design**: Ensure high-quality architectural design that is compatible with the existing GKGM Building and the site's surroundings by incorporating design features such as setbacks, varied massing elements, and complementary materials.
- **Sustainability**: Build new and modern energy-efficient construction that meets the latest building and energy codes and eliminate contaminated urban runoff into the City's drainage system from the existing paved surface parking lot.
- **Employment, Economic, and Fiscal Benefits**: Provide an economically viable project that would contribute to the economic health of the City by attracting future medical and healthcare businesses that will generate local tax revenue, provide new construction jobs, and house new residents to support local businesses, including dining, shopping, and entertainment venues.
- **Community and Project Benefits**: Provide substantial and meaningful community and project benefits that are aligned with the LUCE, including publicly accessible ground floor open space, enhanced open space opportunities for employees and visitors, transportation demand management, high-quality architectural design, sustainability, payment of a transportation infrastructure fee, encouraged use of public transportation, bicycling and walking, enhanced pedestrian-oriented design features including widened walkways, outdoor seating and public use areas, pedestrian-oriented uses along street frontages, and local hiring.

6.4 ALTERNATIVES CONSIDERED AND REJECTED

The State CEQA Guidelines Section 15126.6(c) recommends that an EIR identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons for their rejection. Among the factors described by State CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in an EIR are failure to meet most of the basic objectives of the project, infeasibility, or inability to avoid significant environmental impacts.

With respect to the feasibility of potential alternatives to the project, State CEQA Guidelines Section 15126.6(t)(l) states the following:

> "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries ... and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site."

In determining an appropriate range of project alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and then rejected. Project alternatives were rejected because they could not accomplish the basic objectives of the proposed project; they would not reduce adverse environmental impacts; or they were considered infeasible to construct or operate.

No Project/Reoccupation of Former Uses

This alternative explored the reoccupation of the project site with the former uses of the existing buildings. Specifically, the existing GKGM Building would be updated/rehabilitated and reoccupied for use as a funeral home and chapel again. Additionally, the former residential buildings would be updated and upgraded to meet current building codes for occupancy. This alternative was rejected because it did not meet any of the project objectives. Furthermore, the GKGM building has already been altered within the interior to accommodate the existing restaurant.

As stated in State CEQA Guidelines 15126.6(a), the EIR should describe a reasonable range of alternatives "which would feasibly attain most of the basic objectives of the project." However, this alternative would not meet most of the project objectives. As discussed in Section 6.3, Project Objectives, above, the proposed project addresses the development of a facility dedicated to historical resource preservation, medical research advancement and community wellbeing, LUCE consistency and implementation, pedestrian-oriented design, mobility and circulation, architectural design, sustainability, employment, economic, and fiscal benefits, and community and project benefits. Further, the applicant is not obligated to reoccupy the project site with its former uses. As a result, the reoccupation of the project site with its former uses was rejected and is not evaluated in this EIR.

Alternate Site

CEQA does not require that an analysis of alternate sites always be included in an EIR. Pursuant to State CEQA Guidelines Section 15126.6(f)(2), in making the decision to include or exclude analysis of an alternate site, the "key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR." If no feasible alternative locations exist, the EIR must disclose the reasons for this conclusion.

The proposed project involves the development of a medical office/research & development Wellness Center on an existing site containing a surface parking lot and a former apartment building within the urbanized City of Santa Monica. The proposed medical office and research & development uses would be consistent with the LUCE and Zoning Ordinance's goals to address healthcare needs of the community and supports the continued viability of the two hospitals in the City, within the HMU District. The HMU designation allows for a variety of uses that support the City's two hospitals, and ensures continued improvement and ongoing expansion, while being sensitive to the surrounding residential neighborhoods in ways that meet the healthcare needs of the City and the sub-region.

Alternative sites that could accommodate development of the proposed project are limited in the City. An alternate site would have to be large enough to accommodate the project and would have to be zoned/designated to permit the development of medical office/research & development uses. Furthermore, development of the proposed project at an alternative site within the City would not necessarily reduce the

construction impacts of the proposed project and would likely result in similar or even potentially greater transportation impacts. The proposed medical office/research & development uses of the proposed project would be consistent with other similar medical office and hospital uses along 20th Street and the surrounding area. In general, relocation of the proposed project at an alternative location would likely result in similar or increased impacts at other infill locations within the City.

Further, the proposed project is focused on the development of particular sites that are under the ownership and control of the project applicant, where a substantial investment has been made in developing the proposed project that is uniquely suited to the project site. To pursue development at a different location would present a significant financial loss due to investments to date and those needed to design new projects and restart the entitlement process. As a result, alternative sites were rejected and are not analyzed in this EIR.

Alternate On-site Uses

According to the Santa Monica Municipal Code (SMMC), allowable uses within the HMU District include residential and daycare uses. An alternative was considered to adaptively reuse the existing GKGM Building as a day care, and develop new residential uses instead of the proposed medical office and research & development uses. Under this alternative, it is assumed that the rear garage portion of the GKGM Building, former apartment buildings, and surface parking would be demolished (similar to the project). Assuming Tier 2 standards (2.5 FAR), a total floor area of 112,522 sf could be provided on the site consisting of an approximately 7,400 sf day care and 105,123 sf residential building with up to 100 residential units.

The alternative on-site uses would require construction activities, which would have similar or greater effects as the proposed project as it relates to air quality, greenhouse gas (GHG) emissions, hazards, noise, and transportation. This alternative would also reduce the degree to which the project complies with applicable land use plans and policies. The overall purpose of the HMU District is to “provide for the future orderly expansion of the City’s hospitals and related healthcare facilities in order to meet the needs of both the community and region while protecting the integrity of the surrounding residential neighborhoods. The District fosters the evolving needs of the healthcare community with expanded medical office uses and outpatient services along with retail and non-medical services” (SMMC Section 9.13.010). As such, while residential uses and daycare uses are allowed to be developed within the HMU District, its primary purpose is to provide for the expansion of the City’s hospitals and related healthcare facilities. The project site is located across the street from the Providence Saint John’s Health Center campus and less than one mile from the Santa Monica-UCLA Medical Center. As such, development of the project site with healthcare-related uses would further the key objectives of the HMU District by expanding healthcare facilities that would support the nearby hospitals. Development of the project site with alternative on-site uses, such as residential and daycare uses, would not be consistent with the overall goal and purpose of the HMU District.

Additionally, this alternative would not meet most of the proposed project objectives. As discussed in Section 6.3, Project Objectives, above, the proposed project addresses the development of a facility dedicated to historical resource preservation, medical research advancement and community wellbeing, LUCE consistency and implementation, pedestrian-oriented design, mobility and circulation, architectural design, sustainability, employment, economic and fiscal benefits, and community and project benefits. Further, the project applicant is not obligated to develop the project site for other uses. Therefore, since this alternative would not achieve most of the project applicant's objectives and would not reduce the environmental effects of the project, this alternative was not selected for further analysis.

6.5 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

As described above, according to State CEQA Guidelines Section 15126.6(a) the purpose of analyzing project alternatives is to identify alternatives that "…*would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project."* According to Section 15126.6(e), an EIR alternatives analysis should include the analysis of a No Project Alternative to allow decision makers to compare the impacts of approving a proposed project with the impacts and foreseeable future of not approving that project.

While no significant and unavoidable impacts have been identified in association with the proposed project, the alternatives presented below would avoid or substantially lessen at least one of the less-than-significant impacts of the proposed project and/or have been selected to inform the decision-making process. The six alternatives analyzed are as follows:

- Alternative 1: No Project/No Build Alternative
- Alternative 2: No Project/Reasonably Foreseeable Development Alternative
- Alternative 3: Administrative Approval (AA) Project Alternative
- Alternative 4: Tier 1 (Reduced Project) Alternative
- Alternative 5: Tier 2 (2.5 FAR) Project Alternative
- Alternative 6: 20th Street Access Alternative

6.6 ANALYSIS FORMAT

In accordance with Section 15126.6(d) of the State CEQA Guidelines, each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the proposed project. Furthermore, each alternative is evaluated to determine whether the project objectives, identified in Chapter 3, Project Description, of this EIR would be substantially attained. The evaluation of each of the alternatives follows the process described below:

- A description of the alternative
- The net environmental impacts of the alternative before and after implementation of mitigation measures for each environmental issue area analyzed in the EIR are described. Where

applicable, the evaluation is divided between temporary impacts that would occur during the construction phase, and impacts that would occur during the operational phase.

- The magnitude and nature of environmental impacts prior to and following implementation of mitigation for each alternative are compared to the proposed project impacts for each environmental topic area as further evaluated in Chapter 4, Environmental Impact Analysis, of this EIR. Where the impact of the alternative would be clearly less than the impact of the proposed project, the comparative impact is said to be "less." Where the alternative's net impact would clearly be more than the proposed project, the comparative impact is said to be "greater." Where the impacts of the alternative and proposed project would be roughly equivalent, the comparative impact is said to be "similar." Where the impacts of the alternative would be the same as the proposed project, the comparative impact is said to be the "same." The evaluation also documents whether the impact would be entirely avoided or whether a significant impact could be reduced to a less than significant level without the need for mitigation measures.
- The comparative analysis of the impacts is followed by a general discussion of the extent to which the underlying purpose and project objectives could be attained by the alternative.

Pursuant to State CEQA Guidelines, Section 15126.6(e)(2), an EIR must identify an environmentally superior alternative, and where the no project alternative is identified as environmentally superior, the EIR is then required to identify an alternative from among the others evaluated as environmentally superior. At the end of the section, a table presenting a comparison between each of the alternatives and the proposed project is provided.

6.7 IMPACT ANALYSIS OF THE ALTERNATIVES

6.7.1 Alternative 1 - No Project/No Build Alternative

Alternative Project Description

Per State CEQA Guidelines Section 15126.6(e)(2), the No Project/No Build Alternative analysis shall discuss existing conditions at the time the Notice of Preparation (NOP) is published (January 9, 2018), as well as what would be reasonably expected to occur in the foreseeable future if the proposed project were not approved, based on current plans and consistent with available infrastructure and community services.[1] The environmental impacts of the no project alternative shall be compared to those of the proposed project.

[1] As described in Section 2.2.2, Notice of Preparation and Scoping Process, in this EIR, the conditions at the project site have changed since the time of the NOP. The vacant GKGM Building has become partially occupied by a restaurant, and the former residential structures are being leased as office spaces (although they are not fully occupied). For the reasons described in Section 2.2.2, the current existing conditions (i.e., partially occupied buildings) are considered the environmental baseline of the project site.

The State CEQA Guidelines state that "in certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment" (14 CCR 15126.6(e)(3)(B)). Under Alternative 1, the proposed project would not be developed. Rather, the project site would remain as is with the existing GKGM Building remaining partially occupied with a restaurant, two underutilized residential buildings leased as office space, and a surface parking lot. However, given the high land value of the project site and economic development pressures within the Healthcare Mixed-Use (HMU) District, it is unlikely that the project site would remain in its current underutilized state. Nonetheless, in compliance with CEQA, this EIR includes an analysis of a No Project/No Build Alternative that assumes no new development or uses would occur on the project site.

Analysis

Aesthetics

Under Alternative 1, the project site would not be redeveloped. The construction of a new building and adaptive reuse of a portion of the GKGM Building would not occur. No new lighting or glare sources would be introduced relative to existing conditions. The project site would continue to reflect its current conditions and character. Since no changes would occur, the project site would have no change from the existing environmental conditions. Therefore, Alternative 1 would have no impacts on scenic quality, light and glare, or shading in contrast to the proposed project, which would have less than significant impacts.

Air Quality

Construction Emissions

Under the Alternative 1, there would be no redevelopment of the project site. No construction activities would occur, and therefore, there would be no construction air pollutant emissions. In terms of construction air pollutant emissions, Alternative 1 would have no impacts, in contrast to the proposed project, which would have less than significant impacts after mitigation for construction emissions.

Operational Emissions

Under Alternative 1, the project site would not be redeveloped. The project site would remain occupied with the existing GKGM Building, two underutilized residential buildings (currently leased as offices), and a surface parking lot. No new buildings or improvements would occur, which would generation emissions from mobile sources, consumer products, energy use, and landscape maintenance. There would be no air quality impacts due to operational air quality emissions. Alternative 1would have no impacts, in contrast to the proposed project, which would have less than significant impacts.

Construction Effects

Under Alternative 1, there would be no redevelopment of the project site. No construction activities would occur on the project site; therefore, no construction impacts would occur. Alternative 1would have no impacts, (including construction-related air quality, noise, and traffic) in contrast to the proposed project, which would have less than significant impacts after mitigation for construction impacts.

Cultural Resources

Historic

Under Alternative 1, no demolition or adaptive reuse of existing buildings would occur; as such, the former residential structures and GKGM Building would remain on the project site. No alterations to the historic Tudor-style GKGM Building would occur, and the former residential structures would remain in place. Therefore, Alternative 1 would have no impacts, in contrast to the proposed project, which would have less than significant impacts after mitigation.

Archaeological Resources and Human Remains

Under Alternative 1, there would be no redevelopment of the project site. As there would be no construction or ground-disturbing activities, there would be no potential to uncover archaeological resources or human remains. Therefore, Alternative 1 would have no impacts, in contrast to the proposed project, which would have less than significant impacts with mitigation.

Geology and Soils

Under Alternative 1, no impacts related to seismic hazards or geologic conditions would occur since no new construction would occur and the underlying artificial fill and alluvial soils would not be exposed. Alternative 1 would not cause or exacerbate existing geologic/soil conditions that could pose a threat to public safety. Alternative 1 would have no impacts, in contrast with the proposed project, which would have less than significant impacts.

Paleontological Resources

Under Alternative 1, there would be no redevelopment of the project site. As there would be no construction or ground-disturbing activities, there would be no potential to uncover paleontological resources. Therefore, Alternative 1 would have no impacts, in contrast to the proposed project, which would have less than significant impacts with mitigation.

Greenhouse Gas Emissions

Under Alternative 1, the project site would not be redeveloped and no construction would occur on the project site. No new buildings or improvements would occur that could generate additional GHG emissions relative to current conditions. Therefore, there would be no GHG impacts associated with construction or operation. As such, Alternative 1 would have no impacts, in contrast with the proposed project, which would have less than significant impacts.

Hazards and Hazardous Materials

Under Alternative 1, there would be no redevelopment. The project site would remain occupied with the existing GKGM Building, two underutilized residential buildings (currently leased as offices), and a surface parking lot. There would be no increase in transport, use, or disposal of hazardous materials, and no changes in safety conditions relative to existing conditions. Alternative 1 would have no impacts, in contrast with the proposed project, which would have less than significant impacts with mitigation.

Land Use and Planning

Under Alternative 1, the project site would remain occupied with the existing GKGM Building, two underutilized residential buildings (currently leased as offices), and a surface parking lot. No new buildings or improvements would occur. However, given high land values and limited availability of development sites in the vicinity of the project site, it is unlikely that it would remain in its current underutilized condition. Economic interests and development pressures would likely result in development proposals similar to that of the proposed project.

Alternative 1 would not result in land use changes. The project site is zoned HMU District per the City's Zoning Ordinance. This zoning district is intended to provide for the future orderly expansion of the City's hospitals and related healthcare facilities in order to meet the needs of both the community and region while protecting the integrity of the surrounding residential neighborhoods. Alternative 1 would not provide community benefits that are associated with the proposed project. Additionally, Alternative 1 does not meet the LUCE goal of providing for the orderly expansion of the City's hospitals and related healthcare facilities. Even so, since no new change would occur, Alternative 1 would result in less than significant impacts.

Noise

Construction Noise

Under Alternative 1, there would be no redevelopment of the project site. No construction activities would occur on the project site; therefore, no construction noise from the use of construction equipment, such as heavy equipment, haul trucks, and additional worker trips, would occur. Therefore, construction noise impacts to sensitive receptors near the project site would not occur under Alternative 1. Alternative 1 would have no construction noise impacts, in contrast with the proposed project, which would have less than significant impacts with mitigation.

Operational Noise

Under Alternative 1, the project site would remain unchanged. No new operational noise sources would be introduced. Noise levels at the project site would remain consistent with existing noise levels. Alternative 1 would have no impacts related to operational noise, in contrast with the proposed project, which would have less than significant impacts.

Transportation

Under Alternative 1, the project site would remain occupied with the existing GKGM Building, two residential buildings (currently leased as offices), and a surface parking lot. No increase in vehicle miles traveled would occur relative to existing conditions. Additionally, no changes to the existing conditions of the site would occur. Since Alternative 1would have no impacts, impacts would be less than those of the proposed project, which would be less than significant. However, Alternative 1 would not provide the sustainability and mobility and circulation benefits on-site, which would be provided by the proposed project. Nonetheless, since Alternative 1would not generate any increase in vehicle miles traveled, no impacts would occur, compared to the proposed project's less than significant impacts.

Tribal Cultural Resources

Under Alternative 1, there would be no redevelopment of the project site. No ground disturbing activities that could potentially disturb tribal cultural resources would occur. Furthermore, no known tribal cultural resources have been identified per the City's tribal consultation efforts conducted under AB 52. Alternative 1 would have no impacts on tribal cultural resources, in contrast with the proposed project, which would have less than significant impacts with mitigation.

Utilities and Service Systems

Infrastructure

Under Alternative 1, the current conditions at the project site would not change. As such, no improvements to utilities would occur, including the construction of new water lines, wastewater collection or treatment facilities, and electric power, natural gas, and telecommunication facilities. As such, Alternative 1 would not generate the need for new or relocated infrastructure and would have no impacts, in contrast to the proposed project, which would have less than significant impacts with mitigation.

Solid Waste

Under Alternative 1, the current conditions at the project site would not change. Therefore, Alternative 1 would not generate additional solid waste relative to existing conditions and would have no impacts, in contrast to the proposed project, which would have less than significant impacts.

Energy Consumption

Under Alternative 1, the project site would remain occupied with the existing GKGM Building, two underutilized residential buildings (currently leased as offices), and a surface parking lot. Alternative 1 would not result in an increase in energy consumption from construction activities or operational activities, relative to existing conditions. As such, no impacts would occur, relative to the proposed project's less than significant impacts. However, it should also be noted that Alternative 1 would not implement more energy-efficient buildings or energy-saving features. Additionally, Alternative 1 would not build new and modern energy-efficient construction that meets the latest building and energy codes.

Conclusion

Alternative 1 would not include redevelopment of the project site; therefore, the project site would remain in its current condition. Alternative 1 would not result in new construction air pollutant emissions, potential discovery of archaeological and paleontological resources, construction-related hazards, construction noise, or construction-related traffic. In comparison, the proposed project would reduce these impacts to less than significant levels with the implementation of mitigation measures.

Furthermore, in terms of achieving the proposed project's objectives, Alternative 1 would not redevelop the project site with a new Wellness Center and would not meet the project objectives and goals related to the HMU District.

6.7.2 Alternative 2 - No Project/Reasonably Foreseeable Development Alternative

Alternative Project Description

Given the high land value of the project site and economic development pressures within the HMU District, it is unlikely that the project site would remain in its current state. Therefore, Alternative 2, the No Project/Reasonably Foreseeable Development Alternative, assumes reoccupation of the project site with new uses. Alternative 2 assumes reoccupation of the existing currently unoccupied portion of the GKGM Building with clinical/medical office as permitted by the existing HMU zoning and land use designation. The existing restaurant within the GKGM Building would remain as-is. The two underutilized existing two-story buildings would be fully occupied with office uses. Alternative 2 contemplates interior renovations that would upgrade the existing buildings, such as altering the existing floor plans and providing modern amenities. Repairs/upgrades, as necessary, would be undertaken to meet current market demands and Building Code requirements. The surface parking lot on the project site would remain in place to serve the parking needs of the tenants of the three buildings.

Table 6-1
Alternative 2

Building	Land Uses	Floor Area (square feet)
Rehabilitated Administration Wing of GKGM Building	Clinical/Medical Office	4,483
Existing Former Residential Buildings	Office	Approximately 2,584 sf/3 units Approximately 5,754 sf/7 units
	Total	**12,821**

Analysis

Aesthetics

Construction

Construction activities under Alternative 2 would involve the interior renovations that would upgrade the existing structures. Only minor external aesthetic changes (such as repainting of buildings, minor landscape plantings) would occur under Alternative 2. Therefore, the extent of construction activity would be minimal and construction would not conflict with regulations addressing scenic quality, including the standards in the Zoning Ordinance. As compared to the proposed project, construction activities would be less under Alternative 2. In addition, construction-related visual impacts would be less due to the reduction in construction activity and duration. Therefore, Alternative 2 would have reduce impacts, but impacts would remain less than significant.

Operation

Under Alternative 2, no new buildings would be constructed. The project site would continue to reflect its current conditions and character, with the existing Tudor-style GKGM Building, two former residential buildings, and a surface parking lot. Only minor external aesthetic changes (such as repainting of buildings, minor landscape plantings) would occur under Alternative 2. Therefore, the project site would have minimal change from the existing environmental conditions and would not conflict with regulations addressing scenic quality, including the standards in the Zoning Ordinance. Therefore, Alternative 2 would have no impacts on scenic quality, light and glare, or shading in contrast to the proposed project, which would have less than significant impacts.

Air Quality

Similar to the proposed project, Alternative 2 would not conflict with the 2016 Air Quality Management Plan (AQMP), because this alternative would not contribute to population growth in excess of the AQMP's population forecast and would not cause or contribute to new air quality violations. In contrast to the

proposed project, Alternative 2 would not result in the construction of new buildings and would have minimal construction activities associated with rehabilitation of the existing buildings.

Construction

Under Alternative 2, there would be minimal construction activity as compared to the proposed project, and therefore, there would be fewer construction-related air quality impacts. With the reduction in construction activities under Alternative 2, there would be less construction-related criteria air pollutant emissions. The rehabilitation of the existing buildings would require less construction activity than the new building to be developed under the proposed project. Since the maximum daily construction emissions would not exceed SCAQMD significance thresholds for the proposed project, Alternative 2 would also not exceed the SCAQMD's thresholds. Impacts of Alternative 2 on air quality due to construction would be minimal and, like those of the proposed project, would be less than significant.

Construction activities under Alternative 2 would involve interior renovations that would upgrade and rehabilitate the existing buildings. Therefore, the extent of construction activity would be minimal, and odors generated from construction would be minimal. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people.

Section 4.2, Air Quality analyzes the proposed project's impacts from construction and operational air pollutant emissions to nearby sensitive receptors and health risks due to toxic air contaminants (TACs) and contribution of carbon monoxide (CO) at CO hotspot intersections. The analysis concludes that TAC emissions from construction activities of the proposed project would result in a potentially significant impact; therefore, mitigation is required to reduce effects below a level of significance. As described previously, Alternative 2 would generate fewer pollutant emissions than the proposed project because no demolition activities or new construction of buildings would occur. Nearby sensitive receptors would not be exposed to TACs as a result of Alternative 2. Therefore, impacts of Alternative 2 on sensitive receptors would be less than significant, compared to the proposed project's impacts, which would be less than significant with mitigation.

Operation

Fewer trips would be generated under Alternative 2 as compared to the proposed project. As such, implementation of Alternative 2 would result in fewer air pollutant emissions due to mobile sources, including vehicle trips. Similar to the proposed project, Alternative 2 would result in emissions from area sources, including the use of consumer products and landscape maintenance equipment, and energy sources. However, due to the overall reduction in floor area, operational air pollutant emissions from area sources would be less. Alternative 2 and the proposed project would also meet regulatory energy efficiency requirements. Impacts of Alternative 2 on air quality would be less than those of the proposed project, which would result in less than significant impacts.

Additionally, the medical office uses and office uses that would reoccupy the existing buildings would not produce other adverse emissions including odors. Similar to the proposed project, typical odors generated from operation would be limited to vehicle exhaust generated by employees and patrons traveling to and from the project site and through the periodic use of landscaping or maintenance equipment. Alternative 2 would have no impacts, in contrast to the proposed project, which would have less than significant impacts.

Construction Effects

Construction activities under Alternative 2 would involve interior renovations and any necessary repair/upgrades to the existing buildings. Therefore, the extent of construction activity would be minimal and substantially less than the proposed project. Construction impacts of Alternative 2 would be less than significant, compared to the proposed project's impacts, which would be less than significant with mitigation.

Cultural Resources

Historic

Construction activities under Alternative 2 would involve interior renovations that would upgrade the existing unoccupied administrative portion of the GKGM Building, and any necessary repair/upgrades to the former residential buildings to allow for office occupancy. Similar to the proposed project, any interior renovations to the existing GKGM Building would require the implementation of mitigation measures and compliance with the Secretary of Interior Standards. However, Alternative 2 would have overall fewer impacts, since no demolition would occur in close proximity to the GKGM Building. Similar to the proposed project, Alternative 2 would result in a less than significant impact with mitigation.

Archaeological Resources and Human Remains

Under Alternative 2, there would be no ground-disturbing activities associated with new building construction. As such, there would be no potential to uncover archaeological resources or human remains. Therefore, Alternative 2 would have no impacts, in contrast to the proposed project, which would have less than significant impacts with mitigation incorporated.

Geology and Soils

No impacts related to geologic conditions would occur under Alternative 2, since no new construction would occur and there would be no exposure of artificial fill and alluvial soils. Alternative 2 would not cause or exacerbate existing geologic/soil hazards that could pose a threat to public safety. Alternative 2 would have no impacts, in contrast with the proposed project, which would have less than significant impacts.

Under Alternative 2, there would be no new construction. As there would be no construction or ground-disturbing activities, there would be no potential to uncover paleontological resources. Therefore,

Alternative 2 would have no impacts, in contrast to the proposed project, which would have less than significant impacts with mitigation incorporated.

Greenhouse Gas Emissions

Under Alternative 2, no new buildings would be constructed and the vacant portions of the existing buildings would be reoccupied. Therefore, construction activities at the project site and construction-related GHG emissions would be minimal and less than those of the proposed project. Once operational, the vehicle trips generated by Alternative 2 would be less than that of the proposed project. As such, vehicle-related GHG emissions would be less. Therefore, impacts associated with GHG emissions would be less than those of the proposed project. As is the case with the proposed project, GHG impacts of Alternative 2 would be less than significant.

Under Alternative 2, the existing unoccupied administrative portion of the GKGM Building would be reused as medical office space, and the former residential buildings would be fully occupied as offices. These uses would comply with water conservation, energy conservation, tree-planting, and other sustainability requirements established in the City's Green Building Code. As with the proposed project, Alternative 2 would not conflict with GHG reduction plans and other applicable plans adopted for the purpose of reducing emissions of GHGs. Impacts would less than significant as with the proposed project in terms of consistency with a GHG plan, policy, or regulation.

Hazards and Hazardous Materials

Construction

Under Alternative 2, the quantity of hazardous substances such as fuels for equipment and vehicles, new and used motor oils, cleaning solvents, and paints, used and stored on-site during rehabilitation activities for the reoccupancy of existing buildings would be greatly reduced from that of the proposed project. Proper use and disposal of these materials in accordance with federal, state, and local laws would not pose a significant risk to the public or to the environment.

Although Alternative 2 would not involve demolition, due to the age of the existing buildings, rehabilitation and interior construction work could result in exposure of workers and/or the public to lead-containing material (LCM) and asbestos-containing material (ACM). Upon compliance with local, state, and federal laws pertaining to the safe removal, treatment, and disposal of ACM and LCM, it is expected that workers, the public, and the environment would be protected from any hazards related to ACM and LCM to the extent practicable.

The project site is located near several sites where hazardous materials may have been released to the groundwater or soil. However, Alternative 2 would not result in ground-disturbing activities, which could result in the accidental release of contaminated soil or water during construction activities. Alternative 2

would comply with all local, state, and federal regulations related to hazardous waste during the minimal construction activities. Therefore, impacts of Alternative 2 would be less than significant, compared to the proposed project, which would be less than significant with mitigation.

The extent of construction activity would be minimal under Alternative 2. As such, Alternative 2 would not be expected to impair or physically interfere with the City's emergency response and evacuation plans as a result of construction-related activity or traffic. Emergency access would continue to be available via existing streets, including 20th Street and Arizona Avenue. Impacts as a result of Alternative 2 would not occur, compared to the proposed project, which would have less than significant impacts.

Operation

Routine operation of the Alternative 2, similar to the proposed project, would include the use of various hazardous materials, including chemical reagents, solvents, fuels, paints, and cleansers. Many of these materials are considered household hazardous wastes, common wastes, and universal wastes by the Environmental Protection Agency (EPA), which considers these types of wastes common to businesses and households and to pose a lower risk to people and the environment than other hazardous wastes when properly handled, transported, used, and disposed of. The new medical office use could result in various hazardous materials, such as sharps, medical waste, and biological waste. All hazardous materials generated and/or used on the project site would be managed in accordance with all relevant federal, state, and local laws, including the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR 4.5). Potential exposure to hazardous materials would be less than with the proposed project; and like the proposed project would be less than significant.

Land Use and Planning

As with the proposed project, Alternative 2 would be consistent with applicable standards and regulations of the existing HMU zoning and land use designations. No discretionary approvals would be required. No impacts under Alternative 2 would occur, compared to the proposed project, which would be less than significant.

Noise

Construction

The extent of construction activity would be minimal under Alternative 2. Alternative 2 would not involve demolition and grading activities and would not require construction equipment associated with these types of construction activities such as bulldozers, jackhammers, backhoes, and graders. As such, construction noise generated by Alternative 2 would be minimal and substantially reduced from those generated by the proposed project. As indicated in Section 4.9, Noise, the proposed project would require

mitigation to reduce construction-related impacts. Impacts from Alternative 2 would be less than the proposed project, which would result in less than significant impacts with mitigation.

Under Alternative 2, the extent of construction activity would be minimal and limited to interior renovations that would upgrade and rehabilitate the existing buildings. As compared to the proposed project, impacts from construction vibration would be less under Alternative 2 because there would be no demolition activities or new building construction. Additionally, reoccupation of the vacant portions of existing buildings would not result in operational groundborne vibration. Therefore, groundborne vibration impacts for Alternative 2 would be less than the impacts of the proposed project and would be less than significant.

Operation

Alternative 2 would generate fewer vehicle trips relative to the proposed project. As such, off-site roadway noise impacts due to vehicular trips would be less than significant.

On-site operational noise generated by Alternative 2 would be similar to the proposed project. As with the proposed project, on-site operational noise impacts from parking, mechanical equipment, and truck activities (at loading and trash collection areas would occur). There would be no enclosed parking garage or loading dock areas to contain on-site operational noise. However, in comparison to the proposed project, on-site operational noise impacts from Alternative 2 would be less than proposed project since there would be less uses and operational activities. Similar to the proposed project, impacts would be less than significant.

Transportation

The project site and surrounding area is served by several transit facilities and services. The project site is located approximately 0.7 mile by foot from the 17th Street/Santa Monica College Station of the Metro E Line and is well-served by bus transit service, including Big Blue Bus and Metro buses. The bus stops closest to the project site are on 20th Street southbound and at the Wilshire Boulevard/20th Street intersection. Alternative 2 would support employment near transit consistent with SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the City's LUCE. Furthermore, similar to the proposed project, this alternative would not physically impede, alter, or remove existing or planned transit, bicycle, or pedestrian facilities and would not conflict with the City's LUCE, Bike Action Plan, and Pedestrian Action Plan. Therefore, Alternative 2 would not conflict with an applicable program, plan, ordinance or policy addressing the circulation system. Impacts would be less than significant and similar to the proposed project.

Alternative 2 would consist of less than 50,000 square feet of commercial space. As such, it would be screened out from further vehicle miles traveled (VMT) analysis based on the City's criteria. Therefore, similar to the proposed project, no further analysis is required, and impacts would be less than significant.

Under Alternative 2, vehicular access would continue to be provided from 20th Street consistent with existing conditions. No hazardous design features such as sharp curves, dangerous intersections or curb cuts/driveways, or incompatible land uses would be introduced. Therefore, impacts associated with hazardous geometric design features or incompatible uses would not occur.

Under Alternative 2, the project site would continue to be accessible to emergency responders including the Santa Monica Fire Department (SMFD) via the existing streets during construction and operation. Under this alternative, there would no changes to the emergency vehicle access and circulation. Therefore, impacts associated with emergency access would not occur.

Tribal Cultural Resources

Under Alternative 2, there would be no new construction. As there would be no construction or ground-disturbing activities, there would be no potential to uncover tribal cultural resources. Therefore, Alternative 2 would have no impacts, in contrast to the proposed project, which would have less than significant impacts with mitigation incorporated.

Utilities and Service Systems

Infrastructure

Water Lines

Alternative 2 would not result in new construction, which would generate the need for new water lines, and would not substantially increase the water demand within the project site relative to existing conditions. A hydraulic evaluation of the City's future water distribution system was performed, based on future water demand projections, in the City Sustainable Water Master Plan (Kennedy/Jenks Consultants 2014). As a result of this evaluation, it was determined that the proposed project would not directly require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. Since Alternative 2 would result in less water demand compared to the proposed project, impacts would be less than those of the proposed project and would be less than significant.

Wastewater Collection and Treatment Facilities

As with the proposed project, Alternative 2 would generate wastewater typical of other office and medical office uses in the area. This alternative would result in an increase in wastewater generation compared to the existing conditions. The anticipated increase in wastewater generation from Alternative 2 was estimated using the City of Los Angeles Bureau of Sanitation sewage generation rates. The amount of wastewater that would be generated by this alternative and the proposed project is shown in Table 6-2.

Table 6-2
Alternative 2-Estimated Wastewater Generation

Land Uses	Square Feet	Wastewater Demand Factor[1]	Wastewater Generation (gpd)
Proposed Uses			
Clinical/Medical Office	4,483	250 gpd/1,000 gsf	1,121
Office	8,338	120 gpd/1,000 gsf	1,001
		Total	**2,122**
		Total Proposed Project	**18,203**

Source: Dudek 2020.
[1] Based on sewage generation rates provided by the City of Los Angeles Bureau of Sanitation. All calculations rounded to the nearest whole. Parking uses are considered to have negligible water demand.
gpd = gallons per day
gsf = gross square feet

Based on the City's sewer model, a preliminary review of the proposed project's wastewater flows indicates that the existing line is adequate to serve the proposed project. Since Alternative 2 would generate less wastewater flows than the proposed project, the existing lines could adequately serve Alternative 2.

Wastewater flows from the City are treated at the Hyperion Treatment Plant (HTP), which has a dry-weather capacity of approximately 450 million gallons per day (mgd) processed through full secondary treatment and a wet-weather capacity of 800 mgd. The HTP currently meets applicable water quality standards, and is anticipated to have sufficient capacity to serve the proposed project. Therefore, Alternative 2 (which would generate less wastewater than the project and similar wastewater quality) would also not exceed the wastewater treatment requirements of the applicable Regional Water Quality Control Board and would not exceed the capacity of the HTP. Therefore, Alternative 2 would not directly require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects.

Electric Power, Natural Gas, and Telecommunication

The proposed project would not result in significant impacts associated with electric, natural gas, and telecommunication lateral connections to the project site. Since Alternative 2 would not result in the construction of new buildings, impacts would be reduced relative to the proposed project but would remain less than significant.

Solid Waste

Construction of Alternative 2 would not generate construction waste such as asphalt and concrete because no demolition would be required and no new building would be constructed. Any waste generated during rehabilitation and upgrade activities of the existing buildings would be minor and substantially less than solid waste generated by the proposed project. Due to the significant reduction in

construction activities, the amount of construction waste would be less than the proposed project. Impacts of Alternative 2 would, as is the case with the proposed project, be less than significant.

Solid waste generation for the alternative during operation and maintenance was calculated per the City's solid waste generation rates for medical office and office uses. The amount of solid waste generated by this alternative is shown in Table 6-3.

Table 6-3
Alternative 2-Estimated Solid Waste Generation

Proposed Land Uses	Square Feet	Solid Waste Generation Rate (day)[1]	Solid Waste Generation
Clinical/Medical Office	4,483	0.006 lbs/sf	27 lbs/day
Office	8,338	0.006 lbs/sf	50 lbs/day
		Total	**77 lbs/day**
		Total Proposed Project	**491 lbs/day**

Notes:
[1] *City of Santa Monica 2010*.
Lbs = pounds

Alternative 2 would generate less solid waste than the proposed project. As with the proposed project, the increase in solid waste generated by Alternative 2 would be minimal when compared to the typical yearly volume of waste handled by the City in a single year. As indicated in Section 4.13, Utilities and Service Systems – Solid Waste, the Los Angeles County has adequate landfill capacity to accommodate waste disposal needs for the next 15 years. Impacts of t Alternative 2 would, as is the case with the proposed project, be less than significant.

Like the proposed project, under the Alternative 2, all collection, transportation, and disposal of municipal solid waste would continue and occur in accordance with all applicable federal, state, and local statues and regulations. During construction, construction activities would comply with waste diversion standards contained within Santa Monica Municipal Code Chapter 8.108. Additionally, consistent with City requirements and State goals for reducing solid waste, trash and recycling collection bins would be provided. Medical-related waste, in the event it is generated, would be stored on-site per regulatory and industry procedures and transported off-site by qualified vendors in accordance with applicable regulations. Impacts of Alternative 2 would, as is the case with the proposed project, be less than significant.

Energy Consumption

Construction

During construction activities, Alternative 2 would result in energy consumption that would be minimal and temporary; therefore, impacts would be less than significant. Energy use during rehabilitation and

repair/upgrade activities of the existing buildings would be minor and substantially less than that of the proposed project. Impacts of Alternative 2 during construction would, as is the case with the proposed project, be less than significant.

Operation

Alternative 2 would require the use of energy for operations. However, Alternative 2 would require less energy consumption than the proposed project due to the reduction in uses. Under Alternative 2, it is anticipated that the existing buildings would be rehabilitated and upgraded to include various sustainability and energy efficiency features in compliance with current codes. With these features, Alternative 2 would provide opportunities for improved energy efficiency that would support state and local plans for increasing renewable energy efficiency. For the reasons stated, Alternative 2 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts of Alternative 2 during operation would, as is the case with the proposed project, be less than significant.

Conclusion

Alternative 2 would result in new medical office uses within the existing GKGM Building and full reoccupancy of former residential buildings with office uses. There would be no demolition, no ground-disturbing activities, and no new construction of new buildings. As such, construction activities would be substantially reduced as compared to the proposed project, along with impacts associated with all resources areas, as described above. Such impacts with regards to the above-mentioned environmental issue areas would be less than the proposed project's less than significant impacts.

Alternative 2 would help to meet project objectives related to historic resources preservation because the existing GKGM Building would be rehabilitated in accordance with the Secretary of the Interior Standards. However, this alternative would not allow for the construction of a new wellness center, which is the primary project objective. Furthermore, as compared to the proposed project, this alternative would not meet the project's objectives for Pedestrian Oriented Design, Sustainability, Architectural Design, and Community and Project Benefits.

6.7.3 Alternative 3 – Administrative Approval Project Alternative

Alternative Project Description

Alternative 3, Administrative Approval (AA) Project Alternative would add 15,000 sf of new development to the existing GKGM Building for an administrative approval. For this alternative, no development review permit per SMMC Section 9.40.020 is required. Alternative 3 would not involve the demolition of the rear garage portion of the existing GKGM Building. To accommodate the new medical office uses, the existing administrative portion of the GKGM Building would be rehabilitated and interior renovations would be made to upgrade the building, such as altering the existing floor plans and providing modern amenities. These

improvements would be conducted in accordance with the Secretary of the Interior Standards. The existing restaurant within the GKGM Building would remain as-is.

Under Alternative 3, the existing two-story former residential buildings would be demolished, similar to the proposed project. In place of these buildings, a new one-story 15,000-sf building addition to house medical office uses would be constructed. The maximum height of the building addition would be approximately 18 feet. It is anticipated that the new building addition would be designed in a similar architectural style as the proposed project, but with decreased ground floor footprint and height due to the reduction in size/massing.

In total, this alternative would provide 19,483 sf of medical office uses with a FAR of 0.54.[2] It is assumed that a two-level subterranean parking garage would be constructed to accommodate parking; the total number of parking spaces would not exceed the amount of parking allowed by the City's Municipal Code. Access to the garage would be provided off the alley.

Table 6-4
Alternative 3

Building	Land Uses	Floor Area (square feet)
Rehabilitated Administration Wing of GKGM Building	Clinical/Medical Office	4,483
New Building	Clinical/Medical Office	15,000
	Total	**19,483**

Analysis

Aesthetics

If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Construction

Construction activities associated with Alternative 3 would temporarily alter the visual character and quality of the project site, similar to the proposed project. The extent of construction activity would be less than the proposed project due to the reduction in development. Within the construction area, an assortment of construction vehicles and equipment, including excavators, crawler tractors, graders, loaders, scrapers,

[2] The FAR is calculated based on the floor area within the above-ground portions of the buildings only and includes the existing restaurant floor area. The following square footages are used in the FAR calculation: 19,483 sf of medical office uses; 1,416 sf of existing garage; and 3,356 sf of existing restaurant, for a total of 24,255 sf of building area on a 45,009 sf project site. (24,255 / 45,009 = 0.54 FAR)

dozers, and cranes, may be in operation during working hours and a temporary influx of construction workers would occur. Similar to the proposed project, the staging of construction equipment and vehicles and the demolition and construction of structures on the site would not be noticeable to off-site viewers in the surrounding area, because construction fencing would be erected pursuant to SMMC requirements. As compared to the proposed project, construction activities would be less under Alternative 3 because there would be no demolition of the rear garage portion of the GKGM Building, and the new structure proposed for construction totals 15,000 sf compared to 68,329 sf under the proposed project. In addition, construction-related visual impacts would be less due to the reduction in construction duration. Impacts of Alternative 3 would be less than those of the proposed project, whose impact would be less than significant.

Operation

Alternative 3 would adaptively reuse a portion of the existing GKGM Building and demolish the existing former residential buildings and surface parking lot to develop a new 15,000-sf one-story building addition. Under Alternative 3, the new 15,000 sf building addition would be designed in a similar architectural style/footprint as the proposed project, but with increased ground floor opening space due to the reduction in size and massing. Alternative 3 would also incorporate a contemporary architectural style with façade articulations, varied building materials and differentiated wall surfaces. However, these changes would not substantially alter comparative impacts regarding visual character. Similar to the proposed project, this alternative would be subject to Zoning Ordinance standards regarding building design, such as set backs and step backs. Furthermore, the height would be reduced from 45 feet to 18 feet. Overall, as with the proposed project, this alternative would not conflict with applicable zoning and other regulations governing scenic quality. Furthermore, per Section 21099(d)(1) of the Public Resources Code (PRC)), aesthetic impacts shall not be considered a significant unavoidable impact on the environment since the development would be an employment project within an urban transit priority area. Impacts of Alternative 3 would be similar to the proposed project, and the impact would be less than significant.

Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Construction

As with the proposed project, construction for Alternative 3 could require the use of portable lighting for construction. Any use of portable lighting elements on the project site during construction would be temporary and of short duration (for example, during the last hour of the workday in late fall and winter months). Portable lighting would be used to illuminate the development area and use would be concentrated onto the area of active construction (i.e., widespread use of portable lighting across the project site during individual phases would not occur). Further, use of portable lighting would conform to applicable shielding, light trespass, and maximum height standards established by the SMMC, Section 9.21.080(C)(3)(4)(5). As compared to the proposed project, construction activities would be less under Alternative 3 because there

would be no demolition of the rear garage portion of the GKGM Building, and the new structure proposed for construction would be significantly reduced in size. Exposure to construction lighting would be less due to the reduction in construction duration. Therefore, impacts of Alternative 3 would be less than those of the proposed project, whose impacts would be less than significant.

Operation

Existing development on the project site includes interior and exterior lighting sources. Streetlights, parking garages and lots, and commercial, residential, and healthcare development in the immediate area also contribute lighting to the nighttime environment. As with the proposed project, Alternative 3 would include the installation of new interior and exterior lighting fixtures, including at outdoor lighting entryways/driveways, along pedestrian pathways, and at/within the subterranean parking garage. However, all new lighting fixtures would be shielded "so as not to produce obtrusive glare" onto the public right-of-way or adjacent properties and that light be primarily retained on-site ("lighting may not illuminate other properties in excess of a measurement of 0.5 foot candles of light") (SMMC, Section 9.21.080(C)). Additionally, compliance with SMMC Section 9.21.120 regarding the use of reflective materials would ensure that no more than 25 percent of the surface area of any façade on any new building or addition to an existing building contains black or mirrored glass or other mirror-like material that is highly reflective. With the decreased building development, lighting sources would be less as compared to the proposed project. Therefore, impacts of Alternative 3 would be less than those of the proposed project, whose impacts would be less than significant.

Would the project produce extensive shadows affecting adjacent uses or property?

Under Alternative 3, the vacant portion of the existing GKGM Building would be reused as medical office space, and a new one-story building would be constructed. As such, new shading would be less as compared to the proposed project's three story building. Therefore, Alternative 3 would have less impacts related to shading in contrast to the proposed project, and such impacts would also be less than significant.

Air Quality

Would the project conflict with or obstruct implementation of the applicable air quality plan?

Similar to the proposed project, Alternative 3 would not conflict with the 2016 AQMP, because this alternative would not contribute to population growth in excess of the AQMP's population forecast and would not cause or contribute to new air quality violations. Under Alternative 3, the total building area would be reduced. As such, construction emissions overall would be substantially less than those that would occur the proposed project.

Under Alternative 3, the trip generation would be reduced relative to the proposed project. As such, the operational air emissions for Alternative 3 would be reduced. Therefore, the impacts would be less

under Alternative 3 than the proposed project, and like those of the proposed project, would be less than significant.

Would the project result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative threshold emissions which exceed quantitative thresholds for ozone precursors)?

Construction

Under Alternative 3, total building area would be reduced. There would be less construction activity than under the proposed project, and therefore, there would be less construction emissions than the proposed project. The maximum daily construction emissions for the proposed project would not exceed the SCAQMD's significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years. The duration and scope of construction of Alternative 3 would be substantially reduced relative to the proposed project. Thus, total construction emissions of Alternative 3 would also not exceed SCAQMD thresholds, and there would be fewer construction-related air quality impacts. Impacts of Alternative 3 on air quality due to construction would be less and, like those of the proposed project, would be less than significant.

Operation

Under Alternative 3, new land uses would include medical office uses similar to those of the proposed project. However, the amount of floor area would be reduced. Due to the reduction in floor area, Alternative 3 is expected to generate fewer vehicle trips relative to the proposed project.

As with the proposed project, implementation of Alternative 3 would result in air pollutant emissions due to mobile sources, including vehicle trips; area sources, including the use of consumer products and landscape maintenance equipment; and energy sources. Similar to the proposed project, Alternative 3 would also meet regulatory energy efficiency requirements. Alternative 3 would generate less pollutant emissions than the proposed project due to the reduction in trip generation and building space that would require less energy use. Air pollutant emissions from this alternative's clinical/medical office uses would be reduced from the proposed project. For these reasons, Alternative 3 would have less impact on air quality than the proposed project, and as is the case with the proposed project, would be less than significant.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Section 4.2, Air Quality analyzes the proposed project impacts from construction and operational air pollutant emissions to nearby sensitive receptors. It also evaluates health risks due to TACs and contribution of CO at CO hotspot intersections. TAC emissions from construction activities of the proposed project would result in a potentially significant impact; therefore, mitigation is required to reduce effects

below a level of significance. As described previously, Alternative 3 would generate fewer pollutant emissions than the proposed project due to the reductions in trip generation and building size. Although Alternative 3 would also result in diesel particulate matter (DPM) emissions from exhaust from on-site construction equipment and diesel vehicles, the reduction in new building construction would decrease the construction TAC exposure time to sensitive receptors. In addition, Alternative 3 would similarly implement mitigation measures to reduce impacts. Therefore, impacts would be reduced but would be still be considered less than significant with mitigation.

Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

As with the proposed project, odors would be potentially generated from vehicles and equipment exhaust emissions during construction of Alternative 3. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people.

Alternative 3 would entail the rehabilitation of a portion of the existing GKGM Building and construction of a new 15,000 sf building for clinical/medical offices. Similar to the proposed project, typical odors generated from operation of the clinical/medical offices would be limited to vehicle exhaust generated by employees or patrons traveling to and from the project site and through the periodic use of landscaping or maintenance equipment. Impacts of Alternative 3 related to odors would be similar to the proposed project, and as is the case with the proposed project, would be less than significant.

Construction Effects

Would the project have considerable construction-period impacts due to the scope, or location of construction activities?

Under Alternative 3, total building area would be reduced, resulting in a shorter construction duration. Additionally, construction impacts related to aesthetics, transport of hazardous materials, and emergency response plans would be similar during implementation of Alternative 3 compared to the proposed project. Nonetheless, the duration of construction, total construction air pollutant emissions, and construction-generated noise would be less under Alternative 3.

Alternative 3 would implement construction mitigation measures similar to those required for the proposed project; and construction impacts on a peak construction day would be similar to those of the proposed project. Alternative 3 would also result in DPM emissions from exhaust from on-site construction equipment and require implementation of MM-AQ-1; however, Alternative 3 would be shorter in construction duration and would result in a smaller development footprint, which would reduce the TAC exposure time to sensitive receptors. Therefore, Alternative 3 would result in fewer impacts than the proposed project, and impacts would be less than significant with mitigation.

Cultural Resources

Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

The existing GKGM Building would be rehabilitated in accordance with the Secretary of the Interior Standards. The new construction would require mitigation measures to ensure no impacts to historical resources would occur. However, Alternative 3 would not result in demolition of the rear garage portion of the GKGM Building. Similar to the proposed project, Alternative 3 would result in a less than significant impact with mitigation.

Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Grading activities during construction for Alternative 3 would occur within the footprint of the new building, which could uncover archaeological resources and human remains. Although the extent of construction is less than the proposed project, impacts would similarly be less than significant with mitigation.

Geology and Soils

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death, involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; Strong seismic ground shaking; Seismic-related ground failure, including liquefaction; or Landslides?

Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; caused in whole or in part by the project's exacerbation of the existing environmental conditions; or

Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect risks to life or property?

Under Alternative 3, the new building would be constructed to modern building codes to withstand seismic risks and to reduce potential impacts. Construction activities associated with Alternative 3 would entail excavation for the proposed subterranean levels and foundations, though excavation would be less as compared to the proposed project due to the smaller subterranean parking garage. However, as with all development within the City, Alternative 3 would be required to comply with the Santa Monica Building

Code (SMBC), similar to the proposed project. Measures to minimize the risk of geological hazards and soil collapse associated with temporary excavations are included in the SMBC. Under Alternative 3, geology and soils impacts are considered less than significant with adherence to the recommendations of site-specific geotechnical investigations. Therefore, impacts of Alternative 3 would be similar to the proposed project and would also be less than significant.

Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Grading activities during construction for Alternative 3 would occur within the footprint of the new building, which could uncover paleontological resources. Although the extent of construction is less than the proposed project, impacts would similarly be less than significant with mitigation.

Greenhouse Gas Emissions

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Under Alternative 3, construction activities would be similar to the proposed project; however, the size of the new building on the project site and associated parking garage would be reduced. The amount of floor area would be reduced, and excavation/grading would be significantly reduced. Therefore, construction activities at the project site and construction-related GHG emissions would be less than those of the proposed project.

Due to the reduction in floor area, Alternative 3 is expected to generate fewer vehicle trips relative to the proposed project. As such, vehicle-related GHG emissions would be less. Similar to the proposed project, Alternative 3 would result in GHG emissions from area sources, including the use of consumer products and landscape maintenance equipment and energy sources. Due to the reduction in floor area, operational air pollutant emissions from area sources would be less. Therefore, impacts associated with GHG emissions would be less than those of the proposed project. As is the case with the proposed project, impacts of Alternative 3 would be less than significant.

Would the project be inconsistent with any applicable plan, policy, or regulation of an agency that has been adopted for the purpose of reducing GHG emissions?

Alternative 3 would comply with water conservation, energy conservation, tree-planting, and other sustainability requirements established in the City's Green Building Code. This alternative would represent an infill redevelopment project within an urbanized area served by transit. The development of new medical office uses near existing transit and infrastructure would be consistent with GHG reduction plans, such as SCAG's RTP/SCS as well as the LUCE. As with the proposed project, Alternative 3 would not conflict with GHG reduction plans and other applicable plans adopted for the purpose of reducing emissions of GHGs. Impacts would be similar and less than significant as with the proposed project in terms of consistency with a GHG plan, policy, or regulation.

Hazards and Hazardous Materials

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

Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

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

Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would is create a significant hazard to the public or the environment?

Construction

Under Alternative 3, the quantity of hazardous substances such as fuels for equipment and vehicles, new and used motor oils, cleaning solvents, and paints, used and stored on-site during construction would be reduced from that of the proposed project. Proper use and disposal of these materials in accordance with federal, state, and local laws would not pose a significant risk to the public or to the environment.

Demolition and renovation of the existing former residential buildings at the project site as well as interior construction work within the GKGM Building could result in the release of hazardous building materials such as ACM and LCM, which may create a hazard for the public, with the potential to also affect students, staff, and visitors at nearby schools. However, LCM and ACM would be removed in accordance with applicable federal, state, and local laws. Upon compliance with local, state, and federal laws pertaining to the safe removal, treatment, and disposal of ACM and LCM, it is expected that workers, the public, and the environment would be protected from any hazards related to ACM and LCM to the extent practicable.

The project site is located near several sites where hazardous materials may have been released to the groundwater or soil. Under Alternative 3, in the event that off-site releases of hazardous materials have entered the soil or groundwater underlying the project site, contaminated soil or water could be encountered during construction activities. Additionally, the project site could potentially have an underground storage tank (UST), associated with a former automobile service bay. Soil contamination and/or removal and disposal of the UST could potentially expose workers or the public to hazardous materials associated with the chemicals that were stored in the UST, resulting in a potentially significant impact. As required by law, measures similar to those required for the proposed project would be implemented to ensure construction worker safety; and impacts would be similar to those of the proposed project. However, the construction duration for Alternative 3 would be reduced from that of the proposed project, and overall construction

impacts would be less than those of the proposed project. Impacts of Alternative 3 would, as is the case with the proposed project, be less than significant with mitigation incorporated.

Operation

Routine operation Alternative 3, similar to the proposed project, would include the use of various hazardous materials, including chemical reagents, solvents, fuels, paints, and cleansers. Many of these materials are considered household hazardous wastes, common wastes, and universal wastes by the EPA, which considers these types of wastes common to businesses and households and to pose a lower risk to people and the environment than other hazardous wastes when properly handled, transported, used, and disposed of.

Alternative 3 would also include operation of medical office uses such as laboratory modules, operation of specialized equipment, outpatient care, medical clinics, and medical administrative offices. There is the potential for a hazardous materials incident to occur, if hazardous substances are handled improperly or unsafely such that the substance is released or the public is exposed to the substance. However, medical wastes are regulated by state laws that set forth specific requirements for handling, treating, storing, and disposing medical waste. Pursuant to the California Medical Waste Management Act of 1990, Alternative 3 would be required to prepare a medical waste management plan (MWMP) for submittal to the California Department of Public Health (CDPH) Medical Waste Management Program, in the event that medical wastes are generated. Additionally, California Health and Safety Code, Division 20, Chapter 6.95, requires preparation of a hazardous materials business plan (HMBP) for any business using 55 gallons (liquid) or 500 pounds (solid) or more of hazardous materials.

Due to the types of materials that would be used on the project site and the existing regulations that are required to be put in place, Alternative 3 would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. All hazardous materials generated and/or used on the project site would be managed in accordance with all relevant federal, state, and local laws, including the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR 4.5). Similar to the proposed project, compliance with regulations would ensure that impacts associated with the use, handling, and disposal of hazardous waste would be less than significant. Potential exposure to hazardous materials would be slightly less than with the proposed project; and like the proposed project would be less than significant.

Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Similar to the proposed project, construction for Alternative 3 would involve activities typical of an urban infill development project, which are routine in an urban environment and would not be expected to impair or physically interfere with the City's emergency response and evacuation plans. Further, as with the proposed project, the site plan for Alternative 3 would be reviewed and approved by the SMFD during plan

check review to ensure safety and adequate emergency access. Emergency access would continue to be available via existing streets, including 20th Street and Arizona Avenue. Impacts of Alternative 3 would, as is the case with the proposed project, be less than significant.

Land Use and Planning

Would the project cause a significant environment impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Under Alternative 3, the floor area of development would be reduced. The maximum floor area and height of the building addition would be approximately 15,000 square feet and 18 feet, respectively, and medical office uses would be provided with a total FAR of 0.43. Alternative 3 would be developed in the HMU District under an Administrative Approval pursuant to SMMC Section 9.40.020. No discretionary review would be required. Similar to the proposed project, Alternative 3 would provide infill development and employment opportunities in close proximity to neighborhoods and major boulevards, creating more sustainable and complete communities. As with the proposed project, Alternative 3 would be consistent with the existing applicable standards and regulations of the existing HMU zoning and land use designations, and thus, would not cause a significant environmental impact due to conflicts with an applicable plan. Impacts related to consistency with plans and policies would be similar to those of the proposed project, and like the proposed project, impacts would be less than significant.

Noise

Would the project would result in a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Construction activities for Alternative 3 would be reduced from those of the proposed project, due to the decrease in new construction area and grading/excavation. This would result in a shorter construction duration, reducing the number of days with maximum levels of noise and vibration. However, the noise level on a peak construction day could be potentially similar to that of the proposed project. As indicated in Section 4.9, Noise, the City's construction noise standards would be exceeded, due to the proximity to sensitive uses, during several construction phases of the proposed project. As with the proposed project, construction activities including demolition, grading, and building construction would occur and require heavy haul equipment, haul trucks, and worker trips that would cause noise and vibration impacts. Therefore, with mitigation, impacts of Alternative 3 on sensitive receptors would be similar to those of the proposed project, and as is the case with the proposed project, would be less than significant.

Operation

Under Alternative 3, the trip generation would be reduced relative to the proposed project. As such, off-site traffic noise levels would be less than the proposed project, which would also be less than significant.

On-site operational noise generated by Alternative 3 would be similar to the proposed project. As with the proposed project, on-site operational noise impacts from parking garage, mechanical equipment, and truck activities (at loading docks and trash collection areas) under Alternative 3 would be similar to the proposed project, and similar to the proposed project, would be less than significant.

Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?

Similar to the proposed project, construction of Alternative 3 would generate groundborne vibration from various types of construction equipment such as drillers, loaders, jack hammers, and bulldozers. Periods of high vibration levels would occur primarily during demolition, excavation, and construction of the site foundation. As shown in Section 4.9*,* Noise, the maximum vibration levels for the proposed project would exceed the thresholds for potential for structural damage at the GKGM Building; the structural damage threshold would be exceeded up to a distance of 15 feet from heavy equipment such as a large bulldozer or caisson drill rigs. The potential vibration impacts would be reduced by the implementation of MM-NOI-1. In addition, Mitigation Measure MM-NOI-2 is prescribed to reduce vibration impacts directly. Similar to the proposed project, Alternative 3 could result in structural building damage to the GKGM Building as a result of construction vibration. Therefore, groundborne vibration impacts for Alternative 3 would be, as is the case of the proposed project, less than significant with mitigation.

Transportation

Would the project conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The project site and surrounding area is served by several transit facilities and services. The project site is located approximately 0.7 mile by foot from the 17th Street/Santa Monica College Station of the Metro E Line and is well-served by bus transit service, including Big Blue Bus and Metro buses. The bus stops closest to the project site are on 20th Street southbound and at the Wilshire Boulevard/20th Street intersection. As with the proposed project, Alternative 3 would support employment opportunities near transit consistent with SCAG's RTP/SCS and the City's LUCE. Furthermore, similar to the proposed project, this alternative would not physically impede, alter, or remove existing or planned transit, bicycle, or pedestrian facilities and would not conflict with the City's LUCE, Bike Action Plan, and Pedestrian Action Plan. Therefore, Alternative 3 would not conflict with an applicable program, plan, ordinance, or policy addressing the circulation system. Impacts would be less than significant and similar to those of the proposed project.

Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Alternative 3 would consist of less than 50,000 square feet of commercial space. As such, it would be screened out from further vehicle miles traveled (VMT) analysis based on the City's criteria. Therefore, similar to the proposed Project, no further analysis is required, and impacts would be less than significant.

Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Under Alternative 3, vehicular access would also be proposed from 19th Court with pedestrian access from 20th Street. The proposed driveway to the garage would be designed in accordance with all applicable design standards, including those addressing ADA accessibility, adequate width, and adequate turning radius. No hazardous design features such as sharp curves, dangerous intersections or curb cuts/driveways, or incompatible land uses are proposed. In addition, all site plans would be reviewed by the City's Mobility Division and Traffic Engineering Division for adequate line-of-sight provision at driveways, so no structures or landscaping would block the views of vehicles entering and exiting the site. Therefore, as with the proposed project, impacts associated with hazardous geometric design features or incompatible uses would be less than significant.

Would the project result in inadequate emergency access?

Under Alternative 3, the project site would continue be accessible to emergency responders, including SMFD, during construction and operation. As with the proposed project, Alternative 3 would comply with all applicable local requirements related to emergency vehicle access and circulation. Therefore, impacts associated with emergency access would be similar to the proposed project and less than significant.

Tribal Cultural Resources

Would the 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)?***
- ***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 shall consider the significance of the resource to a California Native American tribe?***

Grading activities during construction for Alternative 3 would occur within the footprint of the new building, which could uncover tribal cultural resources. Although the extent of construction is less than the proposed project, impacts would similarly be less than significant with mitigation.

Utilities and Service Systems

Infrastructure

Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Water Lines

A hydraulic evaluation of the City's future water distribution system was performed, based on future water demand projections, in the City Sustainable Water Master Plan (Kennedy/Jenks Consultants 2014). As a result of this evaluation, it was determined the proposed project would not directly require or result in the relocation or

construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. Alternative 3 would result in new construction, similar to the proposed project; however, Alternative 3 would develop 15,000 square feet of new building compared to the 68,329 sf under the proposed project. Thus, the development intensity of the proposed project would be greater, and thus, water demand would be greater. Therefore, the Alternative 3 would result in less impacts than the proposed project. Nevertheless, MM-UT-1 would still be required to ensure that additional demands can be accommodated. As such, impacts would be reduced relative to the proposed project but would remain less than significant with mitigation.

Wastewater Collection and Treatment Facilities

As with the proposed project, Alternative 3 would generate wastewater typical of other medical office uses in the area. This alternative would result in an increase in wastewater generation compared to the existing conditions. The anticipated increase in wastewater generation from Alternative 3 was estimated using the City of Los Angeles Bureau of Sanitation sewage generation rates. The amount of wastewater that would be generated by this alternative and the proposed project is shown in Table 6-5.

Table 6-5
Alternative 3-Estimated Wastewater Generation

Land Uses	Square Feet	Wastewater Demand Factor[1]	Wastewater Generation (gpd)
Proposed Uses			
Clinical/Medical Office	19,483	250 gpd/1,000 gsf	4,871
		Alternative 3	**4,871**
		Total Proposed Project	**18,203**

Notes:
1 Based on sewage generation rates provided by the City of Los Angeles Bureau of Sanitation. All calculations rounded to the nearest whole. Parking uses are considered to have negligible water demand.
gpd = gallons per day
gsf = gross square feet

Based on the City's sewer model, a preliminary review of the project's wastewater flows indicates that the existing line is adequate to serve the proposed project. Alternative 3 would generate less wastewater than the proposed project, as shown in Table 6-5. Therefore, impacts of Alternative 3 on wastewater treatment requirements and conveyance infrastructure would be less than that of the proposed project, and would be less than significant.

Wastewater flows from the City are treated at the HTP, which has a dry-weather capacity of approximately 450 mgd processed through full secondary treatment and a wet-weather capacity of 800 mgd. The HTP currently meets applicable water quality standards, and is anticipated to have sufficient capacity to serve the proposed project. Therefore, Alternative 3 (which would generate less wastewater than the proposed project and similar wastewater quality) would also not exceed the wastewater treatment requirements and would not exceed the capacity of the HTP. Therefore, Alternative 3 would not directly require or result

in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects.

Electric Power, Natural Gas, and Telecommunication

The proposed project would not result in significant impacts associated with electric, natural gas, and telecommunication lateral connections to the project site. Since Alternative 3 would result in fewer construction activities and a reduced building footprint, impacts would be less than the proposed project, but would remain less than significant.

Solid Waste

Would the 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

Construction of Alternative 3 would generate construction waste such as asphalt and concrete from demolition of the existing multi-family residential buildings and surface parking lot. As with the proposed project, this alternative would comply with SMMC Chapter 8.108, requiring submission of a waste management plan and requiring 70% of all construction and demolition material generated to be diverted. Alternative 3 would not demolish the rear garage area portion of the GKGM Building, and thus, fewer construction waste materials would be generated. Impacts of Alternative 3 would, as is the case with the proposed project, be less than significant.

Operation

Solid waste generation for the alternative during operation and maintenance was calculated per the City's solid waste generation rate. The amount of solid waste generated by this alternative is shown in Table 6-6.

Table 6-6
Alternative 3-Estimated Solid Waste Generation

Proposed Land Uses	Square Feet	Solid Waste Generation Rate (day)[1]	Solid Waste Generation
Clinical/Medical Office	19,483	0.006 lbs/sf	117 lbs/day
		Total Alternative 3	**117 lbs/day**
		Total Proposed Project	**491 lbs/day**

Notes:
[1] City of Santa Monica 2010.
Lbs = pounds

Alternative 3 would generate less solid waste than the proposed project. As with the proposed project, the increase in solid waste generated by Alternative 3 would be minimal when compared to the typical yearly volume of waste handled by the City in a single year. As indicated in Section 4.13, Utilities and Service Systems – Solid Waste, the Los Angeles County has adequate landfill capacity to accommodate waste disposal needs for the next 15 years. Impacts of the Alternative 3 would, as is the case with the proposed project, be less than significant.

Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Like the proposed project, under Alternative 3, all collection, transportation, and disposal of municipal solid waste would occur in accordance with all applicable federal, state, and local statues and regulations. During construction, construction activities would comply with waste diversion standards contained within SMMC Chapter 8.108. Additionally, consistent with City requirements and State goals for reducing solid waste, trash and recycling collection bins would be provided. Medical-related waste, in the event it is generated, would be stored on-site per regulatory and industry procedures and transported off-site by qualified vendors in accordance with applicable regulations. Impacts of Alternative 3 would, as is the case with the proposed project, be less than significant.

Energy Consumption

Would the project result in wasteful, inefficient, or unnecessary consumption of energy?

During construction activities, Alternative 3 would result in energy consumption that would be minimal and temporary similar to the proposed project; therefore, impacts would be less than significant. Under Alternative 3, the total floor area would be reduced. Alternative 3, as with the proposed project, would also require the use of energy for operations. However, under Alternative 3, the reduced floor area would require less energy consumption. Impacts of Alternative 3 would, as is the case with the proposed project, be less than significant.

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Alternative 3, similar to the proposed project, would include various sustainability features. With these features, Alternative 3 would provide opportunities for improved energy efficiency that would support state and local plans for increasing renewable energy efficiency. For the reasons stated, Alternative 3 would not conflict with or obstruct a state or local plan for renewable energy or energy efficient. Impacts of Alternative 3 would, as is the case with the proposed project, be less than significant.

Conclusion

Alternative 3 would have a development density that is reduced from the proposed project, and as such, would cause less change to the visual character and setting conditions. The trip generation would be reduced, along with construction impacts associated with air quality, noise, and transportation.

However, Alternative 3 would not meet most of the proposed project objectives. Although Alternative 3 would preserve the GKGM Building, provide modern medical facilities consistent with the HMU District policies in the LUCE, and would contribute to an improved pedestrian orientation along 20th Street (through removal of the existing surface parking lot), Alternative 3 would provide fewer jobs in close proximity to housing and transit to support the mobility and circulation objectives of the proposed project. Furthermore, this alternative would not provide research & development uses, a higher level of community benefits and greater support for the goals and policies related to the economic viability of the HMU District.

6.7.4 Alternative 4 – Tier 1 (Reduced Project) Alternative

Alternative Project Description

Alternative 4, Tier 1 (Reduced Project) Alternative, would adaptively reuse the vacant portion of the existing GKGM Building and develop a new 33,750 sf building adjacent to the GKGM Building. Alternative 4 represents a reduction when compared to the proposed project by developing a smaller building area. Similar to the proposed project, this alternative would develop the project site with medical office and research & development uses. This alternative would retain and adaptively reuse the currently unoccupied portion of the GKGM Building, and interior renovations would be made to upgrade the building to current standards, such as altering the existing floor plans and providing modern amenities. The existing restaurant within the GKGM Building would remain as-is.

The City's Zoning Ordinance establishes Tier 1 standards in the HMU District at a maximum height of 45 feet and a 1.5 FAR. In order to develop a reduced project alternative when compared to the proposed project, Alternative 4 considered the amount of developable area (22,500 sf) that would be used for the new building, which would allow for a 33,750-sf (maximum) structure that is mostly 1 to 2 stories in height (maximum 30 feet) at an FAR of 1.5 for that portion of the site. This new building would adjoin the GKGM Building and would be used for clinical/medical office uses.

In total, this alternative would provide 38,233 sf of medical office use with a FAR of 0.96.[3] It is assumed that a 3-level subterranean parking garage would be constructed to accommodate parking; the total number

[3] The FAR for Alternative 4 is calculated based on the floor area within the above-ground portions of the buildings only and includes the existing restaurant floor area. The following square footages are used in the FAR calculation: 38,233 sf of medical office uses; 1,416 sf of existing garage; and 3,356 sf of existing restaurant, for a total of 43,005 sf of building area on a 45,009 sf project site. (43,009 / 45,009 = 0.96 FAR)

of parking spaces would not exceed the amount of parking allowed by the City's Municipal Code. Access to the garage would be provided off the alley.

Table 6-7
Alternative 4

Building	Land Uses	Floor Area (square feet)
Rehabilitated Administration Wing of GKGM Building	Clinical/Medical Office	4,483
New Building	Clinical/Medical Office	33,750
	Total	**38,233**

Analysis

Aesthetics

If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Construction

Construction activities associated with Alternative 4 would temporarily alter the visual character and quality of the project site, similar to the proposed project. The extent of construction activity would be less due to the reduction in development. Within the construction area, an assortment of construction vehicles and equipment, including excavators, crawler tractors, graders, loaders, scrapers, dozers, and cranes, may be in operation during working hours and a temporary influx of construction workers would occur. Similar to the proposed project, the staging of construction equipment and vehicles and the demolition and construction of structures on the site would not be noticeable to off-site viewers in the surrounding area, because construction fencing would be erected pursuant to SMMC requirements. As compared to the proposed project, construction activities would be less under Alternative 4 because there would be no demolition of the rear garage of the GKGM Building, and the new structure proposed for construction would be reduced in size. In addition, construction-related visual impacts would be less due to the reduction in construction duration. Impacts of Alternative 4 would be less than those of the proposed project, whose impact would be less than significant.

Operation

Under the Alternative 4, the new building addition would be designed in a similar architectural style/footprint as the proposed project. Alternative 4 would also incorporate a contemporary architectural style with façade articulations, varied building materials and differentiated wall surfaces. Planters and landscaping would be installed along the north, east, and west elevation of the proposed building to soften metal and glass

elements. Strategic carve-outs and terraces would be incorporated to help reduce the perceived mass and scale of the project as experienced from adjacent properties and the nearby public realm. Similar to the proposed project, this alternative would comply with Zoning Ordinance standards regarding building design, such as set backs and step backs. Furthermore, per Section 21099(d)(1) of the Public Resources Code (PRC)), aesthetic impacts shall not be considered a significant unavoidable impact on the environment since the development would be an employment project within an urban transit priority area. Therefore, Alternative 4 would not conflict with applicable zoning and other regulations addressing scenic quality, and impacts would be similar to those be of the proposed project, whose impact would be less than significant.

Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Construction

As with the proposed project, construction for Alternative 4 could require the use of portable lighting for construction. Any use of portable lighting elements on the project site during construction would be temporary and of short duration (for example, during the last hour of the workday in late fall and winter months). Portable lighting would be used to illuminate the development area and use would be concentrated onto the area of active construction (i.e., widespread use of portable lighting across the project site during individual phases would not occur). Further, use of portable lighting would conform to applicable shielding, light trespass, and maximum height standards established by the SMMC, Section 9.21.080(C)(3)(4)(5). As compared to the proposed project, construction activities would be less under Alternative 4 because there would be no demolition of the rear garage portion of the existing GKGM Building, and the new structure proposed for construction would be reduced in size. Exposure to construction lighting would be less due to the reduction in construction duration. Therefore, impacts of Alternative 4 would be less than those of the proposed project, whose impacts would be less than significant.

Operation

Existing development on the project site includes interior and exterior lighting sources. Streetlights, parking garages and lots, and commercial, residential, and healthcare development in the immediate area also contribute lighting to the nighttime environment. As with the proposed project, Alternative 4 would include the installation of new interior and exterior lighting fixtures, including at outdoor lighting entryways/driveways, along pedestrian pathways, and at/within the subterranean parking garage. However, all new lighting fixtures would be shielded “so as not to produce obtrusive glare” onto the public right-of-way or adjacent properties and that light be primarily retained on-site (“lighting may not illuminate other properties in excess of a measurement of 0.5 foot candles of light”) (SMMC, Section 9.21.080(C)). Additionally, compliance with SMMC Section 9.21.120 regarding the use of reflective materials would ensure that no more than 25 percent of the surface area of any façade on any new building or addition to an existing building contains black or mirrored glass or other mirror-like material that is highly reflective.

With the decreased building development, lighting sources would be less as compared to the proposed project. Therefore, impacts of Alternative 4 would be less than those of the proposed project, whose impacts would be less than significant.

Would the project produce extensive shadows affecting adjacent uses or property?

Under Alternative 4, the unoccupied portion of the existing GKGM Building would be reused as medical office space, and a new one- to two-story building would be constructed. As such, new shading would be less as compared to the proposed project's three-story building. Therefore, Alternative 4 would have less impacts related to shading in contrast to the proposed project, and such impacts would also be less than significant.

Air Quality

Would the project conflict with or obstruct implementation of the applicable air quality plan?

Similar to the proposed project, Alternative 4 would not conflict with the 2016 AQMP, because this alternative would not contribute to population growth in excess of the AQMP's population forecast and would not cause or contribute to new air quality violations. In contrast to the proposed project, Alternative 4 would have slightly reduced air emissions due to the reduction in uses. Therefore, the impacts would be less under Alternative 4 than the proposed project, and like those of the proposed project, would be less than significant.

Would the project result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative threshold emissions which exceed quantitative thresholds for ozone precursors)?

Construction

Under Alternative 4, the reduction in total floor area would require less construction activity than the proposed project. With the reduction in construction under the Alternative 4, there would be less construction-related criteria air pollutant emissions and fewer construction-related air quality impacts. As shown in Section 4.2, Air Quality, of this EIR, the maximum daily construction emissions of the proposed project would not exceed SCAQMD's significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years. The duration of construction and total construction emissions would be fewer under Alternative 4 and as such, would also not exceed SCAQMD thresholds. The impacts of Alternative 4 on air quality due to construction would be less and, like those of the proposed project, would be less than significant.

Operation

As with the proposed project, implementation Alternative 4 would result in air pollutant emissions due to mobile sources, including vehicle trips; area sources, including the use of consumer products, natural gas hearths, and landscape maintenance equipment; and energy sources. Similar to the proposed project, Alternative 4 would also meet regulatory energy efficiency requirements. Alternative 4 would generate less pollutant emissions than the proposed project due to the reduction in building space that would require less energy use. Air pollutant emissions from the clinical/medical office uses would be similar or slightly reduced from the proposed project. Impacts of Alternative 4 on air quality would be, as is the case with the proposed project, less than significant.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Section 4.2, Air Quality analyzes the proposed project impacts from construction and operational air pollutant emissions to nearby sensitive receptors. It also evaluates health risks due to toxic air TACs and contribution of CO at CO hotspot intersections. TAC emissions from construction activities of the proposed project would result in a potentially significant impact; therefore, mitigation is required to reduce effects below a level of significance. As described previously, Alternative 4 would generate fewer pollutant emissions than the proposed project due to the reductions in total floor area. Although Alternative 4 would also result in DPM emissions from exhaust from on-site construction equipment and diesel vehicles, the reduction in new building construction would decrease the construction TAC exposure time to sensitive receptors. In addition, Alternative 4 would similarly implement mitigation measures to reduce impacts. Therefore, impacts would be reduced but would be still be considered less than significant with mitigation.

Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

As with the proposed project, odors would be potentially generated from vehicles and equipment exhaust emissions during construction of Alternative 4. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people.

Similar to the proposed project, typical odors generated from operation of the clinical/medical offices would be limited to vehicle exhaust generated by employees or patrons traveling to and from the project site and through the periodic use of landscaping or maintenance equipment. Impacts of the Alternative 4 related to odors would be similar to the proposed project, and as is the case with the proposed project, would be less than significant.

Construction Effects

Would the project have considerable construction-period impacts due to the scope, or location of construction activities?

Under Alternative 4, construction activities would be reduced from those that would occur under the proposed project. The reduced building size would be reflected in a shorter construction duration. Additionally, construction impacts related to aesthetics, transport of hazardous materials, and emergency response plans would be similar during implementation of Alternative 4 compared to the proposed project. Nonetheless, the duration of construction, total construction emissions, and construction-generated noise would be less under Alternative 4.

Alternative 4 would implement construction mitigation measures similar to those required for the proposed project; and construction impacts on a peak construction day would be similar to those of the proposed project. However, the construction duration for Alternative 4 would be reduced from that of the proposed project, and overall construction impacts would be less than those of the proposed project. Therefore, Alternative 4 would result in fewer impacts than the proposed project, and impacts would be less than significant with mitigation.

Cultural Resources

Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

As compared to the proposed project, construction activities would be less under Alternative 4 because there would be no demolition of the rear garage of the GKGM Building, and the new structure proposed for construction would be reduced in size. The adaptive reuse and construction activities occurring under Alternative 4 could result in significant impacts to the GKGM Building, and thus, would require mitigation. However, Alternative 4 would not result in demolition of the rear garage portion of the GKGM Building. Similar to the proposed project, Alternative 4 would result in a less than significant impact with mitigation.

Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Under Alternative 4, grading activities associated with the new building could uncover archaeological resources and human remains. Although no cultural resources were identified on the project site during the California Historical Resources Information System records search, impacts regarding the inadvertent discovery of cultural resources are potentially significant. Therefore, similar to the proposed project, impacts under Alternative 4 would be less than significant with mitigation.

Geology and Soils

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death, involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; Strong seismic ground shaking; Seismic-related ground failure, including liquefaction; or Landslides?

Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; caused in whole or in part by the project's exacerbation of the existing environmental conditions; or

Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect risks to life or property?

The new building constructed under Alternative 4 would be constructed to modern building codes to withstand seismic risks and to reduce potential impacts. Construction activities associated with Alternative 4 would entail excavation for the proposed subterranean levels and foundations. However, as with all development within the City, Alternative 4 would be required to comply with the SMBC. Measures to minimize the risk of soil collapse associated with temporary excavations are included in the SMBC. Under both the Alternative 4 and the proposed project, geology and soils impacts are considered less than significant with adherence to the recommendations of site-specific geotechnical investigations. Therefore, impacts of Alternative 4 would be similar to the proposed project and would also be less than significant.

Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Construction activities for Alternative 4 would be reduced from those of the proposed project, due to the decrease in new construction area and floor area . However, grading activities associated with the new building could still uncover paleontological resources. Given the proximity of the project site to past fossil discoveries, and due to the relatively shallow depths of discovery, the project site is moderately to highly sensitive for supporting paleontological resources. Therefore, impacts under Alternative 4 are, as is the case with the proposed project, less than significant with mitigation.

Greenhouse Gas Emissions

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Under Alternative 4, construction activities would be similar to the proposed project; however, the size of the new building on the project site would be reduced. The amount of floor area would be reduced. Therefore,

construction activities at the project site and construction-related GHG emissions would be less than those of the proposed project. Alternative 4 is expected to generate fewer daily trips compared to the proposed project. As with the proposed project, Alternative 4 would not be anticipated to generate a substantial increase in GHG emissions. As is the case with the proposed project, impacts of Alternative 4 would be less than significant.

Would the project be inconsistent with any applicable plan, policy, or regulation of an agency that has been adopted for the purpose of reducing GHG emissions?

Alternative 4 would comply with water conservation, energy conservation, tree-planting, and other sustainability requirements established in the City's Green Building Code. This alternative would represent an infill redevelopment project within an urbanized area served by transit. The development of new medical office uses near existing transit and infrastructure would be consistent with GHG reduction plans, such as SCAG's RTP/SCS as well as the LUCE. As with the proposed project, Alternative 4 would not conflict with GHG reduction plans and other applicable plans adopted for the purpose of reducing emissions of GHGs. Impacts would be similar and less than significant as with the proposed project in terms of consistency with a GHG plan, policy, or regulation.

Hazards and Hazardous Materials

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

Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

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

Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would is create a significant hazard to the public or the environment?

Construction

Under Alternative 4, the quantity of hazardous substances such as fuels for equipment and vehicles, new and used motor oils, cleaning solvents, and paints, used and stored on-site during construction would be slightly reduced from that of the proposed project. Proper use and disposal of these materials in accordance with federal, state, and local laws would not pose a significant risk to the public or to the environment

Due to the age of the buildings, construction activities within the interior of the GKGM Building and demolition of the former residential buildings could result in exposure of workers and/or the public to LCM and ACM. As with

the proposed project, upon incorporation of MM-HAZ-1 and MM-HAZ-2, it is expected that workers, the public, and the environment would be protected from any hazards related to ACM and LCM to the extent practicable.

The project site is located near several sites where hazardous materials may have been released to the groundwater or soil. Under Alternative 4, in the event that off-site releases of hazardous materials have entered the soil or groundwater underlying the project site, contaminated soil or water could be encountered during construction activities. Additionally, the project site could potentially have a UST, associated with the automobile service bay. Soil contamination and/or removal and disposal of the UST could potentially expose workers or the public to hazardous materials associated with the chemicals that were stored in the UST, resulting in a potentially significant impact.

Alternative 4 would implement construction mitigation measures similar to those required for the proposed project; and impacts would be similar to those of the proposed project. Impacts of Alternative 4 would, as is the case with the proposed project, be less than significant with mitigation.

Operation

Routine operation of Alternative 4, similar to the proposed project, would include the use of various hazardous materials, including chemical reagents, solvents, fuels, paints, and cleansers. Both would also include operation of medical office uses, such as laboratory modules, operation of specialized equipment, outpatient care, medical clinics, and medical administrative offices. These uses would involve a variety of potentially hazardous medical materials, such as sharps, medical waste, and biological waste, which would be stored and used on-site, as well as transported to and from the site for delivery and disposal. There is the potential for a hazardous materials incident to occur, if hazardous substances are handled improperly or unsafely such that the substance is released or the public is exposed to the substance. However, medical wastes are regulated by state laws that set forth specific requirements for handling, treating, storing, and disposing medical waste. Pursuant to the California Medical Waste Management Act of 1990, the Alternative 4 would be required to prepare a MWMP for submittal to the CDPH's Medical Waste Management Program, in the event that medical wastes are generated. Additionally, California Health and Safety Code, Division 20, Chapter 6.95, requires preparation of a HMBP for any business using 55 gallons (liquid) or 500 pounds (solid) or more of hazardous materials.

Due to the types of materials that would be used on the project site and the existing regulations that are required to be put in place, it is not expected that Alternative 4 would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. All hazardous materials generated and/or used on the project site would be managed in accordance with all relevant federal, state, and local laws, including the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR 4.5). Potential exposure to hazardous materials would be slightly less than with the proposed project; and like the proposed project would be less than significant.

Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction for Alternative 4 would involve activities typical of an urban infill development project, which are routine in an urban environment and would not be expected to impair or physically interfere with the City's emergency response and evacuation plans. Further, as with the proposed project, the Alternative 4 site plan would be reviewed and approved by the SMFD during plan check review to ensure safety and adequate emergency access. Emergency access would continue to be available via existing streets, including 20th Street and Arizona Avenue. Impacts of the Alternative 4 would, as is the case with the proposed project, be less than significant.

Land Use and Planning

Would the project cause a significant environment impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Under Alternative 4, the general site plan for development would be similar to that of the proposed project; however reduced in size and height. The total floor area would be reduced. Alternative 4 would implement ground-floor design elements that would contribute to the pedestrian level frontage along 20th Street. As with the proposed project, Alternative 4 would be consistent with the applicable standards and regulations of the existing HMU zoning and land use designations and thus, would not cause a significant environmental impact due to conflict with an applicable plan. Impacts related to consistency with plans and policies would be similar to those of the proposed project, and like the proposed project, impacts would be less than significant.

Noise

Would the project result in a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Construction activities for Alternative 4 would be reduced from those of the proposed project, due to the decrease in new construction area And total floor area . This would result in a shorter construction duration, reducing the number of days with maximum levels of noise and vibration. However, the noise level on a peak construction day could be potentially similar to that of the proposed project. As indicated in Section 4.9, Noise, the City's construction noise standards would be exceeded, due to the proximity to noise-sensitive receptors, during several construction phases. As with the proposed project, construction activities including demolition, grading, and building construction would occur and require heavy haul equipment, haul trucks, and worker trips that would case noise and vibration impacts. Therefore, with mitigation,

impacts of Alternative 4 on sensitive receptors would be similar to those of the proposed project, and as is the case with the proposed project, would be less than significant.

Operation

Under Alternative 4, the trip generation would be lower than that of the proposed project during each of the analyzed peak hours. As such, off-site traffic noise levels would be less than the proposed project, which would also be less than significant.

On-site operational noise generated by Alternative 4 would be similar to the proposed project as a result of the clinical/medical office use. As with the proposed project, on-site operational noise impacts from parking, mechanical equipment, and truck activities (at loading docks and trash collection areas) would occur. On-site operational noise impacts from Alternative 4 would be similar to proposed project, and similar to the proposed project, would be less than significant.

Would the project result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

Similar to the proposed project, construction of Alternative 4 would generate groundborne vibration from various types of construction equipment such as drillers, loaders, jack hammers, and bulldozers. Periods of high vibration levels would occur primarily during demolition, excavation, and construction of the site foundation. As shown in Section 4.9*, Noise*, the maximum vibration levels for the proposed project would exceed the thresholds for potential for structural damage at the GKGM Building; the structural damage threshold would be exceeded up to a distance of 15 feet from heavy equipment such as a large bulldozer or caisson drill rigs. The potential vibration impacts would be reduced by the implementation of MM-NOI-1. In addition, MM-NOI-2 is required to reduce vibration impacts directly. Similar to the proposed project, Alternative 4 could result in structural building damage to the GKGM Building, as a result of construction vibration. Therefore, similar to the proposed project, the impacts of Alternative 4 would be less than significant with mitigation.

Transportation

Would the project conflict with a program, plan, or ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The project site and surrounding area is served by several transit facilities and services. The project site is located approximately 0.7 mile by foot from the 17th Street/Santa Monica College Station of the Metro E Line and is well-served by bus transit service, including Big Blue Bus and Metro buses. The bus stops closest to the project site are on 20th Street southbound and at the Wilshire Boulevard/20th Street intersection. As with the proposed project, Alternative 4 would support employment opportunities near transit consistent with SCAG's RTP/SCS and the City's LUCE. Furthermore, similar to the proposed project, this alternative would not physically impede, alter, or remove existing or planned transit, bicycle, or

pedestrian facilities and would not conflict with the City's LUCE, Bike Action Plan, and Pedestrian Action Plan. Therefore, Alternative 4 would not conflict with an applicable program, plan, ordinance or policy addressing the circulation system. Impacts would be less than significant and similar to those of the proposed project.

Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Alternative 4 would consist of less than 50,000 square feet of commercial space. As such, it would be screened out from further vehicle miles traveled (VMT) analysis based on the City's criteria. Therefore, similar to the proposed project, no further analysis is required, and impacts would be less than significant.

Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Under Alternative 4, vehicular access would also be proposed from 19th Court with pedestrian access from 20th Street. The proposed driveway to the garage would be designed in accordance with all applicable design standards, including those addressing ADA accessibility, adequate width, and adequate turning radius. No hazardous design features such as sharp curves, dangerous intersections or curb cuts/driveways, or incompatible land uses are proposed. In addition, all site plans would be reviewed by the City's Mobility Division and Traffic Engineering Division for adequate line-of-sight provision at driveways, so no structures or landscaping would block the views of vehicles entering and exiting the site. Therefore, as with the proposed project, impacts associated with hazardous geometric design features or incompatible uses would be less than significant.

Would the project result in inadequate emergency access?

Under Alternative 4, the project site would continue be accessible to emergency responders, including SMFD, during construction and operation. As with the proposed project, Alternative 4 would comply with all applicable local requirements related to emergency vehicle access and circulation. Therefore, impacts associated with emergency access would be similar to the proposed project and less than significant.

Tribal Cultural Resources

Would the 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)?

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 shall consider the significance of the resource to a California Native American tribe?

Construction activities for Alternative 4 would be reduced from those of the proposed project, due to the decrease in new construction area. Grading activities associated with the new building could uncover tribal cultural resources. Although the City determined that no tribal cultural resources are present in the proposed project site, impacts regarding the inadvertent discovery of cultural resources are potentially significant. Therefore, impacts under Alternative 4 are, as is the case with the proposed project, less than significant with mitigation.

Utilities and Service Systems

Infrastructure

Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Water Lines

Under Alternative 4, new land uses would include medical office uses similar to those of the proposed project. However, the total amount of floor area would be reduced. A hydraulic evaluation of the City's future water distribution system was performed, based on future water demand projections, in the City Sustainable Water Master Plan (Kennedy/Jenks Consultants 2014). As a result of the evaluation, it was determined the proposed project would not directly require or result in the relocation or construction of new or expanded water facilities. Similar to the proposed project, Alternative 4 would involve the construction of new lateral connections to existing water mains, but would not involve the construction of or expansion of new water facilities. Since Alternative 4 would result in less floor area, there would be less demand for water as compared to the proposed project. Nevertheless, MM-UT-1 would still be required to ensure that additional demands can be accommodated. As such, impacts would be reduced relative to the proposed project but would remain less than significant with mitigation.

Wastewater Collection and Treatment Facilities

As with the proposed project, Alternative 4 would generate wastewater typical of other medical office uses in the area. This alternative would result in an increase in wastewater generation compared to the existing conditions. The anticipated increase in wastewater generation from Alternative 4 was estimated using the City of Los Angeles Bureau of Sanitation sewage generation rates. The amount of wastewater that would be generated by this alternative and the proposed project is shown in Table 6-8.

Table 6-8
Alternative 4-Estimated Wastewater Generation

Land Uses	Square Feet	Wastewater Demand Factor[1]	Wastewater Generation (gpd)
Proposed Uses			
Clinical/Medical Office	38,233	250 gpd/1,000 gsf	9,558
		Total Alternative 4	**9,558**
		Total Proposed Project	**18,203**

Notes:
[1] Based on sewage generation rates provided by the City of Los Angeles Bureau of Sanitation. All calculations rounded to the nearest whole. Parking uses are considered to have negligible water demand.
gpd = gallons per day
gsf = gross square feet

Based on the City's sewer model, a preliminary review of the project's wastewater flows indicates that the existing line is adequate to serve the proposed project. Since the Alternative 4 would generate less wastewater flows than the proposed project, the existing infrastructure could adequately serve Alternative 4.

Wastewater flows from the City are treated at the HTP, which has a dry-weather capacity of approximately 450 mgd processed through full secondary treatment and a wet-weather capacity of 800 mgd. The HTP currently meets applicable water quality standards, and is anticipated to have sufficient capacity to serve the proposed project. Therefore, Alternative 4 (which would generate less wastewater) would not exceed wastewater treatment requirements and would not exceed the capacity of the HTP. Therefore, Alternative 4 would not directly require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects.

Electric Power, Natural Gas, and Telecommunication

The proposed project would not result in significant impacts associated with electric, natural gas, and telecommunication lateral connections to the project site. Since Alternative 4 would result in a smaller new construction footprint, it is anticipated that impacts would be less than the proposed project's and would be less than significant.

Solid Waste

Would the 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

Construction of Alternative 4 would generate construction waste such as asphalt and concrete. As with the proposed project, this alternative would comply with SMMC Chapter 8.108, requiring submission of a waste management plan and requiring 70% of all construction and demolition material generated to be diverted. Alternative 4 would entail a reduced building footage compared to the proposed project. Due to the reduction in development, the amount of construction waste would be less than the proposed project. Impacts of Alternative 4 would, as is the case with the proposed project, be less than significant.

Operation

Solid waste generation for the alternative during operation and maintenance was calculated per the City's solid waste generation rate for medical office. The amount of solid waste generated by this alternative is shown in Table 6-9.

Table 6-9
Alternative 4-Estimated Solid Waste Generation

Proposed Land Uses	Square Feet	Solid Waste Generation Rate (day)[1]	Solid Waste Generation
Clinical/Medical Office	38,233	0.006 lbs/sf	229 lbs/day
		Total Alternative 4	**229 lbs/day**
		Total Proposed Project	**491 lbs/day**

Notes:
[1] City of Santa Monica 2010.
Lbs = pounds

Alternative 4 would generate less solid waste than the proposed project. As with the proposed project, the increase in solid waste generated by Alternative 4 would be minimal when compared to the typical yearly volume of waste handled by the City in a single year. As indicated in Section 4.13, Utilities and Service Systems – Solid Waste, the Los Angeles County has adequate landfill capacity to accommodate waste disposal needs for the next 15 years. Impacts of Alternative 4 would, as is the case with the proposed project, be less than significant.

Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Like the proposed project, under Alternative 4, all collection, transportation, and disposal of municipal solid waste would continue and occur in accordance with all applicable federal, state, and local statues and regulations. During construction, construction activities would comply with waste diversion standards contained within SMMC Chapter 8.108. Additionally, consistent with City requirements and State goals for reducing solid waste, trash and recycling collection bins would be provided. Medical-related waste, in the event it is generated, would be stored on-site per regulatory and industry procedures and transported off-site by qualified vendors in accordance with applicable regulations. Impacts of Alternative 4 would, as is the case with the proposed project, be less than significant.

Energy Consumption

Would the project result in wasteful, inefficient, or unnecessary consumption of energy?

Under Alternative 4, there would be reduced redevelopment of the project site. During construction activities, Alternative 4 would result in energy consumption that would be minimal and temporary; therefore, impacts would be less than significant. Alternative 4, as with the proposed project, would require the use of energy for operations. However, under Alternative 4, the reduced floor area would require less energy consumption. Impacts of Alternative 4 would, as is the case with the proposed project, be less than significant.

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Alternative 4, similar to the proposed project, would include various sustainability features. With these features, Alternative 4 would provide opportunities for improved energy efficiency that would support state and local plans for increasing renewable energy efficiency. For the reasons stated, Alternative 4 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts of Alternative 4 would, as is the case with the proposed project, be less than significant.

Conclusion

Alternative 4 would adaptively reuse the vacant portion of the existing GKGM Building and would develop a new building adjacent to the GKGM Building for medical office uses. The duration of construction activities would be reduced, along with the associated air quality, noise, and transportation impacts.

Alternative 4 would meet most of the objectives identified for the proposed project. Specifically, Alternative 4 would meet the historic resource preservation objective to preserve the GKGM Building, as well as the objectives to provide modern medical facilities consistent with the HMU District policies in the LUCE. Additionally, this alternative would provide pedestrian oriented design, high quality architectural design,

sustainability features, and community/project benefits. However, Alternative 4 would not fully meet the economic objectives of the proposed project.

6.7.5 Alternative 5 – Tier 2 (2.5 FAR) Project Alternative

Alternative Project Description

Alternative 5, Tier 2 (2.5 FAR) Project Alternative, represents development of the proposed project at a Tier 2 density and height. Similar to the proposed project, Alternative 5 would develop the project site with medical office and research & development uses. Similar to the proposed project, Alternative 5 would adaptively reuse the currently unoccupied portion of the existing GKGM Building and demolish the rear alley-facing garage. The existing restaurant within the GKGM Building would remain as-is. The GKGM Building would be rehabilitated in accordance with Secretary of the Interior Standards and interior renovations would be made to upgrade the building, such as altering the existing floor plans and providing modern amenities. The existing former residential buildings and surface parking lot would be removed for construction of the new building. Under Alternative 5, the maximum Tier 2 FAR of 2.5 and height of 70 feet for the HMU District would apply. Alternative 5 would develop a 104,283-sf building addition that is 5 stories in height (maximum 70 feet). It is anticipated that the new building addition would be designed in a similar architectural style/footprint as the proposed project, but with greater massing/height. It is assumed that a 6-level subterranean parking garage would be constructed to accommodate parking; the total number of parking spaces would not exceed the amount of parking allowed by the City's Municipal Code. Access to the garage would be provided off the alley.

Alternative 5 includes 32,974 sf of clinical/medical office area (30%) and 76,152 sf of research and development office space area (70%). In total, this alternative would provide 109,126 sf of total floor area with a FAR of 2.5.

Table 6-10
Alternative 5

Building	Land Uses	Floor Area (square feet)
Rehabilitated Administration Wing of GKGM Building	Clinical/Medical Office Space	4,843
New Building	Clinical/Medical Office	28,131
	Research & Development	76,152
	Total	**109,126**

Analysis

Aesthetics

If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Construction

During construction activities, construction vehicles and equipment, including backhoes, pile drivers, bulldozers, excavators, forklifts, loaders, dump trucks, and cranes, may be in operation during working hours. In addition, a temporary influx of construction workers would be observed on-site. Visual changes to the project site would occur throughout the duration of construction as the form of the new structure slowly takes shape. While construction fencing would be erected along the perimeter of the project site pursuant to SMMC requirements, the staging of construction equipment and vehicles and the partial to full demolition of existing one- to two-story structures on-site would be partially visible to off-site viewers. However, the visibility of construction equipment and vehicles and the demolition and construction of new structures on the project site would be not be significant due to the temporary nature of construction activities.

During remodeling of the interior of the currently unoccupied portion of the GKGM Building, construction workers and vehicles would be present and would operate on the southern portion of the project site. However, it is assumed that the majority of remodeling work would occur in the interior of the building. As such, remodeling activities would typically be obscured from the view of off-site viewers. Further, all demolition, remodeling, and construction activities would be of a temporary duration and would cease once the new building is operational. Therefore, because construction activities would be partially screened from view and effects would be experienced over a temporary timeframe, construction activities would not degrade the existing visual character or quality of the project site and its surroundings. Alternative 5 would result in greater impacts than the proposed project due to the extended construction time for the additional building area. Nonetheless, impacts of Alternative 5 would be less than significant.

Operation

Under Alternative 5, it is anticipated that the new building would be designed in a similar architectural style/footprint as the proposed project, but with greater massing/height. Alternative 5 would be located immediately north of the existing two-story GKGM Building on the southern portion of the project site, and thus would only be partially visible to receptors located south of the project site (i.e., motorists and pedestrians on Arizona Avenue and residents located south of Arizona Avenue). While Alternative 5 would contribute scale, mass, and building materials that are not currently on the project site, structures of greater scale and mass and similar building materials occur in the immediate vicinity of the project site. Examples include buildings on the Providence Saint John's Health Center campus, office development along Santa Monica Boulevard, the four-story Ambrose Hotel, and the seven-story glass office building located at the

Wilshire Boulevard/20th Street intersection. As such, the 5-story building would be representative of the type of nearby office and healthcare-related development constructed in the immediate area. In contrast to the proposed project, Alternative 5 would result in a new building that is larger in scale and height. However, Alternative 5 would be subject to Zoning Ordinance standards regarding building design, such as setbacks and step backs. Furthermore, new construction would be subject to Architectural Review Board design review to ensure high quality design. Furthermore, per Section 21099(d)(1) of the Public Resources Code (PRC)), aesthetic impacts shall not be considered a significant unavoidable impact on the environment since the development would be an employment project within an urban transit priority area.

Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Construction

As with the proposed project, construction for Alternative 5 could require the use of portable lighting for construction. Any use of portable lighting elements on the project site during construction would be temporary and of short duration (for example, during the last hour of the workday in late fall and winter months). Portable lighting would be used to illuminate the development area and use would be concentrated onto the area of active construction (i.e., widespread use of portable lighting across the project site during individual phases would not occur). Further, use of portable lighting would conform to applicable shielding, light trespass, and maximum height standards established by the SMMC, Section 9.21.080(C)(3)(4)(5). As compared to the proposed project, construction under Alternative 5 would be longer; however, due to the temporary and short-term duration of its use and compliance with the SMMC, impacts of Alternative 5 would be less than significant.

Operation

As with the proposed project, Alternative 5 would include the installation of new interior and exterior lighting fixtures, including at outdoor lighting entryways/driveways, along pedestrian pathways, and at/within the subterranean parking garage. However, all new lighting fixtures would be shielded “so as not to produce obtrusive glare” onto the public right-of-way or adjacent properties and that light be primarily retained on-site (“lighting may not illuminate other properties in excess of a measurement of 0.5 foot candles of light”) (SMMC, Section 9.21.080(C)). Additionally, compliance with SMMC Section 9.21.120 regarding the use of reflective materials would ensure that no more than 25 percent of the surface area of any façade on any new building or addition to an existing building contains black or mirrored glass or other mirror-like material that is highly reflective. In addition, the SMMC requires that roofing materials be of a non-reflective nature. Similar to the proposed project, Alternative 5 would be required to comply with this City regulation by limiting the use of reflective materials (under 25% of facades). Thus, particularly reflective metal would not be a prominent building material. Adherence to SMMC standards and regulations regarding lighting and reflective materials would ensure that Alternative 5 would not result in adverse effects to daytime and nighttime views due to new lighting and glare. Therefore, impacts of Alternative 5 would be, like the proposed project, less than significant.

Would the project produce extensive shadows affecting adjacent uses or property?

Under Alternative 5, the existing GKGM Building would remain, and a new five-story building would be constructed. Due to the low angle of the sun, shadows cast on December 21st would be the longest in length, and therefore, represent the worst-case scenario. As shown on Figure 4.1-10, in Section 4.1, Aesthetics, the shadows generated by the proposed structure at 9:00 a.m. would be cast to the north on the project site and would surround the existing Lighthouse Church and School for the proposed project (3-story building), and by 12:00 p.m. the shadows cast by the proposed project would no longer surround the structure on the property located north of the project site. However, with two additional stories under Alternative 5, shadows would be anticipated to shade the adjacent buildings for a longer period of time, potentially producing extensive shadows affecting adjacent uses or property during the winter. Regardless, this analysis is provided for informational purposes only, as aesthetics impacts are not be considered significant pursuant to SB 743. As such, new shadows would be greater as compared to the proposed project's three-story building. Therefore, Alternative 5 would have greater impacts related to shading in contrast to the proposed project however, and such impacts would also be less than significant.

Air Quality

Would the project conflict with or obstruct implementation of the applicable air quality plan?

Similar to the proposed project, Alternative 5 would not conflict with the 2016 AQMP because this alternative would not contribute to population growth in excess of the AQMP's population forecast, and would not cause or contribute to new air quality violations. In contrast to the proposed project, Alternative 5 may have higher air emissions due to the increase in development. Although Alternative 5 would result in 109,126 sf of development, the maximum daily construction activities and intensity including equipment and vehicle trips associated with Alternative 5 would likely be similar to what is assumed for the proposed project due to the size of the urban project site. However, even if daily construction equipment use were to increase under Alternative 5, as presented in Table 4.2-10 of this EIR, the estimated maximum daily construction emissions for the proposed project would be substantially under the SCAQMD significance thresholds. Therefore, the impacts would be increase under Alternative 5but would remain be less than significant.

Would the project result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative threshold emissions which exceed quantitative thresholds for ozone precursors)?

Construction

Construction of Alternative 5, similar to the proposed project, would result in the temporary addition of pollutants to the local airshed caused by on-site sources (e.g., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (e.g., on-road haul trucks, vendor trucks, and worker vehicle trips).

As part of the proposed project analysis, the criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod. Section 4.2, Air Quality, of this EIR presents the estimated maximum daily construction emissions generated during construction of the proposed project. As shown in Section 4.2, the proposed project is far below SCAQMD significance thresholds. Alternative 5 would result in a longer construction period due to the increased size of the new building; however, the maximum daily construction activities and intensity associated with Alternative 5 would likely be similar to what is assumed for the proposed project due to the size of the urban project site. However, even if daily construction equipment use were to increase under Alternative 5, as presented in Table 4.2-10 of this EIR, the estimated maximum daily construction emissions for the proposed project would be substantially under the SCAQMD significance thresholds. Given this and the sizeable buffer between proposed project impacts and the SCAQMD significance thresholds, it is anticipated that daily construction emissions of Alternative 5 would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years. Therefore, impacts related to exceedance of SCAQMD daily construction emission thresholds for Alternative 5 would be, as is the case of the proposed project, less than significant.

Operation

Similar to the proposed project, under Alternative 5, the operations on the project site would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicle trips; area sources, including the use of consumer products and landscape maintenance equipment; and energy sources.

Section 4.2, Air Quality, of this EIR presents the maximum daily area, energy, and mobile source emissions associated with operation of the proposed project. As shown in Section 4.2, the proposed project is far below operational SCAQMD significance thresholds. Alternative 5 would result in a greater amount of medical office and research & development uses than the proposed project; however, given the sizeable buffer between proposed project impacts and the SCAQMD significance thresholds, it is anticipated that Alternative 5's combined daily area, energy, mobile, vehicle traffic, and off-road emissions would not exceed the SCAQMD operational thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Therefore, impacts of Alternative 5 would be, as is the case of the proposed project, less than significant.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Section 4.2, Air Quality, analyzes the proposed project impacts from construction and operational air pollutant emissions to nearby sensitive receptors. It also evaluates health risks due to TACs and contribution of CO at CO hotspot intersections. TAC emissions from construction activities of the proposed project would result in a potentially significant impact; therefore, mitigation is required to reduce effects below a level of significance. As described previously, Alternative 5 would generate greater emissions due to the increase in building size; however, the daily construction activities and intensity

including equipment and vehicle trips associated with Alternative 5 would likely be similar to what is assumed for the proposed project due to the size of the urban project site. Thus, Alternative 5 would also result in DPM emissions from exhaust from on-site construction equipment and diesel vehicles and would require mitigation. However, as with the proposed project, MM-AQ-1 would be applied to reduce construction emissions. As with the proposed project, incorporation of MM-AQ-1 is expected to reduce impacts to below a level of significance. Therefore, impacts under Alternative 5 would be less than significant with mitigation incorporated.

Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

As with the proposed project, odors would be potentially generated from vehicles and equipment exhaust emissions during construction of Alternative 5. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people.

Similar to the proposed project, typical odors generated from operation of the research & development and clinical/medical offices for Alternative 5 would be limited to vehicle exhaust generated by employees or patrons traveling to and from the project site and through the periodic use of landscaping or maintenance equipment. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Impacts of Alternative 5 related to odors would be similar to the proposed project, and as is the case with the proposed project, would be less than significant.

Construction Effects

Would the project have considerable construction-period impacts due to the scope, or location of construction activities?

Under Alternative 5, the duration of construction traffic from haul trucks, cement trucks, equipment and material delivery trucks, and construction worker vehicles would be longer. Similar to the proposed project, Alternative 5 would implement construction-related mitigation to reduce impacts to less than significant. Due to the increase in construction activities under Alternative 5, impacts would be greater than the proposed project, but would remain less than significant with mitigation.

Cultural Resources

Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

Under Alternative 5, the garage portion of the GKGM Building would be demolished, and the GKGM Building would be adjacent to where construction activities would take place. As such, there is the

potential for a significant impact. However, impacts would be reduced to a level below significance with the implementation of mitigation measures. Because Alternative 5 includes construction of a five-story building adjacent to the GKGM Building, potential impacts are, similar to the proposed project, potentially significant and require mitigation measures to reduce impacts. Because the new building under Alternative 5 would be taller than the proposed project, impacts are greater than the proposed project but would be less than significant with mitigation.

Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Although no cultural resources were identified on the project site during the California Historical Resources Information System records search for the proposed project, impacts regarding the inadvertent discovery of cultural resources are potentially significant. Therefore, similar to the proposed project, impacts under Alternative 5 are less than significant with mitigation.

Geology and Soils

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death, involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?

Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; caused in whole or in part by the project's exacerbation of the existing environmental conditions; or

Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect risks to life or property?

Construction activities associated with Alternative 5 would entail excavation for the proposed subterranean levels and foundations, similar to the proposed project. However, as with all development within the City, Alternative 5 would be required to comply with the SMBC. Measures to minimize the risk of soil collapse and geological hazards associated with temporary excavations are included in the SMBC. Under the Alternative 5, geology and soils impacts are considered less than significant with adherence to the recommendations of a site-specific geotechnical report which is required prior to issuance of a building

permit. Therefore, impacts of Alternative 5 would be similar to the proposed project and would also be less than significant.

Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Alternative 5 would involve demolition and renovation activities on the project site. Given the proximity of the project site to past fossil discoveries, and due to the relatively shallow depths of discovery, the project site is moderately to highly sensitive for supporting paleontological resources. Because ground-disturbing activities associated with construction of the proposed project and Alternative 5 have the potential to destroy a unique paleontological resource or site, implementation of mitigation measures would be required to reduce potential impacts. Therefore, impacts under Alternative 5 are, as is the case with the proposed project, less than significant with mitigation.

Greenhouse Gas Emissions

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Similar to the proposed project, Alternative 5 would generate GHG emissions through mobile sources; area sources (e.g., landscape maintenance equipment); energy use (natural gas and generation of electricity consumed by the proposed project); generation of electricity associated with wastewater treatment and with water supply, treatment, and distribution; and solid waste disposal. As shown Section 4.6, Greenhouse Gas Emissions, the proposed project was determined to not conflict with applicable regulatory plans and policies to reduce GHG emissions. As discussed in Section 4.6 of this EIR, the primary emission source for the proposed project would be mobile emissions, which would generate approximately 902 CO_2e metric tons per year. Alternative 5 would generate more vehicle trips than the proposed project; however, it is anticipated that Alternative 5 would result in marginal increase in local traffic relative to the proposed project. Therefore, GHG emissions associated with Alternative 5 would not substantially differ compared with the proposed project. In addition, similar to the proposed project, Alternative 5 would not conflict with adopted GHG plans, policies, or regulations. Thus, impacts related to GHG emissions would be slightly greater under Alternative 5 but would remain less than significant.

Would the project be inconsistent with any applicable plan, policy, or regulation of an agency that has been adopted for the purpose of reducing GHG emissions?

Alternative 5 would comply with water conservation, energy conservation, tree-planting, and other sustainability requirements established in the City's Green Building Code. Similar to the proposed project, this alternative would represent an infill redevelopment project within an urbanized area served by transit. The development of new medical office uses near existing transit and infrastructure would be consistent with GHG reduction plans, such as SCAG's RTP/SCS as well as the LUCE. Thus, impacts related to GHG

emissions would be less than significant under Alternative 5, which would be similar to the proposed project's less than significant impact.

Hazards and Hazardous Materials

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

Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

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

Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would is create a significant hazard to the public or the environment?

Construction

Under Alternative 5, the quantity of hazardous substances such as fuels for equipment and vehicles, new and used motor oils, cleaning solvents, and paints, used and stored on-site during construction would be similar to that of the proposed project. Proper use and disposal of these materials in accordance with federal, state, and local laws would not pose a significant risk to the public or to the environment.

Alternative 5 would involve demolition and renovation activities on the project site. Due to the age of the buildings, construction activities could result in exposure of workers and/or the public to LCM and ACM. As with the proposed project, upon incorporation of MM-HAZ-1 and MM-HAZ-2, it is expected that workers, the public, and the environment would be protected from any hazards related to ACM and LCM to the extent practicable.

The project site is located near several sites where hazardous materials may have been released to the groundwater or soil. Under Alternative 5, in the event that off-site releases of hazardous materials have entered the soil or groundwater underlying the project site, contaminated soil or water could be encountered during construction activities. Additionally, the project site could potentially have a UST, associated with the automobile service bay. Soil contamination and/or removal and disposal of the UST could potentially expose workers or the public to hazardous materials associated with the chemicals that were stored in the UST, resulting in a potentially significant impact. Alternative 5 would implement construction mitigation measures similar to those required for the proposed project; and impacts would be similar to those of the proposed project. Impacts of Alternative 5 would, as is the case with the proposed project, be less than significant with mitigation.

Operation

Similar to the proposed project, routine operations for Alternative 5 would include the use of various hazardous materials, including chemical reagents, solvents, fuels, paints, and cleansers. These materials would be used for building and grounds maintenance. Alternative 5 would also include operation of a variety of medical uses, such as medical research and development, laboratory modules, operation of specialized equipment, outpatient care, medical clinics, and medical administrative offices. These uses would involve a variety of potentially hazardous medical materials, such as sharps, medical waste, and biological waste, which would be stored and used on-site, as well as transported to and from the site for delivery and disposal.

Medical wastes are regulated by state laws that set forth specific requirements for handling, treating, storing, and disposing medical waste. As stated in Section 4.7, Hazards and Hazardous Materials, of this EIR any medical-related waste, in the event it is generated, would be stored on-site per regulatory and industry procedures and transported off-site by qualified vendors in accordance with applicable regulations. Pursuant to the California Medical Waste Management Act of 1990, Alternative 5 would be required to prepare a MWMP for submittal to the CDPH's Medical Waste Management Program, in the event that the Wellness Center generates medical wastes. The MWMP must describe the types and amounts of medical waste generated and how the waste would be disposed of. Additionally, California Health and Safety Code, Division 20, Chapter 6.95, requires preparation of a HMBP for any business using 55 gallons (liquid) or 500 pounds (solid) or more of hazardous materials. HMBPs contain information on hazardous materials inventory, inspections, training, recordkeeping, and reporting and is submitted electronically through the California Environmental Reporting System

Due to the types of materials that would be used on the project site and the existing regulations that are required to be put in place, it is not expected that Alternative 5 would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. All hazardous materials generated and/or used on the project site would be managed in accordance with all relevant federal, state, and local laws, including the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR 4.5). Compliance with applicable regulations involving hazardous materials and potentially hazardous medical materials during operation, and applicable mitigation measures would ensure that such materials are transported, used, and disposed in a manner that minimizes potential effects to workers, the public, and the environment. Impacts of Alternative 5 would be, as is the case with the proposed project, less than significant with mitigation incorporated.

Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City's Office of Emergency Management has prepared the City's Multi Hazard Functional Emergency Plan and the All Hazards Mitigation Plan. The closest disaster route to the project site is Santa Monica Boulevard,

located approximately 700 feet from the project site. Construction under Alternative 5 could result in a temporary increase in construction vehicles in the area surrounding the project site. However, during construction, all access to local roads would be maintained and emergency access would be ensured. Construction would not involve any obstructions or closures along nearby County-designated disaster routes, including Santa Monica Boulevard. Santa Monica Boulevard would remain open as a potential disaster route throughout construction. Similar to the proposed project, traffic generated during Alternative 5 construction would not substantially change the use and function of any nearby disaster routes. In the event of an emergency, the City's emergency plans would be implemented and would proceed in the same manner with or without project construction.

Operations Alternative 5 would, like the project, generate vehicle trips on nearby roadways. However, it would not involve obstructions to any roadways in the area and, therefore, would not affect emergency evacuation routes. In the event of a major evacuation, operation-related traffic would be negligible. The City requires plan check and approval from the SMFD, which would ensure that the SMFD has inspected the plans and determined that access driveways and fire and life safety measures on the project site would be in accordance with applicable codes. Adherence to SMFD regulations would ensure safety and access compliance for Alternative 5. Impacts of Alternative 5 would be, as is the case with the proposed project, less than significant

Land Use and Planning

Would the project cause a significant environment impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Alternative 5 would develop a wellness center project with research & development and clinical/medical office uses. These uses are permitted uses in the HMU District. Alternative 5 would develop the project site at Tier 2 Standards, which allows for a maximum 2.5 FAR and a maximum height of 70 feet. Thus, this alternative is consistent with the standards set forth in the SMMC. As a Tier 2 project, a higher level of community benefits would need to be provided. (The SMMC requires Tier 2 projects to be accompanied by a range of community benefits from four priority categories: Affordable Housing, Trip Reduction and Traffic Management, Community Physical Improvements, and Social and Cultural Facilities. For Alternative 5, the required community benefits would not have physical impacts on the environment; rather, they would consist of payment of fees or similar methods of compliance. Since Alternative 5 would be developed with the same uses and similar architectural style as the proposed project, Alternative 5 would be in compliance with existing goals identified in the City's LUCE. This alternative would also include building elements that encourage pedestrian-oriented design, a TDM plan, provide a sustainable building that would meet the needs of healthcare community, and encourage historic preservation. Therefore, the Alternative 5 would not cause a significant environmental impact due to a conflict with an applicable plan. Impacts related to consistency with plans and policies would be similar to those of the proposed project, and like the proposed project, impacts would be less than significant.

Noise

Would the project would result in a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Under Alternative 5, the extent and scope of construction would be greater than the proposed project. As such, the duration of construction traffic from haul trucks, cement trucks, equipment and material delivery trucks, and construction worker vehicles would be longer. However, similar to the proposed project, Alternative 5 would be required to implement mitigation to reduce construction related noise. Impacts under the Alternative would be similar to the proposed project, and would be less than significant with mitigation incorporated.

Operation

Under Alternative 5, the daily trip generation would be greater than the proposed project's trip generation. In the context of the existing and forecasted cumulative traffic on the adjacent roadways, the overall increase in trip volumes on local roadways resulting from Alternative 5 would be a marginal increase in local traffic compared to the proposed project, corresponding to an increase in roadway noise of well below one decibel (1 dB) compared to the proposed project. Since a change in noise levels of less than 1 dB is typically not an audible change in the context of community noise (i.e., outside of a controlled environment such as a listening lab), this would be a negligible change. Impacts under Alternative 5 would be similar to the proposed project, and would be less than significant.

Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?

Under Alternative 5, the duration of construction would be longer compared to the proposed project. The duration of construction traffic from haul trucks, cement trucks, equipment, and material delivery trucks, and construction worker vehicles would also be longer. As shown in Section 4.9*,* Noise, the maximum vibration levels for the proposed project would exceed the thresholds for potential for structural damage at the GKGM Building; the structural damage threshold would be exceeded up to a distance of 15 feet from heavy equipment, such as a large bulldozer or caisson drill rigs. The potential vibration impacts would be reduced by the implementation of MM-NOI-1. In addition, MM-NOI-2 is required to reduce vibration impacts directly. Similar to the proposed project, Alternative 5 could result in structural building damage to the GKGM Building as a result of construction vibration. Impacts would be reduced with the implementation of these mitigation measures. Therefore, similar to the proposed project, groundborne vibration impacts for Alternative 5 would be less than significant with mitigation.

Transportation

Would the project conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The project site and surrounding area is served by several transit facilities and services. The project site is located approximately 0.7 mile by foot from the 17th Street/Santa Monica College station of the Metro E Line and is well-served by bus transit service, including Big Blue Bus and Metro buses. The bus stops closest to the project site are on 20th Street southbound and at the Wilshire Boulevard/20th Street intersection. As with the proposed project, Alternative 5 would support employment opportunities near transit consistent with SCAG's RTP/SCS and the City's LUCE. Furthermore, similar to the proposed project, this alternative would not physically impede, alter, or remove existing or planned transit, bicycle, or pedestrian facilities and would not conflict with the City's LUCE, Bike Action Plan, and Pedestrian Action Plan. Therefore, Alternative 5 would not conflict with an applicable program, plan, ordinance, or policy addressing the circulation system. Impacts would be less than significant and would be similar to the proposed project.

Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Alternative 5 was reviewed against the City's VMT screening criteria system to determine if a VMT analysis would be required. The research and development space exceeds the City's Tier 1 screening criteria of 50,000 sf. Alternative 5 was therefore reviewed against the City's Tier 2 screening criteria (proximity to transit). While the project site is located more than 0.5 miles from the 17th Street/Santa Monica College station for the Metro E Line, it is located less than 0.25 miles from the Big Blue Bus Rapid 10 and Metro Rapid 704 bus stop at the corner of Santa Monica Boulevard and 20th Street, meeting the Tier 2 screening criteria. Alternative 5 was therefore reviewed against the City's Tier 3 screening criteria (parking). Alternative 5 includes a 6-level subterranean parking garage. The total number of parking spaces would not exceed the amount of parking allowed by the City's Municipal Code. Since the number of proposed parking spaces would not exceed the amount of parking allowed by the City's Municipal Code, the Tier 3 screening criteria is met. As such, similar to the proposed project, Alternative 5 is not required to conduct a VMT analysis and it is determined to have a less-than-significant impact.

Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Like the proposed project, vehicular access would also be proposed from 19th Court with pedestrian access from 20th Street. The proposed driveway to the garage would be designed in accordance with all applicable design standards, including those addressing ADA accessibility, adequate width, and adequate turning radius. No hazardous design features such as sharp curves, dangerous intersections or curb cuts/driveways, or incompatible land uses are proposed. In addition, all site plans would be reviewed by the City's Mobility Division and Traffic Engineering Division for adequate line-of-sight provision at driveways,

so no structures or landscaping would block the views of vehicles entering and exiting the site. Therefore, as with the proposed project, impacts associated with hazardous geometric design features or incompatible uses would be less than significant for Alternative 5.

Would the project result in inadequate emergency access?

Under Alternative 5, the project site would continue be accessible to emergency responders, including SMFD, during construction and operation. As with the proposed project, Alternative 5 would comply with all applicable local requirements related to emergency vehicle access and circulation. Therefore, impacts associated with emergency access would be similar to the proposed project and would be less than significant.

Tribal Cultural Resources

Would the 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)?

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 shall consider the significance of the resource to a California Native American tribe?

Alternative 5 would involve demolition and renovation activities on the project site. Although the City determined that no tribal cultural resources are present in the proposed project site, impacts regarding the inadvertent discovery of cultural resources are potentially significant. Therefore, similar to the proposed project, impacts under Alternative 5 are less than significant with mitigation.

Utilities and Service Systems

Infrastructure

Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Water Lines

A hydraulic evaluation of the City's future water distribution system was performed, based on future water demand projections, in the City Sustainable Water Master Plan (Kennedy/Jenks Consultants 2014). As a result of the evaluation, it was determined the proposed project would not directly require or result in the relocation or construction of new or expanded water facilities. Alternative 5 would involve the construction of new lateral connections to existing water lines and would result in greater demands relative to the proposed project. As with the proposed project, MM-UT-1 would be required to ensure that additional demands can be accommodated. As such, impacts would be increased relative to the proposed project but would remain less than significant with mitigation.

Wastewater Collection and Treatment Facilities

As with the proposed project, Alternative 5 would not result in wastewater quality that would be substantially different from existing conditions. The anticipated increase in wastewater generation from Alternative 5 was estimated using the City of Los Angeles Bureau of Sanitation sewage generation rates. The amount of wastewater that would be generated by this alternative and the proposed project is shown in Table 6-11.

Table 6-11
Alternative 5-Estimated Wastewater Generation

Land Uses	Square Feet	Wastewater Demand Factor[1]	Wastewater Generation (gpd)
Proposed Uses			
Clinical/Medical Office	32,974	250 gpd/1,000 gsf	8,244
Research & Development	76,152	250 gpd/1,000 gsf	19,000
		Alternative 5 Total	**27,244**
		Proposed Project Total	**18,203**

Notes:
[1] Based on sewage generation rates provided by the City of Los Angeles Bureau of Sanitation. All calculations rounded to the nearest whole. Parking uses are considered to have negligible water demand.
gpd = gallons per day
gsf = gross square feet

Based on the City's sewer model, a preliminary review of the proposed project's wastewater flows indicates that the existing line is adequate to serve the proposed project. Although Alternative 5 would result in greater wastewater generation than the proposed project, the City reviews sewer lines to ensure the adequacy of

sewer line capacity. Furthermore, per MM-UT-1, the applicant would be required to submit a sewer study to the City of Santa Monica Public Works Department that demonstrates the City's sewer system can accommodate Alternative 5's wastewater flows based on current sewer flows. The applicant would be responsible for upgrading any downstream deficiencies, to the satisfaction of the Public Works Department, if calculations show that Alternative 5 would cause such mains to receive greater demand than can be accommodated. Improvement plans will be submitted to and approved by the Engineering Division. Therefore, impacts under Alternative 5 would be less than significant with mitigation.

Wastewater flows from the City are treated at the HTP, which has a dry-weather capacity of approximately 450 mgd processed through full secondary treatment and a wet-weather capacity of 800 mgd. The HTP currently meets applicable water quality standards and is anticipated to have sufficient capacity to serve the proposed project. The increases in wastewater generation under Alternative 5 would also be minor relative to regional generation and relative to the capacity of the HTP. Therefore, Alternative 5 would not exceed wastewater treatment requirements and would not exceed the capacity of the HTP.

Electric Power, Natural Gas, and Telecommunication

Although utility upgrades may be required, upgrades would be completed in accordance with the NPDES General Construction Permit and the City's Urban Runoff Pollution Ordinance (Chapter 7.10 of the Santa Monica Municipal Code). In accordance with the ordinance, Best Management Practices (BMPs) and pollutant control measures would be employed during project construction under the Tier 2 Project Alternative to minimize pollutants and reduce runoff to levels that comply with applicable water quality standards. The proposed project would not result in significant impacts associated with electric, natural gas, and telecommunication lateral connections to the project site. This significance criterion is generally applicable to projects that are not already served by municipal utilities, or for large specific plans or greenfield developments, because it is those projects that either need to construct new electrical power, natural gas, and telecommunication centralized facilities, or that would tax existing infrastructure. As with the proposed project, Alternative 5 would be an infill development project on a site that is already served by electric power, natural gas, and telecommunications infrastructure. As a result, impacts under Alternative 5 would be less than significant.

Solid Waste

Would the 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

Construction of Alternative 5 would generate construction and demolition waste such as asphalt and concrete. Alternative 5 would generate a similar amount of demolition debris as the proposed project, and the solid waste disposal needs for the proposed project and Alternative 5 consists of construction and

demolition (C&D) material,[4] soils, and hazardous materials. As with the proposed project, this alternative would comply with SMMC Chapter 8.108, requiring submission of a waste management plan and requiring 70% of all construction and demolition material generated to be diverted. The remaining construction material would be disposed of at a solid waste facility with available capacity. Based on the range of waste types accepted, the number of landfills available in the region, and their remaining capacity, there is sufficient capacity to accommodate Alternative's 5 waste and disposal needs. Regionally, Los Angeles County has adequate landfill capacity for the next 15 years . Therefore, there is sufficient permitted capacity in the region to accommodate the construction activities associated with Alternative 5. Impacts of Alternative 5 would be, as is the case for the proposed project, less than significant.

Operation

Although the exact rate of solid waste generation for Alternative 5 during operation and maintenance is unknown, it would be typical of a commercial/medical office building.

Table 6-12
Alternative 5-Estimated Solid Waste Generation

Proposed Land Uses	Square Feet	Solid Waste Generation Rate (day)[1]	Solid Waste Generation
Clinical/Medical Office	32,974	0.006 lbs/sf	198 lbs/day
Research & Development	76,152	0.007 lbs/sf	533 lbs/day
		Total Alternative 5	**731 lbs/day**
		Total Proposed Project	**491 lbs/day**

Notes:

1 City of Santa Monica 2010.

Lbs = pounds

As is typical for land uses that require special disposal needs, the site operator would contract with a hazardous waste management company approved by the City to schedule regular pickups of waste and transport it to authorized disposal facilities. As indicated above, Los Angeles County has adequate landfill capacity to accommodate waste disposal needs for the next 15 years. Adequate daily surplus capacity exists at the receiving landfill(s), so development of the proposed project or Alternative 5 would not significantly affect current operations or the expected lifetime of the landfills serving the project area. Impacts of Alternative 5 would be, as is the case of the proposed project, less than significant.

4 Building materials and solid waste resulting from construction, remodeling, repair, cleanup, or demolition operations that are not hazardous as defined in California Code of Regulations, Title 22 Section 66261.3 et seq. This term includes, but is not limited to, asphalt, concrete, Portland cement concrete, brick, lumber, gypsum wallboard, cardboard, and other associated packaging, roofing material, ceramic tile, carpeting; plastic pipe and steel.

Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Like the proposed project, under Alternative 5, all collection, transportation, and disposal of municipal solid waste would continue and occur in accordance with all applicable federal, state, and local statues and regulations. During construction, construction activities would comply with waste diversion standards contained within SMMC Chapter 8.108. Additionally, consistent with City requirements and State goals for reducing solid waste, trash and recycling collection bins would be provided. Medical-related waste, in the event it is generated, would be stored on-site per regulatory and industry procedures and transported off-site by qualified vendors in accordance with applicable regulations. Impacts of Alternative 5 would, as is the case with the proposed project, be less than significant.

Energy Consumption

Would the project result in wasteful, inefficient, or unnecessary consumption of energy?

Construction

Construction of the both the proposed project and Alternative 5 would require the use of electric power for as-necessary lighting and electronic equipment, and petroleum for transportation. The majority of the energy used during construction would be from petroleum, and thus, the use of electricity would be temporary and minimal. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and vehicle miles traveled associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption.

As described in Section 4.14, Energy Consumption, of this EIR, the proposed project is estimated to consume approximately 91,622 gallons of petroleum during the construction phase. By comparison, California as a whole consumes approximately 19.3 billion gallons of petroleum per year (EIA 2019). Similar to the proposed project, the Alternative 5 petroleum use would be temporary and minimal and would not be wasteful or inefficient. Impacts of Alternative 5 would be, as is the case of the proposed project, less than significant.

Operation

Alternative 5 would require electricity for building operation, natural gas for building heating, and fuel consumption for the use of motor vehicles traveling to and from the project site. Similar to the proposed project, Alternative 5 would also be required to comply with CALGreen (Title 24, Part 11), and the City of Santa Monica's Green Building Code or the most recent standards. These standards would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in the buildings. They would also reduce the energy impact of the building envelope through use of efficient building materials, such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs. The proposed project would incorporate solar electric

PV systems on the rooftop, as required by the City. Because Alternative 5 would implement sustainability features similar to the proposed project, which would reduce direct and indirect electricity demand, Alternative 5 would not result in a wasteful use of electricity.

Natural gas would be directly consumed throughout operation of Alternative 5, primarily through building heating. Similar to the proposed project, Alternative 5's natural gas use would be minimal in comparison to SoCalGas's distribution of natural gas to customers throughout the region. With various sustainability features, natural gas impacts would be less than significant.

Alternative 5 would require fuel consumption related to the use of motor vehicles traveling to and from the project site. Over the lifetime of Alternative 5, the fuel efficiency of the vehicles being used by residents and employees is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the proposed project area during operation would decrease over time. Additionally, as an infill project, Alternative 5 would also reduce Citywide VMT and contribute to reduction in petroleum usage. The high-density design and location proximal to residential uses would allow for workers to live closer to their jobs, reducing the vehicle miles traveled. Alternative 5, like the proposed project, would include dedicated bicycle parking facilities and an improved streetscape with pedestrian amenities, to encourage non-automotive forms of transportation such as walking or biking to destinations. In addition, this alternative would develop employment opportunities located near several bus routes operated by the Big Blue Bus and the Metro E line, which would encourage alternative modes of transportation. Additionally, a TDM program to achieve LUCE-compliant trip rates would be required as a condition of approval with the goal of reducing the use of single occupant vehicles by increasing the number of trips by walking, bicycle, carpool, vanpool, and transit.

For the reasons stated above, similar to the proposed project, Alternative 5 would not result in wasteful or inefficient use of energy. Impacts of Alternative 5 would be, as is the case of the proposed project, less than significant.

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Both the proposed project and Alternative 5 would include various sustainability features. With these features, the proposed project and Alternative 5 would provide opportunities for improved energy efficiency that would support state and local plans for increasing renewable energy efficiency. For the reasons stated, the proposed project and Alternative 5 would not conflict with or obstruct a state or local plan for renewable energy or energy efficient, and impacts would be less than significant.

Conclusion

Alternative 5 would be similar to the proposed project; however, the FAR and height of the new development would be increased. In comparison to the proposed project, Alternative 5 would result in greater impacts than the proposed project due to the increase in building construction activities.

As discussed, Alternative 5 would result in greater impacts related to aesthetics, air quality, cultural resources, GHG emissions, noise, and utilities and service systems. However, the Alternative 5 would result in less VMT per capita and would meet most of the project objectives.

6.7.6 Alternative 6 – 20th Street Access Alternative

Alternative Project Description

During the scoping period for this EIR, community members expressed concerns regarding the proposed parking garage entrance along the alley (i.e., 19th Court). Specifically, commenters stated that this alley is already busy and that use of the alley for ingress/egress to the proposed project could affect dropoff/pickup for the adjacent Lighthouse Church School. Commenters suggested moving the proposed project's driveway to 20th Street. As such, this alternative is being set forth in response to these comments expressed during the scoping period.

Under this alternative, the ingress/egress for the project site would be changed; primary vehicular access would be provided via 20th Street, with service and loading access provided via 19th Court Alley. All other aspects of the proposed project would remain the same, including the construction scenario, square footages, land use mix, operational scenario, etc.

Analysis

As indicated above, Alternative 6 would be essentially the same as the proposed project with the exception of the location of the primary vehicular access. Because construction, architecture/landscape design, the development program, and operational issues are the same in Alternative 6 as the project, the focus of the comparative impact analysis provided below is limited to those topical areas where the change in access would have a comparative difference. Accordingly, the topics analyzed below are limited to Transportation (specifically, the threshold that addresses hazardous design features). Given the similarities between Alternative 6 and the proposed project, impacts associated with the following topics would be the same as those of the proposed project, and are therefore not evaluated under this alternative: aesthetics, air quality, construction effects, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, land use and planning, noise, tribal cultural resources, utilities and service systems, and energy consumption.

Transportation

Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment)?

As described in Section 4.10, Transportation, of this EIR, the proposed project would result in less than significant impacts relative to hazardous design features and incompatible uses. Alternative 6 may reduce impacts in this category, because the primary ingress/egress driveway would not be situated near the

adjacent school's dropoff/pickup area. However, placing the project's main ingress/egress along 20th Street may cause queuing and backups along 20th Street, thus resulting in new and different impacts from the proposed project. Furthermore, City policy dictates that the project's access be located along 19th Court, unless the Planning Director determines that there are sufficient traffic, circulation, or safety concerns to justify locating the primary driveway for the project on 20th Street. Fehr and Peers conducted a study to determine whether there are specific considerations indicating that access should be located along 20th Street (see Appendix I). The analysis shows that access from 19th Court or 20th Street would be viable. Fehr and Peers did not find unusual circumstances that would dictate deviation from City policy and location of the access along 20th Street (Appendix I). In balance, impacts of Alternative 6 would be similar to those of the proposed project and would be less than significant.

Conclusion

Alternative 6 would result in the same environmental impacts as the proposed project. In the category of traffic-related design hazards, Alternative 6 would result in different impacts relative to the proposed project. Alternative 6 would eliminate conflicts with the adjacent school's dropoff/pickup area. However, impacts would simply be relocated to a different street. As such, the proposed project's impacts would not be substantially reduced or eliminated by Alternative 6. Because Alternative 6 would result in the same land use mix as the proposed project, it would meet the project objectives to the same degrees as the proposed project.

6.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the State CEQA Guidelines indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR and that if the "no project" alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives.

With respect to identifying an Environmentally Superior Alternative among those analyzed in this EIR, the range of feasible Alternatives includes: Alternative 1 – No Project/No Build Alternative; Alternative 2 – No Project/Reasonably Foreseeable Development Alternative; Alternative 3 – Administrative Approval Project Alternative; Alternative 4 – Tier 1 (Reduced Project) Alternative; and Alternative 5 – Tier 2 (2.5 FAR) Project Alternative, and Alternative 6 – 20th Street Access Alternative. A comparative summary of the environmental impacts estimated for each Alternative to the environmental impacts associated with the proposed project is provided in Table 6-13.

As indicated in Table 6-13, Alternative 1 would have fewer impacts than the proposed project or other alternatives, as it would have no impacts on the environment. However, this is considered a "no project" alternative, and thus, another alternative must be selected. Similarly, the Alternative 2 would have fewer impacts than the proposed project and other alternatives; but, is also considered a "no project" alternative.

The remaining alternatives were reviewed in accordance with the State CEQA Guidelines requirement to identify an environmentally superior alternative other than Alternative 1 and Alternative 2. Of the remaining Alternatives, Alternative 3 would be the environmentally superior alternative. Alternative 3 and would lessen the impacts of the proposed project. While Alternative 4 would also lessen impacts, it would do so to a lesser degree than Alternative 3. Alternative 5 would have similar and/or greater impacts to the proposed project. Alternative 6 would have similar impacts to the proposed project. However, Alternative 3 would not meet the project objectives. Additionally, while Alternative 4 meets most of the objectives identified for the proposed project, Alternative 4 would not fully meet the economic objectives of the proposed project.

Table 6-13
Comparison of Impacts Associated with the Alternatives and the Proposed Project

Resource Topic	Proposed Project Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Aesthetics							
Consistency with Scenic Quality Standards: Construction	Less than significant	Less (No Impact)	Less (Less than significant)	Less (Less than significant)	Less (Less than significant)	Greater (Less than significant)	Same (Less than significant)
Consistency with Scenic Quality Standards: Operation	Less than significant	Less (No Impact)	Less (No Impact)	Similar (Less than significant)	Less (Less than significant)	Greater (Less than significant)	Same (Less than significant)
Light or Glare: Construction Operation	Less than significant	Less (No Impact)	Less (Less than significant)	Less (Less than significant)	Less (Less than significant)	Greater (Less than significant)	Same (Less than significant)
Light or Glare: Operation	Less than significant	Less (No Impact)	Less(No Impact)	Less (Less than significant)	Less (Less than significant)	Similar (Less than significant)	Same (Less than significant)
Shade/ Shadow	Less than Significant	Less (No Impact)	Less (No Impact)	Less (Less than significant)	Less (Less than Significant)	Greater (Less than significant)	Same (Less than significant)
Air Quality							
Consistency with Applicable Air Quality Plan	Less than significant	Less (No Impact)	Less (Less than significant)	Less (Less than significant)	Less (Less than significant)	Greater (Less than significant)	Same (Less than significant)
Construction Emissions of Pollutants	Less than significant	Less (No Impact)	Less (Less than significant)	Less (Less than significant)	Less (Less than significant)	Greater (Less than significant)	Same (Less than significant)
Operation Emissions of Pollutants	Less than significant	Less (No Impact)	Less (Less than significant)	Less (Less than significant)	Less (Less than significant)	Greater (Less than significant)	Same (Less than significant)

Table 6-13
Comparison of Impacts Associated with the Alternatives and the Proposed Project

Resource Topic	Proposed Project Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Expose Sensitive Receptors	Less than significant with mitigation	Less (No Impact)	Less (Less than significant)	Less (Less than significant with mitigation)	Less (Less than significant with mitigation)	Greater (Less than significant with mitigation)	Same (Less than significant with mitigation)
Other Emissions, including Odors	Less than significant	Less (No Impact)	Less (No Impact)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Same (Less than significant)
Construction Effects							
Construction Effects	Less than significant with mitigation	Less (No Impact)	Less (Less than significant)	Less (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Greater (Less than significant with mitigation)	Same (Less than significant with mitigation)
Cultural Resources							
Historical Resources	Less than significant with mitigation	Less (No Impact)	Less (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Less (Less than significant with mitigation)	Greater (Less than significant with mitigation)	Same (Less than significant with mitigation)
Archaeological Resources/ Human Remains	Less than significant with mitigation	Less (No Impact)	Less (No Impact)	Similar (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Same (Less than significant with mitigation)
Geology and Soils							
Earthquake Fault Zone, Unstable Soil, Expansive Soil	Less than significant	Less (No Impact)	Less (No Impact)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Same (Less than significant)

Table 6-13
Comparison of Impacts Associated with the Alternatives and the Proposed Project

Resource Topic	Proposed Project Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Paleontological Resources	Less than significant with mitigation	Less (No Impact)	Less (No Impact)	Less (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Same (Less than significant with mitigation)
Greenhouse Gas Emissions							
GHG Emissions	Less than significant	Less (No Impact)	Less (Less than significant)	Less (Less than significant)	Less (Less than significant)	Greater (Less than significant)	Same (Less than significant)
Consistency with Applicable Plan, Policy, or Regulation	Less than significant	Less (No Impact)	Less (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Same (Less than significant)
Hazards and Hazardous Materials							
Release of Hazardous Materials, Hazardous Site: Construction	Less than significant with mitigation	Less (No Impact)	Less (Less than significant)	Less (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Same (Less than significant with mitigation)
Release of Hazardous Materials, Hazardous Site: Operation	Less than significant	Less (No Impact)	Less (Less than significant)	Less (Less than significant)	Less (Less than significant)	Similar (Less than significant)	Same (Less than significant)
Emergency Plan	Less than significant	Less (No Impact)	Less (No Impact)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Same (Less than significant)

Table 6-13
Comparison of Impacts Associated with the Alternatives and the Proposed Project

Resource Topic	Proposed Project Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Land Use and Planning							
Consistency with Applicable Land Use Plan	Less than significant	Less (Less than significant)	Less (No Impact)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Same (Less than significant)
Noise							
Noise Levels: Construction Operation	Less than significant with mitigation	Less (No Impact)	Less (Less than significant)	Less (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Greater (Less than significant with mitigation)	Same (Less than significant with mitigation)
Vibrations	Less than significant with mitigation	Less (No Impact)	Less (Less than significant)	Less (Less than significant with mitigation)	Less (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Same (Less than significant with mitigation)
Transportation							
Applicable Plan, Ordinance, or Policy	Less than significant	Less (No Impact)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Same (Less than significant)
CEQA Guidelines section 15064.3, subdivision (b)	Less than significant	Less (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Same (Less than significant)
Design Feature	Less than significant	Less (No Impact)	Less (No Impact)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)
Emergency Access	Less than significant	Less (No Impact)	Less (No Impact)	Similar (Less than significant)	Similar (Less than significant)	Similar (Less than significant)	Same (Less than significant)

Table 6-13
Comparison of Impacts Associated with the Alternatives and the Proposed Project

Resource Topic	Proposed Project Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Tribal Cultural Resources							
Tribal Cultural Resources	Less than significant with mitigation	Less (No Impact)	Less (No Impact)	Less (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Similar (Less than significant with mitigation)	Same (Less than significant with mitigation)
Utilities and Service Systems							
Infrastructure	Less than significant with mitigation	Less (No Impact)	Less (Less than significant)	Less (Less than significant with mitigation)	Less (Less than significant with mitigation)	Greater (Less than significant with mitigation)	Same (Less than significant with mitigation)
Solid Waste	Less than significant	Less (No Impact)	Less (Less than significant)	Less (Less than significant)	Less (Less than significant)	Similar (Less than significant)	Same (Less than significant)
Energy Consumption							
Wasteful Consumption of Energy Resources	Less than significant	Less (No Impact)	Less (Less than significant)	Less (Less than significant)	Less (Less than significant)	Similar (Less than significant)	Same (Less than significant)
Consistency with Renewable Energy /Energy Efficiency Plan	Less than significant	Less (No Impact)	Less (Less than significant)	Less (Less than significant)	Less (Less than significant)	Similar (Less than significant)	Same (Less than significant)

6.9 REFERENCES

City of Santa Monica. 2010. Land Use and Circulation Element Final Environmental Impact Report, Table 4.13-11, Solid Waste Generated from the Proposed LUCE. SCH No. 2009041117.

EIA (U.S. Energy Information Administration). 2019. "California State Profile and Energy Estimates – Table F16: Total Petroleum Consumption Estimates, 2017." Accessed January 2020. https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA.

Kennedy/Jenks Consultants. 2014. Sustainable Water Master Plan. Prepared for the City of Santa Monica, Water Resources Division, December 2014. Accessed April 19, 2018. https://www.smgov.net/uploadedFiles/Departments/Public_Works/Water/SWMP.pdf.

CHAPTER 7
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