## UC San Diego

# La Jolla Innovation Center Project SCH No. 2020110344

Draft Environmental Impact Report

February 2021 | UCS-33.10



Prepared for:

University of California, San Diego Campus Planning 9500 Gilman Drive, MC 0074 La Jolla, CA 92093

Prepared by:

HELIX Environmental Planning, Inc. 7578 El Cajon Boulevard La Mesa, CA 91942

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### TABLE OF CONTENTS

Section	<u>on</u>			<u>Page</u>
ES	EXECU	JTIVE SUN	/IMARY	ES-1
	ES.1	Overvie	ew	ES-1
	ES.2	Project	Description	ES-1
	ES.3	Project	Objectives	ES-2
	ES.4	Alterna	tives to the Proposed Project	ES-3
	ES.5	Issues F	Raised During Public Scoping	ES-6
1.0	INTRO	DUCTION	I	1-1
	1.1	Environ	mental Review Process	1-1
		1.1.1	Lead, Responsible, and Trustee Agencies	1-1
		1.1.2	Notice of Preparation/Scoping Process of the EIR	1-2
		1.1.3	Draft EIR Public Review	1-3
		1.1.4	Additional Public Outreach	1-3
	1.2	Organiz	ration of the Environmental Impact Report	1-4
2.0	PROJE	CT DESCR	RIPTION	2-1
	2.1	Project	Location	2-1
	2.2	Background and Objectives	2-2	
		2.2.1	Project Background	2-2
		2.2.2	Project Objectives	2-5
	2.3	Project	Characteristics	2-6
		2.3.1	Project Overview	2-6
		2.3.2	Building Program	2-6
		2.3.3	Architectural Design	2-7
		2.3.4	Sustainability Features	2-8
		2.3.5	Light and Glare Minimization Features (UC San Diego Outdoor Lighting	
			and Design Guideline Compliance)	
		2.3.6	Noise Minimization Features (California Building Code Compliance)	
		2.3.7	Project Demolition, Grading, and Drainage	
		2.3.8	Seismic and Geologic Safety Measures	
		2.3.9	Access and Circulation	
		2.3.10	Landscaping, Hardscape, and Other Site Amenities	
		2.3.11	Utility Improvements	
	2.4		action Schedule, Staging, and Best Management Practices	
		2.4.1	Construction Schedule and Staging	
		2.4.2	Best Management Practices	2-15
	2.5	-	Approval Process	
		2.5.1	Campus Review and Approval Process	
		2.5.2	Other Agency Considerations	
	2.6	Referer	nces	2-17

Secti	<u>on</u>			Page
3.0	ENVII	RONMEN <sup>-</sup>	TAL ANALYSIS AND MITIGATION	3-1
	3.1	Aesthe	etics	3.1-1
		3.1.1	Existing Environmental Setting	3.1-1
		3.1.2	Regulatory Framework	
		3.1.3	Environmental Impacts and Mitigation	
		3.1.4	Cumulative Impacts and Mitigation	
		3.1.5	References	
	3.2	Air Qu	ality	3.2-1
		3.2.1	Existing Environmental Setting	3.2-1
		3.2.2	Regulatory Framework	
		3.2.3	Environmental Impacts and Mitigation	
		3.2.4	Cumulative Impacts and Mitigation	
		3.2.5	References	
	3.3	Energy	/	3.3-1
		3.3.1	Existing Environmental Setting	
		3.3.2	Regulatory Framework	
		3.3.3	Environmental Impacts and Mitigation	
		3.3.4	Cumulative Impacts and Mitigation	
		3.3.5	References	
	3.4	Greenl	house Gas Emissions	3.4-1
		3.4.1	Existing Environmental Setting	3.4-1
		3.4.2	Regulatory Framework	
		3.4.3	Environmental Impacts and Mitigation	
		3.4.4	Cumulative Impacts and Mitigation	
		3.4.5	References	3.4-28
	3.5	Hydrol	logy and Water Quality	3.5-1
		3.5.1	Existing Environmental Setting	
		3.5.2	Regulatory Framework	3.5-7
		3.5.3	Environmental Impacts and Mitigation	
		3.5.4	Cumulative Impacts and Mitigation	
		3.5.5	References	
	3.6	Land U	Jse and Planning	3.6-1
		3.6.1	Existing Environmental Setting	
		3.6.2	Regulatory Framework	
		3.6.3	Environmental Impacts and Mitigation	
		3.6.4	Cumulative Impacts and Mitigation	
		3.6.5	References	

<u>Secti</u>	<u>on</u>			Page
	3.7	Noise		3.7-1
		3.7.1	Existing Environmental Setting	3.7-1
		3.7.2	Regulatory Framework	
		3.7.3	Environmental Impacts and Mitigation	
		3.7.4	Cumulative Impacts and Mitigation	
		3.7.5	References	
	3.8	Transpo	ortation	3.8-1
		3.8.1	Existing Environmental Setting	3.8-1
		3.8.2	Regulatory Framework	3.8-1
		3.8.3	Environmental Impacts and Mitigation	3.8-6
		3.8.4	Cumulative Impacts and Mitigation	3.8-13
		3.8.5	References	3.8-15
4.0	OTHE	R CEQA CO	ONSIDERATIONS	4-1
	4.1	Effects	Found Not to be Significant	4-1
		4.1.1	Agriculture and Forestry Resources	4-1
		4.1.2	Biological Resources	4-2
		4.1.3	Cultural Resources	4-4
		4.1.4	Geology and Soils	4-5
		4.1.5	Hazards and Hazardous Materials	4-7
		4.1.6	Minerals Resources	4-10
		4.1.7	Population and Housing	4-11
		4.1.8	Public Services	4-11
		4.1.9	Recreation	4-12
		4.1.10	Tribal Cultural Resources	4-12
		4.1.11	Utilities and Service Systems	4-13
		4.1.12	Wildfire	4-16
	4.2	Growth	Inducement	4-17
	4.3	Significa	ant and Unavoidable Environmental Impacts	4-18
	4.4	Significa	ant Irreversible Environmental Effects	4-18
	4.5	Referer	nces	4-19
5.0	PROJ	ECT ALTER	NATIVES	5-1
	5.1	Introdu	ction	5-1
	5.2	Summa	ry of Project Objectives and Significant Impacts	5-1
		5.2.1	Project Objectives	5-1
		5.2.2	Significant Impacts of the Proposed Project	5-2
	5.3	Alterna	tives Considered But Rejected	5-3
		5.3.1	Alternative Off-Campus Location	
		5.3.2	Alternative On-Campus Location	5-3
		5.3.3	Reduced Height Project (Same Size)	5-3
		5.3.4	Maximum Buildout Project	5-4

Section	ļ.		<u>Page</u>
	5.4	Alternatives Analyzed	5-4
		5.4.1 No Project Alternative (Existing Restaurant Use)	5-4
		5.4.2 Two-Level Office Building Alternative	5-7
		5.4.3 Two-Level Educational Building Alternative	5-10
	5.5	Summary of Project Alternatives	5-13
	5.6	Environmentally Superior Alternative	5-15
6.0	PREPAF	LIST OF APPENDICES	6-1
A B C D E1 E2 F G	Air Qua Cultura Geotec Drainag Storm \ Phase I Noise S	of Preparation (NOP), Response Letters, and Scoping Meeting Comments lity and Greenhouse Gas Emissions Technical Report I Resources Report hnical Investigation ge Report Vater Quality Management Plan Environmental Site Assessment urvey Sheets and Modeling Results ortation Impact Analysis	

### **LIST OF FIGURES**

No.	<u>Title</u>	Follows Page
1-1	Regional Location	1-2
1-2	Project Vicinity	
2-1	Aerial Photograph of Site and Surroundings	
2-2	Limits of Work	
2-3	Site Topography	2-2
2-4	Schematic Site Design	
2-5	Conceptual Architectural Renderings	2-8
2-6	Conceptual Building Elevation – North	2-8
2-7	Conceptual Building Elevation – South	2-8
2-8	Conceptual Building Elevation – East	2-8
2-9	Conceptual Building Elevation – West	2-8
2-10	Conceptual Grading Plan	2-12
2-11	Conceptual Drainage Plan	2-12
2-12	Vehicular and Pedestrian Access	2-14
2-13a-b	Conceptual Landscape Plan	2-14
2-14	Conceptual Hardscape Plan	2-14
3.1-1a-c	Surrounding Development Photos	3.1-2
3.1-2a-b	Project Site Photos	3.1-2
3.1-3a-d	Pre- and Post-Project Views	3.1-12
3.5-1	Regional Hydrological Setting – Peñasquitos Hydrologic Unit	3.5-2
	LIST OF TABLES	
No.	<u>Title</u>	<u>Page</u>
ES-1	Project-Level Environmental Impacts and Mitigation Measures	ES-8
ES-2	Cumulative Impacts and Mitigation Measures	
ES-3	Summary of Analysis for Alternatives to the Proposed Project	
2-1	Proposed Uses	2-6
2-2	Proposed Building Program	2-7
3-1	Geographic Scope of Cumulative Impact Analyses	3-3
3-2	Cumulative Projects	3-3
3.2-1	Air Quality Monitoring Data	3.2-5
3.2-2	Existing Land Use (Restaurant) Maximum Daily Operational Emissions	3.2-5
3.2-3	Ambient Air Quality Standards	3.2-7
3.2-4	San Diego Air Basin Attainment Status	3.2-8
3.2-5	Screening-level Thresholds for Air Quality Impact Analysis	
3.2-6	Construction Equipment Assumptions	3.2-15
3.2-7	Anticipated Construction Schedule	
3.2-8	Maximum Daily Construction Emissions	
3.2-9	Maximum Daily Operational Emissions	
3.3-1	San Diego County Electricity Consumption 2015-2019	
3.3-2	San Diego County Gas Consumption 2015-2019	3.3-3

### LIST OF TABLES (cont.)

<u>No.</u>	<u>Title</u>	<u>Page</u>
3.3-3	Project Estimated Construction Energy Use	3.3-9
3.4-1	Global Warming Potentials and Atmospheric Lifetimes	3.4-3
3.4-2	California Greenhouse Gas Emissions by Sector	3.4-3
3.4-3	2016 UC San Diego La Jolla Campus GHG Emissions	3.4-5
3.4-4	Existing Land Use (Restaurant) Operational GHG Emissions	3.4-6
3.4-5	Statewide Emissions Inventory and Reduction Targets	3.4-18
3.4-6	Adjusted Statewide Emissions Inventory – Land Use-Related Sectors	3.4-19
3.4-7	Service Population Efficiency Targets	3.4-21
3.4-8	Estimated Construction GHG Emissions	3.4-22
3.4-9	Estimated Operational (Year 2024) GHG Emissions	3.4-24
3.4-10	GHG Emissions Significance Determination for Consistency with AB 32 and SB 32	
	(Scopes 1, 2, and 3)	3.4-24
3.5-1	Applicable Beneficial Use Designations	3.5-3
3.5-2	Definitions of Applicable Beneficial Use Designations	
3.5-3	Existing Flow Rates during Flood Years (6-Hour Event)	3.5-24
3.5-4	Proposed Flow Rates during Flood Years (6-Hour Event)	3.5-24
3.7-1	Typical A-Weighted Noise Levels	
3.7-2	Human Response to Groundborne Vibration	
3.7-3	FTA Groundborne Vibration Impact Criteria	3.7-5
3.7-4	City of San Diego Land Use Noise Compatibility Guidelines	3.7-7
3.7-5	City of San Diego Applicable Noise Limits	3.7-8
3.7-6	Summary of Applicable Noise Impact Significance Criteria	3.7-9
3.7-7	Existing Plus Project Traffic Noise Levels	
3.7-8	Construction Equipment Assumptions	3.7-14
3.7-9	Construction Noise Level	3.7-15
3.7-10	Vibration Impact Significance Criteria with Respect to Vibration-Sensitive Activities	3.7-17
3.7-11	Vibration Impact Screening Distances	
3.7-12	Vibration Source Levels for Construction Equipment	3.7-18
3.8-1	University Alternative Transportation Goals and Project Consistency	3.8-7
3.8-2	City of San Diego Draft VMT Significance Thresholds	
3.8-3	Office Use Employee VMT Analysis	3.8-10
3.8-4	Total Regional VMT Analysis for Classroom and Retail Use	3.8-10
5-1	Summary Analysis for Alternatives to the Proposed Project	
5-2	Ability of Alternatives to Meet Project Objectives	
	· · · · · · · · · · · · · · · · · · ·	

### ACRONYMS AND ABBREVIATIONS

2018 LRDP 2018 UC San Diego Long Range Development Plan La Jolla Campus

AB Assembly Bill

ADA Americans with Disabilities Act

ADT average daily trips
AMSL above mean sea level
APCD air pollution control district
APZ Accident Potential Zone

ASBS Areas of Special Biological Significance

ASHRAE American Society of Heating, Refrigerating, and Air-Conditioning

**Engineers** 

ATS advanced treatment system

BAAQMD Bay Area Air Quality Management District

BAT best available technology economically achievable BCT best conventional pollutant control technology

BMP best management practice

BTU British thermal unit

C&D construction and demolition

C/CPC Campus/Community Planning Committee

CAA Clean Air Act

CAAQS
CAFE
Corporate Average Fuel Economy
CalEEMod
California Emissions Estimator Model
CalEPA
California Environmental Protection Agency
CALGreen
California Green Building Standards Code
Caltrans
CAPCOA
California Pollution Control Officers Association

CARB California Air Resources Board

CASQA California Stormwater Quality Association

CBC California Building Code

CCAB Chancellors Community Advisory Board

CCR California Code of Regulations

CDC California Department of Conservation

CEC California Energy Commission

CEQA California Environmental Quality Act

CFC chlorofluorocarbon
CFS cubic feet per second

CH<sub>4</sub> methane

CHRIS California Historical Resources Information System

City City of San Diego

CMP Congestion Management Plan/corrugated metal pipe

CNEL Community Noise Equivalent Level

CNRA California Natural Resources Agency

CO carbon monoxide CO<sub>2</sub> carbon dioxide

CO₂e carbon dioxide equivalent COC constituents of concern Community Plan University Community Plan

CPUC California Public Utilities Commission
CSMP Construction Site Monitoring Program

CWA Clean Water Act
CY cubic yard

dB decibel

dBA A-weighted decibel
DOD Department of Defense
DPM diesel particulate matter
DRB Design Review Board

DTSC Department of Toxic Substances Control

DWR Department of Water Resources

EAP Energy Action Plan

EH&S Environmental Health & Safety
EIR Environmental Impact Report

EMRA encroachment maintenance and removal agreement

EO Executive Order

ESA Environmental Site Assessment ESL Environmentally Sensitive Lands

FEMA Federal Emergency Management Agency

FHWA Federal Highway Administration
FTA Federal Transit Administration

g/L grams per liter
GHG greenhouse gas
GSF gross square feet
GWh gigawatt hour

GWP global warming potential

H<sub>2</sub>S hydrogen sulfide HA hydrologic area

HAP hazardous air pollutant

HELIX Environmental Planning, Inc.

HRA health risk assessment
HSA hydrologic sub area
HU Hydrologic Unit

HVAC heating, ventilation, and air conditioning

I-5 Interstate 5
I-805 Interstate 805

ICLEI International Council for Local Environmental Initiatives

IEPR Integrated Energy Policy Report

IGP General Permit for Industrial Storm Water Discharges

in/sec inches per second

IPCC Intergovernmental Panel on Climate Change

ITE Institute of Transportation Engineers

kW kilowatt kWh kilowatt hour

L<sub>DN</sub> Day Night sound level LED light emitting diode

LEED Leadership in Energy and Environmental Design

LEQ equivalent sound level LID Low Impact Development

LICPA La Jolla Community Planning Association LLG Linscott, Law, & Greenspan Engineers

LOS level of service

LRDP Long Range Development Plan

LRT light rail transit

LUST leaking underground storage tank

MCAS Marine Corps Air Station
MEI maximally exposed individual
MEP maximum extent practicable
MHPA Multi-Habitat Planning Area

mm millimeter

MMRP Mitigation Monitoring and Reporting Program

MMT million metric tons mPa micro-Pascals mph miles per hour

MPO Metropolitan Planning Organization

MRZ-1 Mineral Resource Zone One

MS4 Municipal Separate Storm Sewer Systems
MSCP Multiple Species Conservation Program

MT metric ton

MTS Metropolitan Transit System

MW megawatt

N<sub>2</sub>O nitrous oxide

NAAQS National Ambient Air Quality Standards
NAHC Native American Heritage Commission

NASA National Aeronautics and Space Administration NCCP Natural Community Conservation Planning

NF<sub>3</sub> nitrogen trifluoride

NHTSA National Highway Traffic Safety Administration

NIH National Institutes of Health

NO nitric oxide

NO<sub>2</sub> nitrogen dioxide
NOP Notice of Preparation
NO<sub>X</sub> oxides of nitrogen

NPDES National Pollutant Discharge Elimination System

NSLU noise-sensitive land use

 $O_3$  ozone

OITC outdoor-indoor transmission class

OPR Governor's Office of Planning and Research

PFCs perfluorocarbons

PLWTP Point Loma Wastewater Treatment Plant

PM particulate matter

PM<sub>10</sub> particulate matter less than 10 microns in diameter PM<sub>2.5</sub> particulate matter less than 2.5 microns in diameter

POC point of compliance
ppm parts per million
PPV peak particle velocity
PRC Public Resources Code
PUD Public Utilities Department

PV photovoltaic PVC polyvinyl chloride

RCNM Roadway Construction Noise Model RCP Regional Comprehensive Plan

REAP Rain Event Action Plan

REC recognized environmental condition

Regents Board of Regents of the University of California

RFS Renewable Fuel Standard

RMS root-mean-square ROG reactive organic gas

RPS Renewable Portfolio Standard RTP Regional Transportation Plan

RWQCB Regional Water Quality Control Board

SAFE Safer Affordable Fuel-Efficient

SANDAG San Diego Association of Governments

SB Senate Bill

SCIC South Coastal Information Center
Scripps Scripps Institution of Oceanography
SCS Sustainable Communities Strategy

SDAB San Diego Air Basin

SDAPCD San Diego Air Pollution Control District
SDCWA San Diego County Water Authority

SDG&E San Diego Gas and Electric SDMC San Diego Municipal Code

SDRWQCB San Diego Regional Water Quality Control Board

SEP Strategic Energy Plan

SF square foot/feet
SF<sub>6</sub> sulfur hexafluoride

SIP State Implementation Plan

SMAQMD Sacramento Metropolitan Air Quality Management District

SMARTS Stormwater Multiple Application Tracking System

SO<sub>2</sub> sulfur dioxide

SOV single-occupant vehicle

SO<sub>X</sub> sulfur oxide

SP service population
SPL sound pressure level
SR 163 State Route 163
SR 52 State Route 52

STC sound transmission class
SUV sport utility vehicle

SWMP storm water management plan

SWPPP storm water pollution prevention plan SWQMP Storm Water Quality Management Plan SWRCB State Water Resources Control Board

TAC toxic air contaminant

T-BACT Toxics-Best Available Control Technology

TCP traffic control plan

TCR Tribal Cultural Resource/The Climate Registry

TDM Transportation Demand Management
TFIC Traffic Forecast Information Center
TIA Transportation Impact Analysis
TMDL Total Maximum Daily Load
TOD transit oriented development

TPA Transit Priority Area

U.S. United States

UC University of California

UC San Diego University of California, San Diego

UCOP University of California Office of the President

UCPG University Community Planning Group USEPA U.S. Environmental Protection Agency

USGBC U.S. Green Building Council UTC University Town Center

VA Veterans Affairs
VdB vibration decibel
VMT vehicle miles traveled
VOC volatile organic compound
VRF variable refrigerant flow

WDR waste discharge requirement

WLA waste load allocation

WMA Watershed Management Area

WPCP Water Pollution Control Plan

WQBEL water quality-based effluent limitation WQIP water quality improvement plan

ZEV zero emissions vehicle

ZWP Zero Waste Plan

### **EXECUTIVE SUMMARY**

This section is an executive summary of the Environmental Impact Report (EIR) for the proposed La Jolla Innovation Center Project (herein referred to as "Project"), prepared in compliance with the California Environmental Quality Act (CEQA). This section highlights the major areas of importance in the environmental analysis for the proposed Project, as required by CEQA Guidelines Section 15123. It also provides a brief description of the proposed Project, Project objectives, alternatives to the proposed Project, and areas of public interest known to the University of California, San Diego (UC San Diego). In addition, this section provides a table summarizing: (1) the potential environmental impacts that could occur as a result of the proposed Project; (2) the level of impact significance before mitigation; (3) the recommended mitigation measures that would avoid or reduce significant environmental impacts; and (4) the level of impact significance after mitigation measures are implemented.

A cumulative impacts table is included as well, which summarizes: (1) cumulative environmental impacts; (2) the geographic scope of the cumulative impact analysis for each issue; (3) the significance of each cumulative impact; (4) the Project's contribution to each impact; (5) recommended mitigation measures; and (6) significance of Project impact considering mitigation. A third table that compares the anticipated environmental impacts of the proposed Project with each Project alternative is also provided.

#### **ES.1** OVERVIEW

As required by CEQA, this EIR: (1) assesses the potentially significant direct, indirect, and cumulative environmental effects of the proposed Project; (2) identifies potential feasible means of avoiding or substantially lessening significant adverse impacts; and (3) evaluates a range of reasonable alternatives to the proposed Project, including the required No Project Alternative.

The Project site is currently owned by an affiliate of GPI Companies, a private real estate development firm. The site is currently located within a larger approximately 7-acre commercial property within the jurisdiction of the City of San Diego University City Community Plan area, zoned as CO-1-2, Commercial, within the Coastal Height Limit Overlay Zone, Community Plan Implementation Overlay Zone, and the Parking Impact Overlay Zone. The site is not within the boundaries of the UC San Diego La Jolla campus. The commercial center property is proposed to be subdivided and the existing restaurant building demolished, with the approximately 0.9-acre Project parcel subsequently sold to UC San Diego and leased to an affiliate of GPI Companies to develop the proposed Project. The total Project workspace includes would encompass 1.2 acres. Upon acquisition of the property, the Project site would be under the ownership of The Board of Regents of the University of California (UC Regents or The Regents) and be subject to UC land management policies. This EIR will be used by The Regents to evaluate the environmental implications of developing the proposed Project.

#### ES.2 PROJECT DESCRIPTION

The Project proposes a seven-story above-grade building that would include five levels of UC San Diego Health Sciences and UC San Diego Extension uses and two levels of parking, as well as two subterranean parking levels (four parking levels total). The building would be a maximum of 100 feet in height from the existing ground level. The building would include 103,314 gross square feet (GSF) associated with

office and educational uses. Approximately 1,420 GSF of ground-floor retail space (such as a café) would be provided within Parking Level P3 at the southeastern corner of the building. The Project would provide approximately 275 parking spaces spread between a four-level, 95,500-GSF parking garage and surface parking.

Vehicular access to the Project site would be provided by the two existing driveways to the commercial center from Villa La Jolla Drive and the Villa Norte cul-de-sac. Pedestrian access to the Project site would be provided via a new sidewalk connection to La Jolla Village Drive and via an existing City owned pedestrian bridge that crosses La Jolla Village Drive and provides direct access to the Health Sciences portion of the UC San Diego campus. Utility connections would be required to provide potable water, sanitary sewer, storm drains, and electrical power to the Project site. The proposed Project would establish connections to these existing utilities located in the Project area.

The interior of the building would be designed to allow for flexibility of use by UC San Diego School of Medicine and UC San Diego Extension. Building occupancy is estimated at approximately 947 individuals based upon the anticipated uses, and the maximum occupancy of the building would be approximately 2,027 individuals based upon City of San Diego egress requirements.

The Project would comply with the current California Green Building Standards Code (CALGreen) and Leadership in Energy and Environmental Design (LEED) parking and bicycle storage requirements. On-site parking would include 7 accessible parking stalls (including 2 van stalls) located within the parking structure; the 2 accessible parking stalls (including 1 van stall) that would be removed during demolition of the existing surface parking would be replaced. Per CALGreen requirements, approximately 8 percent of the total stalls provided are required to be designated for clean air vehicles and 6 percent wired for electric vehicle charging; a total of 23 clean air vehicle stalls and infrastructure for 17 electric vehicle charging stations would be provided. A total of 15 long-term bicycle parking stalls are proposed within the parking structure.

#### ES.3 PROJECT OBJECTIVES

The following objectives have been identified for the proposed La Jolla Innovation Center Project:

- 1. Provide a facility that aligns with the UC Seismic Safety Policy, allowing UC San Diego Health Sciences and UC San Diego Extension programs to relocate from approximately 102,500 GSF of existing space that is non-compliant with UC Seismic Safety Policy.
- 2. Create programmatic and space efficiencies that allow for future UC San Diego Health Sciences and UC San Diego Extension program growth, including use of shared amenities by consolidating programs currently spread out over multiple locations into one building.
- 3. Provide leasable office space proximate to the VA Medical Center and the UC San Diego Health Sciences West Neighborhood for UC San Diego Health Sciences programs (including UC San Diego Health and School of Medicine) at a location that is public-facing and easily accessible to patients and research participants as well as faculty and other personnel located primarily on campus.

- 4. Provide leasable classroom and office space for UC San Diego Extension programs at a location that is public-facing and conveniently accessible to both campus and community constituents as well as faculty and other personnel located primarily on campus.
- 5. Redevelop a currently vacant and underutilized site within a transit priority area (TPA) that has abundant alternative transportation options, including access to the UC San Diego Blue Line Light Rail Transit (LRT) system and bike and pedestrian access to the UC San Diego La Jolla campus and VA Medical Center.
- 6. Incorporate sustainable design features to achieve LEED Silver rating or better for the Project, thereby reducing energy consumption, conserving natural resources, and complying with the UC Sustainable Practices Policy.
- 7. Develop a financially feasible project through a strategic public-private partnership opportunity that develops a facility with leasable office and educational space that complies with UC building policies.

### ES.4 ALTERNATIVES TO THE PROPOSED PROJECT

Three alternatives to the proposed Project were identified for further analysis. These alternatives were selected to avoid or minimize significant impacts associated with implementing the proposed Project. The following Project alternatives are analyzed in this EIR:

- The No Project Alternative assumes that the current land use of the site would be retained, specifically re-use of the existing building as a restaurant.
- The Two-Level Office Building Alternative assumes that the site would be redeveloped with a two level (maximum 30 feet in height) office building and associated parking.
- The Two-Level Educational Building Alternative assumes that the site would be redeveloped with two levels of educational uses and associated parking.

### No Project Alternative (Existing Restaurant Use)

Under the No Project Alternative, the Project site would not be purchased by UC and would not be redeveloped with office and educational uses and parking. Although the existing building is currently vacant, the No Project Alternative assumes that the building would be leased to a new tenant under its existing land use as a restaurant. The UC San Diego Extension and UC San Diego Health Sciences user groups would continue to operate in their existing locations on the UC San Diego campus and in leased space at a different off-campus location when the leases expire.

The No Project Alternative would avoid the potentially significant but mitigable construction impacts identified for the proposed Project related to energy and vibration. However, the No Project Alternative would not meet any of the Project objectives.

The No Project Alternative would not achieve any of the Project objectives identified in Section 5.1.1. It would not provide a facility that would allow the UC San Diego Health Sciences and UC San Diego Extension programs to be relocated into a building that is compliant with the UC Seismic Safety Policy, UC building policies, and the UC Sustainable Practices Policy (Objectives 1 and 6). It would not create

programmatic and space efficiencies in shared amenities by consolidating programs currently spread out over multiple locations into one building (Objective 2). The No Project Alternative would not provide leasable office space proximate to the VA Medical Center and the UC San Diego Health Sciences West Neighborhood for UC San Diego Health Sciences programs (including UC San Diego Health and School of Medicine) or provide leasable classroom and office space for Extension programs at a location that is public-facing and easily accessible to patients, research participants (Objectives 3 and 4), and those seeking educational opportunities provided by UC San Diego Extension. The currently vacant site would not be revitalized, and the objective of redeveloping an underutilized site proximate to two new LRT stations would not occur (Objective 5). Finally, the University would not be able to develop a financially feasible project through a public-private partnership (Objective 7).

### Two-Level Office Building Alternative

The Two-Level Office Building Alternative assumes no subdivision of the parcel and subsequent purchase by UC and that the current owner redevelops the 0.9-acre area with a two-level office building, limiting the structure to the City's 30-foot height limit. Under the Two-Level Office Building Alternative, a two-story building with 45,345 SF of general office uses would be constructed, with one subgrade parking level, providing 115 parking spaces in addition to the 69 surface parking spaces to meet the City's parking ratio requirements. It is assumed that the building would not be leased to the UC and therefore the Two-Level Office Building Alternative would not be required to meet the UC Seismic Policy or other UC policies and building codes.

The UC San Diego Extension and UC San Diego Health Sciences user groups would continue to operate in their existing locations on the UC San Diego campus and in leased space located off campus until their current leases expire.

The Two-Level Office Building Alternative would reduce the adverse effects (while still requiring mitigation) on energy (use of fuel-efficient construction equipment) and noise (construction vibration).

The Two-Level Office Building Alternative would achieve one out of the seven Project objectives identified in Section 5.1.1. The currently vacant, underutilized site would be revitalized within a site proximate to two new LRT stations (Objective 5). However, it would not provide a facility that would allow the UC San Diego Health Sciences and UC San Diego Extension programs to relocate into a building that is compliant with the UC Seismic Safety Policy, building codes, and UC Sustainable Practices Policy (such as incorporating sustainable design features to achieve a LEED silver rating) (Objectives 1 and 6). It would not create programmatic and space efficiencies in shared amenities by consolidating programs currently spread out over multiple locations into one building (Objective 2). It would also not allow for future expansion of either UC San Diego Health Sciences or Extension programs in this space. The Two-Level Office Building Alternative would not provide leasable office space proximate to the VA Medical Center and the UC San Diego Health Sciences West Neighborhood for UC San Diego Health Sciences programs (including UC San Diego Health and School of Medicine) or provide leasable classroom and office space for Extension programs at a location that is public-facing and easily accessible to patients, research participants and those seeking education opportunities from UC San Diego Extension (Objectives 3 and 4). Finally, the University would not be able to develop a financially feasible project through a public-private partnership (Objective 7).

### Two-Level Education Building Alternative

Under the Two-Level Educational Building Alternative, the 0.9-acre parcel would be sold to UC and a two-story building, limiting the structure to the City's 30-foot height limit with 39,670 SF of office/educational uses limited to UC San Diego Extension would be constructed, providing 115 parking spaces in addition to the 69 surface parking spaces. The retail component (café) would not be included to maximize educational space. The Two-Level Educational Building Alternative would include the same sustainability features as the proposed Project, as applicable, and would achieve LEED Silver certification.

The UC San Diego Health Sciences programs, including support for UC San Diego Health Sciences and UC San Diego School of Medicine would continue to operate in their existing locations on the UC San Diego campus and in leased space located off campus until their lease term expires, after which they would need to relocate to alternate lease space that complies with UC Seismic Safety Policy and building policies.

The Two-Level Education Building Alternative would reduce the adverse effects (while still requiring mitigation) on energy (use of fuel-efficient construction equipment) and vibration (construction vibration).

The Two-Level Educational Building Alternative would meet three and partially achieve two out of the seven Project objectives identified in Section 5.1.1. While it would allow the University to develop a project through a public-private partnership and provide a facility that aligns with the UC Seismic Safety Policy, it would not include capacity required for UC San Diego Health Sciences and other office uses, and therefore would not fully satisfy the goal of relocating all of the 102,500 SF of existing space that is non-compliant with the UC building code (Objective 1). Because the Two-Level Educational Building Alternative would only include uses associated with UC San Diego Extension, it would only partially satisfy the goal of creating programmatic and space efficiencies including use of shared amenities by consolidating programs currently spread out over multiple locations into one building (Objective 2). It would not allow for future expansion of either UC San Diego Health Sciences or Extension programs in this space.

The Two-Level Educational Building Alternative would provide leasable classroom and office space for UC San Diego Extension programs at a location that is public-facing and conveniently accessible to both campus and community constituents as well as faculty and other campus personnel though not to the extent as the proposed Project (Objective 4). The alternative would redevelop a currently vacant and underutilized site within a TPA that has abundant alternative transportation options (Objective 5), and incorporate sustainable design features to achieve LEED Silver rating or better for the Project (Objective 6).

The Two-Level Educational Building Alternative would not provide leasable office space proximate to the VA Medical Center and the UC San Diego Health Sciences West Neighborhood for UC San Diego Health Sciences programs (Objective 3). Therefore, the UC San Diego Health Sciences programs would necessitate finding another location for these uses, which may not be available at a location that is public-facing, in proximity to the UC San Diego La Jolla campus and easily accessible to patients and research participants. Finally, the University would not be able to develop a financially feasible project, and consequently would not consider this alternative to develop the site (Objective 7).

#### **Environmentally Superior Alternative**

An EIR is required to identify the environmentally superior alternative (the alternative having the potential for the fewest significant environmental impacts) from among the range of reasonable alternatives that are evaluated. Table ES-3 provides a summary comparison of the alternatives with the proposed Project with the purpose of highlighting whether the alternatives would result in a similar, greater, or lesser impact, than the proposed Project. The No Project Alternative (Existing Restaurant Use) would avoid the potentially significant but mitigable temporary construction impacts identified for the proposed Project related to energy and vibration. Further, the No Project Alternative would not meet any of the Project objectives.

Although the No Project Alternative could result in minimal environmental impacts, CEQA Guidelines requires identification of an alternative other than the No Project Alternative as environmentally superior. Based upon the discussion above, the Two-Level Educational Building Alternative would be considered Environmentally Superior Alternative for its ability to reduce the adverse effects (while still requiring mitigation) on energy (use of fuel-efficient construction equipment) and vibration (construction vibration), while meeting more of the Project objectives than the Two-Level Office Building Alternative.

The Two-Level Educational Building Alternative would meet three of the Project objectives, though to a lesser extent than the proposed Project. It would not include capacity to consolidate the UC San Diego School of Medicine uses as the proposed Project, so it would only partially achieve the following Project objectives:

Provide a facility that aligns with the UC Seismic Safety Policy, allowing UC San Diego Health
Sciences and UC San Diego Extension programs to relocate from approximately 102,500 SF of
existing space that is non-compliant with UC building code.

Create programmatic and space efficiencies including use of shared amenities by consolidating programs currently spread out over multiple locations into one building.

### ES.5 ISSUES RAISED DURING PUBLIC SCOPING

This EIR addresses issues associated with the proposed Project that are known to the lead agency or were raised by agencies or interested parties during the Notice of Preparation (NOP) public/agency review period. Written comments, as well as comments submitted during the online public scoping meeting held on December 7, 2020 were received from 4 public agencies, 1 Native American tribe, 1 organization, and 3 individuals. Appendix A of this EIR includes comments received on the NOP and scoping meeting. These issues include:

- Requests of copies of all records, communications, and mailed notices of all hearings and/or actions related to the Project;
- Analysis of multimodal transportation such as pedestrian and bicycle connectivity;
- Analysis of vehicle miles traveled (VMT) and operational transportation impacts;
- Consideration of potential Project impacts within Caltrans Right-of-Way;

- Consideration of historic resources, cultural resources, and tribal cultural resources;
- Consideration of potential impacts to traffic and parking;
- Consideration of potential visual impacts from the building's location and those resulting from construction of the proposed building, removal of vegetation, and increased lighting from cars.
- Consideration of potential noise impacts from proposed heating, ventilation, and air conditioning (HVAC) units and increased traffic;
- Consideration of changes to the storm water system;
- Consideration with discharge limitations involving downstream marine life and ecological reserves;
- Consideration of groundwater discharge;
- Consideration of potential archaeological and Native American monitoring pending the results of site surveys and records searches;
- Consideration of the Project's height within the coastal zone; and
- Consideration of potential biological impacts to migratory birds and other native species.

Table ES-1
PROJECT-LEVEL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
ENVIRONMENTAL IMPACTS AND	MITIGATION			•
Aesthetics				
Scenic Vistas	The Project site is not located within an area designated as within a scenic vista or corridor and would not obstruct views of scenic resources.	NI	No mitigation is required.	NA
Scenic Resources within a State Scenic Highway	The Project site is not located along a designated State scenic highway and therefore would not damage scenic resources within a State scenic highway.	NI	No mitigation is required.	NA
Degradation of Existing Community Character or Conflict with Zoning and Other Regulations for Scenic Quality	Implementation of the proposed Project does not substantially degrade the existing community character of areas adjacent to the Project site and, once acquired by UC Regents, would not conflict with regulations governing scenic quality.	LS	No mitigation is required.	NA
Lighting and Glare	Although the Project would introduce new sources of lighting, it is located in an urban, well-lit area and would adhere to University guidelines regarding light and glare.	LS	No mitigation is required.	NA
Air Quality				
Consistency with Applicable Air Quality Plan	Implementation of the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan.	LS	No mitigation is required.	NA
Cumulative Increase in Criteria Pollutant Emissions	Implementation of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard.	LS	No mitigation is required.	NA
Sensitive Receptors	Implementation of the proposed Project would not expose sensitive receptors to substantial pollutant concentrations.	LS	No mitigation is required.	NA
Other Emissions	Implementation of the proposed Project would not expose sensitive receptors to substantial pollutant concentrations (such as those leading to odors) adversely affecting a substantial number of people.	LS	No mitigation is required.	NA

S = Significant; LS = Less than Significant; PS = Potentially Significant; SU = Significant/Unavoidable; NI = No Impact; NA = Not Applicable

### Table ES-1 (cont.) PROJECT-LEVEL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Signific Impact Befo Mitiga		Mitigation Measure(s)	Significance After Mitigation
Energy				
Energy Consumption	Implementation of the proposed Project could result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.	PS	Mitigation Measure ENE-1.	LS
Consistency with Applicable Energy Plans	Implementation of the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LS	No mitigation is required.	NA
Greenhouse Gas Emissions			•	
Generate GHG Emissions	Implementation of the proposed Project would not generate GHG emissions that may have a significant impact on the environment.	LS	No mitigation is required.	NA
Consistency with Applicable Plan	Implementation of the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.	LS	No mitigation is required.	NA
Hydrology and Water Quality	,		-1	•
Water Quality	The proposed Project would not violate water quality requirements or degrade water quality.	LS	No mitigation is required.	NA
Groundwater	The proposed Project would not result in an increase in substantial decreases in groundwater supplies or interfere substantially with groundwater recharge.	NI	No mitigation is required.	NA
Site Drainage and Hydrology	The proposed Project would not result in an increase in impervious surfaces and would not exceed the capacity of the storm water drainage systems or cause substantial erosion.	LS	No mitigation is required.	NA
Inundation	The Project site is not subject to inundation by flood hazard, tsunami, or seiche.	NI	No mitigation is required.	NA
Water Quality Control Plan or Sustainable Groundwater Management Plan	The proposed Project would have the potential to generate pollutants during construction and post-construction activities; however, compliance with applicable regulations would ensure that it would not conflict with or obstruct the implementation of the San Diego Basin Plan.	LS	No mitigation is required.	NA

S = Significant; LS = Less than Significant; PS = Potentially Significant; SU = Significant/Unavoidable; NI = No Impact; NA = Not Applicable

### Table ES-1 (cont.) PROJECT-LEVEL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Land Use and Planning				
Divide an Established Community	The proposed Project would not divide an established community.	NI	No mitigation is required.	NA
Consistency with Applicable Plans	The Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation for the purposes of avoiding an environmental effect.	LS	No mitigation is required.	NA
Noise				
Exceed Noise Standards	Implementation of the proposed Project would increase traffic volumes on local roadways, feature stationary noise sources, and result in construction activities that could expose NSLUs to noise levels in excess of standards.	LS	No mitigation is required.	NA
Excessive Groundborne Vibration and Noise	Vibration-sensitive land uses may be subject to vibration levels in excess of established guidelines. Construction of the proposed Project may require heavy equipment or pile-driving activities that may cause damage, disruption, or interruption of vibration-sensitive land uses.	PS	Mitigation Measure NOI-1.	LS
Aircraft Noise	The Project site is not located in the vicinity of a public airport or private airstrip that would expose people working in the Project to excessive noise levels.	LS	No mitigation is required.	NA
Transportation	, ,		1	-1
Compliance with Applicable Circulation Plan	The Project would not conflict with an applicable circulation plan.	LS	No mitigation is required.	NA
Induce Substantial Vehicle Miles Traveled	The Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision(b).	LS	No mitigation is required.	NA
Hazardous Design Features	The Project would not substantially increase hazards or introduce incompatible uses.	LS	No mitigation is required.	NA
Emergency Access	The Project would not interfere with emergency access.	LS	No mitigation is required.	NA

S = Significant; LS = Less than Significant; PS = Potentially Significant; SU = Significant/Unavoidable; NI = No Impact; NA = Not Applicable

### Table ES-2 CUMULATIVE IMPACTS AND MITIGATION MEASURES

Issue	Geographic Scope of Cumulative Impact Analysis	Significance of Cumulative Impact	Project Contribution	Mitigation Measures	Project Significance Considering Mitigation
Aesthetics					
Degradation of scenic vista(s).	The adjacent UC San Diego campus and the surrounding area south of West Campus.	Potentially significant.	Not cumulatively considerable.	No mitigation is required.	Not applicable.
Degradation of resources within a State scenic highway.	The adjacent UC San Diego campus and the surrounding area south of West Campus.	Potentially significant.	Not cumulatively considerable.	No mitigation is required.	Not applicable.
Degradation of existing community character or conflict with applicable zoning or regulations governing visual quality.	The adjacent UC San Diego campus and the surrounding area south of West Campus	Potentially significant.	Not cumulatively considerable.	No mitigation is required.	Not applicable.
New source of substantial light or glare on campus.	The adjacent UC San Diego campus and the surrounding area south of West Campus	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Air Quality					
Consistency with applicable air quality plan.	San Diego Air Basin	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Cumulative increase in criteria pollutant emissions.	San Diego Air Basin	Potentially significant.	Not cumulatively considerable.	No mitigation is required.	Not applicable.
Expose sensitive receptors to substantial pollutant concentrations.	San Diego Air Basin	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.

### Table ES-2 (cont.) CUMULATIVE IMPACTS AND MITIGATION MEASURES

Issue	Geographic Scope of Cumulative Impact Analysis	Significance of Cumulative Impact	Project Contribution	Mitigation Measures	Project Significance Considering Mitigation
Air Quality (cont.)			<u>.                                      </u>		
Result in other emissions adversely affecting a substantial number of people.	San Diego Air Basin	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Energy		•	-		
Wasteful, inefficient, or unnecessary energy consumption.	The service areas of the energy providers in the Project area	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Consistency with applicable energy plans.	The service areas of the energy providers in the Project area	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Greenhouse Gas Emissions			<u>.                                      </u>		•
Direct and Indirect generation of GHG emissions.	Global	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Conflict with applicable plans, policies, or regulations.	Global	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Hydrology and Water Quality			<u>.                                      </u>		•
Violate or substantially degrade water quality standards.	Peñasquitos Hydrologic Unit	Less than significant.	Not cumulatively considerable.	No mitigation is required.	Not applicable.
Decrease groundwater supplies or interfere substantially with groundwater recharge.	Peñasquitos Hydrologic Unit	No impact.	No impact.	No mitigation is required.	Not applicable.
Alter the existing drainage pattern of a site or area.	Peñasquitos Hydrologic Unit	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Expose people or structures to inundation as a result of tsunami or mudflow.	Peñasquitos Hydrologic Unit	No impact.	No impact.	No mitigation is required.	Not applicable.
Conflict or obstruct the implementation of a water quality control plan or sustainable groundwater management plan.	Peñasquitos Hydrologic Unit	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.

### Table ES-2 (cont.) CUMULATIVE IMPACTS AND MITIGATION MEASURES

Issue	Geographic Scope of Cumulative Impact Analysis	Significance of Cumulative Impact	Project Contribution	Mitigation Measures	Project Significance Considering Mitigation
Land Use and Planning					
Physically divide an established community.	The West Campus area of UC San Diego, the area defined as South of West Campus in the LRDP, and the Central Subarea of the	No impact.	No impact.	No mitigation is required.	Not applicable.
Consistency with applicable plans.	University Community Plan The West Campus area of UC San Diego, the area defined as South of West Campus in the LRDP, and the Central Subarea of the University Community Plan	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Noise					
Exceed noise standards.	Immediate Project vicinity including the two roadways adjacent to the Project	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Excessive groundborne vibration and noise.	Immediate Project vicinity including the two roadways adjacent to the Project	Potentially significant.	Not cumulatively considerable.	Mitigation Measure NOI-1.	Not cumulatively considerable.
Aircraft noise.	Immediate Project vicinity including the two roadways adjacent to the Project	No impact.	No impact.	No mitigation is required.	Not applicable.
Transportation					
Compliance with applicable circulation plans.	Circulation network within and adjacent to the Project site and the UC San Diego La Jolla campus	Potentially significant.	Not cumulatively considerable.	No mitigation is required.	Not applicable.
Induce substantial vehicle miles traveled.	Circulation network within and adjacent to the Project site and the UC San Diego La Jolla campus.	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.

### Table ES-2 (cont.) CUMULATIVE IMPACTS AND MITIGATION MEASURES

Issue	Geographic Scope of Cumulative Impact Analysis	Significance of Cumulative Impact	Project Contribution	Mitigation Measures	Project Significance Considering Mitigation
Transportation (cont.)					
Hazardous design features.	Circulation network within and adjacent to the Project site and the UC San Diego La Jolla campus	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.
Emergency access.	Circulation network within and adjacent to the Project site and the UC San Diego La Jolla campus	Less than significant.	Less than significant.	No mitigation is required.	Not applicable.

Table ES-3
SUMMARY OF ANALYSIS FOR ALTERNATIVES TO THE PROPOSED PROJECT

EIR Issues Addressed for the Proposed Project	Proposed Project Without Mitigation	Proposed Project With Mitigation	No Project Alternative (Existing Restaurant Use)	Two-Level Office Building Alternative	Two-Level Education Building Alternative
Aesthetics					
Scenic Vistas	NI	NI	▼	▼	▼
Scenic Resources within a State Scenic Highway	NI	NI	▼	▼	▼
Degradation of Existing Community Character or Conflict with Zoning and Other Regulations for Scenic Quality	LS	LS	▼	▼	▼
Lighting and Glare	LS	LS	▼	▼	▼
Air Quality			•	1	
Consistency with Applicable Air Quality Plan	LS	LS	▼	=	=
Cumulative Increase in Criteria Pollutant Emissions	LS	LS	▼	▼	▼
Sensitive Receptors	LS	LS	▼	▼	▼
Other Emissions	LS	LS	▼	▼	▼
Energy					
Energy Consumption	PS	LS	▼		
Consistency with Applicable Energy Plans	LS	LS	▼	=	=
Greenhouse Gas Emissions					
Generate GHG Emissions	LS	LS	▼	▼	▼
Consistency with Applicable Plan	LS	LS	▼	=	=
Hydrology and Water Quality					
Water Quality	LS	LS	▼	=	=
Groundwater	N	N	▼	=	=
Site Drainage and Hydrology	LS	LS	▼	=	=
Inundation	N	N	▼	=	=
Water Quality Control Plan or Sustainable Groundwater Management Plan	LS	LS	▼	=	=

PS – potentially significant impact; LS – less than significant impact; SU – potentially significant and unavoidable impact; NI – no impact

Alternative would result in an increased level of impact when compared to the proposed Project.

<sup>=</sup> Alternative would result in a similar level of impact when compared to proposed Project.

<sup>■</sup> Alternative would result in a reduced level of impact when compared to the proposed Project but would still require mitigation to reduce potential impacts to a less than significant level.

<sup>▼</sup> Alternative would result in a reduced level of impact when compared to proposed Project and would not require mitigation.

### Table ES-3 (cont.) SUMMARY OF ANALYSIS FOR ALTERNATIVES TO THE PROPOSED PROJECT

EIR Issues Addressed for the Proposed Project	Proposed Project Without Mitigation	Proposed Project With Mitigation	No Project Alternative (Existing Restaurant Use)	Two-Level Office Building Alternative	Two-Level Education Building Alternative
Land Use					
Divide an Established Community	NI	NI	▼	=	=
Consistency with Applicable Plans	LS	LS	▼	=	=
Noise					
Exceed Noise Standards	LS	LS	▼		
Excessive Groundborne Vibration and Noise	PS	LS	▼	•	
Aircraft Noise	LS	LS	▼	=	=
Transportation					
Compliance with Applicable Circulation Plan	LS	LS	▼	=	=
Induce Substantial Vehicle Miles Traveled	LS	LS	▼	=	=
Hazardous Design Features	LS	LS	▼	=	=
Emergency Access	LS	LS	▼	=	=

PS – potentially significant impact; LS – less than significant impact; SU – potentially significant and unavoidable impact; NI – no impact

<sup>▲</sup> Alternative would result in an increased level of impact when compared to the proposed Project.

<sup>=</sup> Alternative would result in a similar level of impact when compared to proposed Project.

Alternative would result in a reduced level of impact when compared to the proposed Project but would still require mitigation to reduce potential impacts to a less than significant level.

<sup>▼</sup> Alternative would result in a reduced level of impact when compared to proposed Project and would not require mitigation.

### 1.0 INTRODUCTION

This Environmental Impact Report (EIR) assesses the potentially significant environmental effects of the proposed La Jolla Innovation Center Project (herein referred to as "Project"), being proposed by the University of California, San Diego (UC San Diego). The location of the Project is shown on Figure 1-1, *Regional Location*, and Figure 1-2, *Project Vicinity*.

As required by the California Environmental Quality Act (CEQA), this EIR:

- Assesses the potentially significant direct and indirect environmental effects of the proposed Project as well as the potentially significant cumulative impacts that could occur from implementation of the Project;
- 2. Identifies potential feasible means of avoiding or substantially lessening significant adverse impacts; and
- 3. Evaluates a range of reasonable alternatives to the proposed Project, including the required No Project Alternative.

As described in CEQA and the CEQA Guidelines, public agencies are charged with the duty to avoid or substantially lessen significant environmental effects, with consideration of other conditions, including economic, social, technological, legal, and other benefits. This EIR is an informational document, the purpose of which is to identify the potentially significant effects of the proposed Project on the environment and to indicate the manner in which those significant effects can be avoided or significantly lessened; to identify any significant and unavoidable adverse impacts that cannot be mitigated to below a less than significant level; and to identify reasonable and feasible alternatives to the proposed Project that would avoid or substantially lessen any significant adverse environmental effects associated with the proposed Project.

### 1.1 ENVIRONMENTAL REVIEW PROCESS

#### 1.1.1 Lead, Responsible, and Trustee Agencies

Section 21067 of the CEQA Statutes defines a lead agency as the public agency which has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment. The University of California (the University, or the UC) is the lead agency for the Project evaluated in this EIR. The University is governed by the Board of Regents of the University of California (The Regents), which, under Article IX, Section 9 of the California Constitution, has "full powers of organization and governance" subject only to very specific areas of legislative control. The Regents have the principal responsibility for approving University projects.

CEQA specifies that any lead agency is required to consider the information in the EIR, along with any other relevant information, in making its decisions on a project. CEQA requires the lead agency to consider the information in the EIR prior to project approval and make findings regarding each significant impact identified in the EIR. The EIR aids the lead agency in the decision-making process but does not determine the ultimate decision that will be made regarding implementation of the Project.

Under CEQA, state and local agencies, other than the lead agency, that have discretionary authority over a project, or aspects of a project, are considered responsible agencies pursuant to Section 15381 of the CEQA Guidelines. Federal agencies are not responsible agencies under CEQA; no federal agencies have discretionary authority over the Project. The City of San Diego (City) and the San Diego Regional Water Quality Control Board (RWQCB) are responsible agencies that have discretionary authority over the proposed Project. City permit(s) and encroachment maintenance and removal agreements (EMRAs) would be required for roadway and utility improvements and shoring and overhead encroachments. The University would be required to obtain coverage under the State Water Resources Control Board (SWRCB) Construction General Permit, in addition to complying with the applicable requirements under the SWRCB General Phase II Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) (Phase II Small MS4 Permit) program.

As defined in Section 15386 of the CEQA Guidelines, a trustee agency is a state agency that has jurisdiction by law over natural resources affected by a project that are held in trust for the people of the state of California (see CEQA Guidelines Section 15386). The four trustee agencies are California Coastal Commission, State Lands Commission, California Department of Parks and Recreation, and the University of California (Natural Reserve System). Because the Project site is not within the Coastal Zone (see Figure 1-2) and there are no natural or historic resources associated with the Project site, there are no trustee agencies with discretionary authority over the Project.

### 1.1.2 Notice of Preparation/Scoping Process of the EIR

Scoping is the public process conducted to solicit environmental concerns of individuals, organizations, and agencies about a proposed project. This allows the Lead Agency to adequately address these concerns within a project's environmental document. Scoping is an integral part of the CEQA process because it allows interested parties to participate directly in the preparation of the environmental document, and to identify significant environmental effects and alternatives.

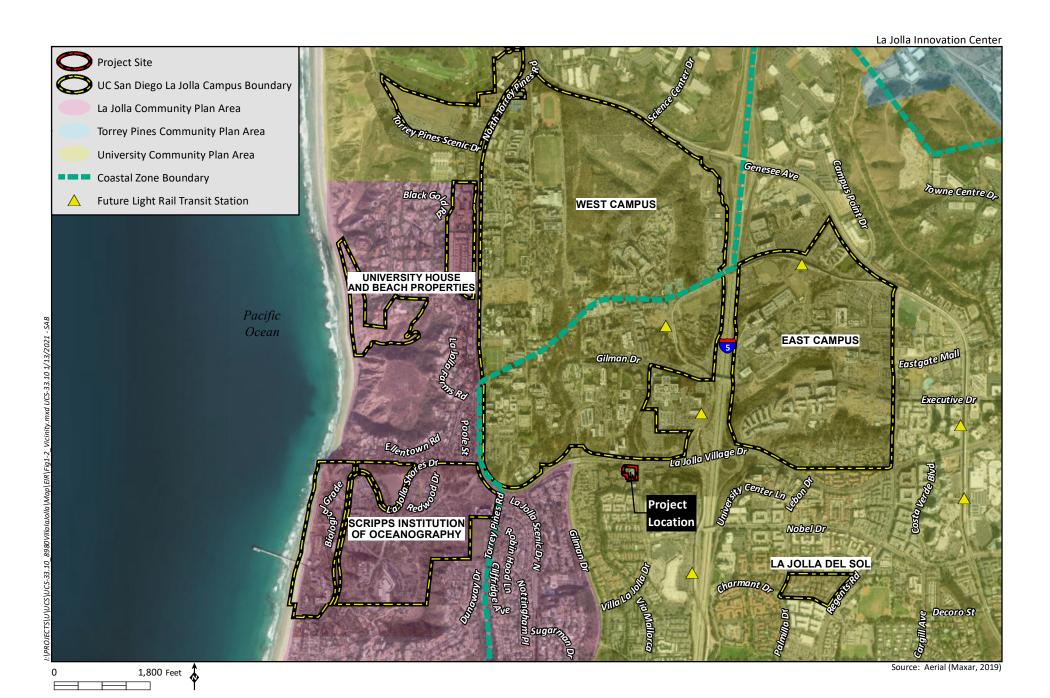
To initiate the public scoping process for this EIR in accordance with CEQA, UC San Diego circulated a Notice of Preparation (NOP) on November 20, 2020. The NOP was published in the San Diego Union Tribune and submitted to the State Clearinghouse. The NOP was distributed to various governmental agencies and other interested parties. The 30-day public review period for the NOP ended at 5:00 p.m. on December 21, 2020. A total of nine responses were received during the NOP public scoping period. Responses to the NOP were received from the following:

- Native American Heritage Commission (NAHC)
- Jeff Modrzejewski, CREED LA
- San Diego Association of Governments (SANDAG)
- California Department of Transportation (Caltrans)
- Joann Selleck
- Chris Nielsen
- San Pasqual Band of Mission Indians
- Andrew Wiese
- City of San Diego Stormwater Division



8 Miles

Source: Base Map Layers (SanGIS, 2016)





As a result of the outbreak of COVID-19 and restrictions placed on in-person gatherings throughout California, an online public scoping meeting was held on Monday, December 7, 2020, from 6:00 p.m. to 7:00 p.m. The purpose of the public scoping meeting was to provide information on the Project and the CEQA process, as well as receive public comments on the scope of the EIR. Participants were given the opportunity to submit comments on environmental issues and alternatives that should be considered in the EIR by using an online question submitting tool. The presentation materials, including a recording of the event, was provided following the scoping meeting on the Project website at https://blink.ucsd.edu/facilities/real-estate/ljic.html.

Appendix A to this EIR includes the NOP, comment letters received in response to the NOP, the proof of publication in the San Diego Union Tribune, and questions submitted during the online scoping meeting.

The following eight environmental issue topic areas are applicable to this EIR and addressed at an in-depth level: (1) aesthetics, (2) air quality, (3) energy, (4) greenhouse gas (GHG) emissions, (5) hydrology and water quality, (6) land use and planning, (7) noise, and (8) transportation. The remaining 12 issue topics listed in Appendix G of the CEQA Guidelines are discussed in Section 4.0, Other CEQA Considerations, of this EIR.

#### 1.1.3 Draft EIR Public Review

Among the principal objectives of CEQA are that the environmental review process be a public one, and that the EIR inform members of the general public, The Regents, and technical reviewers of the physical impacts associated with the proposed Project. This Draft EIR has been published and circulated for public review in accordance with Section 15087 of the CEQA Guidelines. The document is subject to review and comment by the public and interested jurisdictions, agencies, and organizations for a period of 45 days beginning February 5, 2021 and ending March 22, 2021. The document can be reviewed online at the following link: <a href="https://blink.ucsd.edu/facilities/real-estate/ljic.html">https://blink.ucsd.edu/facilities/real-estate/ljic.html</a>.

An online public hearing on the Draft EIR will be held during the public review period to gather additional public input on the Project and the adequacy of the Draft EIR. Notification of the date and time of the public hearing will be published prior to the scheduled date. In addition, written comments on this Draft EIR may be sent electronically to <a href="mailto:LIICcomment@helixepi.com">LIICcomment@helixepi.com</a> or mailed to:

HELIX Environmental Planning Attention: Joanne Dramko Regarding: La Jolla Innovation Center 7578 El Cajon Boulevard La Mesa, CA 91942

Following the public review period, a Final EIR will be prepared to address the written and verbal comments and testimony received on the Draft EIR during the public review period. The Regents will review and consider the Final EIR when making a decision to approve the proposed Project.

#### 1.1.4 Additional Public Outreach

In addition to the public participation processes mandated by CEQA, the University maintains an active dialogue with its local community and interested stakeholders regarding campus efforts. As part of this regular outreach and engagement, the University shared Project-related information, its rationale and need with the campus and community groups, including the Campus/Community Planning Committee

(C/CPC), UC San Diego Design Review Board, the Chancellors Community Advisory Board (CCAB) Executive Committee, the La Jolla Community Planning Association (LJCPA), and the University Community Planning Group (UCPG); interested stakeholders; businesses; agency partners; and local elected officials.

Additionally, the Project was highlighted in monthly updates to interested individuals and organizations from the local community (particularly in La Jolla and University City), agency partners, local elected officials, and others. At the request of UCPG, the University provided an informational presentation and answered questions from the group at its January 2021 meeting. Responses to questions on the Project were also provided at the LJCPA January meeting wherein Project information was shared as part of the UC San Diego monthly update.

The University also hosts a Project informational website, which contains answers to frequently asked questions, Project presentations, and other pertinent information.

#### 1.2 ORGANIZATION OF THE ENVIRONMENTAL IMPACT REPORT

This Draft EIR is an informational document and has been prepared in a format that allows the decision makers and public to easily review and comprehend the environmental implications of the proposed Project. The report has been divided into seven sections:

- **Executive Summary**: summarizes the proposed Project, environmental impacts that would result from implementation of the Project, proposed mitigation measures that would avoid or reduce impacts, and the level of significance of impacts both before and after mitigation.
- **Section 1.0**, *Introduction*, provides an introduction and overview describing the background of the proposed Project, the environmental review process, and structure of the EIR.
- Section 2.0, Project Description, gives a detailed description of the proposed Project, including
  its location, the existing environmental setting, the University's goals and objectives, and the
  overall Project characteristics.
- Section 3.0, Environmental Analysis and Mitigation, is the body of the environmental analysis wherein potential impacts (including cumulative) and mitigation are discussed for each issue (refer above to Section 1.1.2 for a list of those issues). The subsection for each environmental topic contains a description of the existing setting, regulatory framework, standards of significance, direct, indirect, and cumulative impacts, mitigation measures (if appropriate), and references.
- **Section 4.0,** *Other CEQA Considerations,* contains discussions required by CEQA pertaining to environmental effects found not to be significant, unavoidable significant impacts, growth inducing impacts, and significant and irreversible effects.
- **Section 5.0,** *Alternatives*, presents alternatives to the Project that could avoid or substantially lessen significant effects and evaluates their environmental effects in comparison to the proposed Project.

• **Section 6.0,** *Preparers*, identifies the individuals who prepared this EIR and those who were part of the Project team.

Supporting materials and technical appendices include the following:

- Appendix A Notice of Preparation, Response Letters, and Scoping Meeting Comments
- Appendix B Air Quality and GHG Emissions Technical Report
- Appendix C Cultural Resources Report
- Appendix D Geotechnical Investigation
- Appendix E1 Drainage Report
- Appendix E2 Stormwater Quality Management Plan
- Appendix F Phase I Environmental Site Assessment
- Appendix G Noise Survey Sheets and Modeling Results
- Appendix H Transportation Impact Analysis

The Final EIR will contain the Mitigation Monitoring and Reporting Program (MMRP) for the Project, the comments received on the Draft EIR and responses, and any changes or clarifications to the Draft EIR that were made in response to public comments.

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# 2.0 PROJECT DESCRIPTION

# 2.1 PROJECT LOCATION

The La Jolla Innovation Center Project (Project) proposes an office and educational use building at 8980 Villa La Jolla Drive, San Diego, California, south of the UC San Diego La Jolla campus. The UC San Diego La Jolla campus encompasses approximately 1,200 acres of land extending from the Pacific Ocean to the east side of Interstate 5 (I-5) in the northwest portion of the City and adjacent to the La Jolla and University communities (refer to Figure 1-1). More specifically, the Project site is located west of I-5, at the southwestern corner of the intersection of La Jolla Village Drive and Villa La Jolla Drive (Figure 1-2). The Project would be located within an existing approximately 7-acre developed commercial center, referred to as "The Campus on Villa La Jolla." The commercial center is currently configured as a single parcel (Assessor's Parcel Number 344-250-04-00) and comprises five existing buildings, including the two-story restaurant building formerly occupied by Rock Bottom Restaurant and Brewery, UC San Diego Health Center and Urgent Care—La Jolla, and the Professional Center comprising three multi-story medical and commercial office buildings occupied primarily by UC San Diego (refer to Figure 2-1, *Aerial Photograph of Site and Surroundings*). The Campus on Villa La Jolla also includes 721 spaces for parking beneath the three multi-story buildings and within the commercial center.

The Project limits of work would occur within an approximately 1.2-acre area of the commercial center, in which a 0.9-acre parcel would be sold to the UC Regents and developed as the La Jolla Innovation Center. The remaining 0.3 acres are included within the Project work limits surrounding the 0.9-acre parcel and would not be sold to the UC Regents. This area would include surface parking, landscaping, and hardscape improvements as part of the Project (Figure 2-2, *Limits of Work*). The 0.9-acre Project parcel would be owned by UC Regents and leased to an affiliate of GPI Companies, the current landowner, to develop the Project for UC San Diego occupancy. The commercial center property outside of the 0.9-acre parcel would continue to remain within the ownership of GPI.

#### **Existing Site Conditions**

Figure 2-3, *Site Topography*, provides topographic information for the Project site and immediate surroundings. The Project site is relatively flat with a gradual slope descending toward Villa La Jolla Drive along the eastern side of the existing building. Site elevations are between 272 and 280 feet above mean sea level (AMSL). Vegetation consists of trees and other ornamental plantings in landscaped areas.

The site is currently within the jurisdiction of the City of San Diego, within the University Community Plan area, and is zoned as Commercial (CO-1-2). The site is also currently within the City's Coastal Height Limit Overlay Zone, Community Plan Implementation Overlay Zone, and the Parking Impact Overlay Zone. Upon acquisition of the property, the Project site would be under the ownership and use of the UC Regents and would be subject to UC land management policies. The Project would be developed following UC Regents approval and after the purchase transaction is completed.

#### **Surrounding Uses**

The Project is located within an area developed primarily with mixed commercial, retail, educational, medical, and residential uses (refer to Figure 2-1). Land uses surrounding the Project site include the Health Sciences West Neighborhood of the UC San Diego La Jolla campus to the north (north of La Jolla Village Drive); a gas station, UC San Diego Health offices, and commercial office buildings to the east

(east of Villa La Jolla Drive), and the adjacent buildings within the commercial center that consist of the Professional Center comprising the three commercial buildings noted above to the west; and UC San Diego Health Center and Urgent Care—La Jolla to the south. Beyond the immediate property, multifamily residential and hotel uses are located east, west, and south of the Project site, including the Residence Inn by Marriott San Diego La Jolla hotel located approximately 600 feet to the west, the Sheraton La Jolla located approximately 650 feet to the east, and the La Jolla Boardwalk Apartments located approximately 400 feet to the south. Within the UC San Diego La Jolla campus, the Rita L. Atkinson Residences student housing building is located to the northwest of the Project site and the Veterans Affairs (VA) Medical Center is located to the northwest of the Project site. An approximately 10-foot-wide concrete pedestrian bridge located directly northwest of the Project site connects the site to the UC San Diego La Jolla campus over La Jolla Village Drive.

The Project site is also located within 0.33-mile of two future UC San Diego Blue Line Trolley Light Rail Transit (LRT) stations, which are expected to begin service in late 2021. The area is designated as a Transit Priority Area (TPA) in the SANDAG Regional Transportation Plan, which encourages greater development density in such areas. TPAs are defined by SANDAG as locations in the City of San Diego within one-half mile of a major transit stop or a high-quality transit corridor and are an important component of the region's climate action strategy to encourage use of alternative modes of transportation.

# 2.2 PROJECT BACKGROUND AND OBJECTIVES

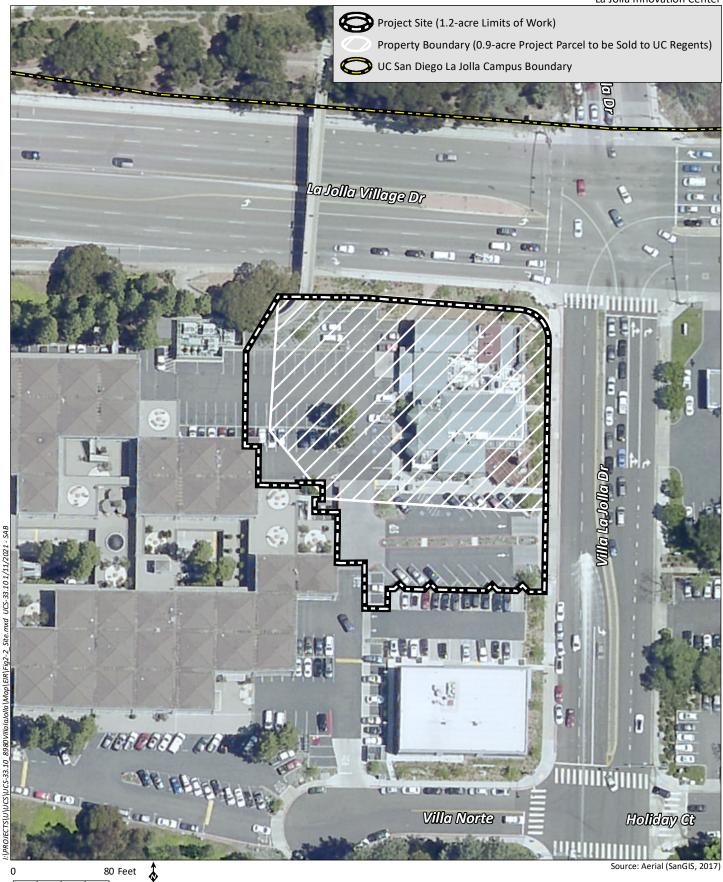
UC San Diego has a need to relocate public facing campus programs from existing buildings both on campus and off-campus that have been rated as a high priority for correction under the UC Seismic Safety Policy and unsuitable for continued long-term UC occupancy. UC policy prohibits its San Diego campus from entering into new lease renewals that do not meet these new seismic standards, such as those at The Campus on Villa La Jolla, and is only permitting short-term extension of leases to provide sufficient time for relocation of the UC San Diego department tenants to building space that meets the policy. The purpose of the proposed Project is to take advantage of a unique public-private partnership opportunity at the edge of campus that would deliver a financially feasible solution to help meet the need to relocate and consolidate the office and educational uses into a single, UC Policy-compliant building. Specifically, the Project would provide a new facility in a campus-adjacent, community-facing accessible location required by UC San Diego Health Sciences and UC San Diego Extension. Additional Project details are provided in the following subsections.

## 2.2.1 Project Background

The Project site is currently owned by an affiliate of GPI Companies, a private real estate development firm. The site is currently within the jurisdiction of the City of San Diego, located within the University Community Plan area and is zoned as CO-1-2, Commercial. This site is also currently located within the City's Coastal Height Limit Overlay Zone, the Community Plan Implementation Overlay Zone, and the Parking Impact Overlay Zone. The site is not currently within the boundaries of the UC San Diego La Jolla campus and is located outside the boundaries of the California Coastal Zone (see Figure 2-2). Approximately 0.9 acre of the approximately 7-acre commercial center property is proposed to be sold to the UC Regents and then ground-leased to an affiliate of GPI Companies to demolish the existing restaurant building and develop the proposed Project for UC San Diego use. Upon acquisition of the property, the Project site would be under the ownership and use of the UC Regents and subject to UC land management policies. The building would be primarily occupied by the University and would











include office space for UC San Diego Health Sciences (including UC San Diego Health and School of Medicine) and office/educational space for UC San Diego Extension based on the needs outlined below.

The Project site is not within and would not be incorporated into the boundaries of the 2018 UC San Diego Long Range Development Plan La Jolla Campus (2018 LRDP). However, as with other off-campus University projects and acquisitions, the Project would be subject to UC policies and regulations, including, but not limited to, the policies outlined below.

#### **UC Seismic Safety Policy**

All UC structures, including those at UC San Diego, must meet applicable California building codes in effect at the time of their construction and at the time of any renovation. However, beginning in 2017, the UC proactively launched a comprehensive, multi-year initiative to make updates to its system-wide seismic safety policy (UC San Diego 2021). The updated UC Seismic Safety Policy (UC 2017) exceeds state and local requirements in an effort to provide an exceptional level of safety for the UC community and the public at large. Critical upgrades to take place over the next decade, by the year 2030, will take UC structures beyond what is currently required by state and local building authorities.

From 2018 through 2020, UC San Diego assessed seismic hazards and the integrity of its buildings in compliance with the updated policy. This assessment applied to both University-owned and leased facilities that the University occupies throughout San Diego. For buildings that have been determined to have a Seismic Performance Rating of V, VI, or VII, the campus is required to develop a systematic plan, including risk to occupants and structures, feasibility of seismic performance upgrades, and prioritization. A "V" rating requires further evaluation and, if confirmed, must be addressed; a "VI" rating is a high priority for correction; and a "VII" rating must be immediately unoccupied and access-restricted. The complex task of addressing seismically deficient buildings across campus requires substantial financial investment yet is consistent with UC San Diego's well-established history of proactively ensuring the safety of the community, whether they are part of the campus seeking medical treatment or visiting. Meanwhile, UC San Diego has begun to review available, realistic options to limit occupancy and usage of seismically deficient buildings on its campus and in leased facilities.

Through this effort, multiple buildings that house UC San Diego Extension and School of Medicine programs have been rated as a high priority for correction. These programs collectively occupy approximately 56,500 square feet (SF) of leased building space at 8950 Villa La Jolla in "The Campus on Villa La Jolla" commercial center, which has been rated "VI." In addition, UC San Diego Health Sciences also currently occupies approximately 7,800 SF of leased building space at 8939 Villa La Jolla, which has been rated "V." UC San Diego does not own these buildings or the land, and therefore does not have the ability to implement seismic retrofits and cannot require the property owners to make the retrofits. Because the buildings are compliant with the California Building Code and local regulations, it would not be financially viable for those building owners to design and construct the retrofits that would be required for the more stringent UC Seismic Safety Policy. Rather, the building owners would be able to lease these buildings to non-UC occupants. Thus, the UC San Diego occupants must find space to relocate to a building that complies with the UC Seismic Safety Policy.

In addition, UC San Diego Extension currently occupies over 38,200 SF in several modular buildings in the Marshall College Neighborhood on the UC San Diego La Jolla campus that have been rated "V" and "VI." These buildings consist of aging, modular structures that were not meant to provide a permanent

UC San Diego 2-3 February 2021

https://plandesignbuild.ucsd.edu/ files/projects/UCSanDiegoPreliminarySeismicPerformanceReports.pdf

location for the program. The 2018 LRDP has identified this location as a redevelopment/infill site for a future planned undergraduate student housing use, so retrofitting or rebuilding these structures for UC San Diego Extension programs would not be consistent with the long-term goals of the 2018 LRDP (UC San Diego 2018). If the investment were to be made to permanently house the UC San Diego Extension programs at this location, it would displace the planned housing use and affect the campus's ability to expand its on-campus student housing supply. Therefore, the UC San Diego Extension occupants in the Marshall College Neighborhood must be relocated to a seismically compliant building in a different location.

#### **Program Efficiencies**

The proposed Project would allow UC San Diego to consolidate existing UC San Diego Health Sciences and Extension programs that are currently housed across multiple locations on- and off-campus. Efficiencies are gained where spaces such as administrative support space (copy/print rooms, reception areas, and conference rooms) and other building amenities (break rooms, restrooms, and food options) are shared instead of being spread out over multiple buildings and/or locations. By moving these programs into a new purposely-designed building, space and operational efficiencies are gained along with opportunity to accommodate projected future growth in UC San Diego Health Sciences and Extension program needs.

#### **Strategic Location**

UC San Diego Health Sciences' School of Medicine is located within the Health Sciences West Neighborhood, situated north of the Project site and within the UC San Diego La Jolla campus. The Health Sciences West Neighborhood consists of academic and research programs and associated uses, including several medical and research laboratories and teaching facilities; the Biomedical Library; housing; parking; landscape plazas; and open space. In addition, the VA Medical Center is located directly east of the Health Sciences West Neighborhood. The Project site is located at the southern entry to the University from Villa La Jolla Drive, and is also connected to these areas of campus via a Cityowned pedestrian bridge spanning La Jolla Village Drive, making it a logical and strategic location.

The UC San Diego Health Science programs to be housed within the proposed Project would serve faculty, staff, students, visitors, VA Medical Center patients, and patients from the greater community. The proposed site location is key for staff and students who travel frequently between their existing office space at The Campus on Villa La Jolla commercial center and the Health Sciences West Neighborhood. The proximity of the site to these areas would allow staff and students to walk or bike rather than drive between the two locations and save the time it would otherwise take to drive and park in a new location further away. Additionally, the Project tenants would include cardiovascular and neurological researchers that have critical partnerships with the VA Medical Center, so proximity to the VA Medical Center is optimal. The School of Medicine provides mental health services to students, faculty, and staff, so adjacency to campus is also critical. Other programs include pediatrics, research on healthy aging, and smoking cessation. Because many patients and research subjects also come from the surrounding community and require easy access to proximate parking and transportation, a location within the center of the campus would not be convenient to these user groups from the outside community.

The Project site is well-connected to the San Diego region due to its proximity to multiple transit stops and La Jolla Village Drive, which directly connects with the I-5 and Interstate 805 (I-805) freeways. As

discussed previously, UC San Diego Health Sciences programs cater to patients and research subjects that require convenient access and parking. In addition, as indicated by its name, UC San Diego Extension's purpose is to be an "extension" of the University into the community for continuing education and certificate programs which include courses in business leadership, healthcare, and languages, as well as classes designed specifically for seniors. Its diverse student base comes from all over San Diego County to attend classes. As such, UC San Diego Extension programs benefit from both proximity to campus and easy access to the surrounding community, public transit, and freeways. Additionally, because of its diverse student base, accessible parking is also key to the program's success. Extension programs would not be served well in a more central location on campus, where access to parking and facilities is less proximate and more challenging. Therefore, the Project location directly adjacent to the campus with easy pedestrian/bike access to campus, public transit stops, and the VA Medical Center, as well as close proximity to the freeway, is an ideal solution to address both the UC San Diego Health Sciences and Extension program needs.

# 2.2.2 Project Objectives

- 1. Provide a facility that aligns with the UC Seismic Safety Policy, allowing UC San Diego Health Sciences and UC San Diego Extension programs to relocate from approximately 102,500 gross square feet (GSF) of existing space that is non-compliant with the UC Seismic Safety Policy.
- 2. Create programmatic and space efficiencies that allow for future UC San Diego Health Sciences and UC San Diego Extension program growth, including use of shared amenities by consolidating programs currently spread out over multiple locations into one building.
- 3. Provide leasable office space proximate to the VA Medical Center and the UC San Diego Health Sciences West Neighborhood for UC San Diego Health Sciences programs (including UC San Diego Health and School of Medicine) at a location that is public-facing and easily accessible to patients and research participants as well as faculty and other personnel located primarily on campus.
- 4. Provide leasable classroom and office space for UC San Diego Extension programs at a location that is public-facing and conveniently accessible to both campus and community constituents as well as faculty and other personnel located primarily on campus.
- 5. Redevelop a currently vacant and underutilized site within a TPA that has abundant alternative transportation options, including access to the UC San Diego Blue Line LRT system and bike and pedestrian access to the UC San Diego La Jolla campus and VA Medical Center.
- 6. Incorporate sustainable design features to achieve Leadership in Energy and Environmental Design (LEED) Silver rating or better for the Project, thereby reducing energy consumption, conserving natural resources, and complying with the UC Sustainable Practices Policy.
- 7. Develop a financially feasible project through a strategic public-private partnership opportunity that develops a facility with leasable office and educational space that complies with UC building policies.

## 2.3 PROJECT CHARACTERISTICS

# 2.3.1 Project Overview

The Project proposes a seven-story above-grade building that would include five levels of UC San Diego Health Sciences and UC San Diego Extension uses and two levels of parking, as well as two subterranean parking levels (four parking levels total). See Figure 2-4, *Schematic Site Design*. The building would be a maximum of 100 feet in height from the existing ground level. The proposed Project components are shown on Table 2-1, *Proposed Uses*. The building would include 103,314 GSF associated with office and educational uses. Approximately 1,420 GSF of ground-floor retail space (such as a café) would be provided within Parking Level P3 at the southeastern corner of the building. The Project would provide approximately 275 parking spaces spread between a four-level parking garage and surface parking. The building footprint would be approximately 23,700 SF in area.

Vehicular access to the Project site would be provided by the two existing driveways to the commercial center from Villa La Jolla Drive and the Villa Norte cul-de-sac. Pedestrian access to the Project site would be provided via a new sidewalk connection to La Jolla Village Drive and via an existing City owned pedestrian bridge that crosses La Jolla Village Drive and provides direct access to the Health Sciences portion of the UC San Diego campus. Utility connections would be installed to provide potable water, sanitary sewer, storm drains, and electrical power to the Project site. The proposed Project would establish connections to these existing utilities located in the Project area.

Table 2-1 PROPOSED USES

Proposed Uses	Gross Square Feet (GSF)
Office and Educational Uses	
Secondary Education/Classroom	27,176
Office, Support, and Circulation	76,138
Subtotal Office and Education Uses	103,314
Ground Floor Retail (café)	1,420
Parking (within garage, approximately 206 spaces)	93,379
Subtotal Uses within Building	198,113
Parking (surface spaces, 69 spaces)	3,520
Landscape/Hardscape Improvements	18,650

# 2.3.2 Building Program

A breakdown of the currently estimated square footages for each level is provided in Table 2-2, *Proposed Building Program*.

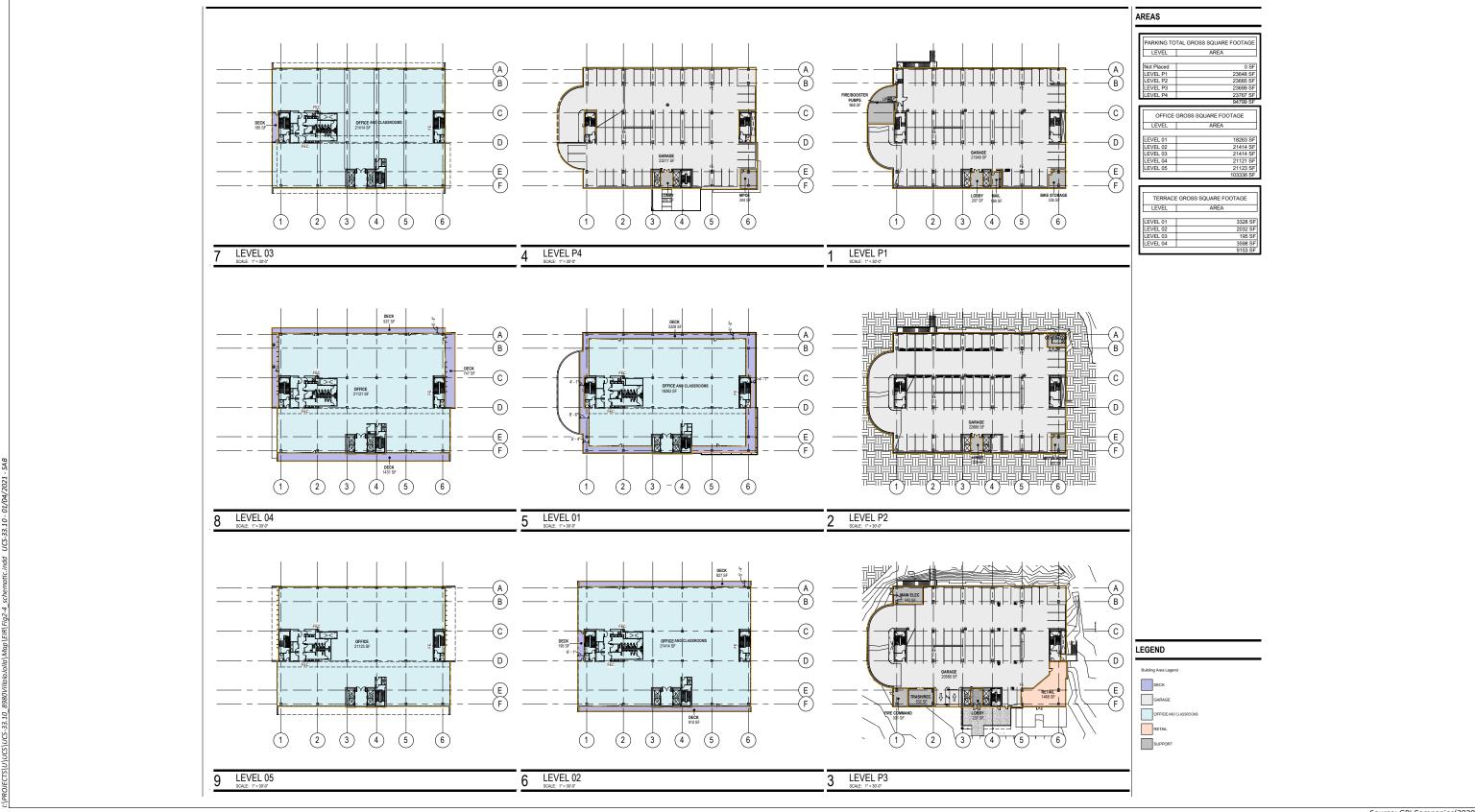


Table 2-2
PROPOSED BUILDING PROGRAM

Building Program	Proposed Uses	Gross Square Feet (GSF)
PARKING		
Parking Level P1	Parking, elevator lobby, bicycle parking/storage,	23,648
(below grade)	mechanical, fire pumps, stairs/elevator	
Parking Level P2	Parking, elevator lobby, meter room, generator	23,685
(below grade)		
Parking Level P3	Parking, ground floor retail (café), elevator lobby, mail	23,699
	room, trash, fire command, exterior lobby	
Parking Level P4	Parking, elevator lobby	23,767
Subtotal Parking		94,799
OFFICE/EDUCATIONAL		
Office Level 1	Meeting, lobby, classroom, office/support/circulation	18,262
	(UC San Diego Extension)	
Office Level 2	Classroom, office/support/circulation (UC San Diego	21,408
	Extension)	
Office Level 3	Classroom, office/support/circulation (UC San Diego	21,408
	Extension)	
Office Level 4	Meeting, office/support/circulation (UC San Diego	21,118
	Extension and School of Medicine)	
Office Level 5	Meeting, office/support/circulation (School of	21,118
	Medicine)	
Subtotal Office		103,314
	TOTAL	198,113

The interior of the building would be designed to allow for flexibility of use by UC San Diego School of Medicine and UC San Diego Extension, as described in further detail in Section 2.3.3, *Architectural Design*, below. Building occupancy is estimated at approximately 947 individuals based upon the anticipated uses identified in Table 2-1.

The Project would provide approximately 275 parking spaces between the garage and surface parking. The Project would comply with the current California Green Building Standards Code (CALGreen) and LEED parking and bicycle storage requirements. On-site parking would include 7 accessible parking stalls (including 2 van stalls) located within the parking structure; the 2 accessible parking stalls (including 1 van stall) that would be removed during demolition of the existing surface parking would be replaced. Per CALGreen requirements, approximately 8 percent (23 spaces) of the total stalls provided are required to be designated for clean air vehicles and 6 percent (17 spaces) would provide infrastructure for electric vehicle charging. A total of 15 long-term, covered bicycle parking stalls are proposed within the parking structure.

Parking Level P3 would include approximately 1,420 GSF proposed as a café to be leased to a retail operator, located at the southeastern corner of the building at the ground level.

#### 2.3.3 Architectural Design

The proposed Project area is 0.9 acres (1.2 acres including the entire limits of work), constrained by two major thoroughfares (La Jolla Village Drive to the north and Villa La Jolla Drive to the east), a utility

easement, and existing buildings. The building architecture has been designed to optimize the use of the site that includes structured parking (two subterranean and two above-grade levels), a ground-floor retail amenity, and five levels of office/educational space with an indoor-outdoor ground-floor lobby and outdoor terraces or decks throughout the office/educational levels, while also considering bulk, scale, and site context.

The proposed Project would exhibit a modern architectural design with visual interest created through façade articulation and variations in the use of metal, concrete, and glass elements (refer to Figure 2-5, *Conceptual Architectural Renderings*). Representative elevations depicting the external appearance of the building from vantage points surrounding the Project site are shown in Figure 2-6, *Conceptual Building Elevation – North*; Figure 2-7, *Conceptual Building Elevation – South*; Figure 2-8, *Conceptual Building Elevation – West*. Each elevation is labeled in relation to the direction the building faces; for example, looking south toward the Project from La Jolla Village Drive, you would see the north elevation, or north-facing façade, of the building (Figure 2-6). The elevations include building heights by level, as well as a conceptual depiction of the exterior building materials proposed to be used. The building would be approximately 100 feet in height from the existing ground level.

The main lobby of the building would be designed as an exterior space. Exterior seating spaces would be visually defined by low architectural screen fences that create a semi-transparent buffer between pedestrians and vehicles, or by seating. The internal design of the building would allow flexibility for UC San Diego Extension and School of Medicine office, classroom, and meeting space. One set of restrooms would be provided on each of the five levels, which would also include the main elevator lobby and retail amenity. Three stairwells would be provided on the eastern, western, and southern sides of the building, with a bank of four elevators on the southern side of the building for internal access within the building.

The Project would be of Type 1-A construction (i.e., fire-resistive non-combustible) with two levels of parking below grade. The main structural system of the building would be reinforced concrete construction.

# 2.3.4 Sustainability Features

The Project would comply with the UC Sustainable Practices Policy, which establishes goals in ten areas of sustainable practices: green building design, clean energy, climate protection, sustainable transportation, sustainable building operations, zero waste, sustainable procurement, sustainable food service, sustainable water systems, and sustainability at UC Health (UC 2020). The Project would meet the UC San Diego sustainability standards for all new construction and is designed to achieve U.S. Green Building Council's (USGBC) LEED Silver certification at a minimum. Per the UC Sustainable Practices Policy, the Project would outperform current (2019) California Energy Code Title 24 Energy Standards by at least 20 percent.

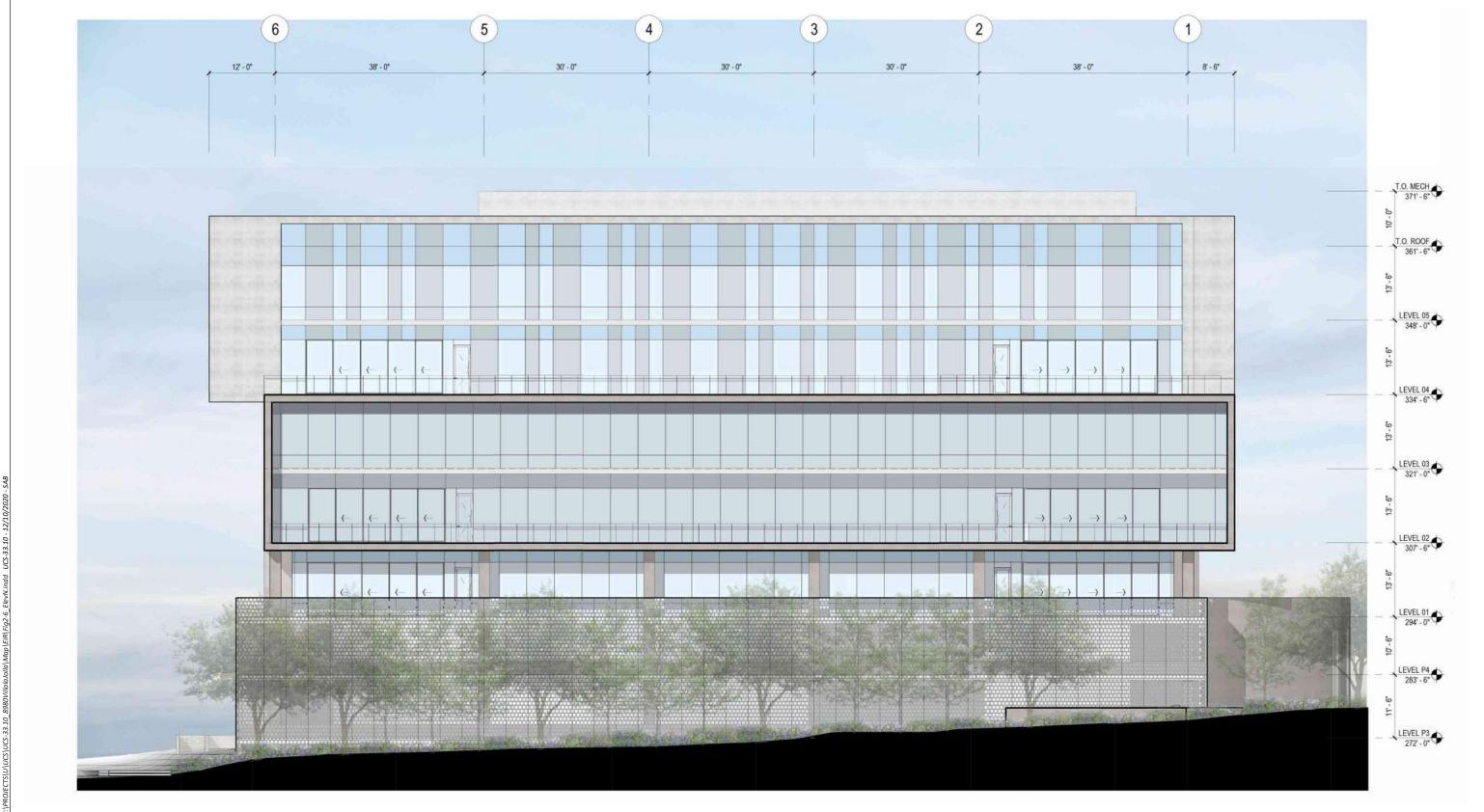
The Project is purposefully designed with specific architectural and interior features to be a high-performance, energy-efficient structure. The site orientation and façade treatments of the building intentionally balance solar exposure and heat gain and promote natural ventilation. Passive strategies, such as continuous horizontal shades, are designed to shade the windows on the south façade. The introduction of solid concrete areas as well as vertical shading strategies on glazing would be implemented on the building façades. Each office level would integrate multiple multi-slide exterior



RENDERING NE CORNER



RENDERING SE CORNER SCALE: 11/2"=1'-0"









door exterior systems to allow fresh air in and potential cross-ventilation for full-floor users. The passive sustainable strategies are proposed to be accompanied by an efficient variable refrigerant flow (VRF) mechanical system with increased outside air ventilation to ensure thermal comfort and highly efficient energy performance. Sustainable features that are anticipated to be incorporated into the Project design include:

#### Mechanical

- Compliance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 62 for indoor air quality.
- Use of nonchlorofluorocarbon-(CFC)-based refrigerants in the HVAC system.
- Installation of demand-controlled ventilation system.
- Design of zones for natural ventilation and maximization of natural light.

#### **Energy**

- Exceedance of current 2019 Title 24 energy efficiency standards by at least 20 percent.
- Participation in the SDG&E Savings by Design program, as available.
- Obtainment of 100 percent clean energy by 2025 in compliance with the UC Sustainable Practices Policy.
- Installation of light emitting diode (LED) lighting for all fixtures to reduce energy demands and
  meet the mandatory requirements outlined in the California Energy Code. Project design would
  include corridor lighting featuring LED luminaries with occupancy sensing controls, restroom
  lighting with recessed LED downlights and cove fixtures, lobby lighting with decorative
  architectural LED fixtures, exterior pedestrian scale LED pathway lighting and low-level
  decorative lighting, and linear LED luminaries with local occupancy sensing and daylighting
  controls for the parking structure. Additionally, Project lighting would meet Title 24 Dark Sky
  requirements.
- Interior light fixtures would not be connected to the building main lighting control system but would be programmed to function as local groups via local controllers.
- Incorporation of lighting control systems to integrate time-based, daylight based, sensor-based, and manual lighting control schemes.
- Compliance with ASHRAE Standard 62.1-2010 for mechanical and heating, ventilation, and air conditioning (HVAC) systems.
- Provision of infrastructure for electric vehicle charging for approximately 6 percent of the total parking allotment per CALGreen requirements.

#### **Water Use**

- Installation of low-flow fixtures (e.g., urinals, toilets, and faucets) to achieve a potable water reduction of 35 percent compared to the statewide average for a building of comparable size.
- Installation of faucets with infrared automatic flush valves and hands free on/off controls.
- Use of a dedicated irrigation meter with an evapotranspiration-based weather sensor with central control capability.
- Use of separate irrigation systems for trees and ground cover. Trees would be watered by a bubbler system, while shrub and ground cover areas would be watered by a high-efficiency subsurface in-line drip tubing.
- Management of storm water runoff through installation of a BioClean modular biofiltration wetland system, a stormtrap storage vault, and landscaped areas.
- Use of drought-tolerant native and adapted low-medium water use plant species in the landscape plan.

# **Building Design**

- Incorporation of low-energy, high-performance mechanical, electrical, and plumbing systems and building envelopes.
- Use of full cut-off and/or fully shielded exterior light fixtures.
- Use of low volatile organic compound (VOC) emitting adhesives, sealants, paints and coatings, and flooring systems.
- Use of building materials and finishes that would contain both post-consumer and pre-consumer recycled content (minimum value of 20 percent of total cost).

## Site Design

- Incorporation of bioretention basins to filter and dissipate water and slow runoff dispersal into the storm drain system.
- Integration of appropriate best management practices (BMPs) into a project-specific storm water pollution prevention plan (SWPPP) and storm water management plan (SWMP).
- Striping of at least 8 percent of the total allocated parking for low emission/fuel efficient "clean air" vehicles.
- Striping of at least 6 percent of the total allocated parking for electric vehicles, including providing infrastructure for electric vehicle charging.
- Provision of covered, secured bicycle parking/storage for 15 bicycles to encourage the use of non-motorized transportation options.

- Construction and Demolition Waste Management would comply with the current LEED Rating system for the Project for a total of 2 points with a 75 percent diversion rate.
- As a UC San Diego facility, the UC San Diego building users would comply with the recommendations of the campus' Zero Waste Plan (ZWP) (September 2019) to the extent practicable and would report data on building waste quantities to the UC San Diego Sustainability Office and Zero Waste Working group on an annual basis. While not all programs recommended by the ZWP have been implemented, the UC San Diego Zero Waste Working Group is actively working to roll out its programs and campus-wide requirements. As programs become available, UC San Diego building users would be required to participate. The ZWP includes waste reduction, reuse, and diversion as well as educational programs to encourage campus users to reduce waste streams. The campus's ZWP strives to achieve a 90 percent waste diversion rate campus-wide and is updated on a regular basis to meet new policies and regulations, incorporate new technologies and best practices, and alter existing programs based on lessons learned.

# 2.3.5 Light and Glare Minimization Features (UC San Diego Outdoor Lighting and Design Guideline Compliance)

The Project would comply with the UC San Diego Outdoor Lighting Policy and Outdoor Lighting Design Guidelines that require the use of focused and shielded outdoor lighting, discourages upward lighting, and prohibits lighting for landscaping or decorative purposes after 10:00 p.m. The following UC San Diego Outdoor Lighting Design Guidelines would be incorporated in all or in part to minimize impacts from glare from new buildings: windows would use "clear vision" glass to minimize glare and reflectivity; anti-reflective coating would be used in all windows; a variety of window types would be provided such as low emissivity (i.e., energy efficient) insulated glass, spandrel glass, and window glazing; and avoidance of repetitive bands of reflective windows that could result in a substantial source of new glare to off-site areas or travelers on adjacent roadways.

# 2.3.6 Noise Minimization Features (California Building Code Compliance)

The Project would comply with the California Building Code (CBC), as the UC has adopted the code as its building code for UC projects. Title 24, Part 11, Section 5.507 specifies environmental comfort with regard to noise exposure for non-residential buildings. Buildings can either incorporate features that include specific sound transmission ratings (prescriptive method) or demonstrate compliance with an interior noise standard of 50 A-weighted decibels (dBA) (performance method). For the prescriptive method, wall and roof-ceiling assemblies would have a composite sound transmission class (STC) rating of at least 50, or a composite outdoor-indoor transmission class (OITC) rating of not less than 40. Additionally, exterior windows would be rated with a minimum STC of 40, or OITC of 30. The performance method requires an acoustical analysis documenting compliance with the interior sound level limits, prepared and approved by the architect or engineer of record. This noise level can be achieved by means of building envelope construction and/or exterior features such as noise walls or berms.

# 2.3.7 Project Demolition, Grading, and Drainage

As noted above, the Project site is currently developed with a 13,213-SF restaurant building and associated landscaping, paving, and parking. The building and paving would be demolished to construct

the Project. Approximately 10,100 SF of landscaping would be removed, including trees and planter areas along the northern and eastern site boundaries and landscaped medians within the parking area. Demolition of the site would require removal of 51 existing surface parking spaces, the median located at the entrance to the commercial center off Villa La Jolla Drive, and all on-site paving and hardscape. The existing water main connecting to the site across Villa La Jolla Drive would be cut and capped and the backflow preventer removed.

The grading and drainage plans for the Project are shown in Figures 2-10, Conceptual Grading Plan, and 2-11, Conceptual Drainage Plan. The below-grade parking structure has been designed to allow natural ventilation at parking level P2. Proposed earthwork would require approximately 18,700 cubic yards (CY) of cut and 240 CY of fill for a net soil export of approximately 18,460 CY. Maximum depth of excavation is anticipated to be 29 feet below ground surface.

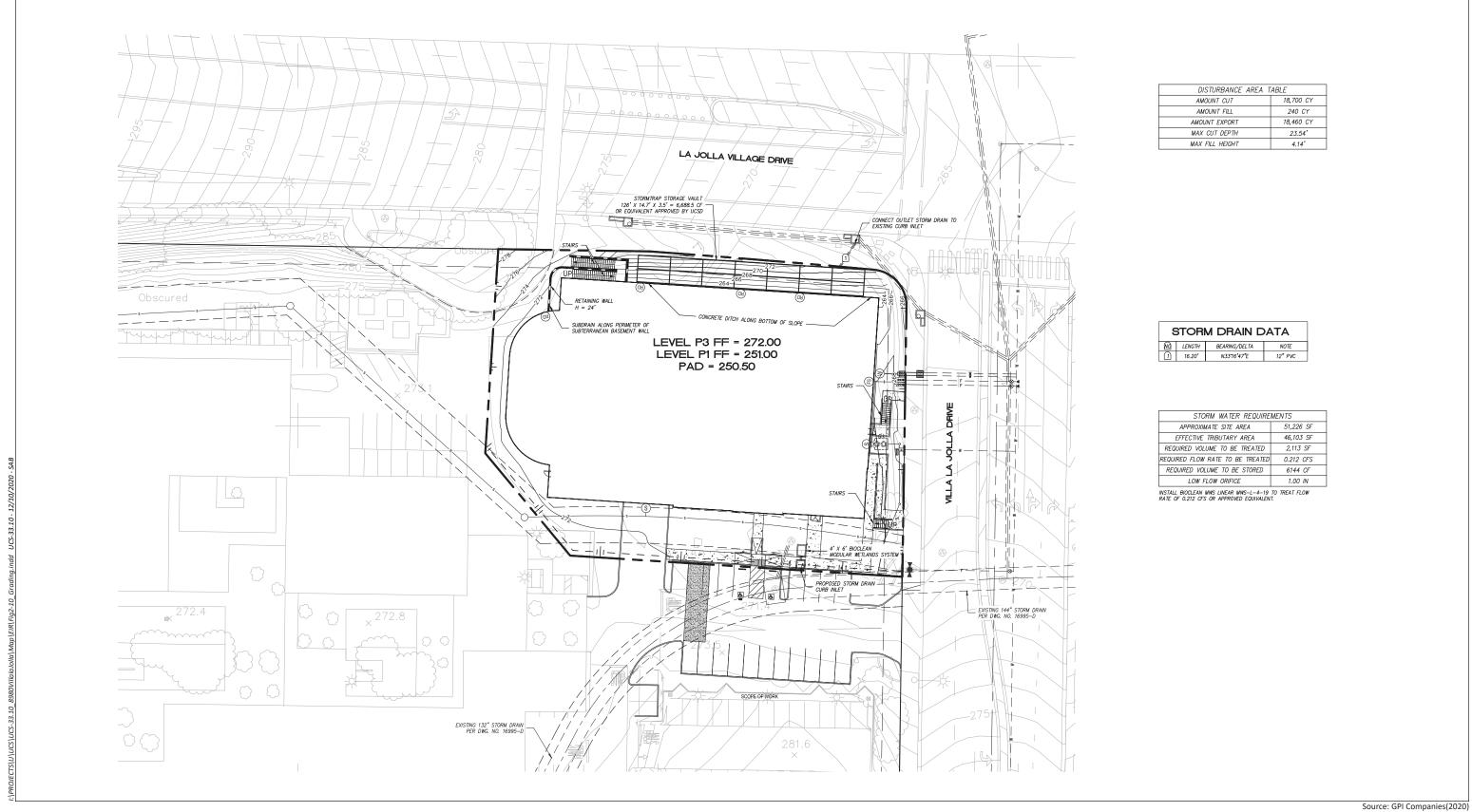
The proposed development would largely maintain the existing drainage patterns of the site by connecting roof drains to an existing storm drain line on the south side of the Project site. The Project proposes a similar amount of impervious area as the existing site and the 100-year stormwater flow rate leaving the site would not increase. Due to the limited development footprint of the site and the need to capture and convey runoff from the roof of the proposed building and lower levels of the subterranean parking garage, compact biofiltration and hydromodification storage vaults would be constructed within the lower level of the garage. A four-foot by six-foot BioClean modular wetland system is proposed at the southern edge of the Project site. A new storm drain curb inlet would connect the biofiltration system to the municipal storm drain system that runs south of the Project site. An approximately 6,680-cubic foot stormtrap storage vault is proposed along the northern boundary of the Project site, which would connect to the municipal storm drain system via an existing curb inlet in the northeastern corner of the site. The compact biofilters have been designed to enhance the drainage of the site and ensure that the Project meets or exceeds all UC San Diego Design Guidelines and complies with postconstruction BMP requirements as set forth in the Phase II Small MS4 permit adopted by UC San Diego on July 1, 2013. All proposed storm drain facilities would be sized to accommodate runoff from a 10-year, 6-hour storm event.

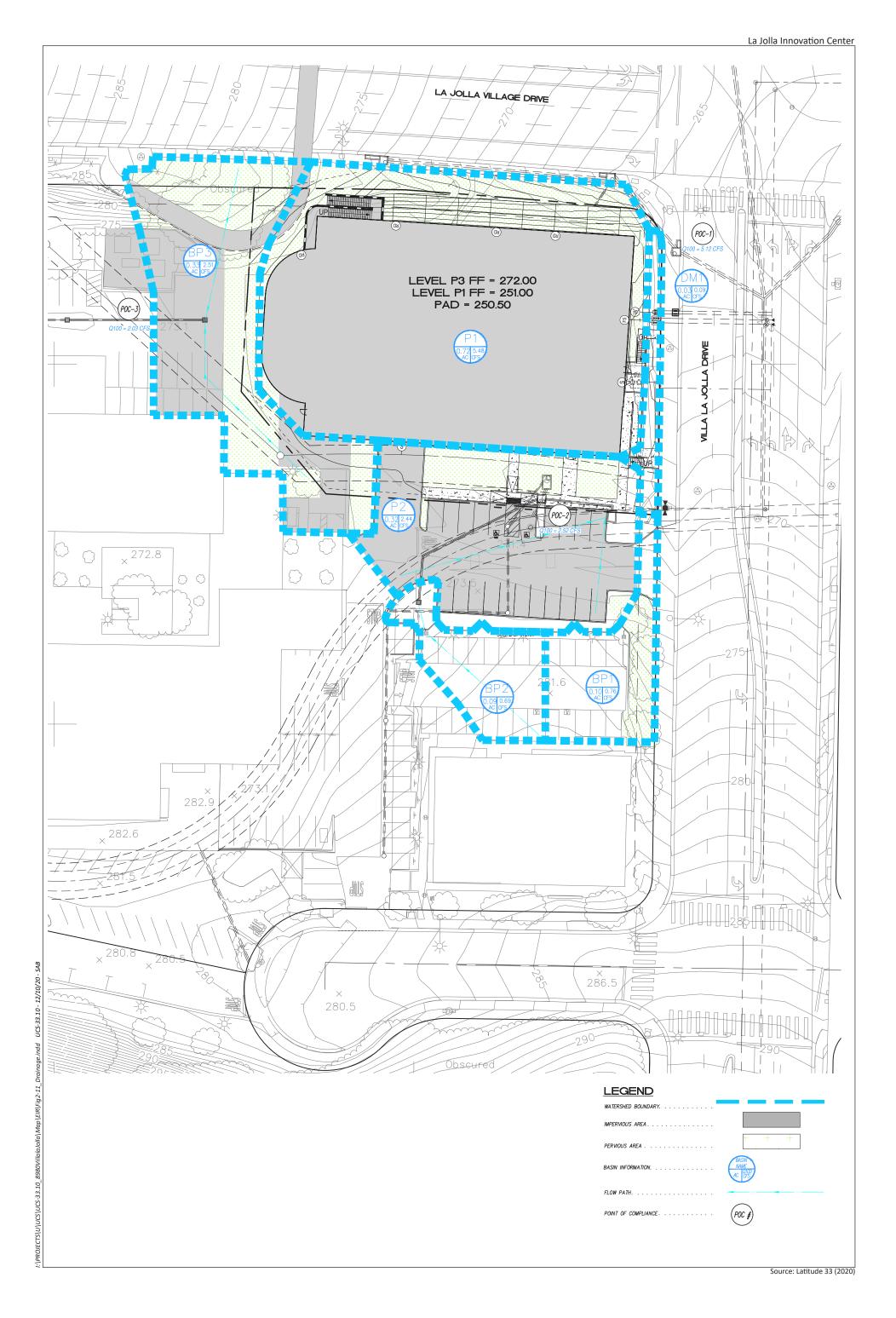
A SWPPP containing appropriate construction site erosion and sedimentation control BMPs would be prepared and implemented at the beginning of the Project construction phase.

## 2.3.8 Seismic and Geologic Safety Measures

The Project would incorporate the recommendations provided in the Geotechnical Investigation prepared by Group Delta Consultants, Inc. (Group Delta 2020), attached as Appendix D to this EIR. This report confirmed that the site is geotechnically suitable for the proposed redevelopment and provided recommendations for design and construction. The building footprint is underlain by undocumented fill, which is highly compressible and susceptible to excessive differential settlement. Therefore, the Project design adopted to include the Reinforced Concrete Mat foundation alternative presented in the Geotechnical Investigation. See Appendix D for a detailed discussion these and other measures related to seismic safety, civil and structural design, and earthwork and shoring construction.

Note the Project will also have measures for compliance with the UC Seismic Safety Policy, which requires anchorage for seismic resistance of nonstructural building elements such as furnishings, fixtures, material storage facilities, and utilities that could create a hazard if dislodged during an





earthquake; and incorporation of seismic-related emergency procedures into departmental emergency response plans.

#### 2.3.9 Access and Circulation

Vehicular access to the Project site would be provided by the two existing driveways to the commercial center from Villa La Jolla Drive and the Villa Norte cul-de-sac, as shown in Figure 2-12, *Vehicular and Pedestrian Access*. Regional access is provided by Villa La Jolla Drive to the east of the site and La Jolla Village Drive to the north, which has a direct connection to I-5. No improvements are proposed to these roadways. Access to the parking garage would be provided by one entrance driveway at ground level near the southwestern corner of the building. The primary emergency access route to the Project site would continue to be from Villa La Jolla Drive and Villa Norte.

Pedestrian access to the Project site would be provided via a new sidewalk connection to La Jolla Village Drive that would receive pedestrians and cyclists who are using the existing pedestrian bridge that connects to the campus. The new sidewalk connection would be paved along the western and southern sides of the building and connect to a new ADA-accessible access ramp from the Project site to the Villa La Jolla Drive sidewalk along the eastern side of the building. A set of stairs would be provided off the eastern building stairwell to connect that exit to the Villa La Jolla Drive sidewalk.

The Project site would be accessible from two LRT stations currently under construction as part of the San Diego Trolley's Mid-Coast Trolley expansion project for the UC San Diego Blue Line LRT: Nobel Drive Station, located approximately 0.33-mile southeast of the Project, and VA Medical Center Station, located approximately 0.33-mile northeast of the Project (see Figure 1-2). The Mid-Coast Trolley project will expand alternative transportation options in the I-5 corridor, providing a commuting alternative and improving public transit services between the City of San Diego University Community (including the UC San Diego campus) and other areas of San Diego County served by existing Trolley routes. The two new UC San Diego Blue Line LRT stations are scheduled to be operational in late 2021.

# 2.3.10 Landscaping, Hardscape, and Other Site Amenities

Conceptual landscape plans for the ground level outdoor areas and terraces are provided in Figures 2-13a and 2-13b, *Conceptual Landscape Plan*. The Project's landscape vegetation would be drought tolerant, using a combination of both native and adapted low-medium water use species to create a "rustic" palette that integrates with the existing plant palette found throughout the UC San Diego La Jolla campus. The palette would include a mixture of woody shrubs, ornamental grasses, flowering perennials, and succulents combined to highlight varying textures, colors, and flowering times. Taller vertical evergreen trees (e.g., *Arbutus* 'Marina') and shrubs (e.g., *Westringia fruticose* 'Blue Gem', Chinese yew) would be used to screen the parking level from the surrounding streets. Ornamental grasses (e.g., foothill sedge, mat rush) would be used to create soft foreground layers, and succulents (e.g., blue elf aloe, fox tail agave) would be used as accent vegetation in key areas. Arbutus 'Marina' also are proposed to provide shade canopy within the parking lot. The Project's irrigation system would be tied to a dedicated irrigation meter with an evapotranspiration-based weather sensing controller.

Conceptual plans for hardscaping to be used throughout the Project site are provided in Figure 2-14, Conceptual Hardscape Plan. Exterior use spaces, such as the outdoor lobby and retail amenity seating areas, would be visually defined by low architectural screen fences, seating, and a hierarchy of specific hardscape treatments. Hardscape materials include tile (covered exterior lobby space), cast-in-place concrete (exterior retail amenity areas), and natural stone tile paving (garden lounge space west of the garage entrance). All site elements, including paving, seating, lighting, trash and recycling receptacles, and signage would integrate with the overall design of the site. Exterior wayfinding and ADA signage would be installed as required by UC San Diego standards. Trash and recycling containers would be located in active areas, such as entrances to building elevators and stairwells and pathway intersections.

Outdoor lighting would be designed to comply with UC San Diego's Outdoor Lighting Policy, including use of full cutoff or fully shielded fixtures when possible to avoid excessive light pollution (UC San Diego 2009). Adequate and safe lighting levels would be provided in areas of pedestrian activity, and lighting may be used as a wayfinding element along pathways.

# 2.3.11 Utility Improvements

Utility connections would be installed to provide potable water, sanitary sewer, storm drains (discussed above in Section 2.3.4), natural gas, and electrical power to the Project site. Adequate capacity exists within the current utility systems and the proposed Project would establish connections to these existing City utilities located in the Project area.

#### **Domestic Water**

Domestic water systems would include the building's distribution system to plumbing fixtures, hose bibs, and water heaters. Zone valves, branch valves, and isolation valves would be provided for the interior water distribution network. A packaged booster pump system would be included to maintain design pressure. Building water supply would connect to a new on-site water main, which would connect to the existing municipal water main located within Villa La Jolla Drive at the southeastern corner of the building. Dual fire and water connections would be provided at the southwestern corner of the building, adjacent to the parking garage access.

## Sewer

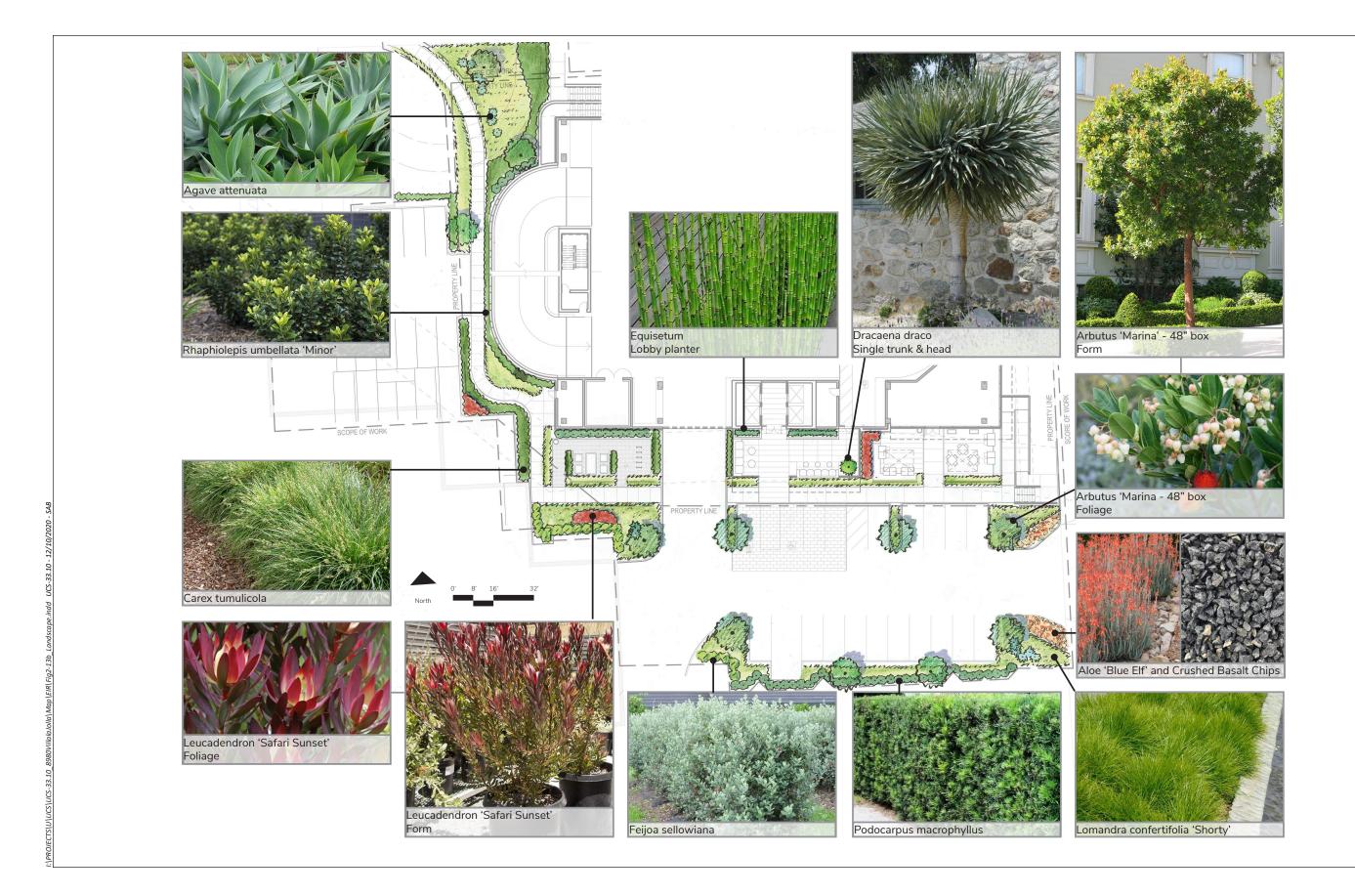
Wastewater generated on site would be collected in new eight-inch sewer lateral pipelines that would tie into the existing system. Sanitary sewer laterals would connect to the existing sewer main that traverses the southern edge of the building within a City of San Diego utility easement and connects to an existing main within La Jolla Village Drive. All sanitary sewer horizontal piping would include cleanout access ports for servicing with drain-cleaning equipment.

#### **Electrical**

The Project would connect to and be served by San Diego Gas and Electric (SDG&E). The main electrical service would include an indoor switchboard connected to an outdoor SDG&E pad-mounted transformer. Emergency power would be served from a standby diesel generator, sized at approximately 250 kilowatts. The generator would provide life safety and legally required loads, including the fire pump.

Source: Gensler (2021)







# 2.4 CONSTRUCTION SCHEDULE, STAGING, AND BEST MANAGEMENT PRACTICES

# 2.4.1 Construction Schedule and Staging

Construction of the Project is anticipated to commence in mid-2021 shortly after all applicable approvals and permits are obtained from the required permitting agencies. Construction of the Project is anticipated to last approximately 15 to 18 months, including site preparation, demolition, grading, excavation, construction of the concrete structure, installation of exteriors, and interior buildout/tenant improvements. Testing and inspections would follow physical building construction and last for seven months. Initial occupancy by the University is anticipated in summer 2023.

Construction staging is proposed to occur entirely within the 1.2-acre limits of work. Construction staging would be located within the existing parking area adjacent to the Villa La Jolla Drive entrance, south of the building footprint. A contractor trailer would be temporarily installed within the surface parking area at the western extent of the limits of work. Construction fencing would be installed along the perimeter of the limits of work for the duration of construction. Staging areas used during Project construction would be returned to their original condition upon completion of the Project.

During construction, the existing driveway entrance to the commercial center off Villa La Jolla Drive would be temporarily inaccessible to the public and utilized for site deliveries and construction worker access; public access to the commercial center would be maintained from Villa Norte. Temporary closure of the west lane of Villa La Jolla Drive adjacent to the Project site may be required, as needed.

# 2.4.2 Best Management Practices

#### 2.4.2.1 Traffic Control Plan

A traffic control plan (TCP) would be prepared and implemented prior to the start of construction by the construction contractor, in coordination with UC San Diego Capital Program Management. During construction, the TCP would be implemented to allow safe and effective circulation of all road users (i.e., motorists, bicyclists, and pedestrians) through and/or around temporary traffic control zones. Traffic management controls would include measures determined based on site-specific conditions, including, but not limited to, the use of construction signs, flaggers, delineators, and lane closures. The TCP would limit the number of peak hour construction employee and delivery/haul trips as appropriate; require workers to park in remote parking lots (as applicable); require the contractor coordinate with other proximate campus construction projects; and include plans illustrating the placement of signage, striping, traffic personnel, and road cones, as applicable, such that the number of construction-related trips generated during peak commuter hours would be reduced. Coordination with other proximate construction projects would involve the construction contractor working with UC San Diego Capital Program Management to schedule large deliveries and exports so that they do not occur simultaneously with other projects or otherwise utilize different routes, to extent practicable.

## 2.4.2.2 Nesting Bird Survey

Because Project construction is anticipated to begin in the summer of 2021, grubbing, trimming, or clearing of vegetation from the Project site would occur during the general avian breeding season (February 15 through August 31). Therefore, prior to any grubbing, trimming, or clearing, a qualified

biologist would perform a pre-construction nesting bird survey no more than seven days prior to the commencement of vegetation clearing or grubbing to determine if active bird nests are present in the affected areas. Should an active migratory bird nest be located, the Project biologist would direct vegetation clearing away from the nest until it has been determined by the Project biologist that the young have fledged, or the nest has failed. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within the survey area, clearing, grubbing, and grading would be allowed to proceed.

### 2.4.2.3 Paleontological Construction Monitoring

Grading and excavation equating to 1,000 CY or more at depths of 10 feet or greater within highly sensitive geologic formations (i.e., Scripps Formation) would be monitored by a qualified paleontologist, including the following measures:

- 1. Prior to beginning any work that requires paleontological monitoring:
  - a preconstruction meeting would be held that includes the qualified paleontologist, Construction Manager and/or Grading Contractor, and other appropriate personnel so the qualified paleontologist can make comments and/or suggestions concerning the monitoring program to the Construction Manager and/or Grading Contractor.
  - b. the qualified paleontologist would (at that meeting or subsequently) submit to the Project Manager a copy of the site/grading plan (reduced to 11x17 inches) that identifies areas to be monitored as well as areas that may require delineation of grading limits.
  - c. the qualified paleontologist would also coordinate with the Project Manager on the construction schedule to identify when and where monitoring is to begin and to specify the start date for monitoring.
- 2. The qualified paleontologist would document monitoring activity on a standardized form. A record of daily activity shall be sent to Campus Planning and the Project Manager each month.

## 2.4.2.4 Unanticipated Discovery of Human Remains

If human remains are discovered, work would halt in that area and the procedures detailed in the California Health and Safety Code (Section 7050.5) and the California PRC [Public Resources Code] (Section 5097.98) will be followed.

## 2.4.2.5 Dewatering Plan

The depth of groundwater on the site averages about 34 feet below the ground surface and the deepest depth of excavation is planned to be 29 feet below the ground surface, providing a typically recommended separation of 5 feet below the highest groundwater level and deepest depth of excavation. As such, the Project is not likely to encounter groundwater during construction. However, in the unlikely event that dewatering becomes necessary, all dewatering activities would be conducted in compliance with a detailed dewatering plan and all applicable regulations. The detailed dewatering plan would be prepared by a California registered Civil Engineer with support as needed from a Geotechnical Engineer and/or Hydrogeologist prior to the commencement of excavation activities. The dewatering

plan would include a detailed plan, schedule, and description for dewatering of excavations, piezometers, estimated dewatering rates, volume, and equipment requirements. See Section 3.5, *Hydrology and Water Quality*, for further details.

# 2.5 PROJECT APPROVAL PROCESS

This EIR and associated documentation would be used by the University to support the review and approval process for the Project.

## 2.5.1 Campus Review and Approval Process

As the public agency principally responsible for approving and carrying out the proposed La Jolla Innovation Center Project, UC Regents is considered the Lead Agency under CEQA and is responsible for reviewing and certifying this EIR. Following consideration of the EIR, including the Project's potential impacts and comments received from the public, The Regents would deliberate on the approval of the Project including purchase of the parcel, ground and space lease agreements, and Project design at one of their bi-monthly meetings. The Regents would also certify the EIR at this meeting if the Project is determined to be in compliance with CEQA.

# 2.5.2 Other Agency Considerations

Approvals or authorization from other responsible agencies are required, as noted below.

# City of San Diego

The Project would obtain a right-of-way permit for utility connections and surface improvements (e.g., pathways connecting to the street) and maintenance and removal agreements (EMRAs) for shoring and overhead encroachments.

#### State Water Resources Control Board

The Project would entail construction activity that disturbs greater than one acre (approximately 1.2 acres); therefore, the University would obtain coverage under the Construction General Permit by submitting a Notice of Intent to the SWRCB prior to beginning initial site preparations, grading, and construction for the proposed facilities; and development and implementation of a SWPPP.

The Project is also subject to applicable requirements under the SWRCB General Phase II Small MS4 Permit program. The Phase II Small MS4 Permit program requires construction projects that would create and/or replace 2,500 SF or more of impervious surfaces to incorporate post-construction storm water management controls into Project design and does not allow any new increases in runoff from the developed site.

#### 2.6 REFERENCES

Group Delta Consultants, Inc. 2020. Report of Geotechnical Investigation. The Campus on Villa La Jolla, 8980 La Jolla Village Drive, La Jolla, California 92037. January 29.

University of California (UC). 2020. University of California – Policy on Sustainable Practices. July 24.

2017. Seismic Safety Policy. Last revised January 9, 2017. Available at: <a href="https://policy.ucop.edu/doc/3100156/">https://policy.ucop.edu/doc/3100156/</a>.

University of California, San Diego (UC San Diego). 2021. Seismic Safety website. Available at: <a href="https://plandesignbuild.ucsd.edu/projects/seismic.html">https://plandesignbuild.ucsd.edu/projects/seismic.html</a>.

2018a. University of California San Diego 2018 Long Range Development Plan La Jolla Campus. November.

2018b. University of California San Diego Design Guidelines. October 5.

2009. UC San Diego Policy & Procedure Manual, Outdoor Lighting Policy. December.

# 3.0 ENVIRONMENTAL ANALYSIS AND MITIGATION

Chapter 3.0 of this EIR contains a discussion of the potential Project-specific environmental effects from implementation of the proposed Project, including information related to existing site conditions, analyses of the type and magnitude of individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts.

# FORMAT OF THE ENVIRONMENTAL ANALYSIS

# **Environmental Setting**

According to Section 15125 of the CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the "baseline condition" against which project-related impacts are compared. The baseline condition typically is the physical condition that exists when the NOP is published. The Project NOP was published on November 20, 2020, and the baseline conditions contained in this EIR are generally taken from this time period. However, the CEQA Guidelines and applicable case law recognize that the date for establishing an environmental baseline cannot always be rigid. Physical environmental conditions may vary over a range of time periods; thus, the use of environmental baselines that differ from the date of the NOP can be reasonable and appropriate when conducting certain environmental analyses. Some sections rely on a variety of data to establish an applicable baseline, and therefore, projections as to how those conditions might have changed were incorporated in the following sections and corresponding technical reports.

# **Regulatory Framework**

The "Regulatory Framework" subsection provides a summary of regulations, plans, policies, and laws that are relevant to each issue area at the federal, state, regional, and local levels.

# **Project Impacts and Mitigation**

The Environmental Impacts and Mitigation subsection describes the potential environmental impacts of the proposed Project and based on the thresholds of significance, concludes whether the environmental impacts would be considered significant, potentially significant, or less than significant. Each resource that is analyzed is divided into issues based on potential impacts. Each issue is addressed in its own subsection and is separately numbered (e.g., Issue 1, Issue 2, etc.). For each issue, applicable standards of significance are identified, and potential impacts are discussed in the impact analysis subsection. Mitigation measures are included and discussed where applicable. The final subsection within each resource section describes CEQA topics for which no potential impacts were assessed.

The resources that are specifically analyzed in this Project-specific EIR are Aesthetics, Air Quality, Energy, GHG Emissions, Hydrology and Water Quality, Land Use and Planning, Noise, and Transportation. The topics of Agriculture and Forestry Resources; Biological Resources; Cultural Resources; Tribal Cultural Resources; Geology and Soils; Hazards and Hazardous Materials; Mineral Resources; Population and Housing; Recreation; Public Services; Utilities and Service Systems; and Wildfire are addressed in Section 4.1, Effects Found Not to be Significant, of this EIR.

# **Cumulative Impacts and Mitigation**

CEQA requires that EIRs discuss cumulative impacts, in addition to project impacts. In accordance with CEQA, the discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion, guided by the standards of practicality and reasonableness, need not be as detailed as the discussion of environmental impacts attributable to the project alone. According to Section 15355 of the CEQA Guidelines, "cumulative impacts" are defined as:

Two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- (a) The individual effects may be changed resulting from a single project or a number of separate projects.
- (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Section 15130(a) of the CEQA Guidelines further states that a "cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts."

Section 15130(a) of the CEQA Guidelines requires that EIRs discuss the cumulative impacts of a project when the project's incremental effect is determined to be cumulatively considerable. Therefore, the discussion of cumulative impacts in an EIR evaluates whether the impacts of the Project will be significant when considered in combination with past, present, and future reasonably foreseeable projects, and whether the Project would make a cumulatively considerable contribution to those impacts. CEQA Guidelines indicate that where a lead agency is examining a project with an incremental effect that is not cumulatively considerable, it need not consider the effect significant but shall briefly describe the basis for its conclusion. As further clarified by Section 15065 of the CEQA Guidelines, "cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past, current, and probable future projects. The CEQA Guidelines allow for the proposed project's contribution to be rendered less than cumulatively considerable with implementation of mitigation.

The geographic scope of the cumulative impact analysis varies depending upon the specific environmental issue area being analyzed. The geographic areas within which projects may contribute to a specific cumulative impact are defined by the geographic scope. Table 3-1, *Geographic Scope of Cumulative Impact Analyses*, summarizes the geographic scope of the analyses for the issues analyzed in stand-alone EIR sections. For all other topics, the general geographic scope would be the UC San Diego La Jolla campus and adjacent community. Accordingly, past, present, and future reasonably foreseeable projects within the defined geographic area for a given cumulative issue must be considered.

Table 3-1
GEOGRAPHIC SCOPE OF CUMULATIVE IMPACT ANALYSES

Environmental Issue	Geographic Scope	
Aesthetics	UC San Diego La Jolla campus and adjacent community	
Air Quality	San Diego Air Basin	
Energy	San Diego County	
Greenhouse Gas Emissions	Global	
Hydrology and Water Quality	Drainage basin, watershed, or waterbody, depending on where the	
	potential impact is located and its tributary area	
Land Use and Planning	UC San Diego La Jolla campus and adjacent community	
Noise	UC San Diego La Jolla campus and noise-sensitive receptors in	
	adjacent community	
Transportation	UC San Diego La Jolla campus and adjacent community	

Past and current projects are considered as part of the baseline when evaluating Project impacts. When there are exceptions, they are noted as appropriate within the specific impact chapters. Consideration of future projects that could be constructed to fully implement adopted community plans, such as the 2018 LRDP and the University Community Plan Amendment, is typically sufficient to account for cumulative impacts from future reasonably foreseeable projects. Therefore, this is the approach primarily taken in the cumulative analysis for this EIR. Cumulative projects within the vicinity of the proposed Project are described in Table 3-2, *Cumulative Projects*.

Table 3-2
CUMULATIVE PROJECTS

Project	Location	Project Status
2018 UC San Diego La Jolla Campus	UC San Diego La Jolla campus.	Approved, individual projects
Long Range Development Plan		under construction.
UC San Diego North Torrey Pines	UC San Diego campus, 0.75 mile	Approved under UC San Diego
Living and Learning Neighborhood	northwest of the Project site.	2004 LRDP, under construction.
UC San Diego Erosion Repair and	San Diego VA Hospital, 550 feet	Approved under UC San Diego
Parking Lot (South of VA)	northeast of the Project site.	2018 LRDP, under construction.
UC San Diego Theatre District Living	UC San Diego campus, 0.5 mile	Approved under UC San Diego
and Learning Neighborhood	west of the Project site.	2018 LRDP, under construction.
Seismic Deficiency - Spinal Cord Injury	San Diego VA Hospital, 0.25 mile	Approved in 2013. Construction
and Community Living Center Project	northeast of the Project site.	anticipated to commence in
		mid-2021.
SANDAG Mid-Coast Trolley	Construction throughout	Under construction, to be
	University Community Plan area	complete by late 2021.
	and UC San Diego, nearest	
	construction is 0.25 mile east of	
	the Project site.	
City of San Diego University	University Planning Area.	Plan amendment is currently being
Community Plan Amendment		prepared; will subsequently
		undergo environmental review.

#### References

This section identifies sources relied upon for each environmental topic area analyzed in this document (Sections 3.1 through 3.8).

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# 3.1 AESTHETICS

This section describes the existing visual character and quality of the Project site and vicinity, along with a description of existing visual resources, scenic vistas, and light and glare. Potential Project-related impacts are evaluated in terms of visual character and quality degradation, adverse effects to scenic vistas, damage to visual resources within a state scenic highway, and creation of new sources of light and glare affecting day-time and night-time views. In accordance with Senate Bill (SB) 743 criteria, potential aesthetic impacts are not considered to be impacts under CEQA for the proposed Project. However, this section includes an assessment of aesthetic impacts for informational purposes.

# 3.1.1 Existing Environmental Setting

The UC San Diego campus comprises three distinct geographical areas: Scripps Institution of Oceanography (Scripps), West Campus, and East Campus. East Campus and West Campus are bisected by I-5. The Project site is not within any of these entities; rather it is south of West Campus, as discussed further below.

## 3.1.1.1 Surrounding Visual Character

The UC San Diego campus' visual resources include visual connections with the ocean, foothills, nearby canyons, and the mountains to the east. These remain an important consideration both for landmark identification and maintaining the campus' image. Due to topography and proximity to the ocean, the UC San Diego campus contains a variety of visually sensitive areas.

The Project site is located directly south of West Campus (south of La Jolla Village Drive). The West Campus is located generally between Genesee Avenue, North Torrey Pines Road and I-5, and is characterized by a variety of building types and architectural styles spanning the development of UC San Diego starting in the 1960s. Vegetation throughout West Campus is characterized by eucalyptus, ornamental trees, and native vegetation. The topography is characterized by two prominent landforms: (1) a ridge running north-southeast of North Torrey Pines Road, which is over 400 feet AMSL in elevation; and (2) a large undeveloped canyon known as the North Canyon with elevations ranging from 160 feet to 300 feet AMSL in the north central area of West Campus. The remainder of the area between North Torrey Pines Road and I-5 is generally between 300 to 400 feet AMSL. Located in a lower portion of the existing landform, the Project site sits at an elevation of approximately 250 feet AMSL.

The areas south and west of the Project site are characterized by low-rise and mid-rise urban development, with office buildings, shopping centers, and large multi-family residential developments. Areas east of the Project site across I-5 are characterized by highly urbanized developments, with high-rise office buildings, hotels, and residential buildings.

Land uses adjacent to the commercial center include the seven-to-nine-story Rita L. Atkinson Residences building within the UC San Diego campus to the north, the San Diego VA Medical Center's surface parking lot to the northeast and the seven-story VA Medical Center hospital further north, the three-story La Jolla Boardwalk Apartments to the south, a two-story office/commercial complex in the Village La Jolla Plaza to the southeast, a gas station and two-story office structures to the east, and the three-story Residence Inn by Marriott to the west. Photographs of nearby developments are shown in Figures 3.1-1a through 3.1-1c, Surrounding Development Photos.

## 3.1.1.2 Project Site Visual Character

The approximately 1.2-acre Project site is located within a larger approximately 7-acre commercial center, named "The Campus on Villa La Jolla." The commercial center was developed in 1980, and is fully developed supporting five structures, including the existing restaurant building on the Project site, and associated surface parking. In all, the commercial center currently supports 165,000 SF of development. The existing building on the Project site is a two-story 13,213-SF structure that formerly housed the Rock Bottom Restaurant and Brewery. Other land uses at the commercial center include the UC San Diego Health Urgent Care-La Jolla and a suite of two-story medical and commercial offices situated above covered surface parking. Refer to Figure 2-1 for the location of the Project in context with the surrounding areas. Ornamental landscaping, primarily low-lying shrubs, is provided along sidewalks, building entrances, and scattered landscaped islands within the surface parking areas. Deciduous and larger non-deciduous mature trees are scattered throughout the commercial center. The buildings are constructed with flat façades and reflective windows and there are minimal architectural features that provide distinction.

The Project site is located at the intersection of Villa La Jolla Drive, a four-lane roadway (two lanes in each direction, plus two turning queue lanes) and La Jolla Village Drive, and six lane roadway (three lanes in each direction, plus two turning queue lanes). A pedestrian bridge crosses over La Jolla Village Drive just west of the Project site, but within the larger approximately 7-acre commercial center. While the overall visual setting is characterized by development, the southern and northern portions of La Jolla Village Drive contain trees and landscaping that softens the hardlines of the structures. Photographs of the Project site are shown in Figures 3.1-2a and 3.1-2b, *Project Site Photos*.

## 3.1.1.3 Light and Glare

The UC San Diego campus and surrounding area are urbanized with a substantial number of existing light and glare sources. Current sources of light on campus include buildings, streetlights, parking structures, and headlights from vehicles. Major campus roadways and walkways are well lit for the safety of students, faculty, staff, and visitors that may be driving or walking through the campus after dark. Sources of light south of the West Campus area similarly include streetlights, security and lighting, commercial signage, vehicle headlights, and light emanating from inside buildings and the gas station located directly east of the Project site across Villa La Jolla Drive. Glare can occur from reflective building materials and vehicle windshields.

# 3.1.2 Regulatory Framework

#### 3.1.2.1 State

## Senate Bill 743

In September 2013, the Governor's Office signed Senate Bill (SB) 743 into law, which made several changes to CEQA for projects located in areas served by transit (i.e., transit-oriented development or TOD). With respect to aesthetics, SB 743 (Public Resources Code Section 21099, Subdivision [d]) provides that aesthetic impacts shall not be considered significant impacts on the environment, in some circumstances. Specifically, Section 21099(d)(1) provides that aesthetics impacts shall not be considered significant CEQA impacts of a project that meets the following criteria:



A view from the pedestrian bridge over La Jolla Village Drive looking southeast.

The Aventine La Jolla and Hyatt Regency is in the background to the left.

The existing restaurant building is on the right.



A view of the UC San Diego Health Services Building across Villa La Jolla Drive from the Project site.





A view of the Project vicinity, looking north. The UC San Diego Health Services Building is on the right and the VAMC is in the center background.



A view of The Campus on Villa La Jolla commercial center taken from near the southwest corner of the Project site boundary.



A view of the UC San Diego Health Urgent Care – La Jolla building taken from south of the Project site boundary.



A view from the southern edge of the Project site facing north, showing the existing restaurant building.



A view from the southern edge of the Project site facing northwest, showing the existing restaurant building and the Rita Atkinson Residences in the background.





A view from the corner of Holiday Court and Villa La Jolla Drive, looking northwest toward the Campus on Villa La Jolla commercial center. The UC San Diego Health Urgent Care – La Jolla building is on the left, the Project site and existing restaurant building is on the right. The Rita Atkinson Residences are in the backround.



View from the intersection of La Jolla Village Drive and Villa La Jolla Drive, looking west.



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

A TPA is defined as an area within one-half mile of a major transit stop, such as a rail transit station or intersection of two major bus routes. The Project is an "employment center project" as defined by CEQA Guidelines Section 21099 as the Project is "located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and that is located within a TPA." The Project site floor area ratio is 5.2 and located within a TPA (City 2019). The Project meets the second criteria, as it is an infill site, defined by CEQA Guidelines Section 21099 as "a lot located 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 located in a TPA. As the Project meets the SB 743 criteria, potential aesthetic impacts are not considered to be significant impacts under CEQA for the proposed Project. However, this section includes an assessment of aesthetic impacts for informational purposes.

## **UC San Diego Policies and Programs**

The Project site is not within and would not be incorporated into the boundaries of the 2018 LRDP. However, as with other off-campus University projects and acquisitions, the Project would be subject to University-wide policies and regulations.

# **Design Review Board**

The UC San Diego Design Review Board (DRB) advises the Chancellor on the design of new facilities and major landscape projects to ensure that they are architecturally appropriate and generally consistent with the UC San Diego planning and design principles as specified in the UC San Diego Design Guidelines. Projects are examined by the DRB to ensure that the project's design is architecturally appropriate, and consistent with the visual landscape and/or the character of the surrounding development. The design review evaluates and incorporates factors such as building mass and form, building proportion, roof profile, architectural detail and fenestration, texture, color, type, and quality of building materials, and landscaping palette and placement. Prior to approval by the DRB, projects are often required to incorporate additional design measures that result in a more pedestrian-oriented development; improve the visual character and compatibility of design; and/or maintain or enhance the quality of the site and surroundings. The process helps to ensure projects remain consistent with the urban design framework set forth in applicable planning studies.

## **Design Guidelines**

The UC San Diego Design Guidelines (2018c) are advisory in nature and provide design criteria for consideration by the DRB and campus staff for UC San Diego projects for planning, design, and construction. The guidelines are organized into four divisions to coincide with the basic progression of facilities development. Division I, General Guidelines, contains overarching guidance on topics such as LEED, Health and Safety, and structural engineering. Division II, Site Requirements, contains guidance for pre-, during, and post-construction requirements for civil engineering, landscape, and recycled water aspects of facility construction. Division III, Building Guidelines, contains building-specific guidance for architecture, plumbing, electrical power, and lighting, among others. Division IV, Specialized Building Type Guidelines, contains specific guidance for classrooms, laboratories, and building security.

The 2018 update to the UC San Diego Design Guidelines implements the UC San Diego Outdoor Lighting Policy (2009), described below.

# **Outdoor Lighting Policy**

The primary goal of the UC San Diego Outdoor Lighting Policy is to reduce nighttime light pollution radiating from campus facilities to minimally acceptable levels so that local astronomical research is supported and advanced, while ensuring adequate lighting levels for safety and security. Another important goal of the UC San Diego Outdoor Lighting Policy is to limit nuisance light and glare impacts to adjacent properties. This limitation of luminosity aims to minimize adverse visual impacts to the surrounding community as UC San Diego properties are developed. The guidelines that implement this policy have been embedded into the 2018 UC San Diego Design Guidelines.

#### 3.1.2.2 Local

As discussed in other sections of this EIR, UC San Diego is part of the UC, a constitutionally created entity of the State of California, with "full powers of organization and government" (Cal. Const. Art. IX, Section 9). As a constitutionally created state entity, the UC is not subject to municipal plans, policies, and regulations of surrounding local governments, such as the City's General Plan or land use ordinances, for uses on property owned or controlled by the UC that are in furtherance of the UC's education and research purposes. However, UC San Diego may consider, for coordination or other purposes, aspects of local plans and policies for the communities surrounding the campus when it is appropriate and feasible, but it is not bound by those plans and policies in its planning efforts. Thus, UC San Diego has reviewed municipal plans for general consistency with the proposed Project; however, none of the following plans have jurisdiction over UC San Diego.

#### **University Community Plan**

The University Community Plan was adopted on July 7, 1987, and most recently amended on September 10, 2018, by the San Diego City Council (City 2018). A Community Plan Update is currently underway and anticipated for adoption in 2022 (City 2020a).

The University Community planning area encompasses approximately 8,500 acres and is bounded by Los Peñasquitos Lagoon and the toe of the east-facing slopes of Sorrento Valley on the north; the tracks of the Atchison, Topeka, and Santa Fe Railroad, Marine Corps Air Station Miramar, and I-805 on the east; State Route 52 on the south; and I-5, Gilman Drive, North Torrey Pines Road, La Jolla Farms, and the Pacific Ocean on the west. The Community Plan is divided into subareas by land use. The Project site is located in what is identified as the Central Subarea, the most urban of all four subareas of the University Community Plan. The Central Subarea is a diverse, mixed-use area of relatively intense development. The Community Plan Update underway identifies the area as Focus Area 4, an area for study of intensification of mixed uses acknowledging the close proximity to the campus (City 2020b).

The Community Plan area includes parcels adjacent to West and East Campus portions of UC San Diego beyond the northwestern, northern, eastern, and southern boundaries. Three plan policy elements within the University Community Plan may provide policy direction with respect to visual resources adjacent to the UC San Diego campus: Urban Design, Open Space and Recreation, and Resource Management. The Urban Design Element of the University Community Plan defines the relationship of buildings and spaces and provides direction for public street improvements. This element provides developers and design professionals with explicit project design criteria and identifies overall urban

design goals for the community. In relation to visual resources, the Community Plan notes concerns regarding building height transitions and building orientation within the Central Subarea, and encourages the use of appropriate setbacks to minimize the dominance of buildings along streetscapes within the subarea. An urban design issue affecting this area is that development orients activities and amenities towards the interior of the development and that steep landscaped berms shield views from sidewalks and roadways.

In addition to the specific design issues outlined for the Central Subarea, the Community Plan identifies broader urban design goals for the entire area, including the following:

- Establish standards that give physical design direction to private developments and public improvements.
- Ensure that San Diego's climate and the community's unique topography and vegetation influence the planning and design of new projects.
- Ensure that every new development contributes to the public realm and street livability by providing visual amenities and a sense of place.

The Open Space and Recreation Element of the University Community Plan (2018) identifies open space areas in the community that should be retained and enhanced, and also provides guidelines for their functional integration. Open space serves a wide range of functions in the University Community, including the control of urban design and aesthetic enjoyment. Open space goals relevant to aesthetics include the "preservation of natural resources" for the utilization and enjoyment of the community and the establishment of "an open space system that will utilize the terrain and natural drainage system to guide the form of urban development."

The Resource Management Element (2018) indicates that, "the resources in the University Community are both abundant and highly valuable, due in part to the area's variable topography, undeveloped open spaces, and location near the ocean and other water sources." The Pacific Ocean or steep ocean bluffs are not viewable from the Project site. Topographic features in the Project's immediate vicinity include hillsides and slopes, approximately 150 feet from the Project site across La Jolla Village Drive to the north. The element also identifies a goal to "Preserve the community's natural topography, particularly in the Coastal Zone and in major canyon systems."

# 3.1.3 Environmental Impacts and Mitigation

As discussed under Section 3.1.2.1, in accordance with SB 743 criteria, potential aesthetic impacts are not considered to be impacts under CEQA for the proposed Project. However, this section includes an assessment of aesthetic impacts for informational purposes.

#### 3.1.3.1 Issue 1: Scenic Vistas

### Aesthetics Issue 1 Summary

Would implementation of the proposed Project have a substantial adverse effect on a scenic vista?

**Mitigation:** No mitigation is required.

**Impact:** The Project site is not located within an area designated as a scenic vista or corridor and would not obstruct views of scenic

resources.

**Significance Before Mitigation:** No impact. **Significance After Mitigation:** Not applicable.

## Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Project may have a significant impact if it would result in a substantial adverse effect on a scenic vista. For the purposes of this analysis, adverse effects on scenic vistas are identified when there is a potential to block and/or degrade views of scenic resources. Note that scenic vistas are considered as those being publicly accessible, and the analysis therefore does not include private views.

#### **Impact Analysis**

Scenic vistas are generally defined as public viewpoints that provide expansive or notable views of a highly valued landscape and are typically identified in planning documents, such as a general or community plan, but can also include locally known areas or locations where high quality public views are available. Although the Project site is not included within the boundaries of the UC San Diego La Jolla campus as analyzed in the 2018 LRDP EIR, applicable information from the 2018 LRDP EIR has been included in this Aesthetics analysis due to the site's adjacency to the La Jolla campus. The 2018 LRDP EIR identifies a scenic vista as a view comprised of aesthetically scenic resources (e.g., a view of the ocean and foothills) (UC San Diego 2018b).

The 2018 LRDP EIR identifies visually sensitive resources and key vantage points within the University campus' planning area. The nearest visually sensitive area to the Project site is Scripps, approximately one-half mile to the southwest of the Project site. The 2018 LRDP EIR also identifies key vantage points, which are considered scenic vistas. The nearest key vantage point is also within Scripps. The completed Project would not be visible nor would it obstruct visually sensitive areas or key vantage points in Scripps. Project construction would involve the temporary use of a crane, which may be erected to a height taller than the completed structure. However, construction equipment would be removed following construction and would not impact scenic vistas.

In addition, some of the areas surrounding the campus are considered sensitive from a visual perspective due to their proximity to the campus, views of the campus, views of the nearby ocean and/or mountains, and/or designation as scenic areas within one or more of the relevant community plans. As noted, the Project site is within the area south of West Campus. There are no sensitive views of visual resources from within or across the Project site. Further, the 2018 LRDP EIR states that the area south of West Campus is not considered sensitive from a visual standpoint because the developments

are visually interior-oriented land uses located in an urbanized area with limited views of the University campus (UC San Diego 2018b).

The City's Community Plan does not officially designate vantage points or viewsheds within its planning boundaries, and it does not identify sensitive visual resources in the Project area or the entire Central Subarea (City 2018). The primary viewers in this area include UC San Diego students, faculty, staff, local residents, visitors, and persons that work in the area. Under current conditions, there are no scenic views across the site. Because there are no designated scenic views across the Project site, development of the site with the proposed structure would not result in an impact related to the degradation of a scenic vista, and no mitigation is required.

#### **Mitigation Measures**

There are no impacts related to scenic vistas; therefore, no mitigation is required.

# 3.1.3.2 Issue 2: Scenic Resources within a State Scenic Highway

#### **Aesthetics Issue 2 Summary**

Would implementation of the proposed Project substantially damage scenic resources, including, but not limited to, trees, rocks, outcroppings, and historic buildings within a State scenic highway?

**Impact:** The Project site is not located along a designated State scenic highway and therefore would not damage scenic resources within a State scenic highway.

Mitigation: No mitigation is required.

Significance Before Mitigation: No impact.

**Significance After Mitigation:** Not applicable.

#### Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Project may have a significant impact if it would substantially damage scenic resources, including, but not limited to, trees, rocks, outcroppings, and historic buildings within a state scenic highway.

#### **Impact Analysis**

A "state scenic highway" refers to any interstate, state, or county road that has been officially designated as scenic and thereby requires special scenic conservation treatment. There are no designated state scenic highways in the vicinity of the Project site; the nearest officially designated state scenic highway is State Route 163 (SR 163), nine miles to the southeast of the Project site (Caltrans 2021). I-5 is listed as an eligible state scenic highway from mile marker 14 near the Coronado Bridge northward to SR 74 near San Juan Capistrano in Orange County. As seen in Figure 1-2, I-5 bisects the campus and is approximately one-quarter mile east of the Project site. I-5 is not an Officially Designated State Scenic Highway. Furthermore, there are no unique trees or trees of significant nature, or unique rock outcroppings on the Project site within the viewshed of the I-5.

With regard to scenic resources, the Project site is fully developed and supports a structure that formerly housed the Rock Bottom Restaurant and Brewery. The brewery opened in 1998 and the associated onsite structure does not have historic value. Similarly, the surrounding medical and commercial office uses on the larger approximately 7-acre site were originally constructed in the 1980s and have no historic value. The UC San Diego Health Urgent Care-La Jolla to the south was constructed in 2015. While a few trees are present onsite and within the immediate surrounding area that primarily constitutes the larger commercial center, any such trees are a result of the ornamental landscaping. There are no unique geologic formations such as rock outcroppings that are a visual amenity on the site. Therefore, the Project would result in no impact associated with damaging resources along a State scenic highway, and no mitigation is required.

## **Mitigation Measures**

No impact would occur; therefore, no mitigation is required.

# 3.1.3.3 Issue 3: Degradation of Existing Community Character or Conflict with Zoning and Other Regulations for Scenic Quality

#### **Aesthetics Issue 3 Summary**

In non-urbanized areas, would implementation of the proposed Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?

**Impact:** Implementation of the proposed Project would not substantially degrade the existing community character of areas adjacent to the Project site and would not conflict with regulations governing scenic quality.

**Significance Before Mitigation:** Less than significant impact.

Mitigation: No mitigation is required.

**Significance After Mitigation:** Not applicable.

#### Standards of Significance

Based on Appendix G of the CEQA Guidelines, a project may have a significant impact if, in non-urbanized areas, it would 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 a publicly accessible vantage point. If a project is in an urbanized area, it would result in a significant effect if the project would conflict with applicable zoning and other regulations governing scenic quality.

## **Impact Analysis**

## **Community Character**

The Project site is south of the UC San Diego West Campus, in the Central Subarea of the City's University Community Plan (City 2018). The Central Subarea is considered as the most urban of the four subareas of the Community Plan area. Both the 2018 LRDP and the University Community Plan describe the area as characterized by intense, multi-use urban development. The Community Plan describes the vision for the Central Subarea as promoting a variety of building types, shapes, sizes, colors, and materials in the already established superblock development pattern.

The Project site is situated within the larger approximately 7-acre commercial center. The commercial center supports five buildings, comprised of two- to three-story medical and commercial offices in addition to surface parking and ornamental landscaping. The existing commercial center is incongruent with the preferred land use patterns outlined in the Urban Design Element of the Community Plan, as superblock developments orient activities and amenities inward, away from the streetscape, such that entrances to the offices and businesses are not from the street frontage. Implementation of the Project would encourage pedestrian linkages that would open the existing superblock and provide a major activity center utilizing existing public sidewalks, street level crossings, and the existing overpass above La Jolla Village Drive. The Project would therefore promote the design objectives of the Community Plan.

As illustrated in Figure 2-7, Figure 2-8, and Figures 2-13a and b, the building is designed to provide pedestrian amenities to Villa La Jolla Drive and La Jolla Village Drive, as well as to orient windows from the Project interior such as the ground-level retail, to the public sidewalks and roadways. Additionally, as shown in Figure 2-4, Figure 2-6, and Figure 2-8, Project-related parking is shielded through design. Other architectural elements such as useable outdoor decks and terraces would be provided on each of the above ground levels, disrupting flat planes and providing visual variation.

During Project construction, temporary construction fencing would be installed along the exterior of the site to restrict public access for safety purposes. This fencing would serve to screen the site from public view. Taller equipment such as cranes would be visible above the fencing during the erection of the structure, and short-term construction lighting may be required. Visual changes due to construction would be temporary and would not result in a change to community character.

As identified in the 2018 LRDP, the area south of West Campus, which includes the Project site, does not contain sensitive visual resources (UC San Diego 2018a). The Project, however, would be a marked difference from the existing two-story restaurant that currently is situated on the site (see Figure 2-4). As previously discussed, the University Community Plan identifies that building height transitions are a concern in the area of the Project site, which is discussed further below. The Project's proposed seven-story structure would not match the heights of the existing restaurant building or the two- and three-story structures within the commercial center. Currently, as one travels east or west along La Jolla Village Drive, the existing restaurant building at the Project site is not visible until nearly at the Project site frontage. With the Project, the structure would be visible from both the eastern and western approaches along La Jolla Village Drive. The new seven-story, 100-foot building would rise above the mature trees that are part of the streetscape; however, it would be comparable in scale to the seven- to nine-story Rita L. Atkinson Residence building (up to 87 feet) located across La Jolla Village Drive, approximately 300 feet north of the Project site (refer to Figure 3.1-2a and 3.1-2b). Additionally, the

Rita L. Atkinson structure is located on a hillside approximately 50 feet higher in elevation than the Project site and is similarly surrounded by mature trees. There are also several structures approximately one-half mile east of I-5 in the vicinity of the Project that are of similar or greater height, such as the Hyatt Regency Aventine and adjacent office buildings that range in height from 130 feet to approximately 200 feet (refer to Figure 3.1-1a). The VA Medical Center hospital located approximately 0.3 mile north of the site is also multi-level and between approximately 110 feet to 130 feet in height. Thus, the Project would not introduce a structure of incomparable height to the greater Project area and would provide varying building heights and interesting roofline compositions, as recommended by the Community Plan. Additionally, there are no visual resources in the Project area that would be obstructed with the introduction of the Project. Further, the Project incorporates several architectural features that support the intent of the Community Plan Urban Design Element which are further described in the following subsection.

#### Zoning and Other Regulations Governing Scenic Quality

The site is currently within the jurisdiction of the City of San Diego, zoned as CO-1-2, Commercial, within the Coastal Height Limit Overlay Zone, the Community Plan Implementation Overlay Zone, and the Parking Impact Overlay Zone. Upon acquisition of the Project site, the site would be under the ownership of the UC Regents, subject to UC land management policies, rather than the goals and policies set forth in the City's General Plan and zoning code. Thus, in relation to conflicting with applicable zoning and other regulations governing scenic quality, the appropriate regulations are those that are promulgated by UC San Diego. Specifically, campus development is guided by the 2018 LRDP and associated land use plan. While the proposed Project is not within the 2018 LRDP boundaries, it would still be generally consistent with policies applicable to the Academic land use. Academic use areas primarily include classrooms and ancillary support facilities (such as administrative/office uses and other facilities that support academic operations).

In addition, the UC San Diego DRB advises the Chancellor on the design of all new UC San Diego facilities and major landscape projects and evaluates consistency with the UC San Diego Design Guidelines. While the Guidelines are advisory, the DRB process provides oversight and would recommend measures or features to ensure the visual compatibility of the Project with the surrounding environment. The proposed Project design was presented to the DRB at its pre-concept, concept, and schematic design phases to gain feedback on factors including building mass and form, building proportion, roof profile, architectural detail and fenestration, texture, color, type, and quality of building materials, and landscaping palette and placement. Comments from the DRB on building materials, security, lighting, landscaping, and other features were incorporated into the proposed design. Similar to zoning regulations, the Project site would not be required to adhere to the objectives of the City's University Community Plan. Discussion of the Project and its relationship to existing Community Plan design objectives is provided here for reference. A key objective for the Central Subarea of the City's Community Plan is to improve the central community's urban form and cohesiveness as new construction activity continues. The Community Plan has identified a set of recommendations to accomplish this objective for City projects, including providing appropriate setbacks, transitioning the scale and height of adjacent buildings; siting and designing buildings to maximize solar access and view corridors; articulating the building mass with offsets; changes of plane; incorporating stepped terraces and irregular architectural edges; utilizing building elements, colors and materials that are not disturbing to the eye; concealing rooftop equipment; providing outdoor seating areas; and avoiding the location of parking and parking entrances adjacent to the pedestrian network streets.

As shown in Figures 2-5 through 2-9 of this EIR, the Project is designed to incorporate these recommendations. Figure 2-5 depicts the proposed Project in context of the La Jolla Village Drive and Villa La Jolla Drive intersection. The Project is designed with a combination of concrete, metal, and glass elements with wooden architectural design elements that provide contrast. Decks and terraces disrupt flat planes and irregular stacking of the various floors interrupts stark lines. The ground floor entrance of the building is designed as an exterior lobby space. Exterior seating spaces would be visually defined by low architectural screen fences that create a semi-transparent buffer between pedestrians and vehicles, or by seating. Building siting and façade treatments intentionally balance solar exposure and heat gain and promote natural ventilation. Passive strategies, such as continuous horizontal shades, are designed to shade the vision glazing on the south façade.

Figures 3.1-3a through 3.1-3d, *Pre- and Post-Project Views*, provide visual simulations of the proposed Project in context of its surroundings. As shown, the Project does not visually conflict with its surroundings due to changes in topography and existing development along La Jolla Village Drive. Although construction of the Project would result in a taller building compared to existing conditions, it is not considered out of visual character with the surrounding area and would not conflict with applicable regulations associated with height or massing. The Project would also not block any public scenic views. Therefore, impacts related to community character and conflicts with any applicable zoning or other regulations governing scenic quality would be less than significant and no mitigation is required.

## **Mitigation Measures**

Impacts related to community character or zoning regulations governing scenic resources would be less than significant; therefore, no mitigation is required.

## 3.1.3.4 Issue 4: Lighting and Glare

#### Aesthetics Issue 4 Summary

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

**Impact:** Although the Project would introduce new sources of lighting, it is located in an urban, well-lit area and would adhere to University guidelines regarding light and glare. **Mitigation:** No mitigation is required.

Significance Before Mitigation: Less than

**Significance After Mitigation:** Not applicable.

significant.

#### Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the proposed Project may have a significant adverse impact if it would create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

## **Impact Analysis**

There are two primary artificial sources of light that generally affect an urban environment: light emanating from building interiors that passes through windows to the outside, and light from exterior sources (e.g., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting) that affect the natural ambient light level. The introduction of light can be a nuisance by affecting adjacent areas and diminishing the view of the clear night sky depending on the location of the light sources and its proximity to nearby light-sensitive areas. The Project would introduce new sources of light associated with night-time security, lighting radiating from interior uses, pedestrian scale pathway and low-level decorative lighting, vehicle lighting, and illuminated signs. During Project construction, equipment such as cranes would be visible during the erection of the structure, and short-term construction lighting may be required for safety purposes. Nighttime construction is not anticipated, and construction lighting, if required, would be temporary and would not result in a permanent visual impact.

Currently, substantial nighttime lighting is present at and in the vicinity of the Project site. Major roadways and walkways are well lit for the safety. Residential, commercial, and institutional land uses in the area also contribute to the existing ambient light in the vicinity of the Project site. Within the UC San Diego La Jolla campus, the southern boundary of West Campus along La Jolla Village Drive is generally composed of open space, large trees, and minimal development, with the exception of the Rita L. Atkinson Residences directly across and above La Jolla Village Drive, and visible from the Project site. The campus is generally at a higher elevation than most of the existing residential development south of the campus and is separated by La Jolla Village Drive, a six-lane lane road.

The addition of new Project-related sources of light and glare would increase ambient lighting on campus and at the periphery. Due to the highly developed urban nature of the Project area, a significant amount of ambient light exists in the current setting. Moreover, the Project would be required to comply with the UC San Diego Outdoor Lighting Policy and the UC San Diego Outdoor Lighting Design Guidelines. The UC San Diego Outdoor Lighting Policy and Lighting Design Guidelines are intended to limit nuisance light and glare impacts to adjacent properties and to avoid adverse visual impacts to the surrounding community environment while maintaining adequate levels of lighting to provide safe travel and security. For example, the UC San Diego Outdoor Lighting Policy requires the use of focused and shielded outdoor lighting, discourages upward lighting, and prohibits lighting for landscaping or decorative purposes after 10:00 p.m. In relation to the policy, light pollution shall be controlled by defining the purposes and location, the type of shielding and light distribution required, and the quantity of light required to satisfy specified needs. Further, the Outdoor Lighting Policy is specifically designed to meet or exceed the restrictions contained in the comparable policies of the City of San Diego and San Diego County. Therefore, with the required compliance with the UC San Diego Outdoor Lighting Policy and the UC San Diego Outdoor Lighting Design Guidelines, the Project would not create a new source of substantial light that would adversely affect daytime or nighttime views in the area and impacts would be less than significant in relation to light impacts.

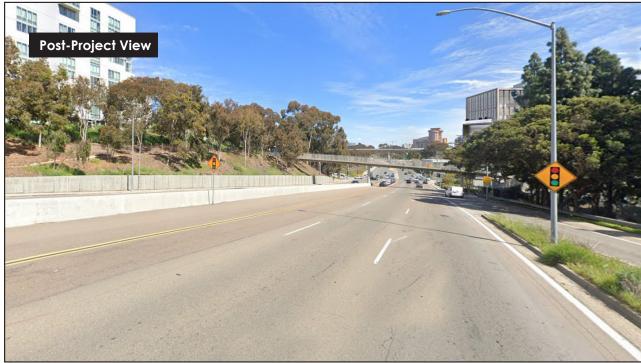
Glare is generally associated with architectural features, such as windows or mirrored solar paneling. Glare could result from the sun reflecting off of reflective building surfaces. As identified in Chapter 2.0, *Project Description*, the structure is designed with metal, concrete, and glass and the Project would incorporate the use of horizontal shades and anti-reflective glass in the windows to minimize glare. The following design features as outlined in the UC San Diego Outdoor Lighting Design Guidelines would be incorporated in all or in part to minimize impacts from glare from new buildings: windows would use



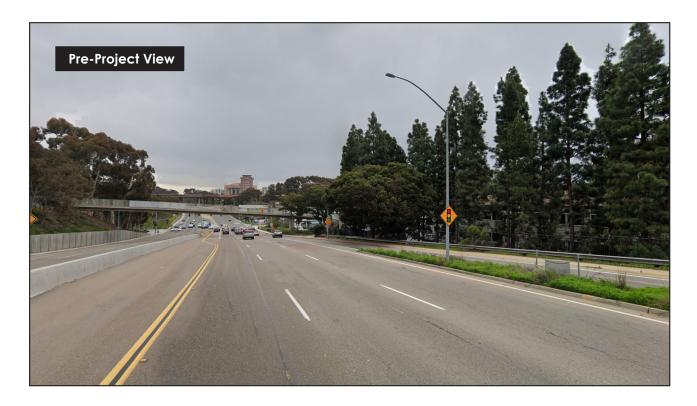
View from north sidewalk of La Jolla Village Drive, approximately 200 feet from intersection with Villa la Jolla Drive, looking southwest towards the Project site.

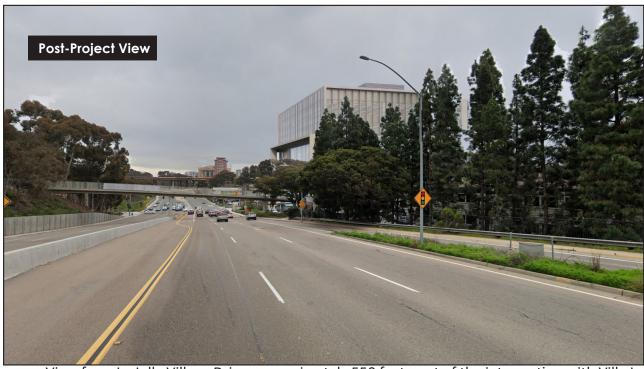


View from east sidewalk of Villa La Jolla Drive 50 feet south of intersection with Villa Norte and Holiday Court, looking northeast towards the Project site.



View from La Jolla Village Drive, approximately 500 feet west of the intersection with Villa La Jolla, looking east.





View from La Jolla Village Drive, approximately 550 feet west of the intersection with Villa La Jolla, looking southeast.



"clear vision" glass to minimize glare and reflectivity; a variety of window types would be provided such as low emissivity (i.e., energy efficient) insulated glass, spandrel glass, and window glazing; and avoidance of repetitive bands of reflective windows that could result in a substantial source of new glare to off-site areas or travelers on adjacent roadways. Therefore, the Project would not result in a substantial new source of light or glare and impacts would be less than significant, and no mitigation is required.

#### **Mitigation Measures**

Impacts related to light and glare would be less than significant; therefore, no mitigation measure is required.

# 3.1.4 Cumulative Impacts and Mitigation

#### **Aesthetics Cumulative Issue Summary**

Would implementation of the proposed Project have a cumulatively considerable contribution to a cumulative aesthetic impact considering past, present, and probable future projects?

Cumulative Impact  Degradation of scenic vista(s).	<u>Significance</u> Potentially significant.	<u>Project Contribution</u> Not cumulatively considerable.
Degradation of resources within a State scenic highway.	Potentially significant.	Not cumulatively considerable.
Degradation of existing community character or conflict with applicable zoning or regulations governing visual quality.	Potentially significant.	Not cumulatively considerable.
New source of substantial light or glare on campus.	Less than significant.	Less than significant.

The study area for the analysis of cumulative impact on aesthetics includes the adjacent UC San Diego campus and the surrounding area south of West Campus. Aesthetic impacts on the surrounding community are currently regulated by the City of San Diego General Plan and University Community Plan. All non-UC projects within the City's jurisdiction must comply with these regulatory documents, which include protection of publicly accessible view corridors and designated scenic vistas, visual character, and light and glare.

## Degradation of Scenic Vista(s)

Cumulative development associated with the 2018 LRDP, the North Torrey Pines Living and Learning Neighborhood Project, Theatre District Living and Learning Neighborhood Project, Erosion Repair and Parking Lot (South of VA), Mid-Coast Trolley, the VA Medical Center Seismic Deficiency—Spinal Cord Injury and Community Living Center Project, and off-campus projects within the University Community Plan, would occur in various locations within the cumulative study area, and some may result in a degradation of a scenic vista, depending on siting and locations of individual projects. Taken together,

the baseline cumulative impact is considered potentially significant. However, the proposed Project is not located within an area designated as a scenic vista and would not obstruct scenic resources. Therefore, it would not result in a cumulatively considerable contribution to impacts associated with degradation of scenic vistas.

## Degradation of Resources within a State Scenic Highway

As described under Issue 2, the nearest state-designated scenic highway is approximately 9 miles southeast of the Project site. Of the projects included in the cumulative analysis, the only project with the potential to affect resources within a scenic highway would be the University Community Plan Update. The details of the planned development within the University Community Plan Update are not yet known; therefore, cumulative impacts are conservatively assessed as potentially significant. However, the proposed Project would not impact scenic resources, including tree, rocks, rock outcroppings, or historic buildings within a state scenic highway. Therefore, the proposed Project would not result in a cumulatively considerable contribution to impacts associated with state scenic highways.

# Degradation of Existing Community Character or Conflict with Zoning and Other Regulations for Scenic Quality

Cumulative campus development within the UC San Diego La Jolla campus would be subject to the 2018 LRDP and the design review guidelines required by UC San Diego to ensure individual project impacts are less than significant. Development of the North Torrey Pines Living and Learning Neighborhood was assessed to be consistent with the 2004 LRDP. City projects within the University Community would be required to adhere to zoning and the objectives stated in the University Community Plan. Construction of the LRT stations as part of the Mid-Coast Trolley Project has resulted in a visual change to the character of the community but was not assessed as being adverse. However, taken together, development of cumulative projects could result in a cumulatively significant change to the existing community character of the vicinity. However, as described previously, the Project would be consistent with the visual character and scale of surrounding developments, both on and off-campus. The Project would not result in a cumulatively considerable contribution to impacts in relation to community character or conflict with zoning and other regulations governing scenic quality.

#### New Source of Substantial Light or Glare

The Project site is in an urban area that has a degree of existing light pollution emanating from, among other things, structures, vehicles, roadways and parking lots, and signs. Currently, the Project site is illuminated to maintain security in the vacant building formerly occupied by the Rock Bottom Restaurant and Brewery. The proposed Project would introduce new sources of light associated with the new building, which would be developed at a greater development intensity. However, as with the cumulative projects associated with the 2018 LRDP, including the Theatre District Living and Learning Neighborhood, the Project would be subject to the standards set forth by UC San Diego Outdoor Lighting Policy. Similarly, City projects in the community and the Mid-Coast Trolley project would be required to adhere to City of San Diego lighting requirements and design guidelines established by the University Community Plan. Collectively, adherence to these regulations reduces cumulative light impacts through measures such as shielding, restrictions on and light fixture intensity. Thus, the cumulative impact associated with new sources of substantial light and glare would be less than significant.

# 3.1.4.1 Mitigation Measures

Implementation of the Project would not result in a cumulatively considerable contribution to a cumulative aesthetic impact considering past, present, and probable future projects; therefore, no mitigation is required.

# 3.1.5 References

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# 3.2 AIR QUALITY

This section describes the existing air quality conditions for the Project site and vicinity, identifies plans and policies applicable to the discussion of air quality issues, evaluates Project-related impacts for significance under pertinent criteria, and identifies mitigation measures where appropriate. The information in this section is summarized, in part, from information contained in the Project-specific Air Quality and Greenhouse Gas Emissions Technical Report prepared by HELIX (January 2021), included as Appendix B to this EIR.

# 3.2.1 Existing Environmental Setting

Air quality is defined by the concentration of pollutants in relation to their impact on human health. Concentrations of air pollutants are determined by the rate and location of pollutant emissions released by pollution sources, and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, and sunlight. Therefore, ambient air quality conditions within the local air basin are influenced by such natural factors as topography, meteorology, and climate, in addition to the amount of air pollutant emissions released by existing air pollutant sources.

Climate, topography, and meteorology influence regional and local ambient air quality. Southern California is characterized as a semiarid climate, although it contains three distinct zones of rainfall that coincide with the coast, mountain, and desert. The Project site is located within the San Diego Air Basin (SDAB). The SDAB is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountain ranges to the east. The topography in the SDAB region varies greatly, from beaches on the west, to mountains and then desert to the east.

# 3.2.1.1 Climatology

The climate in southern California, including the SDAB, is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. Areas within 30 miles of the coast experience moderate temperatures and comfortable humidity.

Due to its climate, the SDAB experiences frequent temperature inversions (temperature increases as altitude increases, which is the opposite of general patterns). Temperature inversions prevent air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere, creating a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and  $NO_2$  react under strong sunlight, creating smog. Light, daytime winds, predominantly from the west, further aggravate the condition by driving the air pollutants inland, toward the foothills. During the fall and winter, air quality problems are created due to CO and  $NO_2$  emissions. High  $NO_2$  levels usually occur during autumn or winter, on days with summer-like conditions.

The predominant wind direction near the Project site is from the west to northwest and the average wind speed is 4.6 miles per hour (mph; Iowa Environmental Mesonet 2020). The annual average maximum temperature as measured at the San Diego International Airport climatic station is 69.9°F. The highest monthly average maximum temperature (76.3°F) occurs in August and the lowest monthly average minimum temperature (48.1°F) occurs in January. Total precipitation in the Project area

averages approximately 10 inches annually. Precipitation occurs mostly during the winter and relatively infrequently during the summer (Western Regional Climate Center 2016).

#### 3.2.1.2 Air Pollutants

Air quality laws and regulations have divided air pollutants into two broad categories: criteria air pollutants and toxic air contaminants (TACs). Criteria air pollutants are a group of common air pollutants regulated by the federal and State governments by means of ambient standards based on criteria regarding public health and/or environmental effects of pollution (California Pollution Control Officers Association [CAPCOA] 2019). TACs are pollutants with the potential to cause significant adverse health effects. In California, the California Air Resources Board (CARB) identifies exposure thresholds for TACs that indicate the level below which no significant adverse health effects are anticipated from exposure to the identified substance; however, thresholds are not specified for TACs that have no safe exposure level, or where insufficient data is available to identify an exposure threshold.

#### Criteria Air Pollutants

Individual air pollutants at certain concentrations may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Six air pollutants have been identified by the U.S. Environmental Protection Agency (USEPA) and CARB as being of concern both on a nationwide and statewide level: carbon monoxide (CO), nitrogen oxides (NO<sub>X</sub>), ozone (O<sub>3</sub>), particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), and lead. The following describes the health effects for each of these criteria air pollutants. Emissions from lead typically result from industrial processes such as ore and metals processing, and leaded aviation gasoline. These sources are not proposed as part of the Project, and therefore lead emissions are not included in this analysis.

#### Carbon Monoxide (CO)

CO is a colorless, odorless, poisonous gas, produced by combustion processes, primarily mobile sources. When CO gets into the body, it combines with chemicals in the blood and prevents the blood from providing oxygen to cells, tissues, and organs. Because the body requires oxygen for energy, high-level exposures to CO can cause serious health effects, including death (CAPCOA 2019).

## Nitrogen Oxides (NO<sub>x</sub>)

 $NO_X$  is a general term pertaining to compounds, including nitric oxide (NO), nitrogen dioxide (NO<sub>2</sub>), and other oxides of nitrogen.  $NO_X$  is produced from burning fuels, including gasoline, diesel, and coal.  $NO_X$  reacts with VOCs to form ground-level  $O_3$  (smog).  $NO_X$  is linked to a number of adverse respiratory system effects (CAPCOA 2019).

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

Ground-level  $O_3$  is not emitted directly in the air but is formed by chemical reactions of "precursor" pollutants– $NO_X$  and VOCs–in the presence of sunlight. Major emissions sources include  $NO_X$  and VOC emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents.  $O_3$  can trigger a variety of health problems, particularly for sensitive receptors, including children, the elderly, and people of all ages who have lung diseases such as asthma (CAPCOA 2019).

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

PM includes dust, metals, organic compounds, and other tiny bits of solid materials that are released into and move around in the air. Particulates are produced by many sources, including burning of diesel fuels by trucks and buses, industrial processes, and fires. Particulate pollution can cause nose and throat irritation and heart and lung problems. PM is measured in microns, which are one millionth of a meter in length (or one-thousandth of a millimeter).  $PM_{10}$  is small (respirable) PM measuring no more than 10 microns in diameter, while  $PM_{2.5}$  is fine PM measuring no more than 2.5 microns in diameter (CAPCOA 2019).

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

 $SO_2$  is formed primarily by the combustion of sulfur-containing fossil fuels, especially at power plants and industrial facilities.  $SO_2$  is linked with a number of adverse effects on the respiratory system (CAPCOA 2019).

#### **Toxic Air Contaminants**

In addition to criteria pollutants, both federal and State air quality regulations also focus on TACs. TACs can be separated into carcinogens and noncarcinogens based on the nature of the effects associated with exposure to the pollutant. For regulatory purposes, carcinogens are assumed to have no safe threshold below which health impacts would not occur. Any exposure to a carcinogen poses some risk of contracting cancer. Noncarcinogens differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

TACs may be emitted by stationary, area, or mobile sources. Common stationary sources of TAC emissions include gasoline stations, dry cleaners, and diesel backup generators, which are subject to local air district permit requirements. The other, often more significant, sources of TAC emissions are motor vehicles on freeways, high-volume roadways, or other areas with high numbers of diesel vehicles, such as distribution centers. Off-road mobile sources are also major contributors of TAC emissions and include construction equipment, ships, and trains.

Particulate exhaust emissions from diesel-fueled engines (diesel particulate patter [DPM]) were identified as a TAC by CARB in 1998. Federal and State efforts to reduce DPM emissions have focused on the use of improved fuels, adding particulate filters to engines, and requiring the production of new-technology engines that emit fewer exhaust particulates.

Diesel engines tend to produce a much higher ratio of fine particulates than other types of internal combustion engines. The fine particles that make up DPM tend to penetrate deep into the lungs and the rough surfaces of these particles makes it easy for them to bind with other toxins within the exhaust, thus increasing the hazards of particle inhalation. Long-term exposure to DPM is known to lead to chronic, serious health problems including cardiovascular disease, cardiopulmonary disease, and lung cancer.

The San Diego Air Pollution Control District (SDAPCD) samples for TACs at the El Cajon and Chula Vista monitoring stations. Excluding DPM, data from these stations indicate that the background cancer risk in 2014 due to TACs was 345 in one million in Chula Vista and 394 in one million in El Cajon (AECOM 2018). CARB estimates the excess cancer risk from DPM in California in 2012 as 520 in a million (SDAPCD 2017).

#### **Odors**

Odors are considered an air quality issue both at the local level (e.g., odor from wastewater treatment) and at the regional level (e.g., smoke from wildfires). Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul 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 is subjective. Some individuals have the ability to smell minute quantities of specific substances while others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person (e.g., from a fast-food restaurant or bakery) may be perfectly acceptable to another. Unfamiliar odors may be more easily detected and likely to cause complaints than familiar ones.

Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

Several examples of common land use types that generate substantial odors include wastewater treatment plants, landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants. There are no wastewater treatment plants, landfills, composting facilities, refineries, or chemical plants in the vicinity of the Project site. The existing Project site consists of a vacant restaurant building and is not a major odor source.

#### 3.2.1.3 Existing Air Quality

## **Air Quality Monitoring Data**

SDAPCD maintains monitoring stations to measure ambient concentrations of pollutants in the SDAB. The nearest monitoring station to the Project site is the Del Mar-Mira Costa College monitoring station, which is located approximately 5.9 miles north of the Project site in the City of Del Mar. The Del Mar-Mira Costa College station monitors ozone; however, the most recent available data from this station is only through 2017. The San Diego-Kearny Villa Road monitoring station located approximately 6.7 miles east of the Project site in the City of San Diego monitors ozone, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> and has data through 2019; therefore, data from the San Diego-Kearny Villa Road monitoring station is used. No stations near the Project site currently monitor CO; the Beardsley Street monitoring station, located approximately 11 miles south of the Project site, last monitored CO at 1.81 parts per million (ppm) in 2012, which was below the 9 ppm State and national standards. Table 3.2-1, *Air Quality Monitoring Data*, presents a summary of the ambient pollutant concentrations monitored at the San Diego-Kearny Villa Road air quality monitoring station during the last three years (2017 through 2019) for which the SDAPCD has reported data.

Table 3.2-1
AIR QUALITY MONITORING DATA

Pollutant Standards	2017	2018	2019
Ozone (O <sub>3</sub> )	·		
Maximum concentration 1-hour period (ppm)	0.097	0.102	0.083
Maximum concentration 8-hour period (ppm)	0.083	0.077	0.075
Days above 1-hour State standard (>0.09 ppm)	2	1	0
Days above 8-hour State standard (>0.070 ppm)	6	5	1
Days above 8-hour federal standard (>0.070 ppm)	6	5	1
Nitrogen Dioxide (NO <sub>2</sub> )			
Maximum 1-hour concentration (ppm)	0.054	0.045	0.046
Days above State 1-hour standard (0.18 ppm)	0	0	0
Days above federal 1-hour standard (0.100 ppm)	0	0	0
Suspended Particulates (PM <sub>10</sub> )			
Maximum 24-hour concentration (μg/m³)	47.0	38.0	*
Days above State standard (>50 μg/m³)	0	0	*
Days above federal standard (>150 μg/m³)	0	0	*
Suspended Particulates (PM <sub>2.5</sub> )			
Maximum 24-hour concentration (μg/m³)	27.5	32.2	16.2
Days above federal standard (>35 μg/m³)	0	0	0

Source: CARB 2020c ppm = parts per million

The 8-hour federal and State standards for ozone were exceeded six times in 2017, five times in 2018 and once in 2019. The 1-hour State standard for ozone was exceeded twice in 2017 and once in 2018. As shown in Table 3.2-1, no other standards were exceeded.

## **Existing Land Use Emissions**

The Project site is currently developed with a 13,213-SF building that formerly contained a restaurant/brewpub, which closed in March 2020 and is currently vacant. The building would be demolished as part of the Project. Operational emissions for the former on-site restaurant use were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2 as described in further detail in Section 3.2.3.2. Table 3.2-2, Existing Land Use (Restaurant) Maximum Daily Operational Emissions, presents the summary of operational emissions for the former on-site restaurant.

Table 3.2-2
EXISTING LAND USE (RESTAURANT) MAXIMUM DAILY OPERATIONAL EMISSIONS

Category	VOC*	NO <sub>x</sub> *	CO*	SO <sub>2</sub> *	PM <sub>10</sub> *	PM <sub>2.5</sub> *
Area	<0.5	<0.5	<0.5	0	0	0
Energy	<0.5	1	1	<0.5	<0.5	<0.5
Mobile	2	7	17	<0.5	4	1
<b>Total Daily Emissions</b>	2	7	17	<0.5	4	1

Source: CalEEMod (output data is provided in Appendix A)

VOC = volatile organic compound;  $NO_X$  = nitrogen oxides; CO = carbon monoxide;  $SO_2$  = sulfur dioxide;

 $PM_{10}$  = particulate matter 10 microns or less in diameter;  $PM_{2.5}$  = particulate matter 2.5 microns or less in diameter

<sup>\*</sup> Pollutant Emissions (pounds per day)

## 3.2.1.4 Sensitive Receptors

Some members of the population are especially sensitive to air pollutant emissions and should be given special consideration when evaluating air quality impacts from projects. The City's CEQA Guidelines define a sensitive receptor as a person who is particularly susceptible to health effects due to exposure to an air contaminant relative to the population at large. These include children, the elderly, and people with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Air quality regulators typically define sensitive receptors as schools, hospitals, resident care facilities, daycare centers, or other facilities that may house individuals who are particularly susceptible to health effects that would be adversely impacted by changes in air quality.

Residential areas are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to pollutants present. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent as the majority of workers tend to stay indoors most of the time. The nearest potential sensitive receptors are the on-campus Rita Atkinson Residences located approximately 350 feet from the Project site, across La Jolla Village Drive. Although there is an urgent care also located in proximity of the Project site, individual potentially sensitive receptors visiting the urgent care would not be present for extended periods of time. Therefore, the urgent care is not considered a potential sensitive receptor in this analysis.

# 3.2.2 Regulatory Framework

The proposed Project is subject to air quality regulatory requirements associated with federal, State, and regional guidelines, as summarized below.

## 3.2.2.1 Federal

## Clean Air Act

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the general public. The USEPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several criteria pollutants, which are introduced above. Table 3.2-3, *Ambient Air Quality Standards*, shows the federal and State ambient air quality standards for these pollutants.

Table 3.2-3
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards Primary <sup>1</sup>	Federal Standards Secondary <sup>2</sup>
O <sub>3</sub>	1 Hour	0.09 ppm (180 μg/m³)	-	_
	8 Hour	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m <sup>3</sup> )	Same as Primary
PM <sub>10</sub>	24 Hour	50 μg/m³	150 μg/m³	Same as Primary
	AAM	20 μg/m³	_	Same as Primary
PM <sub>2.5</sub>	24 Hour	_	35 μg/m³	Same as Primary
	AAM	12 μg/m³	12.0 μg/m³	15.0 μg/m³
CO	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )	_
	8 Hour	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	_
	8 Hour	6 ppm (7 mg/m³)	_	_
	(Lake Tahoe)			
NO <sub>2</sub>	1 Hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	_
	AAM	0.030 ppm (57 μg/m <sup>3</sup> )	0.053 ppm (100 μg/m <sup>3</sup> )	Same as Primary
SO <sub>2</sub>	1 Hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m <sup>3</sup> )	_
	3 Hour	_	_	0.5 ppm
				(1,300 μg/m³)
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	No Federal Standards
Sulfates	24 Hour	25 μg/m³	No Federal Standards	No Federal Standards
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	No Federal Standards	No Federal Standards
Vinyl Chloride	24 Hour	0.01 ppm (26 μg/m³)	No Federal Standards	No Federal Standards

Source: CARB 2020a

AAM = Annual Arithmetic Mean; CO = carbon monoxide; km = kilometer; mg/m<sup>3</sup> = milligrams per cubic meter;  $NO_2$  = nitrogen dioxide;  $O_3$  = ozone; ppm = parts per million;  $PM_{10}$  = coarse particulate matter with a diameter of 10 microns or less;  $PM_{2.5}$  = fine particulate matter with a diameter of 2.5 microns or less;  $SO_2$  = sulfur dioxide; - = No Standard;  $\mu g/m^3$  = micrograms per cubic meter

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. CARB has established the more stringent California Ambient Air Quality Standards (CAAQS) for the six criteria pollutants described in Section 3.2.1.2 through the California Clean Air Act of 1988, and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide (H<sub>2</sub>S), vinyl chloride, and visibility-reducing particles. Similar to the NAAQS, the CAAQS incorporate a margin of safety to protect sensitive individuals from adverse health effects related to air pollutants. Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be "nonattainment areas" for that pollutant.

The USEPA has classified air basins (or portions thereof) as being in "attainment," "nonattainment," or "unclassified" for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If

<sup>&</sup>lt;sup>1</sup> National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public

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

an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. The Project site is located within the SDAB and, as such, is in an area designated a nonattainment area for certain pollutants that are regulated under the CAA. Table 3.2-4, *San Diego Air Basin Attainment Status*, lists the federal and State attainment status of the SDAB for the criteria pollutants.

Table 3.2-4
SAN DIEGO AIR BASIN ATTAINMENT STATUS

Criteria Pollutant	Federal Designation	State Designation
O₃ (1-hour)	(No federal standard)	Nonattainment
O₃ (8-hour)	Marginal Nonattainment	Nonattainment
СО	Attainment	Attainment
PM <sub>10</sub>	Unclassifiable	Nonattainment
PM <sub>2.5</sub>	Attainment	Nonattainment
NO <sub>2</sub>	Attainment	Attainment
SO <sub>2</sub>	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Unclassifiable
Visibility	(No federal standard)	Unclassifiable

Source: SDAPCD 2020a

As shown in Table 3.2-4, the SDAB currently meets the NAAQS for all criteria air pollutants except ozone, and meets the CAAQS for all criteria air pollutants except ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SDAB currently falls under a federal maintenance plan for 8-hour ozone.

The CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The SIP is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The USEPA has the responsibility to review all SIPs to determine whether they conform to the requirements of the CAA.

#### 3.2.2.2 State

## California Ambient Air Quality Standards

The federal CAA allows states to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's SIP, for which it works closely with the federal government and the local air districts.

Table 3.2-4, above, lists the State attainment status of the SDAB for the criteria pollutants. Under State designation, the SDAB is currently in attainment for CO,  $NO_{2}$ ,  $SO_{2}$ , and lead; and is nonattainment for ozone,  $PM_{10}$ , and  $PM_{2.5}$ .

### **Toxic Air Contaminant Regulations**

California's air toxics control program began in 1983 with the passage of the Toxic Air Contaminant Identification and Control Act, better known as AB 1807 or the Tanner Bill. When a compound becomes listed as a TAC under the Tanner process, CARB normally establishes minimum statewide emission control measures to be adopted by local air pollution control districts (APCDs). Later legislative amendments (Assembly Bill [AB] 2728) required CARB to incorporate all 189 federal hazardous air pollutants (HAPs) into the State list of TACs.

Supplementing the Tanner process, AB 2588–the Air Toxics "Hot Spots" Information and Assessment Act of 1987–currently regulates over 600 air compounds, including all of the Tanner-designated TACs. Under AB 2588, specified facilities must quantify emissions of regulated air toxics and report them to the local APCD. If the APCD determines that a potentially significant public health risk is posed by a given facility, the facility is required to perform a health risk assessment (HRA) and notify the public in the affected area if the calculated risks exceed specified criteria.

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is known as DPM. Almost all DPM is 10 microns or less in diameter, and 90 percent of DPM is less than 2.5 microns in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, the CARB identified DPM as a toxic air contaminant based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM has a significant impact on California's population—it is estimated that about 70 percent of total known cancer risk related to air toxics in California is attributable to DPM (CARB 2020b).

In September 2000, CARB approved the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (Diesel Risk Reduction Plan; CARB 2000). The Diesel Risk Reduction Plan outlined a comprehensive and ambitious program that included the development of numerous new control measures over the next several years aimed at substantially reducing emissions from new and existing on-road vehicles (e.g., heavy-duty trucks and buses), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps), and stationary engines (e.g., stand-by power generators). These requirements are now in force on a statewide basis.

### Air Quality and Land Use Handbook: A Community Health Perspective

CARB has also developed the Air Quality and Land Use Handbook: A Community Health Perspective to provide guidance on land use compatibility with sources of TACs (CARB 2005). These sources include freeways and high-traffic roads, commercial distribution centers, rail yards, refineries, dry cleaners, gasoline stations, and industrial facilities. The handbook is not a law or adopted policy but offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs. The handbook indicates that land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues. The recommendations include avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.

### 3.2.2.3 Regional/Local

### San Diego Air Pollution Control District

The SDAPCD is the local agency responsible for the administration and enforcement of air quality regulations for the County. The SDAPCD and SANDAG are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. SDAPCD has prepared an Attainment Plan for San Diego County (SDAPCD 2020b) demonstrating how the SDAB will further reduce air pollutant emissions to attain the current NAAQS for ozone. The Attainment Plan was approved by the SDAPCD Board on October 14, 2020 and by CARB on November 19, 2020. The plan will be submitted to the USEPA as a revision to the SIP. The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin. The current federal and State attainment status for San Diego County is presented in Table 3.2-4.

The SDAPCD is also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws. All development projects within the City may be subject to the following SDAPCD rules (as well as others):

**Rule 51, Nuisance:** prohibits emissions that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which cause injury or damage to business or property.

**Rule 52, Particulate Matter:** establishes limits to the discharge of any PM from non-stationary sources.

**Rule 54, Dust and Fumes:** establishes limits to the amount of dust or fume discharged into the atmosphere in any 1 hour.

**Rule 55, Fugitive Dust Control:** sets restrictions on visible fugitive dust from construction and demolition projects.

**Rule 67, Architectural Coatings:** establishes limits to the VOC content for coatings applied within the SDAPCD.

Projects are required to comply with these rules, and conformance would be incorporated into Project specifications and procedures.

### 3.2.3 Environmental Impacts and Mitigation

The following sections address potential impacts related to air quality that could result from implementation of the proposed Project.

#### 3.2.3.1 Issue 1: Consistency with Applicable Air Quality Plan

#### Air Quality Issue 1 Summary

Would implementation of the proposed Project result in a conflict with or obstruct implementation of the applicable air quality plan?

**Impact:** Implementation of the proposed Project would not conflict with or obstruct implementation of the applicable air quality **Mitigation:** No mitigation is required.

plan.

**Significance Before Mitigation:** Less than

significant.

**Significance After Mitigation:** Not applicable.

### Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Project would have a significant impact if it would result in a conflict with or obstruct implementation of the applicable air quality plan. For the Project, applicable air quality plans include the SDAPCD 2020 Attainment Plan and the SIP.

#### **Impact Analysis**

Air quality plans describe air pollution control strategies to be implemented by a city, county, or regional air district. The primary purpose of an air quality plan is to bring an area that does not attain federal and State air quality standards into compliance with those standards pursuant to the requirements of the CAA and CCAA.

The regional air quality plan for San Diego County is SDAPCD's 2020 Attainment Plan. The Attainment Plan, which would be a revision to the SIP once approved by the USEPA, outlines SDAPCD's plans and control measures designed to attain the NAAQS for ozone. These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the standards. Mobile sources are regulated by the USEPA and CARB, and the emissions and reduction strategies related to mobile sources are considered in the Attainment Plan and SIP.

The two principal criteria for conformance to the Attainment Plan are (1) whether the Project will not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards, and (2) whether the Project will exceed the assumptions in the Attainment Plan.

Project implementation would contribute emissions of PM<sub>10</sub>, PM<sub>2.5</sub>, and the ozone precursors VOC and NO<sub>X</sub> to the area during short-term construction and long-term operations. As described under Section 3.2.3.2 and shown in Tables 3.2-8, Maximum Daily Construction Emissions, and 3.2-9, Maximum Daily Operational Emissions, below, projected pollutant emissions during Project construction and operation would be well below the significance criteria. Therefore, the Project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards.

Assumption for land use development used in the Attainment Plan are taken from local and regional planning documents. Emission forecasts rely on projections of vehicle miles traveled (VMT) by Metropolitan Planning Organizations (MPOs), such as SANDAG, and population, employment, and land use projections made by local jurisdictions during development of the area and general plans.

The Project site is currently subject to the City's General Plan and has an existing land use designation of Commercial and Office. Upon acquisition of the Project site by Regents, the site would not be subject to the City's General Plan. The Project would involve land use types (office, educational, and retail) that are generally consistent with the site's existing land use designation under the City's General Plan, which had been used in development of the Attainment Plan. Further, while the Attainment Plan acknowledges mobile and area sources, minor changes in the assumptions relative to these sources would not obstruct successful implementation of the strategies for improvement of SDAB's air quality. Additionally, the Project site is within a TPA and along a high-quality transit corridor (La Jolla Village Drive). The Project site is also within 0.33 mile of two future UC San Diego Blue Line LRT system stations (Nobel Drive Station and VA Medical Center Station). The Project's location would therefore reduce vehicle trips and VMT and associated pollutant emissions. According to the Transportation Impact Analysis (TIA) prepared for the Project (Linscott, Law & Greenspan Engineers [LLG]; 2021), the Project VMT per employee for the proposed office uses is less than 85 percent of the regional average and the proposed classroom and retail uses would not result in a net increase in the total regional VMT. As such, the Project would not exceed the assumptions of the Attainment Plan or conflict with or obstruct implementation of the Attainment Plan. Impacts associated with consistency with regional air quality plans would be less than significant, and no mitigation is required.

## **Mitigation Measures**

Implementation of the Project would not conflict with or obstruct implementation of the applicable air quality plan; therefore, no mitigation is required.

#### 3.2.3.2 Issue 2: Cumulative Increase in Criteria Pollutant Emissions

#### Air Quality Issue 2 Summary

Would implementation of the proposed 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 standard?

Impact: Implementation of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable federal or state ambient air quality standard.

**Significance Before Mitigation:** Less than significant.

Mitigation: No mitigation is required.

**Significance After Mitigation:** Not applicable.

### Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Project would have a significant impact if it would result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard.

In analyzing cumulative impacts from a project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the SDAB is listed as nonattainment for the CAAQS and the NAAQS. The SDAB has been designated as a federal nonattainment area for ozone, and a State nonattainment area for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. Since few sources emit ozone directly, and ozone is caused by complex chemical reactions, control of ozone is accomplished by the control of emissions of NO<sub>X</sub> and reactive organic gases (ROGs). By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development within the air basin. Thus, this regional impact is a cumulative impact, and projects would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of the regional air quality standards. Consequently, if a project's emissions do not exceed identified significance thresholds, its emissions would not result in a cumulatively considerable contribution to the significant cumulative impact (Sacramento Metropolitan Air Quality Management District [SMAQMD] 2009, Bay Area Air Quality Management District [BAAQMD] 2010).

To determine whether the Project would result in a cumulatively considerable increase of  $PM_{2.5}$ ,  $PM_{10}$ , or exceed quantitative thresholds for ozone precursors (i.e.,  $NO_X$  and VOCs), contribute substantially to a projected air quality violation, or have an adverse effect on human health, Project emissions may be evaluated based on the quantitative emission thresholds established by the SDAPCD. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments. In the absence of a SDAPCD adopted threshold for  $PM_{2.5}$ , the SCAQMD's screening threshold of 55 pounds per day or 10 tons per year is used.

The screening criteria were developed by SDAPCD and SCAQMD with the purpose of attaining the NAAQS and CAAQS. The NAAQS and CAAQS, as discussed in Section 3.2.2, identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. Therefore, for CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality or an adverse effect on human health. The screening thresholds are included in Table 3.2-5, *Screening-level Thresholds for Air Quality Impact Analysis*.

Table 3.2-5
SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS

Pollutant	Total Emissions			
Construction Emissions (Pounds/Day)				
Respirable Particulate Matter (PM <sub>10</sub> )		100		
Fine Particulate Matter (PM <sub>2.5</sub> )		55		
Oxides of Nitrogen (NO <sub>x</sub> )		250		
Oxides of Sulfur (SO <sub>x</sub> )		250		
Carbon Monoxide (CO)		550		
Volatile Organic Compounds (VOCs)		137		
Operational Emissions				
	Pounds/Hour	Pounds/Day	Tons/Year	
Respirable Particulate Matter (PM <sub>10</sub> )		100	15	
Fine Particulate Matter (PM <sub>2.5</sub> )		55	10	
Oxides of Nitrogen (NO <sub>x</sub> )	25	250	40	
Oxides of Sulfur (SO <sub>x</sub> )	25	250	40	
Carbon Monoxide (CO)	100	550	100	
Lead and Lead Compounds		3.2	0.6	
Volatile Organic Compounds (VOCs)		137	15	
<b>Toxic Air Contaminant Emissions</b>				
Excess Cancer Risk	1 in 1 million			
	10 in 1 million with			
	T-BACT			
Non-Cancer Hazard	1.0			

Source: SDAPCD Rule 20.2 and Rule 1210.

T-BACT = Toxics-Best Available Control Technology

#### Methodology

Construction and operational period criteria pollutant emissions and ozone precursors were calculated using CalEEMod, Version 2016.3.2 (SCAQMD 2017). CalEEMod is a computer model used to estimate emissions resulting from construction and operation of land development projects throughout the State of California. CalEEMod was developed by the SCAQMD with the input of several air quality management and pollution control districts. The model calculates emissions of CO, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, the ozone precursors VOC and NO<sub>x</sub>. The input data and construction and operation assumptions for the proposed Project are discussed below.

#### **Construction Assumptions**

As described above, construction emissions were assessed using the CalEEMod. CalEEMod contains OFFROAD2011 emission factors and EMFAC2014 emission factors from CARB's models for off-road equipment and on-road vehicles, respectively. The construction analysis included modeling of the projected construction equipment that would be used during each construction activity and quantities of earth and debris to be moved.

Construction input data for CalEEMod include, but are not limited to: (1) the anticipated start and finish dates of construction activity, (2) inventories of construction equipment to be used, (3) areas to be excavated and graded, and (4) volumes of materials to be exported from and imported to the Project area. This analysis assesses maximum daily emissions from individual construction activities, including

demolition/site preparation; trenching; shoring, excavation, and pile foundation installation; construction of the physical structure; and structure finishes. Project grading is estimated to require 18,700 CY of cut and 240 CY of fill for a net export of 18,460 CY of material. Construction would require heavy equipment during each construction activity. Equipment estimates are based on assumptions provided by GPI Companies and CalEEMod default data. Table 3.2-6, *Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

Table 3.2-6 CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Phase	Equipment	Number
Demolition/Site Preparation	Concrete/Industrial Saw	1
	Rubber Tired Dozer	1
	Tractor/Loader/Backhoe	3
Trenching	Excavator	1
	Tractor/Loader/Backhoe	2
Shoring, Excavation, and Piles	Excavator	2
	Rubber Tired Dozer	1
	Tractor/Loader/Backhoe	2
Structure	Aerial Lift	1
	Crane	1
	Forklift	2
	Generator Set	1
	Tractor/Loader/Backhoe	1
	Welder	3
Finishes	Air Compressor	1

Source: GPI Companies (data, including equipment horsepower, is provided in Appendix B)

The construction schedule used for emissions modeling was based on information provided by GPI Companies. As shown in Table 3.2-7, *Anticipated Construction Schedule*, physical Project construction is assumed to start in June 2021 and projected to be complete in August 2022. Testing and inspections would follow physical building construction and last for seven months, resulting in initial occupancy in mid-2023.

Table 3.2-7
ANTICIPATED CONSTRUCTION SCHEDULE

Construction Activity	Construction Period Start	Construction Period End	Construction Period Number of Working Days
Site Preparation/Demolition	6/1/2021	7/12/2021	30
Trenching	7/13/2021	8/2/2021	15
Shoring, Excavation, and Pile Foundations	8/3/2021	9/27/2021	40
Structure	9/28/2021	8/17/2022	232
Finishes	4/27/2022	8/18/2022	82

Source: GPI Companies (data is provided in Appendix B)

The quantity, duration, and the intensity of construction activity influence the amount of construction emissions and their related pollutant concentrations that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. If construction is delayed or occurs over a longer time period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than incorporated in the CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval). A complete listing of the assumptions used in the analysis and model output is provided in Appendix B of this EIR.

CalEEMod has the capability to calculate reductions in construction emissions from the effects of dust control, diesel-engine classifications, and other selected emissions reduction measures. Construction emission calculations presented herein assume the implementation of BMPs, including watering two times daily during grading, ensuring that all exposed surfaces maintain a minimum soil moisture of 12 percent, limiting vehicle speeds on unpaved roads to 15 mph.

The Project would also conform to the VOC limits included in SDAPCD Rule 67. According to Rule 67, non-residential coatings must have a VOC content less than or equal to 100 grams per liter (g/L). The quantities of coatings that would be applied to the interior and exterior of the new building were estimated according to CalEEMod default assumptions.

#### **Operational Assumptions**

The Project's operational emissions were estimated using CalEEMod. Operational sources of emissions include area sources, mobile sources, energy use, water use, and solid waste generation. Operational emissions from area sources include the use of consumer products, engine emissions from landscape maintenance equipment, and VOC emissions from repainting of buildings. Low-VOC coatings (less than or equal to 100 g/L) were assumed in the model per SDAPCD Rule 67.

Operational mobile source emissions would be associated with Project-related vehicle trip generation and trip length. According to the TIA prepared for the Project by LLG (2021), the Project would generate 1,920 average daily trips (ADT). CalEEMod default average trip lengths, vehicle speeds, and fleet mix were used.

The Project would be designed to exceed the 2019 Title 24 standards to reduce electrical energy usage by 20 percent. Annual electrical usage incorporated into the model for the Project's office, classroom, and retail uses was provided by the Project applicant. Model default electrical usage for the proposed parking garage was used. The Project would not include the use of natural gas.

Model default indoor and outdoor water usage was used. The Project would achieve a 35 percent reduction in indoor water use compared to the statewide average. This reduction was incorporated into the model. A 20 percent outdoor water use reduction per CALGreen requirements was also incorporated into the model.

Project tenants would implement a Zero Waste Action Plan during operations as required by the UC Sustainable Practices Policy; however, because specific solid waste reduction metrics are not available at this stage in the planning process, model default solid waste generation was used and a 75 percent reduction per AB 341 was assumed.

#### **Existing Land Use On-site Operations**

The Project site was formerly developed with a 13,213-SF restaurant that generated emissions through area sources, mobile sources, energy use, water use, and solid waste generation. Emissions associated with the former restaurant land use have been provided for informational purposes. According to the TIA prepared for the Project (LLG 2021), the former restaurant use generated 1,718 ADT. Model defaults for area sources, energy use, water use, and solid waste generation associated with the restaurant use were used.

#### **Impact Analysis**

Implementation of the Project would result in both construction and operational air pollutant emissions, as described in the following sections.

#### **Construction Emissions**

The Project's construction emissions were estimated using CalEEMod as described above. Project-specific input was based on general information provided in Chapter 2, assumptions provided by GPI Companies, and default model settings to estimate reasonably conservative conditions. The results of the calculations for Project construction are shown in Table 3.2-8, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the SDAPCD thresholds.

Table 3.2-8
MAXIMUM DAILY CONSTRUCTION EMISSIONS

Phase	ROG*	NO <sub>x</sub> *	CO*	SO <sub>x</sub> *	PM <sub>10</sub> *	PM <sub>2.5</sub> *
Demolition/Site Preparation (2021)	2	20	15	<0.5	1	1
Trenching (2021)	1	6	8	<0.5	<0.5	<0.5
Shoring, Excavation, and Pile	2	34	19	<0.5	5	3
Foundations (2021)						
Structure (2021)	2	20	19	<0.5	2	1
Structure (2022)	2	19	18	<0.5	2	1
Finishes (2022)	12	1	2	<0.5	<0.5	<0.5
Maximum Daily Emissions <sup>1</sup>	15	34	20	<0.5	5	3
SDAPCD Thresholds	137	250	550	250	100	55
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod (output data is provided in Appendix B

Note: Totals may not sum due to rounding.

PM<sub>10</sub> = particulate matter 10 microns or less in diameter; PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter

As shown in Table 3.2-8, emissions of all criteria pollutants related to Project construction are estimated to be below the SDAPCD's significance thresholds. Therefore, construction of the Project would not result in a cumulatively considerable increase of  $PM_{2.5}$ ,  $PM_{10}$  or exceed quantitative thresholds for ozone precursors (i.e.,  $NO_X$  and VOCs), contribute substantially to a projected air quality violation, or have an adverse effect on human health. Impacts associated with a cumulatively considerable increase in criteria pollutants during Project construction would be less than significant, and no mitigation is required.

<sup>\*</sup> Pollutant Emissions (pounds/day)

Maximum daily emissions of ROG and CO occur when the Structure and Finishes phases overlap in 2022. Maximum daily emissions of NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> occur during the Shoring, Excavation, and Pile Foundations phase.
ROG = reactive organic gas; NO<sub>x</sub> = nitrogen oxides; CO = carbon monoxide; SO<sub>x</sub> = sulfur oxides;

#### **Operational Emissions**

The Project's operational emissions were estimated using CalEEMod as described above. As described in Section 3.2.1.3, the Project site was formerly developed with a 13,213-SF restaurant that would be replaced by the Project. Table 3.2-9, *Maximum Daily Operational Emissions*, presents the summary of the proposed Project's maximum daily operational emissions. For informational purposes, the existing land use's daily emissions have also been provided as context for the overall net increase in emissions.

Table 3.2-9
MAXIMUM DAILY OPERATIONAL EMISSIONS

Category	VOC*	NO <sub>x</sub> *	CO*	SO <sub>2</sub> *	PM <sub>10</sub> *	PM <sub>2.5</sub> *
Area	3	<0.5	<0.5	0	<0.5	<0.5
Energy	0.0	0.0	0.0	0.0	0.0	0.0
Mobile	3	10	30	<0.5	10	3
Stationary	<0.5	1	1	<0.5	<0.5	<0.5
<b>Total Project Daily Emissions</b>	5	11	31	<0.5	10	3
Total Existing Land Use Daily	2	7	17	<0.5	4	1
Emissions <sup>1</sup>						
Net Increase Daily Emissions	3	3	13	<0.5	6	2
SDAPCD Thresholds	<i>7</i> 5	250	550	250	100	55
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod (output data is provided in Appendix B)

Note: Totals may not sum due to rounding.

VOC = volatile organic compound;  $NO_X$  = nitrogen oxides; CO = carbon monoxide;  $SO_2$  = sulfur dioxide;

 $PM_{10}$  = particulate matter 10 microns or less in diameter;  $PM_{2.5}$  = particulate matter 2.5 microns or less in diameter

As shown in Table 3.2-9, when conservatively assessing the Project's emissions as new to the region without the consideration of the recent former restaurant use, daily maximum project emissions of all criteria pollutants during operation would be below the daily thresholds. Therefore, operation of the Project would not result in a cumulatively considerable increase of  $PM_{2.5}$ ,  $PM_{10}$  or exceed quantitative thresholds for ozone precursors (i.e.,  $NO_X$  and VOCs), contribute substantially to a projected air quality violation, or have an adverse effect on human health. Impacts associated with a cumulatively considerable increase in criteria pollutants would be less than significant, and no mitigation is required.

#### Mitigation Measures

Implementation of the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard; therefore, no mitigation is required.

UC San Diego 3.2-18 February 2021

<sup>\*</sup> Pollutant Emissions (pounds per day)

<sup>&</sup>lt;sup>1</sup> Refer to Table 6.

### 3.2.3.3 Issue 3: Sensitive Receptors

#### **Air Quality Issue 3 Summary**

Would implementation of the proposed Project expose sensitive receptors to substantial pollutant concentrations?

**Impact:** Implementation of the proposed **Mitigation:** No mitigation is required.

Project would not expose sensitive receptors to

substantial pollutant concentrations.

**Significance Before Mitigation:** Less than **Significance After Mitigation:** Not applicable.

significant.

### Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Project would have a significant impact if it would expose sensitive receptors to substantial pollutant concentrations.

#### **Impact Analysis**

#### Construction

Construction activities would result in short-term, Project-generated emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment used for the Project's various construction activities. CARB identified DPM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Project.

The nearest potential sensitive receptors are the on-campus Rita Atkinson Residences located approximately 350 feet from the Project site, across La Jolla Village Drive. These residences represent the potentially sensitive receptors with the greatest potential to be exposed to the highest levels of DPM; however, as presented earlier in Table 3.2-8, maximum daily particulate emissions, which include DPM, are estimated at 5 pounds per day for PM<sub>10</sub> and 3 pounds per day for PM<sub>2.5</sub>, which are well below their respective SDAPCD screening-level thresholds of 100 pounds per day and 55 pounds per day. Additionally, the construction period would be relatively short, especially when compared to 30-year exposure duration period that typically requires a full health risk assessment. Combined with the highly dispersive properties of DPM, construction-related emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. Construction impacts to sensitive receptors would be less than significant, and no mitigation is required.

#### **Operations**

With regard to long-term operations, the CARB *Air Quality and Land Use Handbook* (CARB 2005) lists prominent air pollution sources as high traffic freeways and roads; distribution centers; rail yards; ports; refineries; chrome plating facilities; dry cleaners; and large gas dispensing facilities. The proposed Project would develop office and classroom space and a retail use; the Project would not include the types of uses that have been identified as sources of air pollution by CARB. Further, while the Project is estimated to result in emissions of 6 pounds per day of  $PM_{10}$  and 2 pounds per day of  $PM_{2.5}$  during operation, such emissions would be well below SDAPCD screening level thresholds of 100 pounds per day for  $PM_{10}$  and 55 pounds per day for  $PM_{2.5}$ . In addition, the Project would not place sensitive receptors within the CARB siting distances of the listed air pollutant sources. Operational impacts to sensitive receptors would be less than significant, and no mitigation is required.

## **Mitigation Measures**

Implementation of the Project would not expose sensitive receptors to substantial pollutant concentrations; therefore, no mitigation is required.

#### 3.2.3.4 Issue 4: Other Emissions

#### **Air Quality Issue 4 Summary**

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

**Impact:** Implementation of the proposed Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

**Mitigation:** No mitigation is required.

Significance Before Mitigation: Less than

Significance After Mitigation: Not applicable.

significant.

### Standards of Significance

Based on Appendix G of the CEQA Guidelines, an impact is considered significant if implementation of the Project would result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

#### **Impact Analysis**

As discussed above, the State of California Health and Safety Code Sections 41700 and 41705, and SDAPCD Rule 51, prohibit emissions from any source whatsoever in such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to the public health or damage to property. Any emissions that adversely affect a substantial number of people, such as unreasonable odor discernible from the Project site, would be considered a significant impact.

The Project could produce other emissions such as odors during proposed construction activities resulting from construction equipment exhaust, application of asphalt, and/or the application of architectural coatings; however, standard construction practices such as the five-minute diesel idling limit and use of low-VOC coatings would minimize odors. Furthermore, odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction. Accordingly, the proposed Project would not create emissions, such as those leading to objectionable odors, adversely affecting a substantial number of people during construction. Short-term impacts associated with adverse emissions would be less than significant, and no mitigation is required.

The proposed development would not result in substantial emissions such as operational odors. Emissions from office and classroom uses do not typically emit detectible odors. The on-site retail use, which may include a café, could emit odors related to food service; however, such odors are generally not objectionable and would be similar to the recent conditions at the site, which was developed with a restaurant. Furthermore, in 2014 UC San Diego implemented a smoke-free policy that prohibits smoking and smokeless tobacco products at all indoor and outdoor spaces on campus, that would apply to the Project site. Therefore, operations of the proposed Project would not create emissions adversely affecting a substantial number of people. Impacts associated with adverse emissions would be less than significant, and no mitigation is required.

### **Mitigation Measures**

Implementation of the Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people; therefore, no mitigation is required.

# 3.2.4 Cumulative Impacts and Mitigation

#### Air Quality Cumulative Issue Summary

Would implementation of the proposed Project have a cumulatively considerable contribution to a cumulative air quality impact considering past, present, and probable future projects?

	<u>Cumulative Impact</u> Consistency with applicable air quality plan.	Significance Less than significant.	Project Contribution Less than significant.
	Cumulative increase in criteria pollutant emissions.	Significant.	Not cumulatively considerable.
	Expose sensitive receptors to substantial pollutant concentrations.	Less than significant.	Less than significant.
\	Result in other emissions adversely affecting a substantial number of people.	Less than significant.	Less than significant.

### 3.2.4.1 Consistency with Applicable Air Quality Plans

The geographic context for the analysis of cumulative impacts related to consistency with an applicable air quality plan is the SDAB. The Attainment Plan and SIP are intended to address cumulative impacts in

the SDAB based on assumptions for future growth and associated emissions. As described above, implementation of the proposed Project would not exceed assumptions of the Attainment Plan or conflict with or obstruct implementation of the Attainment Plan. Cumulative development is not expected to result in a significant impact in terms of conflicting with SDAPCD's Attainment Plan or the State SIP because cumulative projects would generally propose development that is consistent with applicable growth projections incorporated into the Attainment Plan and SIP. The proposed Project, in combination with other cumulative projects, would not conflict with or obstruct implementation of the Attainment Plan or SIP. Therefore, cumulative impacts would be less than significant.

#### 3.2.4.2 Cumulative Increase in Criteria Pollutant Emissions

The geographic context for the analysis of cumulative impacts related to criteria pollutant emissions is the SDAB, which is currently nonattainment for  $PM_{10}$ ,  $PM_{2.5}$ , and ozone. The baseline cumulative impact is therefore significant. As described above in Section 3.2.3.2, the significance thresholds identified in Table 3.2-5 reflect the potential for the proposed Project to result in a cumulatively considerable net increase of any criteria pollutant for which the SDAB is nonattainment. A project that is below the thresholds in Table 3.2-5 is considered to result in less than cumulatively considerable emissions. As demonstrated above, the Project would not exceed significance thresholds and would not result in a cumulatively considerable contribution.

#### 3.2.4.3 Sensitive Receptors

The geographic context for the analysis of cumulative impacts related to sensitive receptors includes the area in the vicinity of the proposed Project. Construction of the proposed Project in addition to cumulative projects could combine to generate emissions of DPM that could affect nearby sensitive receptors. This would only happen, however, if construction of one or more cumulative projects would emit substantial emissions, occur adjacent to and simultaneously with the proposed Project construction activities, and occur in proximity to sensitive receptors. One of the cumulative projects listed in Table 3-2, the UC San Diego Erosion Repair and Parking Lot, is located 550 feet northeast of the Project site. Both this project and the proposed Project could combine to generate emissions of DPM at the Rita Atkinson Residences, which are located 350 feet from the proposed Project site and 730 feet from the UC San Diego Erosion Repair and Parking Lot project site, if construction of these projects occurs simultaneously. Based on anticipated construction schedules, construction of these two projects could occur simultaneously in the second half of 2021. However, the overall construction duration of both projects (estimated at 15-18 months for the proposed Project and 10 months for the UC San Diego Erosion Repair and Parking Lot project) are relatively short when compared to the 30-year exposure duration recommended by the Office of Environmental Health and Hazard Assessment for DPM health risk assessment. The duration of simultaneous construction, estimated to be limited to a few months, would be even shorter. In addition, as shown above in Table 3.2-8, the Project's maximum daily particulate emissions, which include DPM, would be well below the SDAPCD screening level thresholds and therefore cumulative impacts would be less than significant.

Operationally, neither the proposed Project nor the cumulative projects would involve uses that would generate high levels of TACs. A cumulative impact to sensitive receptors would be less than significant.

#### 3.2.4.4 Other Emissions

The geographic scope for the cumulative analysis of other emissions that could adversely affect a substantial number of people, such as odors, is the area immediately surrounding potential emission and odor sources. Because odors rapidly disperse beyond their source, associated impacts are generally not cumulative in nature. Additionally, as discussed in Section 3.2.3.4, the proposed Project would not result in substantial odor generation (or generation of other emissions) during construction or operation and would therefore not combine with other cumulative projects to result in a cumulatively significant impact associated with objectionable odors. Therefore, cumulative impacts with respect to other emissions is less than significant.

### 3.2.4.5 Mitigation Measures

Cumulative impacts with respect to air quality impacts are either less than significant or not cumulatively considerable; therefore, no mitigation is required.

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UC San Diego 3.2-24 February 2021

### 3.3 ENERGY

This section describes the existing energy-related conditions for the Project site and vicinity, identifies plans and policies applicable to the discussion of energy issues, evaluates Project-related impacts for the significance under pertinent criteria, and identifies mitigation measures where appropriate. GHG emissions are directly correlated to fossil fuel energy use (e.g., oil, natural gas, coal) and, therefore, the information in this section is summarized, in part, from information contained in the Project-specific Air Quality and Greenhouse Gas Emissions Technical Report prepared by HELIX (January 2021), included as Appendix B to this EIR.

### 3.3.1 Existing Environmental Setting

#### 3.3.1.1 Units of Measure

The units of energy used in this section are the British thermal units (BTU), kilowatt hour (kWh),<sup>1</sup> therms, and gallons. A BTU is the quantity of heat required to raise the temperature of one pound of water one °F at sea level. Because the other units of energy can all be converted into equivalent BTU, the BTU is used as the basis for comparing energy consumption associated with different resources. A kWh is a unit of electrical energy, and one kWh is equivalent to approximately 3,413 BTU, taking into account initial conversion losses (i.e., from one type of energy, such as chemical, to another type of energy, such as mechanical) and transmission losses. Natural gas consumption is described typically in terms of cubic feet or therms; one cubic foot of natural gas is equivalent to approximately 1,050 BTU, and one therm represents 100,000 BTU. One gallon of gasoline/diesel is equivalent to approximately 125,000/139,000 BTU, respectively, taking into account energy consumed in the refining process.

## 3.3.1.2 State Energy Overview

#### Electricity

California's electricity needs are satisfied by a variety of entities, including investor-owned utilities, publicly owned utilities, electric service providers, and choice aggregators. In 2019, the California electricity mix totaled 277,704 gigawatt hours (GWh). In-state generating facilities accounted for about 200,475 GWh, or 72 percent of the total electric power used in the state, with the remaining electricity coming from out-of-state imports (California Energy Commission [CEC] 2020a).

Since deregulation in 1998, the CEC has licensed or given small power plant exemptions to 91 power plants, including:

- 66 projects representing 22,965 megawatt (MW) currently on-line;
- 4 projects totaling 2,635 MW currently under construction or pre-construction;

<sup>&</sup>lt;sup>1</sup> Kilowatt hours is the most commonly used measure of electrical consumption; however, due to the scope of this analysis, gigawatt hours (GWh; equivalent to one million kWh) is also used.

<sup>&</sup>lt;sup>2</sup> Community choice aggregation is authorized in California by AB 117 (Chapter 836, Statutes of 2002), which allows cities, counties, and groups of cities and counties to aggregate the electric load of the residents, businesses and institutions within their jurisdictions to provide them electricity.

- 2 projects totaling 795 MW currently on hold or under suspension; and
- 15 projects totaling 5,844.5 MW approved but then cancelled by applicants, or license expired or terminated before construction.

In addition, as of December 2020, the CEC had seven proposed projects under review, totaling approximately 651.4 MW (CEC 2020b). One additional geothermal steam turbine project, representing a total of 250 MW, has been announced but has not yet filed with the CEC.

On the demand side, Californians consumed 284,060 GWh of electricity in 2017; this is a decrease from the 285,434 GWh demanded in 2016 (CEC 2018). CEC staff forecasts of future electricity demand anticipate that consumption will grow by between 0.99 and 1.59 percent per year from 2017 to 2030, with peak demand forecasts growing by 0.30 to 1.52 percent annually from 2017 to 2030 (CEC 2018).

#### **Natural Gas**

Natural gas continues to play an important and varied role in California. In 2012, nearly 45 percent of the natural gas burned in California was used for electricity generation, and much of the remainder was consumed in the residential (21 percent), industrial (25 percent), and commercial (9 percent) sectors (CEC 2019a). Natural gas supplies are currently plentiful and relatively inexpensive as a result of technological advances that allow recovery of natural gas from formations such as shale reservoirs that were previously inaccessible. However, potential environmental concerns are causing decision makers to reexamine the development of shale resources and consider tighter regulations, which could affect future natural gas supplies and prices.

## **Transportation Fuels**

Transportation accounts for a major portion of California's energy budget. Automobiles and trucks consume gasoline and diesel fuel, which are nonrenewable energy products derived from crude oil. Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles (SUVs). In 2015, 15.1 billion gallons of gasoline were sold in California (CEC 2019b). Diesel fuel is the second most consumed fuel in California, used by heavy-duty trucks, delivery vehicles, buses, trains, ships, boats, and farm and construction equipment. In 2015, 4.2 billion gallons of diesel were sold in California (CEC 2019b).

#### 3.3.1.3 Regional Energy Overview

Electrical and natural gas service are provided to the Project area by SDG&E. The SDG&E service area covers 4,100 square miles within San Diego and southern Orange counties. Energy is provided by SDG&E to 3.6 million customers through 1.4 million electric meters and 873,000 natural gas meters (SDG&E 2020). Electricity and natural gas consumption information for San Diego County is provided below.

#### **Electricity**

The County's electricity consumption over from the five-year period of 2015 through 2019 is shown in Table 3.3-1, *San Diego County Electricity Consumption 2015-2019*. As shown in Table 3.3-1, electricity consumption within the County was relatively consistent between 2015 and 2018 and then decreased in 2019.

Table 3.3-1
SAN DIEGO COUNTY ELECTRICITY CONSUMPTION 2015-2019

Year	Electricity Consumption (GWh)
2015	19,894
2016	19,666
2017	19,667
2018	19,733
2019	19,048

Source: CEC 2016a GWh = gigawatt hours

#### **Natural Gas**

The County's gas consumption over from the five-year period of 2015 through 2019 is shown in Table 3.3-2, *San Diego County Gas Consumption 2015-2019*. As shown in Table 3.3-2, gas consumption within the County increased from 2015 to 2016, was relatively consistent from 2016 to 2018, and then increased again in 2019.

Table 3.3-2 SAN DIEGO COUNTY GAS CONSUMPTION 2015-2019

Year	Gas Consumption (millions of Therms)
2015	453
2016	473
2017	480
2018	483
2019	534
-	·

Source: CEC 2016b

## 3.3.1.4 UC San Diego Energy Overview

The UC San Diego La Jolla campus's energy use includes electricity generated on campus at the Central Utilities Plant cogeneration facility, electricity purchased from the University of California Energy Services Unit Direct Access Program (100 percent renewable), a small amount of electricity purchased from SDG&E by privately-operated facilities on a UC San Diego ground lease, and natural gas purchased from SDG&E. An important element of the campus's energy use and energy-related infrastructure is its centralized cooling and heating systems and cogeneration operations for on-site electric power production. Since 2001, UC San Diego's highly efficient, ultra-low emission cogeneration plant has generated about 85 percent of the campus' energy, while producing 75 percent fewer emissions than conventional power plants, reducing the campus's overall usage of energy and the need for off-site energy resources.

#### 3.3.1.5 Existing Land Use Energy Consumption

The Project site includes an existing 13,213-SF restaurant that would be replaced by the Project. Energy consumption associated with the former restaurant on-site use was estimated based on default energy data included in the CalEEMod model run conducted for the Project (see Appendix B). Electricity use for

the former restaurant use is estimated at approximately 500,000 kWh per year and natural gas use is estimated at approximately 2,300,000 kBTU per year.

## 3.3.2 Regulatory Framework

Applicable federal, state, and UC regulations pertaining to energy usage on campus are described below. Regulations pertaining to GHG reduction, which include the reduction of energy usage, are described in Section 3.4 of this EIR.

#### 3.3.2.1 Federal

### Federal Energy Policy and Conservation Act

In 1975, Congress enacted the federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic Safety Administration (NHTSA) is responsible for establishing additional vehicle standards. In 2010, fuel economy standards were set at 27.5 miles per gallon for new passenger cars and 23.5 miles per gallon for new light-duty trucks. Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

## Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law. In addition to setting increased Corporate Average Fuel Economy (CAFE) standards for motor vehicles, the act includes the following provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and lighting efficiency standards (Sections 301–325)
- Building energy efficiency (Sections 411–441)

This federal legislation requires ever-increasing levels of renewable fuels to replace petroleum (Section 202, RFS). The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the Energy Independence and Security Act of 2007, the RFS program was expanded in several ways that laid the foundation for achieving substantial reductions of GHG emissions through the use of renewable fuels, for reducing imported petroleum, and for encouraging the development and expansion of the nation's renewable fuels sector.

#### 3.3.2.2 State

### Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the CEC. The Act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately owned utilities in the energy, rail, telecommunications, and water fields.

### **Integrated Energy Policy Report**

SB 1389 (Chapter 568, Statutes of 2002; PRC 25300–25323) required CEC to "conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop and evaluate energy policies and programs that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety" (PRC Section 25301[a]). This work culminated in the Integrated Energy Policy Report (IEPR).

CEC adopts an IEPR every 2 years and an update every other year. The 2019 IEPR is the most recent IEPR, which was adopted on February 20, 2020. The 2019 IEPR provides a summary of priority energy issues currently facing the state, outlining strategies and recommendations to further the state's goal of ensuring reliable, affordable, and environmentally responsible energy sources. Energy topics covered in the IEPR include progress toward statewide renewable energy targets, integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the preliminary transportation energy demand forecast, renewable gas, updates on Southern California electricity reliability, natural gas outlook, and climate adaptation and resiliency.

#### Senate Bill 1078: California Renewables Portfolio Standard Program

SB 1078 (Chapter 516, Statutes of 2002) establishes a Renewable Portfolio Standard (RPS) for electricity supply. The RPS requires that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide 20 percent of their supply from renewable sources by 2017. This target date was moved forward in 2006 under SB 107 to require compliance by 2010. In addition, electricity providers subject to the RPS must increase their renewable share by at least 1 percent each year. The outcome of this legislation will impact regional transportation powered by electricity. As of 2016, the state has reported that a minimum of 25 percent of electricity has been sourced from certified renewable sources.

#### Senate Bill X1-2: California Renewable Energy Resources Act

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011–2013 compliance period, at least 65 percent for the 2014–2016 compliance period, and at least 75 percent for 2016 and beyond.

#### Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) extended the RPS target and requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. This act also requires doubling of the

energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

#### Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statues of 2005) required CEC to prepare a state plan to increase the use of alternative fuels in California. CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with CARB and in consultation with other state, federal, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative nonpetroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

#### **Executive Order S-06-06**

Executive Order (EO) S-06-06, signed on April 25, 2006, by former Governor Arnold Schwarzenegger, establishes targets for the use and production of biofuels and biopower, and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050. The EO also calls for the state to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so that the state can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 plan and provides a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste;
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications;
- Create jobs and stimulate economic development, especially in rural regions of the state; and
- Reduce fire danger, improve air and water quality, and reduce waste.

## California Building Standards Code

The California Building Standards Code or Title 24 of the California Code of Regulations contains the regulations that govern the construction of buildings in California. Within the Building Standards Code, two parts pertain to the incorporation of both energy efficient and green building elements into land use development. Part 6 is California's Energy Efficiency Standards for Residential and Non-Residential Buildings and Part 11 is the California Green Building Standards, also known as CALGreen. Title 24 was established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and non-residential buildings. In 2013, CEC updated Title 24 standards with more stringent requirements, effective July 1, 2014. All buildings for which an application for a building permit is submitted on or after

July 1, 2014 must follow the 2013 standards. Energy efficient buildings require less electricity. The CEC Impact Analysis for California's 2013 Building Energy Efficiency Standards estimates that the 2013 standards are 23.3 percent more efficient than the previous 2008 standards for residential construction and 21.8 percent more efficient for non-residential construction. In 2018, CEC updated Title 24 standards again. The 2019 Title 24 standards went into effect on January 1, 2020. Additions include required installation of solar photovoltaic systems for new homes and include requirements that separate health care facilities from other non-residential buildings. Homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards. Non-residential buildings will use about 30 percent less energy due mainly to lighting upgrades.

### **Energy Action Plan II**

The CEC, California Power Authority, and CPUC adopted an Energy Action Plan (EAP) to establish goals for California's energy future and a means to achieve these goals. EAP II supports and expands on the commitment of state agencies to cooperate and reflect on the energy actions since original EAP adoption. EAP II includes a coordinated implementation plan for state energy policies that have been articulated through EOs, instructions to agencies, public positions, and appointees' statements; the CEC's IEPR; CPUC and CEC processes; agencies' policy forums; and legislative direction.

## Leadership in Energy and Environmental Design

The USGBC is committed to transforming the way buildings are designed, constructed, and operated through the LEED certification program. LEED acts as a certification program for buildings and communities to guide their design, construction, operations, and maintenance toward sustainability. LEED is based on prerequisites and credits that a project meets in order to achieve a certification level or Certified, Silver, Gold, or Platinum.

### **University of California**

The UC is a national leader in sustainability and effective actions to reduce GHG emissions to mitigate climate change, which typically involves the reduction in the usage of energy from fossil fuels. The UC has developed the UC Sustainable Practices Policy, UC Strategic Energy Plan (SEP), and UC Carbon Neutrality Initiative. The UC Sustainable Practices Policy sets goals and policies for energy efficiency and conservation and for reducing the UC's dependence on non-renewable energy sources, including a requirement for each campus to obtain 100 percent clean energy by 2025. The UC SEP works to fulfill the goal of the UC Sustainable Practices Policy to implement energy efficiency projects in existing buildings. The UC Carbon Neutrality Initiative commits the UC to achieve net zero carbon emissions. Additionally, UC San Diego has published a Climate Action Plan that identifies goals for reducing GHG emissions from operation of the campus. These policies are further outlined in Section 3.4.

## 3.3.3 Environmental Impacts and Mitigation

### 3.3.3.1 Issue 1: Energy Consumption

#### **Energy Issue 1 Summary**

Would implementation of the proposed Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

**Impact:** Implementation of the proposed Project could result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.

**Significance Before Mitigation:** Potentially significant.

**Mitigation:** Implementation of measure ENE-1 would minimize construction equipment diesel fuel and gasoline consumption by using equipment efficiently.

**Significance After Mitigation:** Less than significant.

## Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Project may have a significant impact if it would result in the wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation. The Project would result in wasteful, inefficient, or unnecessary use of energy if it would not implement construction or operational practices that aim to reduce energy use beyond typical demand.

#### **Impact Analysis**

The following analysis incorporates by reference construction and operational energy use related information contained in the Project-specific Air Quality and Greenhouse Gas Emissions Technical Report prepared by HELIX (January 2021), included as Appendix B to this EIR.

#### **Construction Energy Demand**

During construction, the Project would result in an increase in energy consumption through the combustion of fossil fuels in on-road construction vehicles, worker commute vehicles, and off-road construction equipment, and potentially the use of electricity for temporary lighting and other similar sources. Construction of the Project would require demolition/site preparation; trenching; shoring, excavation, and pile installation; building construction; and finishes. Proposed construction activities are typical for the region and building type. The Project does not include unusual circumstances that would require unusually high energy use for construction.

Construction of the structure proposed under the Project is anticipated to require typical building materials that would not require new or unusual manufacturing. Sources of building material and exact types and quantities are unknown at this time. Additionally, the energy use associated with the manufacture of building materials is largely outside the control of UC San Diego; however, the proposed Project is anticipated to achieve a minimum of LEED Silver certification, which includes requirements for

the consideration of products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts.

Fossil fuels required for on-road vehicles and off-road equipment would be used during the various phases of Project construction. On-road material transport vehicles, such as haul trucks and vendor trucks, and off-road construction equipment, such as dozers, excavators, and front-end loaders, would consume diesel fuel while on-road worker vehicles would primarily consume gasoline.

Construction energy used was calculated based on the off-road equipment use and on-road vehicle trips and distances included in the CalEEMod model run conducted for the Project (see Appendix B). Fuel consumption factors in terms of gallons per hour of diesel for off-road equipment were calculated using data from the CARB Mobile Source Emissions Inventory online database—OFFROAD2017 version 1.0.1 (CARB 2020a). Fuel consumption factors in terms of gallons of diesel and gasoline per mile traveled for on-road vehicles were calculated from the CARB Mobile Source Emissions Inventory online database—EMFAC2017 version 1.0.2 (CARB 2020b).

The estimated fuel and energy consumed during Project construction is shown in Table 3.3-3, *Project Estimated Construction Energy Use*.

Table 3.3-3
PROJECT ESTIMATED CONSTRUCTION ENERGY USE

Phase	<b>Gallons Diesel</b>	Gallons Gasoline	MBtu
Demolition/Site Preparation	2,255	148	332
Trenching	308	46	48
Shoring, Excavation, and Shoring	9,129	197	1,293
Structure	25,270	18,396	5,794
Finishes	976	467	194
TOTAL <sup>1</sup>	37.938	19.254	7.661

Source: CalEEMod; OFFROAD2017; EMFAC2017

MBtu = million British thermal units

For the finishing phase of building construction, some electricity may be used (e.g., for power tools and work lighting). While the is electricity use cannot be quantified at this time, it would be typical for this type of construction and relatively minor compared to normal building operations.

As described previously, Project construction is not anticipated to require construction practices that would result in unusually high energy use. Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California regulations (13 California Code of Regulations [CCR] 2449(d)(3), 2485) limit idling from both on-road and off-road diesel-powered equipment and are enforced by CARB. Also, given the high cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. Construction of the Project would not, however, include construction practice requirements that strive to reduce diesel or gasoline use beyond typical demand. This impact would therefore be potentially significant. Mitigation measure ENE-1 would be required to reduce fossil fuel use during construction beyond typical demand. Reduction measures include using the most fuel-efficient equipment available, limiting worker commute trips via carpooling and/or using public transit, and minimizing the total number of haul trucks trips by using trucks with larger capacities. With

The total presented is the sum of the unrounded values.

implementation of mitigation measure ENE-1, construction energy use would not be wasteful, inefficient, or unnecessary, and this impact would be less than significant.

### **Operational Energy Demand**

Operation of the Project would result in demand for building electricity, vehicle fuels, and energy for water treatment and transport. The Project's demand for these energy resources is addressed below. The Project would not involve the use of natural gas.

#### Electricity

Operation of the Project would consume electrical energy for several purposes including, but not limited to, HVAC systems, lighting, appliances, and electronics. SDG&E currently serves the Project site and existing on-site use and would serve the Project once developed. To the extent the program is available and accepting new projects, the Project would participate in the SDG&E *Savings by Design Program*, an energy efficiency program that provides design assistance, energy analysis, life-cycle costing, and financial incentives for new construction and major renovation projects. The Project would also obtain 100 percent clean electricity by 2025 as mandated by the UC Sustainable Practices Policy.

Based on the default electricity values provided in the CalEEMod model run conducted for the Project (see Appendix B), the Project is estimated to result in a demand of approximately 1,900,000 kWh per year. As mentioned above, this demand would be supplied by 100 percent clean electricity sources by 2025. Further, for informational purposes, it should be noted that after considering the estimated electricity use of approximately 500,000 kWh per year for the existing on-site use (also based on default electricity values provided by CalEEMod), the Project is estimated to result in a net increase in electricity demand of approximately 1,400,000 kWh per year.

The Project would use electricity on site in an efficient manner through compliance with the UC Sustainable Practices Policy and through achieving USGBC LEED Silver certification. Per the UC Sustainable Practices Policy, the Project would outperform current (2019) California Energy Code Title 24 Energy Standards by at least 20 percent. The Project would include LED lighting with control systems to integrate time-based, daylight-based, occupancy sensor-based, and manual lighting control schemes. All interior light fixtures would not be connected to the building main lighting system but would rather be programmed to function as local groups via local controllers, which reduces unnecessary usage. As such, the Project would include practices that would require the efficient use of electricity and would therefore not result in wasteful, inefficient, or unnecessary use of electricity.

#### Vehicle Fuels

Operation of the Project would generate vehicle trips to and from the Project site which would require the use of vehicle fuels. Based on the Project's proposed office, classroom, and retail uses, the primary vehicle fuel consumed would be gasoline for light-duty vehicles. Vehicle fuel consumption would be directly related to the VMT generated by the Project. According to the TIA prepared for the Project by LLG (2020), Project VMT per employee for the proposed office uses would be less than 85 percent of the regional average and the proposed classroom and retail uses would result in a net decrease in the total regional VMT. As discussed in further detail in Section 3.4, the Project is considered a net benefit in terms of regional transportation as it would serve to effectively minimize VMT for the population that would occupy the proposed uses by being in a TPA, being adjacent to existing UC San Diego uses, and implementing Transportation Demand Management (TDM) measures. The Project would also provide

allocated parking and charging stations for electric vehicles, which would reduce vehicle fuel consumption. As such, the Project would allow for vehicle fuel use less than typical demand and would not result in wasteful, inefficient, or unnecessary use of electricity.

#### Water-related Energy

The Project is anticipated to result in an increased demand for water at the Project site over the existing on-site use. Water consumption would require treatment and transport of potable water, which requires energy; however, this energy cannot be quantified at this time. Water is provided to the Project site and the UC San Diego campus by the City's Public Utilities Department (PUD), which obtains water from a variety of sources. Data regarding the energy used to treat and transport water that would serve the Project from source to tap is not available, and subject to change as sources shift. Additionally, UC San Diego does not have control over the energy use of water providers serving the Project and campus. However, the Project would implement measures to reduce water use, thus reducing water-related energy demand. The Project would include efficient building equipment to reduce water consumption at all fixtures (e.g., urinals, toilets, and faucets) to achieve a potable water reduction of 35 percent compared to the statewide average. For outdoor water use conservation, trees and groundcover would be irrigated on separate irrigation systems, with the trees watered by a bubbler system and shrub and groundcover areas watered by a high-efficiency subsurface in-line drip system. The irrigation system would also be tied to a dedicated irrigation meter and controlled by an evapotranspiration-based weather-sensing controller with central control capability. In addition, the Project would use droughttolerant native and adapted low-medium water use plant species in the landscape plan to reduce water use. These reductions in water usage would correspondingly reduce energy demand for water treatment and transport. As such, operation of the Project would reduce water use compared to typical demand and would not result in wasteful, inefficient, or unnecessary consumption of energy required for water treatment or transport.

Impacts associated with operational energy use would be less than significant, and no mitigation is required.

#### **Mitigation Measures**

The proposed Project would have a potentially significant impact related to use of diesel and gasoline fuel during construction. Mitigation measure ENE-1, as follows, would implement construction practices that encourage efficient use of fuel beyond typical demand.

- **ENE-1 Construction Fuel Use.** For construction activities, the construction contractor shall implement the following measures during construction:
  - When more than one piece of construction equipment is available to complete a task, the contractor shall use the most fuel-efficient equipment.
  - The newest or most fuel-efficient equipment models shall be selected from the contractor fleet for use.
  - Workers shall be encouraged to carpool or use public transit to access the Project site during construction. The construction contractor shall facilitate carpooling by providing means to organize carpools or request transit center pickups.

When haul trucks are available with a haul capacity larger than 15 cubic yards but a fuel
efficiency similar to a 15-cubic-yard-capacity truck, the larger capacity trucks shall be
used to reduce total trips.

## **Significance After Mitigation**

With implementation of mitigation measure ENE-1, construction energy use would not be wasteful, inefficient, or unnecessary, and this impact would be less than significant.

### 3.3.3.2 Issue 2: Consistency with Applicable Energy Plans

### **Energy Issue 2 Summary**

Would implementation of the proposed Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

**Impact:** Implementation of the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

**Mitigation:** No mitigation is required.

Significance Before Mitigation: Less than

Significance After Mitigation: Not applicable.

significant.

# Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Project may have a significant impact if it would conflict with or obstruct a state or local plan for renewable energy of energy efficiency.

#### Impact Analysis

The proposed Project would be subject to the 2019 Title 24 Building Energy Efficiency Standards, which include requirements for energy use reduction by establishing minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building installation and roofing, and lighting. The Project would be designed to exceed the 2019 Title 24 requirements by 20 percent and would therefore not conflict with the standards. Furthermore, the Project would incorporate sustainable design features to reduce energy consumption, conserve natural resources, and achieve LEED Silver rating for the Project.

As discussed in further detail in Section 3.4, the Project would also be consistent with several UC and UC San Diego plans and policies aimed at reducing GHG emissions which, by association, contain energy use reduction measures. Such plans include the UC Sustainable Practices Policy, UC San Diego Climate Action Plan, UC San Diego Zero Waste Plan, and UC San Diego Water Action Plan. In accordance with the UC Sustainable Practices Policy, the Project would participate in the SDG&E *Savings by Design Program* (to the extent possible) and would obtain 100 percent clean energy by 2025, amongst other measures. As such, the proposed Project would result in less than significant impacts with respect to conflicts with

or obstruction of a state or local plan for renewable energy or energy efficiency, and mitigation is not required.

### Mitigation Measures

The proposed Project would not conflict with or obstruct a local plan for renewable energy or energy efficiency; therefore, no mitigation is required.

## 3.3.4 Cumulative Impacts and Mitigation

#### **Energy Cumulative Issue Summary**

Would implementation of the proposed Project have a cumulatively considerable contribution to a cumulative energy impact considering past, present, and probable future projects?

Cumulative Impact Wasteful, inefficient, or unnecessary energy consumption.	Significance Less than significant.	<u>Project Contribution</u> Less than significant.
Consistency with applicable energy plans.	Less than significant.	Less than significant.

## 3.3.4.1 Energy Consumption

The geographic scope for the cumulative analysis relative to energy use is the service areas of the energy (electricity and natural gas) providers in the Project area. When combined, the cumulative projects could contribute to a regional increase in energy use through their use of gasoline and diesel, electricity, and/or natural gas during construction and/or operation. Cumulative projects, however, would be required to comply with Title 24 Building Energy Efficiency Standards and CALGreen, as well as the City of San Diego's Climate Action Plan for those projects under the City of San Diego's jurisdiction. Further, cumulative projects under UC San Diego jurisdiction would also be required to comply with the UC Sustainable Practices Policy, UC San Diego Climate Action Plan, UC San Diego Zero Waste Plan, and UC San Diego Water Action Plan. These regulations and policies would ensure the cumulative projects would not use energy in a wasteful, inefficient, or unnecessary manner.

The Project would consume energy in the forms of gasoline and diesel fuel for off-road equipment, on-road haul trucks, and worker commute vehicles during construction. Energy use would be limited to that which is necessary for the Project. Further, the Project would implement mitigation measure ENE-1 to further reduce gasoline use during construction. The Project would comply with statewide and University policies pertaining to energy efficiency and incorporate sustainable design features to reduce energy consumption, conserve natural resources, and achieve LEED Silver rating for the Project that would reduce energy use during operation of the Project as described in Section 3.3.3.1. As such, the combined effects from cumulative projects within the geographic scope related to energy would be less than significant.

### 3.3.4.2 Consistency with Applicable Energy Plans

Cumulative new development both on and off the UC San Diego campus is required to comply with applicable plans and policies related to energy use, most notably the 2019 Title 24 Building Energy Efficiency Standards, Cumulative new development specific to the UC San Diego Campus would also be required to comply with the UC Sustainable Practices Policy, UC San Diego Climate Action Plan, UC San Diego Zero Waste Plan, and UC San Diego Water Action Plan. The Project would meet and, in some cases, exceed these efficiency requirements. For example, the Project would incorporate sustainable design features to achieve LEED Silver rating or better and exceed 2019 Title 24 requirements by 20 percent. As such, the combined effects from cumulative projects within the geographic scope related to consistency with energy plans would be less than significant.

## 3.3.4.3 Mitigation Measures

Cumulative impacts with respect to wasteful, inefficient, or unnecessary energy consumption and consistency with applicable energy plans are less than significant; therefore, no mitigation is required.

#### 3.3.5 References

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### 3.4 GREENHOUSE GAS EMISSIONS

This section describes the existing GHG emissions conditions for the Project site and vicinity, identifies plans and policies applicable to the discussion of GHG emissions issues, evaluates potential Project-related impacts, and identifies mitigation measures where appropriate. The information in this section is summarized, in part, from information contained in the Project-specific Air Quality and Greenhouse Gas Emissions Technical Report prepared by HELIX (January 2021), included as Appendix B to this EIR.

## 3.4.1 Existing Environmental Setting

### 3.4.1.1 Global Climate Change Overview

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with: (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The temperature record shows a decades-long trend of warming, with 2016 global surface temperatures ranking as the warmest year on record since 1880 and 2017 as the second warmest. The 2017 global average surface temperatures were 0.9 degrees Celsius warmer than the 1951 to 1980 mean temperature (National Aeronautics and Space Administration [NASA] 2018). GHG emissions from human activities are the most significant driver of observed climate change since the mid-20<sup>th</sup> century (Intergovernmental Panel on Climate Change [IPCC] 2013). The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The statistical models show a "high confidence" that temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees Celsius relative to pre-industrial levels if atmospheric concentrations are stabilized at about 450 parts per million (ppm) carbon dioxide equivalent (CO<sub>2</sub>e) by the year 2100 (IPCC 2014).

### 3.4.1.2 Greenhouse Gases

The following are GHGs that are widely accepted as the principal contributors to human-induced global climate change:

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons
- Perfluorocarbons
- Sulfur hexafluoride (SF<sub>6</sub>)
- Nitrogen trifluoride (NF<sub>3</sub>)

Carbon Dioxide.  $CO_2$  enters the atmosphere through the burning of fossil fuels, solid waste, trees, and wood products, and as a result of other chemical reactions such as through the manufacturing of cement. Globally, the largest source of  $CO_2$  emissions is the combustion of fossil fuels in power plants, automobiles, industrial facilities, and other similar sources.  $CO_2$  is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle. As part of the carbon cycle billions of tons of atmospheric  $CO_2$  are removed from the atmosphere by oceans and growing plants, also known as "sinks," and are emitted back into the atmosphere annually through respiration, decay, and combustion, also known as "sources." When in balance, the total  $CO_2$  emissions and removals from the entire carbon cycle are roughly equal. Since the Industrial Revolution in the 1700s, human activities, such as the burning of oil, coal and gas or deforestation, have increased  $CO_2$  concentrations in the atmosphere (USEPA 2018).

**Methane.** CH<sub>4</sub> is emitted from a variety of both natural and human-related sources, including fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management (USEPA 2020a). It is estimated that 60 percent of global CH<sub>4</sub> emissions are related to human activities. Natural sources of CH<sub>4</sub> include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. Natural processes in soil and chemical reactions in the atmosphere help remove CH<sub>4</sub> from the atmosphere (USEPA 2018).

**Nitrous Oxide.**  $N_2O$  is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste (USEPA 2020a).  $N_2O$  is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. Globally, about 40 percent of total  $N_2O$  emissions come from human activities (USEPA 2018).

**Hydrofluorocarbons.** Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). Chlorofluorocarbons were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the 1989 Montreal Protocol.

**Sulfur Hexafluoride.**  $SF_6$  is an inorganic, odorless, colorless, nontoxic, nonflammable gas.  $SF_6$  is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHG emissions to disperse around the globe. Because GHG emissions vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to  $CO_2$ . For example, because methane and  $N_2O$  are approximately 25 and 298 times more powerful than  $CO_2$ , respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively ( $CO_2$  has a GWP of 1).  $CO_2$ e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce  $CO_2$ e. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 3.4-1, Global Warming Potentials and Atmospheric Lifetimes.

Table 3.4-1
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO <sub>2</sub> )	50-200	1
Methane (CH <sub>4</sub> )	12	25
Nitrous Oxide (N <sub>2</sub> O)	114	298
HFC-134a	14	1,430
PFC: Tetraflouromethane (CF <sub>4</sub> )	50,000	7,390
PFC: Hexafluoroethane (C <sub>2</sub> F <sub>6</sub> )	10,000	12,200
Sulfur Hexafluoride (SF <sub>6</sub> )	3,200	22,800

Source: IPCC 2007

HFC: hydrofluorocarbon; PFC: perfluorocarbon

## 3.4.1.3 Existing Greenhouse Gases Emissions

In an effort to evaluate and reduce the potential adverse impact of global climate change, international, State, and local organizations have conducted GHG inventories to estimate their levels of GHG emissions and removals. The following summarizes the results of these global, national, State, countywide, and local GHG inventories.

For 2018, total GHG emissions worldwide were estimated at 47,515 million metric tons (MMT) CO₂e (World Resources Institute 2020). The U.S. contributed the second largest portion of GHG emissions (behind China) at 13 percent of global emissions, with 6,018 MMT CO₂e in 2018. On a national level in 2018, approximately 28 percent of GHG emissions are associated with transportation and about 27 percent are associated with electricity generation (USEPA 2020b).

#### California Greenhouse Gas Emissions

CARB performs statewide GHG inventories. The inventory is divided into six broad sectors: agriculture and forestry, commercial, electricity generation, industrial, residential, and transportation. Emissions are quantified in MMT CO₂e. Table 3.4-2, *California Greenhouse Gas Emissions by Sector*, shows the estimated statewide GHG emissions for the years 1990, 2000, 2010, and 2018.

Table 3.4-2
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR
(MMT CO<sub>2</sub>e)

Sector	1990	2000	2010	2018
Agriculture and Forestry	23.4 (5%)	31.0 (7%)	34.7 (8%)	32.6 (8%)
Commercial	14.4 (3%)	14.1 (3%)	20.1 (4%)	23.9 (6%)
Electricity Generation	110.6 (26%)	105.3 (22%)	90.6 (20%)	63.2 (15%)
Industrial	103.0 (24%)	105.8 (22%)	101.8 (23%)	101.3 (24%)
Residential	29.7 (7%)	31.7 (7%)	32.1 (7%)	30.5 (7%)
Transportation	150.7 (35%)	183.2 (39%)	170.2 (38%)	173.8 (41%)
TOTAL	433.3	471.7	448.1	425.3

Source: CARB 2007 and CARB 2020a

MMT = million metric tons; CO₂e = carbon dioxide equivalent

As shown in Table 3.4-2, statewide GHG emissions totaled approximately 433 MMT  $CO_2e$  in 1990, 472 MMT  $CO_2e$  in 2000, 448 MMT  $CO_2e$  in 2010, and 425 MMT  $CO_2e$  in 2018. Transportation-related emissions consistently contribute the most GHG emissions, followed by industrial emissions and electricity generation.

### County of San Diego Greenhouse Gas Emissions

In February 2018, in conjunction with the County of San Diego Climate Action Plan, the County of San Diego published a GHG inventory for County operations and the activities occurring within the unincorporated communities of San Diego County. The GHG inventory includes a discussion of the primary sources and annual levels of GHG emissions for 2014 (baseline year) and describes likely trends if emissions are not reduced for 2020, 2030, and 2050. The inventory was developed using the best available data and following the International Council for Local Environmental Initiatives (ICLEI) *U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions* and *ICLEI Local Government Operations Protocol*.

Total GHG emissions in San Diego County in 2014 were estimated to be 3.2 MMT CO<sub>2</sub>e from the following sectors: transportation (on- and off-road), electricity, solid waste, natural gas, agriculture, water, wastewater, and propane (County of San Diego 2018). On-road transportation is the largest emissions sector, accounting for approximately 1.5 MMT CO<sub>2</sub>e, or 45 percent of total emissions. Energy consumption, including electricity and natural gas use, is the next largest source of emissions, accounting for approximately 1.1 MMT CO<sub>2</sub>e, or 35 percent of the total. The County of San Diego prepares GHG inventories every two years for comparison to the 2014 inventory to track progress in reducing emissions. In 2019, the County reduced GHG emissions by 130,075 MT CO<sub>2</sub>e through reduction measures related to the built environment and transportation, energy, water and wastewater, and agriculture and conservation sectors (County of San Diego 2020).

#### City of San Diego Greenhouse Gas Emissions

According to the City of San Diego's 2019 Climate Action Plan Annual Report (City 2019), the total GHG emissions from the City of San Diego in 2018 was approximately 9.8 MMT CO₂e. Changes in emissions were primarily driven by two sectors: natural gas and water use. In 2018, natural gas emissions decreased by 12 percent, while water-related emissions increased by 19 percent due to low rainfall in 2017 and 2018 and the subsequent increase in imported water.

#### **UC San Diego Greenhouse Gas Emissions**

#### The Climate Registry GHG Emissions Inventory

UC San Diego reports the annual GHG emissions inventory to an independent reporting organization, The Climate Registry (TCR). The UC San Diego TCR inventory reported a total of 279,330 metric tons (MT)  $CO_2e$  for the UC San Diego main campus for the 2016 emissions year. As shown in Table 3.4-3, 2016 UC San Diego La Jolla Campus GHG Emissions, the emissions reported to the TCR included 164,806 MT  $CO_2e$  from Scope 1 emissions, 35,413 MT  $CO_2e$  from Scope 2 emissions, and 79,111 MT  $CO_2e$  from Scope 3 emissions (UC San Diego 2019a).

Table 3.4-3
2016 UC SAN DIEGO LA JOLLA CAMPUS GHG EMISSIONS

GHG Emission Scope and Source	MT CO₂e
Scope 1 – Stationary Combustion	159,607 (57%)
Scope 1 – Mobile Combustion	3,462 (1%)
Scope 1 – Fugitive/Other Emissions	1,737 (<1%)
Scope 2 – Purchased Electricity	35,413 (13%)
Scope 3 – Commuting	61,564 (22%)
Scope 3 – Air Travel	17,547 (6%)
TOTAL	279,330

Source: UC San Diego 2019a

MT = metric tons; CO<sub>2</sub>e = carbon dioxide equivalent

# UC San Diego Climate Action Plan

The 2019 update to UC San Diego Climate Action Plan (UC San Diego 2019a) includes UC San Diego's current, historical, and projected emissions. According to the 2019 update to the Climate Action Plan, despite the steady growth in campus population and infrastructure since 2009, the UC San Diego campus has not seen a corresponding increase in GHG emissions. Overall, campus-wide emissions have decreased since adoption of the initial 2008 Climate Action Plan and other policies due to implementation of an aggressive energy efficiency program, development of the campus microgrid, and commitments to reduce emissions from the campus fleet and community by students, faculty, and staff. A slight increase in emissions starting in 2015 was due to several large new facilities coming online during this period, including the Jacobs Medical Center, the Altman Clinical and Translational Research Institute and Tata Hall for the Sciences.

## **Existing Land Use On-site Emissions**

The Project site is currently developed with a 13,213-SF building that formerly contained a restaurant/brewpub, which closed in March 2020 and is currently vacant. The building would be demolished as part of the Project. Operational emissions for the former on-site restaurant use were estimated using CalEEMod as described in further detail in Section 3.4.3.1. As shown in Table 3.4-4, Existing Land Use (Restaurant) Operational GHG Emissions, the restaurant use was estimated to result in annual GHG emissions of 1,190 MT CO<sub>2</sub>e in 2024 if it were to continue operations.

Table 3.4-4
EXISTING LAND USE (RESTAURANT) OPERATIONAL GHG EMISSIONS

Emission Sources	Emissions (MT CO <sub>2</sub> e)				
Scope 1 Sources					
Area Sources	<0.5				
Energy Sources – Natural Gas	124				
Scope 2 Sources					
Energy Sources – Electricity	168				
Scope 3 Sources					
Vehicular (Mobile) Sources	821				
Solid Waste Sources	59				
Water Sources	19				
TOTAL OPERATIONAL EMISSIONS	1,190				

Source: CalEEMod output data is provided in Appendix A Note: Totals may not add up exactly due to rounding. MT = metric tons; CO<sub>2</sub>e = carbon dioxide equivalent

# 3.4.2 Regulatory Framework

The proposed Project is subject to GHG emission regulatory requirements associated with federal, state, and regional guidelines, as summarized below.

#### 3.4.2.1 Federal

The USEPA is the federal agency responsible for implementing the federal CAA.

## Greenhouse Gas Findings under the Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in Massachusetts v. USEPA that  $CO_2$  is an air pollutant, as defined under the CAA, and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including  $CO_2$ ,  $CH_4$ ,  $N_2O$ , Hydrofluorocarbons, Perfluorocarbons, and  $SF_6$ ) threaten the public health and welfare of the American people. This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the U.S. Department of Transportation's NHTSA. The standards require compliance with progressively more stringent GHG emission standards for the 2012 through 2025 vehicle model years.

# Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the Department of Transportation's NHTSA worked together on developing a national program of regulations to reduce GHG emissions and to improve fuel economy of light-duty vehicles. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking establishing standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. On August 2, 2018, the agencies released a notice of proposed rulemaking—the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks. The purpose of the SAFE Vehicles Rule is "to correct the national automobile fuel economy and GHG emissions standards to give the American people greater access to safer, more affordable vehicles that are cleaner for the environment." The direct effect of the rule is to eliminate the standards that were put in place to gradually raise average

fuel economy for passenger cars and light trucks under test conditions from 37 miles per gallon in 2020 to 50 miles per gallon in 2025. By contrast, the new SAFE Vehicles Rule freezes the average fuel economy level standards indefinitely at the 2020 levels. The new SAFE Vehicles Rule also results in the withdraw of the waiver previously provided to California for that State's GHG and zero emissions vehicle (ZEV) programs under section 209 of the CAA.

## Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, the USEPA published the Final Mandatory Greenhouse Gas Reporting Rule (Reporting Rule) in the Federal Register. The Reporting Rule requires reporting of GHG data and other relevant information from fossil fuel and industrial GHG suppliers, vehicle and engine manufacturers, and all facilities that would emit 25,000 MT or more of CO₂e per year. Facility owners are required to submit an annual report with detailed calculations of facility GHG emissions on March 31 for emissions from the previous calendar year. The Reporting Rule also mandates recordkeeping and administrative requirements to enable the USEPA to verify the annual GHG emissions reports.

#### 3.4.2.2 State

CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California, including those related to GHG emissions.

#### **Executive Order S-3-05**

EO S-3-05, signed in June 2005, proclaimed that California is vulnerable to the impacts of climate change. EO S-3-05 declared that increased temperatures could reduce the Sierra Nevada's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emissions targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

## **Assembly Bill 32**

In 2006, California passed the California Global Warming Solutions Act of 2006 (AB 32), California Health and Safety Code, Division 25.5, Sections 38500, et seq. AB 32 further details and puts into law the mid-term GHG reduction target established in EO S-3-05: reduce GHG emissions to 1990 levels by 2020. AB 32 also identifies CARB as the State agency responsible for the design and implementation of emissions limits, regulations, and other measures to meet the target. In addition, AB 32 includes a cap-and-trade regulation that applies to large industrial facilities and electricity generators emitting more than 25,000 MT CO<sub>2</sub>e per year.

#### Senate Bill 97

SB 97 required the Governor's Office of Planning and Research to develop recommended amendments to the CEQA Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

In response to SB 97, the California Natural Resources Agency (CNRA) adopted amendments to the CEQA Guidelines that require evaluation of GHG emissions or the effects of GHG emissions. The amendments, in Section 15064.4, provided that:

- (a) The determination of the significance of GHG emissions calls for careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project.
- (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from GHG emissions on the environment:
  - (1) The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;
  - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
  - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of GHG emissions.

The amendments also added Section 15126.4(c), Mitigation Measures Related to Greenhouse Gas Emissions. Generally, this CEQA Guidelines section requires lead agencies to consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of GHG emissions.

The amendments also added Section 15183.5, which provides standards for tiering and streamlining analysis of GHG emissions, including provisions for adoption of and reliance on GHG reduction plans.

## **Executive Order B-30-15**

In April 2015, Governor Edmund Brown issued an EO establishing a statewide GHG reduction goal of 40 percent below 1990 levels by 2030. The emission reduction target acts as an interim goal between the AB 32 goal (i.e., achieve 1990 emission levels by 2020) and Governor Brown's EO S-03-05 goal of reducing statewide emissions 80 percent below 1990 levels by 2050. In addition, the EO aligns California's 2030 GHG reduction goal with the European Union's reduction target (i.e., 40 percent below 1990 levels by 2030) that was adopted in October 2014.

#### Senate Bill 32

Effective January 1, 2017, Senate Bill (SB) 32 (Stats. 2016, Ch. 249) added a new Section 38566 to the Health and Safety Code. It provides that "in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions authorized by [Division 25.5 of the Health and Safety Code], [CARB] shall ensure that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit no later than December 31, 2030." In other words, SB 32 requires California, by the year 2030, to reduce its statewide GHG emissions so that they are 40 percent below those that occurred in 1990.

## California Air Resources Board Climate Change Scoping Plans

In December 2008, CARB adopted its Climate Change Scoping Plan (Scoping Plan), which contains the main strategies California will implement to achieve the required GHG reductions required by AB 32 (CARB 2008). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of California's GHG inventory. CARB further acknowledges that decisions about how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emissions sectors.

CARB is required to update the Scoping Plan at least once every 5 years to evaluate progress and develop future inventories that may guide this process. In November 2017, CARB released the 2017 Climate Change Scoping Plan, which establishes a framework of action for California to reduce statewide emissions by 40 percent by 2030, compared to 1990 levels (CARB 2017). The 2017 Scoping Plan builds upon the framework established by the 2008 Scoping Plan and the 2014 Scoping Plan Update, while also identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets.

## **Assembly Bill 1493**

AB 1493, signed in July 2002, requires CARB to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with model year 2009. In June 2009, the USEPA Administrator granted a CAA waiver of preemption to California. This waiver allowed California to implement its own GHG emissions standards for motor vehicles beginning with model year 2009. California agencies worked with federal agencies to conduct joint rulemaking to reduce GHG emissions for passenger car model years 2017 to 2025.

## **Executive Order S-1-07**

EO S-1-07, which was signed by then California governor Arnold Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, at more than 40 percent of statewide emissions. EO S-1-07 establishes a goal that the carbon intensity of transportation fuels sold in California should be reduced by a minimum of 10 percent by 2020. CARB adopted the low carbon fuel standard on April 23, 2009. In November 2015, the Office of Administrative Law approved re-adoption of the low carbon fuel standard.

## Senate Bill 375

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations to adopt a Sustainable Communities Strategy (SCS) or an Alternative Planning Strategy, which will prescribe land use allocation in that Metropolitan Planning Organizations' Regional Transportation Plan. On September 23, 2010, CARB adopted regional GHG targets for passenger vehicles and light trucks for 2020 and 2035 for the 18 Metropolitan Planning Organizations in California.

## Senate Bill 350

California's RPS was established in 2002 under SB 1078 and accelerated in 2006 under SB 107, by requiring that 20 percent of electricity retail sales be served by renewable energy sources by 2010.

Subsequent recommendations in California energy policy reports advocated a goal of 33 percent by 2020, and on November 17, 2008, then Governor Arnold Schwarzenegger signed EO S-14-08 requiring retail sellers of electricity to serve 33 percent of their load with renewable energy by 2020. In April 2011, SB X1-2 codified EO S-14-08, setting the new RPS targets at 20 percent by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020 for all electricity retailers. Most recently, Governor Edmund Brown signed SB 350 in October 2015, which extended the RPS target by requiring retail sellers to procure 50 percent of their electricity from renewable energy resources by 2030.

## California Code of Regulations, Title 24, Part 6

California Code of Regulations, Title 24, Part 6, California's Energy Efficiency Standards for Residential and Nonresidential Buildings, were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions. The Title 24 standards are updated periodically to allow the consideration and possible incorporation of new energy-efficiency technologies and methods. The latest update to the Title 24 standards occurred in 2019 and went into effect on January 1, 2020. The Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards include improvements for attics, walls, water heating, and lighting. The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards—the energy budgets—that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

## California Green Building Standards Code

The California Green Building Standards Code (24 CCR, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the California Code of Regulations. The current 2019 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings went into effect on January 1, 2020.

The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

CALGreen contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

## **University of California**

The UC is a national leader in sustainability and effective actions to reduce GHG emissions to mitigate climate change. The UC has developed the following policies.

## **UC Sustainable Practices Policy**

The UC Sustainable Practices Policy provides specific scope, direction, and expectations for implementing sustainable new capital projects, facility operations, and campus transportation resources. It commits UC to implementing actions intended to minimize the UC's impact on the environment and reduce the UC's dependence on non-renewable energy. The most recent version of the policy was issued in July 2020 (UC 2020). The UC Sustainable Practices Policy has nine topic areas: green building, clean energy, transportation, climate protection, sustainable operations, waste reduction and recycling, environmentally preferable purchasing, sustainable foodservice, and sustainable water systems. The UC Sustainable Practices Policy establishes guidelines and includes climate change goals for all campuses, and also requires each campus to complete an update of its climate action plan for reducing GHG emissions to 1990 levels by 2020 and achieving goals of the UC Carbon Neutrality Initiative (further discussed below). GHG reduction efforts focus on energy efficiency and conservation efforts; reducing the University's dependence on non-renewable energy sources; incorporating alternative means of transportation; tracking, reporting, and minimizing GHG emissions; minimizing University-generated waste sent to a landfill; and utilizing the UC's purchasing power to meet its sustainability objectives. Policies included in the UC Sustainable Practices Policy relevant to the proposed Project are summarized below.

#### Green Building Design

- Requires 20 percent better energy performance than Title 24 for new building construction, and strives to achieve 30 percent, or meet the energy performance targets.
- All new buildings must meet a minimum standard of LEED Silver and strive for LEED Gold when possible.
- No new building or major renovation that is approved after June 30, 2019 shall use onsite fossil
  fuel combustion (e.g., natural gas) for space and water heating (except those projects connected
  to an existing campus central thermal infrastructure).
- All new buildings achieve at least two points in LEED Water Efficiency category.

## Clean Energy

- Implementation of energy efficiency actions in buildings and infrastructure systems to reduce the location's energy use intensity by average of at least two percent annually.
- Installation of additional on-site renewable electricity supplies and energy storage systems whenever cost-effective and/or supportive of the location's CAP or other goals.
- By 2025, each campus will obtain 100 percent clean electricity.
- By 2025, at least 40 percent of the natural gas combusted on-site at each campus will be biogas.

#### Climate Protection

- Each campus will develop strategies for meeting the following carbon neutrality goals:
  - Climate neutrality from scope 1 and scope 2 sources by 2025; and
  - Climate neutrality from specific scope 3 sources by 2050.
- And at a minimum, meet the following goal in pursuit of climate neutrality: reduce GHG emissions to 1990 levels by 2020, pursuant to AB 32.

Scope I sources, also referred to as direct sources, are defined as "direct emissions from sources that are owned or controlled by the organization." These include all area source emissions, such as landscaping equipment exhaust and consumer product use, and on-site natural gas consumption for space and water heating. Scope II sources, also referred to as electricity indirect sources, are defined as "indirect emissions from sources that are owned or controlled by the organization." Scope II includes emissions that result from the generation of electricity, heat, or steam purchased by the Agency from a utility provider. Scope III sources, also referred to as other indirect sources, are defined as "emissions from sources not owned or directly controlled by an organization, but related to the organizations activities." Scope III emissions include employee or patron travel and commuting, organic solid waste disposal such as food waste, and wastewater treatment.

#### Sustainable Transportation

- Develop goals for reducing transportation related GHGs and report on progress annually:
  - By 2025, zero emission vehicles or hybrid vehicles shall account for at least 50 percent of all new light-duty vehicle acquisitions.
- For single-occupant vehicles (SOV):
  - By 2025, each location shall strive to reduce its percentage of employees and students commuting by SOV by 10 percent relative to its 2015 SOV commute rates; and
  - By 2050, each location shall strive to have no more than 40 percent of its employees and no more than 30 percent of all employees and students commuting to the location by SOV.
- By 2025, each location shall strive to have at least 4.5 percent of commuter vehicles be zeroemissions vehicles.
- By 2050, each location shall strive to have at least 30 percent of commuter vehicles be zeroemissions vehicles.
- Each location to develop business-case analysis for any parking structures to document how a
  capital investment in parking aligns with each campus CAP and/or sustainable transportation
  policies.

## Sustainable Building Operations for Campuses

- Each campus will submit one pilot LEED for Operations and Maintenance building for certification.
- Each campus shall seek to certify as many buildings as possible through the LEED for Operations and Maintenance.

#### Zero Waste

- Reduce per capita total municipal waste generation as follows:
  - Reduce waste generation per capita to 2015/16 levels by 2020;
  - o Reduce waste generation by 25 percent per capita from 2015/16 levels by 2025; and
  - Reduce waste generation by 50 percent per capita from 2015/16 levels by 2030.
- Achieve zero waste by 2020 (minimum compliance for zero waste is 90 percent diversion of municipal solid waste from landfill).

#### Sustainable Procurement

- Allocate a minimum of 15 percent of the points utilized in solicitation evaluations to sustainability criteria, effective July 1, 2019.
- Contracting with suppliers of products (e.g., electronics, furniture, lab consumables) that have
  established (preferably non-manufacturer specific) end-of-life reuse, recycling, and/or takeback
  programs at no extra cost to the University, and in compliance with applicable federal, State,
  and University regulations regarding waste disposal.
- All procurement staff will consult the UC Sustainable Procurement Guidelines document for minimum mandatory sustainability requirements to be included in solicitations for a given product or service category.

#### Sustainable Foodservices

 Purchase 20 percent sustainable food products by 2020, while maintaining accessibility and affordability for all students and Medical Center foodservice patrons.

#### Sustainable Water Systems

• Develop a Water Action Plan and reduce potable water consumption by 20 percent by 2020, 36 percent by 2025, when compared to a three-year average baseline of fiscal year 2005-2008.

#### **UC Strategic Energy Plan**

In February 2009, the UC Strategic Energy Plan was prepared for all UC campuses, to fulfill a goal of the UC Sustainable Practices Policy to implement energy efficiency projects in existing buildings. The initial goal for the retrofit projects is to reduce system-wide, growth-adjusted energy consumption by

10 percent or more by 2014 from the year 2000 base consumption level. The UC Strategic Energy Plan analyzes energy use and GHG trends and identifies potential energy efficiency retrofit projects at all buildings over 50,000 square feet (primarily lighting, HVAC, commissions, and central plant measures) for all UC campuses (University of California Office of the President [UCOP] 2009). Energy savings, GHG emissions savings, and financial returns are estimated for hundreds of projects, which are grouped into Tier 1 (committed projects to be completed over the next 6 years) and Tier 2 (additional planned projects) projects based on their savings and financial payback. The UC Strategic Energy Plan project list is intended to be regularly updated by each campus to evaluate the feasibility of additional energy-saving measures.

# **UC Carbon Neutrality Initiative**

In November 2013, UC President Janet Napolitano announced the CNI, which commits the UC to achieve net zero carbon emissions from Scope 1 and 2 sources by 2025 and net zero carbon emissions from specific Scope 3 sources by 2050 or sooner (UC San Diego 2020). Scope 1 emission sources include direct emissions from sources owned or controlled by the university, such as emissions from stationary combustion, process emissions, and fugitive emissions; while Scope 2 sources include indirect emissions from purchased electricity and purchased co-generation for heating or cooling. Scope 3 sources include emissions for all other sources that occur as a result of university operations but occur from sources not owned or controlled by the university, such as emissions from campus commutes and business air travel.

## 3.4.2.3 Regional and Local

# San Diego Air Pollution Control District

In San Diego County, SDAPCD is the agency responsible for protecting public health and welfare through the administration of federal and State air quality laws and policies. The SDAPCD has no regulations relative to GHG emissions.

# University of California Strategic Energy Plan: UC San Diego and UC San Diego Medical Center

As described above in Section 3.4.2.2, The UC Sustainable Practices Policy directed the development of a SEP for each campus. The SEP for UC San Diego and the UC San Diego Medical Center (UC 2008) describes the plan for implementing energy efficiency retrofit projects in existing campus buildings. The initial goal for the UC-wide retrofit program is to reduce energy consumption to 1990 levels by 2020. Because electricity and natural gas usage is expected to represent 75 percent of a campus' GHG emissions, the energy use reduction goals of the SEP are closely linked to the UC's overall GHG reduction goals in the Sustainable Practices Policy. As such, the retrofit projects that are being implemented under UC San Diego's SEP are thought to be one of the most important tools the campus is using to work towards meeting its GHG emissions reduction targets.

Since its initial implementation, UC San Diego's SEP has completed energy efficiency retrofit projects at all buildings over 50,000 SF at UC San Diego and UC San Diego Medical Center. The retrofit projects primarily include lighting, HVAC, recommissioning for efficient and proper equipment operations, and central plant efficiency measures. Current efforts are being made in the area of energy storage. Energy storage serves as a method to advance the relationship between energy consumption and production in

order to increase efficiency and reduce production costs. Current renewable and energy generation and storage projects include:

- FuelCell Energy, Inc. 2.8-megawatt fuel cell turning waste methane gas from the Point Loma Wastewater Treatment Plant into electricity;
- Expansion of the 2.2-megawatt solar network including flat photovoltaic (PV) panels and solar energy storage;
- A 2.5-megawatt, 5-megawatt-hour energy storage system using high performance lithium-ion iron-phosphate batteries;
- Thermal Energy Storage totaling 7.6 million gallons; and
- California Energy Commission funded testing of ultracapacitors—devices that charge quickly and store energy from an electric source and discharge it on demand. Maxwell Technologies is testing ultracapacitors connected to a 30-kW flat panel system at the La Jolla Playhouse to better integrate solar panels with the campus microgrid.

# **UC San Diego Climate Action Plan**

In 2008, UC San Diego approved the first campus Climate Action Plan for implanting the UC's climate strategy to meet State and UC climate policies and objectives, including:

- Reducing GHG emissions to 20 percent below 1990 levels by 2020;
- Achieving climate neutrality for Scope I and II emissions by 2025; and
- Continuing to certify new and existing building under the LEED rating system.

The 2019 update to the Climate Action Plan (UC San Diego 2019a), which is a complete revision of the 2008 Climate Action Plan, analyzes UC San Diego's current, historical, and projected emissions and then incorporates this analysis into a climate change mitigation strategy for meeting the UC carbon neutrality goals. Mitigation strategies are included in the following categories: existing building energy efficiency planning; high performance new buildings; renewable energy; campus fleet; commute options; air travel; space utilization; behavioral and institutional change; and carbon offsets. In developing the recommended strategies included in the 2019 update to the Climate Action Plan, the first priority was given to avoiding carbon intensive activities, followed by reducing campus energy use, then replacing high-carbon resources with low carbon resources, with the last option being to offset those emissions that cannot otherwise reasonably be eliminated.

## **UC San Diego Student and Faculty Programs**

UC San Diego has also established academic and research programs focused on climate change education and finding clean energy solutions for the future. UC San Diego faculty are engaged in a variety of interdisciplinary, community-based projects regarding climate change, combining both technical and social science expertise from across the campus, such as the "Deep De-Carbonization Initiative." Some examples include:

- Development of forecasting models for integrating renewable generation into the utility grid and predicting energy demand;
- Applying cloud tracking and solar forecasting models to help promote the economic penetration
  of large amount of solar generation onto the utility grid;
- Investigation of green engineering strategies to reduce energy consumption in urban areas;
- Energy storage research to determine how to efficiently capture and deliver the growing amount of intermittent renewable energy resources to the distribution grid; and
- Improving energy storage and fuel cell technologies.

In addition, UC San Diego's "Campus Neutrality Initiative Student Fellows" program provides students an opportunity to engage in projects ranging from climate action planning to carbon offset studies.

## UC San Diego Zero Waste Plan

The UC San Diego Zero Waste Plan (UC San Diego 2019b) contains updated campus-wide strategies to promote reduction, reuse, recycling, anaerobic digestion, and composting with the goal of achieving zero waste, and in turn assisting the campus in reaching carbon neutrality. The campus-wide goal is to achieve zero waste by 2020 (the minimum compliance for zero waste is 90 percent diversion of municipal solid waste from the landfill). Per capita waste generation goals include the following:

- Reduce waste generation per capita to fiscal year 2015/2016 levels by 2020;
- Reduce waste generation by 25 percent per capita from fiscal year 2015/2016 levels by 2025;
- Reduce waste generation by 50 percent per capita from fiscal year 2015/2016 levels by 2030.

## **UC San Diego Water Action Plan**

In response to the statewide drought and in compliance with the UC Sustainable Water Systems Policy, UC San Diego implemented a 2013 Water Action Plan and a strategy to meet the UC President's January 2014 call for a 20-percent reduction in water use by 2020. The Water Action Plan was updated in 2017 (UC San Diego 2017). The purpose of the updated Water Action Plan is to (1) identify the present and future measures UC San Diego will implement to reduce potable water use by 36 percent, (2) develop and implement an education and outreach platform to encourage behavior change, and (3) establish benchmark goals to go beyond the 36 percent reduction in potable water use.

## 3.4.3 Environmental Impacts and Mitigation

The following sections address potential impacts related to GHG emissions that could result from implementation of the proposed Project.

#### 3.4.3.1 Issue 1: Generate GHG Emissions

#### **Greenhouse Gas Emissions Issue 1 Summary**

Would implementation of the proposed Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

**Impact:** Implementation of the proposed Project would not generate GHG emissions that may have a significant impact on the

environment.

Significance Before Mitigation: Less than

significant.

**Mitigation:** No mitigation is required.

**Significance After Mitigation:** Not applicable.

## Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Project would have a significant impact if it would generate GHG emissions that may have a significant impact on the environment. Given the relatively small levels of emissions generated by a typical development in relationship to the total amount of GHG emissions generated on a national or global basis, individual development projects are not expected to result in significant, direct impacts with respect to climate change; however, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from new development could result in significant, cumulative impacts with respect to climate change. Thus, the potential for a significant GHG impact is limited to cumulative impacts.

The determination of significance is governed by CEQA Guidelines 15064.4, entitled "Determining the Significance of Impacts from Greenhouse Gas Emissions." CEQA Guidelines 15064.4(a) states, "[t]he determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to ... [use a quantitative model or qualitative model]" (emphasis added). In turn, CEQA Guidelines 15064.4(b) clarifies that "[a]n iron clad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

The analysis contained herein therefore relies upon a threshold chosen after the exercise of careful judgment about the setting of the Project, believed to be appropriate in the context of this particular Project.

"A project's contribution is less than cumulatively considerable if the project is required to implement...its fair share of a mitigation measure or measures designed to alleviate the cumulative impact" (CEQA Guidelines 15130(a)(3)). Measures to mitigate a project's GHG impacts broadly include "reductions in emissions resulting from a project though implementation of project features, project design, or other measures" and that such measures must have an "essential nexus" and be "roughly proportionate" to the project (CEQA Guidelines 15126.4 (a)(4),(c)(2)). Finally, "[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence

that the proposed Project's incremental effects are cumulatively considerable" (CEQA Guidelines 15064 (h)(4)).

The California Supreme Court in *Center for Biological Diversity v. California Department of Fish and Wildlife* (November 30, 2015, Case No. 217763), suggested several approaches for determining significance of GHG emissions that would be appropriate, but did not foreclose other methodologies that may be used by lead agencies. One method for determining a fair share contribution quantitatively is to determine if a project's per service population (SP; i.e., residents and/or employees of a project) GHG efficiency level is more or less than the GHG efficiency level that would be needed to achieve the State's 2020 GHG target set forth in AB 32 and the State's 2030 GHG target set forth in SB 32. AB 32 and SB 32 demonstrate the State's commitment to reducing GHG emissions and the State's associated contribution to climate change, without intending to limit population or economic growth within the State. Table 3.4-5, *Statewide Emissions Inventory and Reduction Targets*, shows California's 2020, 2030, and 2050 emissions targets based on CARB's approved 1990 limit of 431 MMT CO<sub>2</sub>e (CARB 2020b).

Table 3.4-5
STATEWIDE EMISSIONS INVENTORY AND REDUCTION TARGETS

	1990	2020	2030	2050
Statewide Emissions Targets (MMT CO₂e)	431.0 <sup>1</sup>	431.0 <sup>1</sup>	258.6 <sup>2</sup>	86.2 <sup>3</sup>
Amount below 1990 Levels	0%	0%	40%	80%

<sup>&</sup>lt;sup>1</sup> CARB 2020b

To achieve the goals of AB 32 and SB 32, which are tied to statewide GHG emission levels of a specific benchmark year (i.e., 1990), California would have to achieve a lower rate of emissions per SP than its current rate. The per SP metrics represent the rates of emissions needed to achieve a fair share of California's emission reduction mandate. Fair share indicates the level of GHG efficiency that, if applied statewide or to a defined geographic area, such as the UC San Diego campus or the proposed Project, would meet the State's emissions targets for 2020 and 2030. For this reason, land uses need to be GHG "efficient" to attain AB 32 and SB 32 goals while also accommodating population and job growth. As such, this analysis focuses on the annual operational GHG emissions for the proposed Project per SP, where SP is the occupancy associated with operation of the Project.

The proposed Project would be located adjacent to the UC San Diego La Jolla campus and would be primarily occupied by UC San Diego. The Project's proposed type of development and uses are similar to the types of development and uses located at the UC San Diego La Jolla campus. As such, land use-related sectors in California's 1990 GHG Emissions Inventory were identified and GHG emissions were separated to tailor the inventory to emission sources relevant to the UC San Diego La Jolla campus. This exercise was completed to identify the emissions sources over which the UC San Diego La Jolla campus can have some influence through planning and development approval, as it would be infeasible for the UC San Diego campus to develop reduction strategies that address the full scope of statewide emissions. Emissions sources not present on campus are not included in the development of the GHG efficiency threshold. For example, this approach excludes emissions associated with agriculture, mining, ship and commercial boats, and other emissions sources not associated with campus activities. Table 3.4-6, Adjusted Statewide Emissions Inventory – Land Use-Related Sectors, presents a revised version of the

UC San Diego 3.4-18 February 2021

<sup>&</sup>lt;sup>2</sup> 40 percent below 1990 levels per Senate Bill 32

<sup>&</sup>lt;sup>3</sup> 80 percent below 1990 levels per Executive Order S-3-05 MMT = million metric tons; CO<sub>2</sub>e = of carbon dioxide equivalent

1990 statewide emissions that includes only the sectors and subsectors relevant to the UC San Diego La Jolla campus, with which the proposed Project would be associated.

Table 3.4-6
ADJUSTED STATEWIDE EMISSIONS INVENTORY – LAND-USE RELATED SECTORS

Main Sector / Sub Sector Level 1	Total Emissions (MMT CO <sub>2</sub> e/year) <sup>1</sup>	Adjusted Land Use- Related Emissions (MMT CO <sub>2</sub> e/year)	Notes / Adjustments
Agriculture and Forestry	18.9	0.0	Not included in land use sector
Commercial	14.4	13.9	Excludes National Security emissions from Sub Sector 1
Electricity Generation (imports)	61.5	61.5	Land use sector includes all emissions
Electricity Generation (in state	49.0	49.0	Land use sector includes all emissions (including CHP: Industrial from Sub Sector Level 1)
Industrial	105.3	11.7	Industrial emissions excluded from land use sector, except as described in sub sectors below
CHP: Industrial	9.7	0.0	Not included in land use sector
Flaring	0.1	0.0	Not included in land use sector
Landfills	7.4	7.4	Land use sector includes all emissions
Manufacturing	32.1	0.0	Construction emissions from Sub Sector Level 2 included in land use sector
Mining	0.03	0.0	Not included in land use sector
Not Specified	2.7	0.0	Not included in land use sector
Oil and Gas Extraction	14.8	0.0	Not included in land use sector
Petroleum Marketing	0.02	0.0	Not included in land use sector
Petroleum Refining	32.8	0.0	Not included in land use sector
Pipelines	1.92	0.0	Not included in land use sector
Waste Water Treatment	3.6	3.6	Waste water treatment emissions are included
Not Specified	1.3	1.3	Land use sector includes all emissions
Residential	29.7	29.7	Land use sector includes all emissions
Transportation	150.6	140.9	Excludes Aviation, Rail, and Water- borne emissions from Sub Sector Level 1
TOTAL	431.0	308.0	

Source: UC San Diego 2018

Note: Sectors/sub sectors may not sum exactly due to rounding.

MMT = million metric tons; CO₂e = of carbon dioxide equivalent

The statewide inventory was tailored to emissions sources that are relevant to the UC San Diego La Jolla campus so that emissions in future years can be compared with California's own targets for the relevant land uses – namely for 2020 under AB 32, for 2030 under SB 32, and for 2050 under EO S-3-05. After

UC San Diego 3.4-19 February 2021

<sup>&</sup>lt;sup>1</sup> CARB 2020b

culling the emissions sources to those that are relevant for the UC San Diego La Jolla campus, which results in an emissions level of 308,013,066 MT CO₂e per year, the second step is developing an appropriate "rate" of emissions, which is determined by dividing the mass emissions by the SP to get a rate of emissions.

California has mass emissions targets for future years. State agencies also forecast future residential population and employment for future years. If one simply divides the mass emissions target by the total residential population and employment, this yields emissions "budget" per population plus employment that is consistent with State GHG goals. If a project or plan has a rate of GHG emissions per SP that is equal to, or less than the State's GHG rate for future years, then that project or plan can demonstrate consistency with the State's GHG goals. In this case, if the proposed Project emissions rates are consistent with the State's goals, it can be concluded that implementation of the Project would make progress toward the State's 2020 and 2030 goals and set a trajectory that is consistent with the State's 2050 goal. The application of an efficiency-based metric as is described herein is consistent with the discussion in CARB's 2017 Scoping Plan (CARB 2017) of the importance of GHG efficiency in land use planning. The 2017 Scoping Plan provides the following guidance on the application of an efficiency-based metric:

"Since the statewide per capita targets are based on the statewide GHG emissions inventory that includes all emissions sectors in the State, it is appropriate for local jurisdictions to derive evidence-based on local per capita goals based on local emissions sectors and population projections that are consistent with the framework used to develop the statewide per capita targets. The resulting GHG emissions trajectory should show a downward trend consistent with the statewide objectives."

Thus, future development would have to improve efficiency to be consistent with the goals of AB 32 and SB 32.

Table 3.4-7, Service Population Efficiency Targets, shows the estimated statewide land-use related GHG emissions per SP for 2020 (to achieve the goals of AB 32), 2030 (to achieve the goals of SB 32), and 2050 (to achieve the goals of EO S-3-05). The table also includes the estimated statewide land-use related GHG emissions per SP for 2024, the first full year that the proposed Project is anticipated to be operational. The emissions target for 2024 was linearly extrapolated from 2020 and 2030 emissions goals, and then divided by the SP to achieve an emissions rate per SP for the proposed Project's operational year of 2024. This operational year rate demonstrates consistency with both AB 32 and SB 32.

	2020	2024	2030	2050
Emissions Target (MT CO₂e/year)	308,013,066	258,730,974	184,807,640	61,602,613
Population <sup>1</sup>	40,129,160	40,938,929	42,263,654	44,856,461
Employment	19,143,220 <sup>2</sup>	19,777,860 <sup>2</sup>	20,615,599 <sup>3</sup>	21,880,333 <sup>3</sup>
Service Population (SP)	59,272,380	60,716,789	62,879,253	66,736,794
Emissions per SP (MT CO <sub>2</sub> e/year)	5.20	4.26	2.94	0.92

Table 3.4-7
SERVICE POPULATION EFFICIENCY TARGETS

- <sup>1</sup> State of California Department of Finance 2020
- Interpolated from the California Employment Development Department (2020) employment projections for 2018 (18,825,900) and 2028 (20,412,500).
- The Employment Development Department provides 10-year employment estimates that currently extend to 2028, so the ratio of employment to population estimated in 2028 (48.8 percent) was applied to the Department of Finance population estimates for 2030 and 2050.

MMT = million metric tons; CO<sub>2</sub>e = of carbon dioxide equivalent

In addition to the 2024 efficiency target, significance will be assessed based on compliance with the UC Sustainable Practices Policy (UC 2020).

## Methodology

Criteria pollutant and GHG emissions were calculated using CalEEMod, Version 2016.3.2 (SCAQMD 2017). CalEEMod is a computer model used to estimate emissions resulting from construction and operation of land development projects throughout the State of California. CalEEMod was developed by the SCAQMD with the input of several air quality management and pollution control districts. The model calculates GHG emissions for CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. The input data and construction and operation assumptions for the proposed Project are discussed in Section 3.2. CalEEMod output files are included in Appendix B.

#### **Impact Analysis**

Implementation of the Project would result in both construction and operational GHG emissions, as described in the following sections.

#### **Construction Emissions**

Project construction GHG emissions were estimated using the CalEEMod model as described in Section 3.2. Project-specific input was based on general information provided in Chapter 2, assumptions provided by GPI Companies, and default model settings to estimate reasonably conservative conditions. Additional details of phasing, selection of construction equipment, and other input parameters, including CalEEMod data, are included in Appendix B.

Emissions of GHGs related to the construction of the Project would be temporary. As shown in Table 3.4-8, *Estimated Construction GHG Emissions*, total GHG emissions associated with construction of the Project are estimated at 610 MT  $CO_2e$ . For construction emissions, City guidance recommends that the emissions be amortized (i.e., averaged) over 30 years and added to operational emissions. Averaged over 30 years, the proposed construction activities would contribute approximately 20 MT  $CO_2e$  per year.

<b>Table 3.4-8</b>
ESTIMATED CONSTRUCTION GHG EMISSIONS

Phase	Emissions (MT CO₂e)
Demolition/Site Preparation	35
Trenching	8
Shoring, Excavation, and Pile Foundations	133
Structure	419
Finishes	15
TOTAL <sup>1</sup>	610
Amortized Construction Emissions <sup>2</sup>	20

Source: CalEEMod (output data is provided in Appendix B)

- <sup>1</sup> The total may not sum due to rounding.
- <sup>2</sup> Construction emissions are amortized over 30 years in accordance with City of San Diego guidance.

MT = metric tons;  $CO_2e$  = of carbon dioxide equivalent

#### **Operational Emissions**

Operational sources of GHG emissions include: (1) area sources, (2) energy use, (3) vehicle use, (4) stationary sources, (5) solid waste generation, and (5) water conveyance and treatment.

#### Area Source Emissions

Area sources include emissions from landscaping equipment, architectural coatings, and consumer products. GHG emissions associated with area sources were estimated using the CalEEMod default values for the Project. The annual GHG emissions from area sources are estimated to be negligible (<0.5 MT CO<sub>2</sub>e per year) in 2024.

#### **Energy Source Emissions**

Buildings use electricity for lighting, heating, and cooling. Electricity generation typically entails the combustion of fossil fuels, including natural gas and coal, which are then stored and transported to end users. A building's electricity use is thus associated with the off-site or indirect emission of GHGs at the source of electricity generation (power plant). The Project would be designed to outperform the 2019 Title 24 electricity requirements by 20 percent. The Project would not require the use of natural gas. In compliance with the UC Sustainable Practices Policy, the Project would participate in the SDG&E Savings by Design Program to the extent the program is available and accepting new projects. The Project would also obtain 100 percent clean energy by 2025; however, because the Project would be operational before 2025, emissions modeling for the Project conservatively assumes the use of non-renewable electricity sources to estimate emissions in the Project's first full year operations, which is anticipated to be 2024. The Project's annual GHG emissions from electricity consumption are estimated to be 628 MT CO<sub>2</sub>e in 2024.

## Stationary Source Emissions

An emergency generator would be used for power during electrical power failures. Generator emissions were estimated based on assumed testing frequency of 15 minutes per month. The Project annual GHG emissions from stationary sources are estimated to be 0.6 MT CO₂e in 2024. Vehicular (Mobile) Source Emissions

Operational mobile source emissions would be associated with Project-related vehicle trip generation and trip length. According to the TIA prepared for the Project by LLG (2021), the Project would generate 1,920 ADT. The Project's annual GHG emissions from vehicular sources are estimated to be 1,769 MT CO<sub>2</sub>e in 2024.

#### Solid Waste Source Emissions

Solid waste generated by the Project would also contribute to GHG emissions. Treatment and disposal of solid waste produces emissions of methane. The Project would implement a Zero Waste Action Plan during operations; however, because specific solid waste reduction metrics are not available at this stage in the planning process, model default solid waste generation was used and a 75 percent reduction per AB 341 was assumed. The Project's annual GHG emissions from solid waste sources are estimated to be 46 MT CO<sub>2</sub>e in 2024.

#### Water Source Emissions

Water-related GHG emissions are from the conveyance and treatment of water. The California Energy Commission's 2006 Refining Estimates of Water-Related Energy Use in California defines average energy values for water in southern California. These values are used in CalEEMod to establish default water related emission factors. Model default indoor and outdoor water usage was used. The Project would achieve a 35 percent reduction in indoor water use compared to the statewide average. This reduction was incorporated into the model. A 20 percent outdoor water use reduction per CALGreen requirements was also incorporated into the model. The Project's annual GHG emissions from water sources are estimated to be 86 MT CO<sub>2</sub>e.

#### Other GHG Emission Sources

Ozone is also a GHG; however, unlike other GHGs, ozone in the troposphere is relatively short lived and therefore is not global in nature. According to CARB, it is difficult to make an accurate determination of the contribution of ozone precursors ( $NO_X$  and VOCs) to global warming (CARB 2006). Therefore, it is assumed that emission of ozone precursors associated with the Project would not significantly contribute to climate change.

At present, there is a federal ban on CFCs and the Project would not use CFC-based refrigerants in the HVAC systems; therefore, the Project would not generate emissions of this GHG. Implementation of the Project may emit a small amount of HFC emissions from leakage, service of, and from disposal at the end of the life of refrigeration and air conditioning equipment. However, these emissions are not quantifiable and are assumed to be negligible. Perfluorocarbons (PFCs) and sulfur hexafluoride are typically used in heavy-duty industrial applications. The proposed Project would not include heavy-duty industrial applications. Therefore, it is not anticipated that the Project would contribute significant emissions of these GHGs.

#### Summary

Table 3.4-9, Estimated Operational (Year 2024) GHG Emissions, includes the annual emissions associated with the Project. The emissions include the Project's anticipated amortized annual construction emissions. As shown in Table 3.4-9, the Project would result in an annual increase in GHG emissions of 2,551 MT  $CO_2$ e in 2024. For informational purposes, the recent former restaurant use has also been provided as context for the overall net increase in regional GHG emissions.

Table 3.4-9
ESTIMATED OPERATIONAL (YEAR 2024) GHG EMISSIONS

Emission Sources	Emissions (MT CO <sub>2</sub> e)
Scope 1 Sources	
Area Sources	<0.5
Stationary Sources	1
Energy Sources – Natural Gas	0
Scope 2 Sources	
Energy Sources – Electricity	628
Scope 3 Sources	
Vehicular (Mobile) Sources	1,769
Solid Waste Sources	46
Water Sources	86
Operational Subtotal	2,531
Construction (Annualized over 30 years)	20
TOTAL OPERATIONAL EMISSIONS	2,551
Total Existing Land Use Operational Emissions <sup>1</sup>	1,190
Net Increase Daily Emissions	1,361

Source: CalEEMod output data is provided in Appendix A

Note: Totals may not add sum due to rounding.

MT = metric tons; CO<sub>2</sub>e = carbon dioxide equivalent

As detailed above in Table 3.4-7, the efficiency target for the Project's first full year of operations, 2024, is 4.26 MT  $CO_2e/SP/year$ . The Project is estimated to support an occupancy of 947 individuals. As shown in Table 3.4-10, *GHG Emissions Significance Determination for Consistency with AB 32 and SB 32 (Scopes 1, 2, and 3)*, based on conservative assumptions that emissions would be new to the area, the Project would result in emissions of 2.69 MT  $CO_2e/SP/year$  in 2024, which is below the efficiency target. Therefore, impacts related to consistency with the AB 32 and SB 32 efficiency targets would be less than significant, and no mitigation is necessary.

Table 3.4-10
GHG EMISSIONS SIGNIFICANCE DETERMINATION FOR
CONSISTENCY WITH AB 32 AND SB 32 (SCOPES 1, 2, AND 3)

Category	2024
Total Project Emissions (MT CO₂e)	2,551
Project Service Population	947
Project Emissions per Service Population (MT CO₂e/SP/year)	2.69
Efficiency Target (MT CO₂e/SP/year)	4.26
Significant Impact?	No

MT = metric tons; CO<sub>2</sub>e = carbon dioxide equivalent; SP = service population

# **Mitigation Measures**

Implementation of the proposed Project would not generate GHG emissions that may have a significant impact on the environment; therefore, no mitigation is required.

<sup>&</sup>lt;sup>1</sup> Refer to Table 9.

## 3.4.3.2 Issue 2: Consistency with Applicable Plan

#### **Greenhouse Gas Emissions Issue 2 Summary**

Would implementation of the proposed Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

**Impact:** Implementation of the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

**Mitigation:** No mitigation is required.

**Significance Before Mitigation:** Less than

significant.

**Significance After Mitigation:** Not applicable.

## Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the proposed Project would have a significant impact if it would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. There are several UC and UC San Diego plans and policies aimed at reducing GHG emissions that are applicable to the Project and that address this CEQA threshold, including the UC Policy of Sustainable Practices, UC San Diego Climate Action Plan, UC San Diego Zero Waste Plan, and the UC San Diego Water Action Plan.

#### Impact Analysis

#### University of California Sustainable Practices Policy

As discussed in Section 3.4.2.2, the most recent version of the UC Sustainable Practices Policy, issued in July 2020, provides specific scope, direction, and expectations for implementing sustainable new capital projects, facility operations, and campus transportation resources. It commits UC to implementing actions intended to minimize the UC's impact on the environment and reduce the UC's dependence on non-renewable energy. The proposed Project incorporates a number of features that demonstrate consistency with the goals of the UC Sustainable Practices Policy, including:

- Exceedance of the current 2019 Title 24 energy efficiency standards by at least 20 percent.
- Incorporation of sustainable design features to reduce energy consumption, conserve natural resources, and achieve LEED Silver rating for the Project.
- No use of on-site fossil fuel combustion (e.g., natural gas) for space and water heating.
- Water consumption strategies to achieve a potable water reduction of 35 percent compared to the statewide average.
- Implementation of a Zero Waste Action Plan for Project operations.

 Striping of at least six percent of the total allocated parking for electric vehicles, including providing electric vehicle charging stations.

With respect to the UC 2025 climate neutrality target for Scope 1 and 2 GHG emission sources, as shown above in Table 3.4-9, the Project would result in negligible Scope 1 emissions, as area source and stationary source emissions would be minimal (estimated at 0.00379 MT CO<sub>2</sub>e and 0.6 MT CO<sub>2</sub>e per year, respectively) and the Project would not use natural gas. In addition, the stationary source emissions are estimated based on assumed testing for an emergency generator. This stationary source would not represent a regular or constant GHG emissions source. While the Project is modeled to generate Scope 2 (electricity-related) emissions in its first full year of operations (2024), the Project would participate in the SDG&E Savings by Design program to the extent the program is available and accepting new projects to obtain 100 percent renewable energy by 2025 per the UC Sustainable Practices Policy directive. This would result in the Project having no Scope 2 emissions by 2025, and the Project would thereby be consistent with the UC 2025 climate neutrality target for Scope 1 and Scope 2 GHG emission sources.

The UC Sustainable Practices Policy also sets forth the goal of achieving climate neutrality from Scope 3 sources by 2050. The primary Scope 3 source associated with the Project would be vehicle trip generation and associated VMT (through implementation of a Zero Waste Plan and increasingly stringent water use requirements, emissions from waste generation and water use are anticipated to be minimal by 2050). According to the TIA prepared for the Project (LLG 2021), the Project VMT per employee for the proposed office uses would be less than 85 percent of the regional average and the proposed classroom and retail uses would not result in a net increase in the total regional VMT. The Project site is within a TPA and along a high-quality transit corridor (La Jolla Village Drive). The Project would promote TOD by redeveloping a currently underutilized site within a TPA that has abundant alternative transportation options, including access to the under-construction UC San Diego Blue Line LRT system with two stations (the Nobel Drive Station and the VA Medical Center Station) within 0.33 mile of the Project site.

Further, by locating the Project adjacent to the main UC San Diego campus, the Project would consolidate UC San Diego programs and uses, allowing for greater efficiency and less vehicular travel associated with commutes between the Project's uses and the main campus. As part of UC San Diego, the Project would also be subject to campus-wide sustainable transportation efforts that will be implemented to achieve Scope 3 emissions reductions by 2050. Requirements in the UC Sustainable Practices Policy call for UC campuses to have no more than 40 percent of employees and no more than 30 percent of all employees and students commuting by SOV by 2050. The UC San Diego's extensive TDM measures would also continue to be implemented at a campus-wide level to reduce VMT and associated emissions. These characteristics associated with the location of the Project effectively minimize the number of VMT for the population that would occupy and use the proposed Project. As such, the Project is considered a net benefit in terms of regional transportation. Therefore, the Project is considered consistent with the 2050 Scope 3 climate neutrality goal.

## **UC San Diego Climate Action Plan**

The UC San Diego Climate Action Plan has set a goal for the campus of being net neutral for Scope I and II sources by 2025. As detailed above, the Project would achieve net neutrality for these sources. Therefore, GHG emissions associated with the Project would not adversely affect GHG reduction targets within the UC San Diego Climate Action Plan.

## UC San Diego Zero Waste Plan

The Project would implement a Zero Waste Action Plan for operations. As a UC San Diego facility, the UC San Diego building users would comply with the recommendations of the campus' Zero Waste Plan to the extent practicable and would report data on building waste quantities to the UC San Diego Sustainability Office and Zero Waste Working group on an annual basis. While not all programs recommended by the Zero Waste Plan have been implemented, the UC San Diego Zero Waste Working Group is actively working to roll out its programs and campus-wide requirements. As programs become available, UC San Diego building users would be required to participate. The Zero Waste Plan includes waste reduction, reuse, and diversion as well as educational programs to encourage campus users to reduce waste streams. The campus' Zero Waste Plan strives to achieve a 90 percent waste diversion rate campus-wide and is updated on a regular basis to meet new policies and regulations, incorporate new technologies and best practices, and alter existing programs based on lessons learned. In addition, construction waste management would comply with the LEED Rating system for the Project. Therefore, the Project would be consistent with the UC San Diego Zero Waste Plan.

#### **UC San Diego Water Action Plan**

The objective of the UC San Diego Water Action Plan is to reduce potable water usage on campus by expanding the use of reclaimed water to offset potable water use and implementing building standards for new construction to improve water efficiency. The Project would include efficient building equipment to reduce water consumption at all fixtures (e.g., urinals, toilets, and faucets) to achieve a potable water reduction of 35 percent compared to the statewide average. For outdoor water use conservation, trees and groundcover would be irrigated on separate irrigation systems, with the trees watered by a bubbler system and shrub and groundcover areas watered by a high-efficiency subsurface in-line drip system. The irrigation system would also be tied to a dedicated irrigation meter and controlled by an evapotranspiration-based weather-sensing controller with central control capability. In addition, the Project would use drought-tolerant native and adapted low-medium water use plan species in the landscape plan to reduce water use. These reductions in water usage would also correspondingly reduce indirect emissions of GHG associated with the transport and treatment of water, consistent with the goals of this plan.

#### Mitigation Measures

Implementation of the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions; therefore, no mitigation is required.

## 3.4.4 Cumulative Impacts and Mitigation

The geographic scope of consideration for GHG emissions is on a global scale as such emissions contribute, on a cumulative basis, to global climate change. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies evaluate the cumulative impacts of GHGs, even relatively small additions, on a global basis. By nature, GHG evaluations are a cumulative study. The plans applicable to the Project for reducing GHG emissions, including the UC Sustainable Practices Policy, UC San Diego CAP, UC San Diego Zero Waste Plan, and UC San Diego Water Action Plan, establish targets for addressing this global issue at a UC system-wide level, considering global and regional projections of GHG emissions as well as local projects that may contribute to GHG emission impacts. As such, the analysis in Section 3.4.3 considers the potential cumulative impacts of the Project related to GHG emissions. Implementation of the Project would result

in less than significant impacts related to (1) the generation of GHG emissions, and (2) conflicts with applicable plans adopted for the purpose of reducing GHG emissions. As such, implementation of the Project would not result in a cumulatively considerable impact, and no mitigation is required.

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## 3.5 HYDROLOGY AND WATER QUALITY

This section describes the existing hydrology and water quality conditions for the Project site and vicinity, identifies plans and policies applicable to the discussion of hydrology and water quality issues, evaluates potential Project-related impacts for significance under pertinent criteria, and identifies mitigation measures where appropriate. The information in this section is summarized, in part from information contained in the Project-specific Drainage Report and Storm Water Quality Management Plan (SWQMP) prepared by Latitude 33 (Appendices E1 and E2 to this EIR, respectively).

# 3.5.1 Existing Environmental Setting

The Project site consists of an existing commercial center comprising five buildings and a parking lot within the Peñasquitos Hydrologic Unit (HU). The Peñasquitos HU is one of 11 major drainage areas within the San Diego Basin (Region 9) identified in the San Diego Regional Water Quality Control Board (SDRWQCB) Water Quality Control Plan for the San Diego Basin (Basin Plan, SDRWQCB 2016). The Peñasquitos HU is a triangular-shaped area of approximately 170 square miles extending generally from Poway to La Jolla and composed of major streams, numerous creeks, two coastal lagoons (Los Peñasquitos Lagoon and Mission Bay), and one major reservoir (Miramar Reservoir). Development within the Peñasquitos HU comprises a variety of land uses, including high- and medium-density residential and commercial uses in the University and Mira Mesa communities, and open space areas such as Rose Canyon, Los Peñasquitos Canyon, Del Mar Mesa, and portions of Marine Corps Air Station (MCAS) Miramar.

The prevailing winds and weather in San Diego are tempered by the Pacific Ocean, with the result that summers and winters are mild. Daily temperatures for San Diego range between 70°F and 85°F in the summer and 55°F to 65°F in the winter. Average annual precipitation in the Peñasquitos HU ranges from approximately 8 inches along the coast to 18 inches at some inland locations, with San Diego averaging approximately 10 inches per year (UC San Diego 2019a). The Peñasquitos HU is divided into five distinct hydrologic areas (HAs) based on local drainage characteristics (see Figure 3.5-1, Regional Hydrological Setting – Peñasquitos Hydrologic Unit). The Project site is located within the Miramar HA. The Miramar HA is drained primarily by east-west trending San Clemente Canyon and Rose Canyon into the northeast corner of Mission Bay (Fiesta Bay) through the Rose Inlet (approximately five miles south of the Project site). Mission Bay outlets to the Pacific Ocean through the Entrance Channel, which is contiguous with the mouth of the San Diego River. There are no hydrologic sub areas (HSAs) identified in the Miramar HA.

According to the Phase I ESA (Terraphase 2018), the Project site elevations are generally flat, ranging between 272 and 280 feet AMSL, and is not located within the 100- or 500-year flood plain areas as defined by the Federal Emergency Management Agency (FEMA). The Project site is not located within or adjacent to the areal extent of any mapped regional groundwater basins, with the closest such aquifer (Mission Valley Basin) located approximately seven miles to the south along the San Diego River corridor (California Department of Water Resources [DWR] 2003). Based on the Project's Geotechnical Investigation, groundwater levels vary throughout the site and from year to year, and have been reported between 235 and 242 feet AMSL, or about 29 to 36 feet below the ground surface (assuming a site ground surface elevation of 271 feet AMSL) (Group Delta Consultants 2020; Appendix D). An existing 24-inch by 24-inch catch basin is located on the west side of the existing parking lot west of the Project site.

## 3.5.1.1 Surface Water Drainage

All on-site and adjacent flows ultimately drain south to Rose Canyon Creek, with current peak flows from the site totaling approximately 9.75 cubic feet per second (CFS) for the 10-year storm and 12.07 CFS for a 100-year storm (Latitude 33 2021a). Three sub-basins are defined at the Project site, identified as E1, E2, and E3. Site drainage ultimately flows into two points of compliance (POC) labeled as POC-1 and POC-2. POC-1 is located within Villa La Jolla Drive and POC-2 is located within the Project site just south of the existing building on the Project site. Site drainage flows across a Caltrans right-of-way before continuing into Rose Canyon Creek and ultimately to Mission Bay and the Pacific Ocean. The three existing drainage sub-basins characteristics are described below.

**Basin E1**. The approximately 0.70-acre basin is comprised of areas in the northwestern portion of the Project site, generally west of the existing on-site building. Development within Basin E1 includes landscaping, parking, sidewalks, and portions of the existing building. Flows from this basin are collected within a series of storm drain inlets that concentrate flows into an existing curb inlet on-site at POC-2 within Basin E3. Flows then travel through an 18-inch corrugated metal pipe (CMP) pipe and are connected to a junction structure within a multi-plate public storm drain.

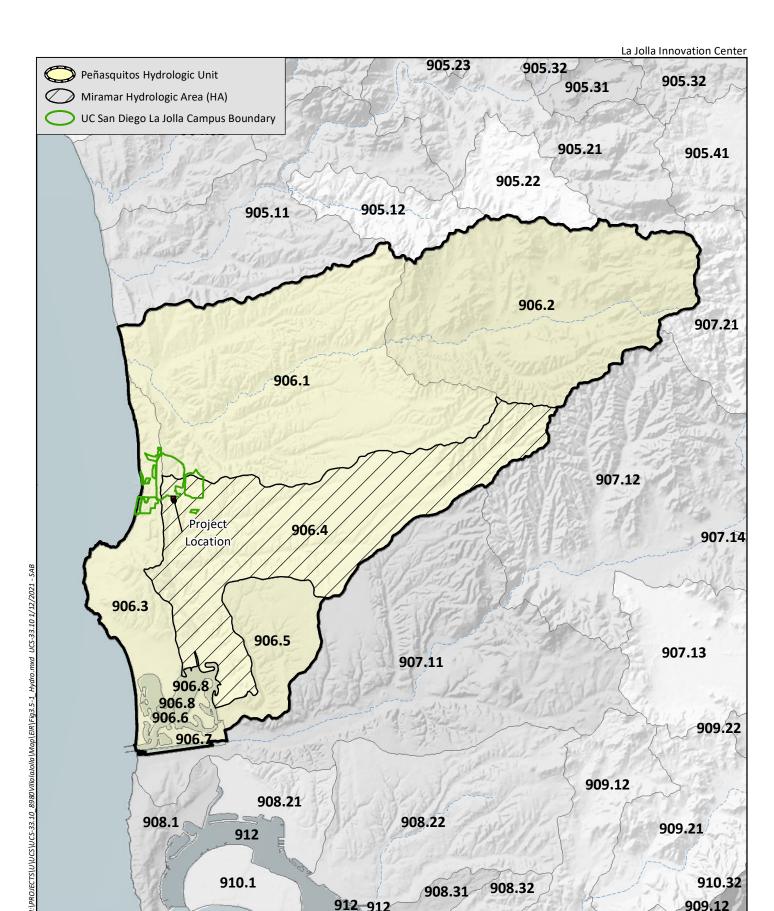
**Basin E2**. The 0.57-acre basin includes the northeastern corner of the Project site. Development within Basin E2 includes landscaped areas and portions of the existing on-site building around the north and east sides, as well as landscaping, parking, and sidewalk areas southeast of the existing building. Runoff from this basin sheet flows towards the intersection of La Jolla Village Drive and Villa La Jolla Drive into off-site public curb inlets at POC-1 that flow into an existing 24-inch storm drain.

**Basin E3**. The 0.32-acre basin is comprised of landscaping, parking, sidewalks, and portions of the existing building in the southern part of the Project site. Runoff from this basin sheet flows into an existing curb inlet near the main entrance of the existing building at POC-2 through an 18-inch CMP pipe connected to the public storm drain.

## 3.5.1.2 Receiving Waters

Receiving waters is a general term typically used to describe any water body, such as a creek, river, lake, bay, or ocean that receives runoff. In the context of this section, it refers to those water bodies that would receive runoff as a result of implementation of the Project. The main receiving water downstream from the Project site is Rose Canyon Creek.

The beneficial uses designated by the RWQCB for Rose Canyon Creek are provided in Table 3.5-1, *Applicable Beneficial Use Designations*. These include Contact Water Recreation, Non-Contact Water Recreation, Warm Freshwater Habitat, and Wildlife Habitat. The definitions for beneficial uses designed for Rose Canyon Creek are provided in Table 3.5-2, *Definitions of Applicable Beneficial Use Designations*. In general, beneficial uses are those uses, users, or activities that benefit from the presence of the water and could be adversely impacted if water quality were degraded.





3 Miles

Regional Hydrological Setting – Peñasquitos Hydrologic Unit

908.31

912 912

Table 3.5-1 **APPLICABLE BENEFICIAL USE DESIGNATIONS** 

	Hydrologic Unit Basin Number	MUM	AGR	ONI	NAV	PROC	GWR	FRSOH	POW	REC 1	REC 2	COMM	BIOL	EST	WARM	COLD	WILD	RARE	MAR	AQUA	MIGR	SPWN	SHELL
Inland Surface Waters																							
Rose Canyon	6.40	*		0						Χ	Χ				Χ		Χ						
<b>Coastal Waters</b>																							
Mission Bay	6.80			Χ						Χ	Χ	Χ		Χ			Χ	Χ	Χ		Χ	Χ	Χ
Pacific Ocean	n/a			Χ	Χ					Χ	Χ	Χ	Χ				Χ	Χ	Χ	Χ	Χ	Χ	Х

Source: SDRWQCB 2016 X Existing Beneficial Use

- o Potential Beneficial Use
- Exempted from MUN

**Table 3.5-2 DEFINITIONS OF APPLICABLE BENEFICIAL USE DESIGNATIONS** 

Designation	Abbreviation	Definition
Municipal and Domestic Supply	MUN	Includes uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.
Industrial Service Supply	IND	Includes uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.
Navigation	NAV	Includes uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.
Contact Water Recreation	REC 1	Includes uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water skiing, skin and SCUBA diving, surfing, white water activities, fishing, or use of natural hot springs.
Non-contact Water Recreation	REC 2	Includes the uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
Commercial and Sport Fishing	СОММ	Includes the uses of water for commercial or recreational collection of fish, shellfish, or other organisms, including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

UC San Diego 3.5-3 February 2021

Table 3.5-2 (cont.)
DEFINITIONS OF APPLICABLE BENEFICIAL USE DESIGNATIONS

Designation	Abbreviation	Definition
Preservation of Biological Habitats of Special Significance	BIOL	Includes uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance (ASBS), where the preservation or enhancement of natural resources requires special protection.
Estuarine Habitat	EST	Includes uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).
Warm Freshwater Habitat	WARM	Includes uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Wildlife Habitat	WILD	Includes uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife, or wildlife water and food sources.
Rare, Threatened, or Endangered Species	RARE	Includes uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state of federal law as rare, threatened, or endangered.
Marine Habitat	MAR	Includes uses of water that supports marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).
Aquaculture	AQUA	Includes the uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.
Migration of Aquatic Organisms	MIGR	Includes uses of water that support habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish.
Spawning, Reproduction, and/or Early Development	SPWN	Includes uses of water that support high-quality aquatic habitats suitable for reproduction and early development of fish. This use is applicable only for the protection of anadromous fish.
Shellfish Harvesting	SHELL	Includes uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial ,or sport purposes.

# **Rose Canyon Creek**

The Project site is located approximately 1.8 miles north of Rose Canyon Creek and surface runoff within the Project site basins eventually drains into Rose Canyon Creek. Rose Canyon Creek is the primary

drainage within Rose Canyon, an "L" shaped canyon to the south of the Project site. Rose Canyon Creek originates south of the City of Poway as a natural creek and extends westward within semi-natural and concrete stabilized channels through MCAS Miramar and the City's communities of Scripps Ranch, Mira Mesa, Kearny Mesa, Clairemont Mesa, University City, La Jolla, and Pacific Beach. The western lower reaches of Rose Canyon Creek are primarily within concrete channels as the creek turns southward near the base of Soledad Mountain and flows along I-5 into Mission Bay. Drainage from the Project site enters Rose Canyon Creek at the downstream end of its more natural reaches and where channelization begins. Therefore, the ecological value of the portion of the creek influenced by runoff from the Project site is limited. Wildlife that may inhabit the limited open spaces around the western reaches of Rose Canyon Creek includes racoons, skunks, rabbits, coyotes, foxes, mule deer, raptors/large hawks, and owls.

Rose Canyon Creek is included on the Clean Water Act (CWA) Section 303(d) list as impaired for toxicity, benthic community effects, and selenium (SWRCB 2018). Total Maximum Daily Loads (TMDLs), or pollution budgets, establish the maximum amount of an impairing substance or stressor that a water body can assimilate and still meet water quality standards, and allocates that load among pollution contributors. TMDLs are quantitative tools for implementing state water quality standards, based on the relationship between pollution sources and water quality conditions. States are required to identify and document any and all polluted surface water bodies, with the resulting documentation referred to as the CWA Section 303(d) List of Water Quality Limited Segments, or more commonly the CWA Section 303(d) list. This list of water bodies identifies the associated pollutants and TMDLs, along with projected TMDL implementation schedules/status. The most current CWA Section 303(d) list was approved in April 2018 and identifies Rose Canyon Creek (13.27 miles) as impaired related to benthic community effects, selenium, and toxicity (likened to selenium exceedances). No TMDLs have been adopted for Rose Canyon Creek. Expected TMDL completion dates include 2025 for benthic community effects and 2021 for both selenium and toxicity (SWRCB 2018).

#### Mission Bay

The Mission Bay watershed drains an area of approximately 80 square miles of a highly urbanized region west of I-15. Rose Canyon Creek and Tecolote Creek are the main tributaries to Mission Bay, which was converted from a coastal marshland after the completion of large dredging projects. A riprap channel connects the bay and the Pacific Ocean at the south end of Mission Beach.

Mission Bay, approximately 1,968 acres, is irregularly shaped with two large islands and depths ranging from seven to 20 feet, and includes a water body lined by residential areas, hotels, marinas, theme parks, and beaches. Recreational activities include many free sporting activities (i.e., volleyball and water sports), park facilities offering picnic shelters, barbecues, designated swim zones staffed with lifeguards during the summer months, basketball courts, and children's playground areas. There are approximately 251 acres of wetland habitat in the bay, including 41 acres in the Norther Wildlife Preserve, which includes UC San Diego's Kendall-Frost Marsh Reserve; about 200 acres in the Southern Wildlife Preserve; and approximately 10 acres of salt pan. It also supports a diverse native flora and fauna that are sensitive to the effects of pollutants due to restricted or intermittent tidal flushing. The three types of aquatic habitats in the bay are sandy bottom shallow water, eelgrass beds, and rocky shoreline. The two types of intertidal habitats are mudflat and marsh. These habitats support over 25 species of marine fish and invertebrates and provide opportunities for bird watching.

The Project site represents less than one percent of the Mission Bay watershed. Circulation in the eastern portion of the bay is poor where Rose Canyon Creek discharges. Coliform bacteria are present in Mission Bay as a result of urban runoff and sewage spills. Mission Bay is identified as an impaired water body on the CWA Section 303(d) list for eutrophic waters and lead along the mouth of Rose Canyon Creek (9.2 acres). TMDLs for eutrophic waters and lead at the Rose Canyon Creek inlet were anticipated by 2019 and have not been reported at the time this EIR was prepared (SSWRCB 2018).

# 3.5.1.3 Water Quality

Runoff is a term used to describe any water that drains or runs off a defined land area into a waterway. Runoff can be the result of rain; in which case it is also sometimes referred to as storm water. Runoff can also result from various other sources or activities such as irrigation, hosing down of areas, wash water from cleaning, leaks in pipes, and air conditioner condensation. When runoff is not the result of natural precipitation, it is sometimes referred to as non-storm water. General hydrologic characteristics, land uses, and activities that involve pollutants have the greatest influence on the water quality runoff from a given area.

Constituents of concern (COCs) found in urban runoff include sediments, non-sediment solids, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons, trash, pesticides, and herbicides. Based on the nature of the Project site and associated upstream watersheds, existing on-site existing surface water quality is anticipated to be moderate.

## **Regional Water Quality**

Runoff within the San Diego region, including the Project site, is managed and regulated under a National Pollutant Discharge Elimination System (NPDES) Regional MS4 Permit (R9-2013-0001 as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100). This Regional MS4 Permit covers 39 municipal, county government, and special district entities (referred to jointly as Copermittees) located in the County, southern Orange County, and southwestern Riverside County, who own and operate large MS4s that discharge storm water (wet weather) runoff and non-storm water (dry weather) runoff to surface waters throughout the San Diego region.

The Regional MS4 Permit also incorporates mechanisms to identify and address highest priority water quality issues through the development of water quality improvement plans (WQIPs) for each Watershed Management Area (WMA) designated by the SDRWQCB. The Project is situated within the Mission Bay WMA, which is a highly urbanized 64 square mile portion of central San Diego County (City 2016). The WMA includes four distinct hydrologic areas that drain to Mission Bay and the Pacific Ocean. The Mission Bay WMA WQIP identifies goals and strategies to address impairments in the quality of urban runoff waters within the WMA. The WQIP is a long-term program that first determines the priority water quality conditions posing the highest threat to water quality in the effected water bodies of the WMA and identifies the sources of pollution of the highest priority water quality conditions. The program formulates goals, strategies, and schedules to address these conditions, with ongoing monitoring to evaluate overall progress made in the WMA. The WQIP is updated as needed to adjust goals and strategies. The highest priority water quality conditions in the Mission Bay WMA include Tecolote Creek and the Pacific Ocean shoreline. These conditions are due to the potential stressors of heavy bacteria. No highest priority water quality conditions have been identified for the Rose Canyon or Mission Bay subwatersheds. The WQIP is designed to concentrate efforts on the highest priority water

quality conditions, while simultaneously developing programs to address the other priority water quality conditions.

#### 3.5.1.4 Tsunami and Seiches

Tsunamis are seismically induced waves generated by sudden movements of the ocean bottom during earthquakes, landslides, or volcanic activity. Waves are often generated in the ocean at a point near the earthquake source by the sudden movement of the sea floor. When a tsunami finally reaches a distant coastline, it may appear as a rapidly rising or falling tide, a series of breaking waves, or a bore (a step-like wave with a steep breaking front). Reefs, bays, entrances to rivers, undersea features, and the slope of the beach all help to modify the tsunami as it approaches the shore. Tsunamis rarely become great, towering breaking waves and sometimes the tsunami may break far offshore or may not be visible at all.

The Pacific Ocean is located approximately 1 mile west of the Project site. The Project is located outside the tsunami inundation area depicted on the City's Inundation Map (City 2017). In addition, Lake Miramar, the nearest large inland waterbody, is located approximately 7 miles east of the Project site and is outside of the range of influence of a seiche.

# 3.5.2 Regulatory Framework

The proposed Project is subject to hydrology and water quality regulatory requirements associated with federal, state, and regional guidelines, as summarized below.

#### 3.5.2.1 Federal

## Clean Water Act/National Pollutant Discharge Elimination System

The Project is subject to applicable elements of the CWA, including the NPDES. Specific NPDES requirements associated with the Project include conformance with the following: (1) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit, NPDES No. CAS000002, SWRCB Order 2009-0009-DWQ; as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ); (2) General Groundwater Extraction Discharges to Surface Waters Permit (Groundwater Permit; NPDES No. CAG919003, Order No. R92015-0013); and (3) Waste Discharge Requirements for MS4 Permit (Municipal Permit, NPDES No. CAS 0109266, Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100). In California, USEPA has delegated authority for implementing NPDES requirements to the SWRCB, with these permits therefore described below under state standards.

## 3.5.2.2 State

## Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act), also known as the California Water Code, is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the state must adopt water quality policies, plans, and objectives that protect the state's waters beneficial uses. State law defines beneficial uses as "domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves" (Water Code Section 13050[f]). The Porter-Cologne Act sets forth the obligations of the SWRCB and RWQCBs pertaining to the adoption

of water quality control plans and establishment of water quality objectives. Unlike the federal CWA, which regulates only surface water, the Porter-Cologne Act regulates both surface water and groundwater. The SWRCB and RWQCBs establish water quality objectives for surface waters and groundwater and have permitting and enforcement authority to prevent and control waste discharges that could affect waters of the state through the issuance of NPDES permits and waste discharge requirements (WDRs). The San Diego RWQCB also develops TMDLs for the San Diego region. Load reduction efforts for sediment, bacteria, and other constituents within the planning area are ongoing and implemented through water quality improvement plans, municipal NPDES storm water permits and individual NPDES permits (e.g., NPDES permit for water treatment plant discharges).

## **UC San Diego Storm Water Regulatory Program**

UC San Diego manages storm water in accordance with the following NPDES permits: (1) the Phase II Small MS4 General Permit (Non-traditional); (2) the General Permit for Industrial Storm Water Discharges (IGP); (3) the Wastewater Discharge Permit for seawater and storm water discharges at Scripps Institution of Oceanography; and (4) the General Permit for Storm Water Discharges Associated with Construction Activity. All of these permits are applicable to the Project and the Project site, and have been developed and adopted by the SWRCB and are regulated by the SDRWQCB. A description of each permit is further described below.

## Phase II Small MS4 General Permit (Non-Traditional) (2013-0001-DWQ)

In 2013, the SDRWQCB adopted a revised NPDES Phase II Small MS4 General Permit that regulates MS4 discharges, which typically discharge water (and any potential pollutants) directly into streams, bays, and/or an ocean. The Phase II Small MS4 General Permit requires the development, implementation, and enforcement of a storm water management program designed to reduce the discharge of pollutants "to the maximum extent possible."

UC San Diego has prepared a comprehensive SWMP to comply with the General Small MS4 Storm Water Permit issued by the SWRCB under the Phase II NPDES requirements. The SWMP includes public education/outreach and participation; illicit discharge detection and elimination; pollution prevention for daily campus operations; construction site storm water runoff control; and post-construction storm water management in new development and redevelopment.

It also identifies pollutant sources potentially affecting the quality and quantity of storm water discharges, provides BMPs for campus operational and construction activities implemented by UC San Diego staff and contractors, and provides measurable goals for the implementation of the SWMP to reduce the discharge of the identified pollutants into the storm drain system and associated waterways. BMPs include treatment controls; operating procedures; training and education; and practices to control site runoff, spill, leaks, and waste disposal. BMPs are required to be updated accordingly to comply with any additions and/or modifications to the NPDES permit requirement or site conditions.

Projects that create or replace more than 2,500 SF of impervious surface are also subject to Low Impact Development (LID) measures, including runoff reduction, and postconstruction storm water management requirements. Runoff reduction must be quantified through the state's water balance calculator and a Post-Construction Storm Water Management Checklist must also be completed. Projects that create or replace more than 5,000 SF of impervious surface are considered to be a

regulated project under UC San Diego's Storm Water Program and subject to additional requirements, including the preparation of a hydrology/drainage study and a project-specific SWQMP.

UC San Diego's SWMP, source control BMPs, and an inventory of the treatment controls that have been installed throughout the campus to prevent storm water pollution are included on UC San Diego's Storm Water Management Plan web page: <a href="http://stormwater.ucsd.edu">http://stormwater.ucsd.edu</a>.

A Program Effectiveness Assessment and Improvement Plan to meet the requirements of the Phase II MS4 Permit has also been prepared by UC San Diego (UC San Diego 2019a). The plan describes an approach for planning, monitoring, and assessing the effectiveness of UC San Diego's Storm Water Management Program. Based on the outcomes of the effectiveness assessment, modifications to program elements, BMPs, and policies are made as needed to better meet water quality objectives and permit obligations.

In 2017, statewide trash provisions were incorporated into the Phase II Small MS4 General Permit (Order No. 2013-0001-DWQ). As a result, UC San Diego will install, operate, and maintain Full Capture Systems for storm drains that capture runoff from the Priority Land Use area (e.g., commercial areas, high density residential areas, and public transportation areas). Full capture means installation of a 5 millimeter (mm) screen, certified by the state, to capture trash that enters the storm drain system.

#### **General Construction Storm Water Permit**

Construction activities exceeding one acre (or meeting other applicable criteria) are subject to pertinent requirements under the Construction General Permit. This permit was issued by the SWRCB, pursuant to authority delegated by the USEPA, as previously noted. Specific conformance requirements include implementing a SWPPP, an associated Construction Site Monitoring Program (CSMP), employee training, and minimum BMPs, as well as a Rain Event Action Plan (REAP) for applicable projects (e.g., those in Risk Categories 2 or 3). Under the Construction General Permit, project sites are designated as Risk Level 1 through 3 based on site-specific criteria (e.g., sediment erosion and receiving water risk), with Risk Level 3 sites requiring the most stringent controls. Based on the site-specific risk level designation, the SWPPP and related plans/efforts identify detailed measures to prevent and control the off-site discharge of pollutants in storm water runoff. Depending on the risk level, these may include efforts such as minimizing/stabilizing disturbed areas, mandatory use of technology-based action levels, effluent and receiving water monitoring/reporting, and advanced treatment systems (ATS). Specific pollution control measures require the use of best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT) levels of treatment, with these requirements implemented through applicable BMPs. While site-specific measures vary with conditions such as risk level, proposed grading, and slope/soil characteristics, detailed guidance for construction-related BMPs is provided in the permit and related City standards (as outlined below), as well as additional sources including the EPA National Menu of Best Management Practices for Storm Water Phase II – Construction (USEPA 2016), and Storm Water Best Management Practices Handbooks (California Stormwater Quality Association [CASQA] 2009). Specific requirements for the Project under this permit would be determined during SWPPP development, after completion of Project plans and application submittal to the SWRCB.

#### **Groundwater Permit**

Project-related construction activities that discharge extracted groundwater into receiving waters are required to obtain coverage under the Groundwater Permit. Conformance with this permit is generally applicable to all temporary and certain permanent groundwater discharge activities, with exceptions as noted in the permit fact sheet. Specific requirements for permit conformance include: (1) submittal of appropriate application materials and fees; (2) implementation of pertinent (depending on site-specific conditions) monitoring/testing, disposal alternative, and treatment programs; (3) provision of applicable notification to the associated local agency prior to discharging to a municipal storm drain system; (4) conformance with appropriate effluent standards (as outlined in the permit); and (5) submittal of applicable documentation (e.g., monitoring reports).

## **Municipal Permit**

The Municipal Permit implements a regional strategy for water quality and related concerns and mandates a watershed-based approach that often encompasses multiple jurisdictions. The overall permit goals include: (1) providing a consistent set of requirements for all co-permittees; and (2) allowing the co-permittees to focus their efforts and resources on achieving identified goals and improving water quality, rather than just completing individual actions (which may not adequately reflect identified goals). Under this approach, the co-permittees are tasked with prioritizing their individual water quality concerns, as well as providing implementation strategies and schedules to address those priorities. Municipal Permit conformance entails considerations such as receiving water limitations (e.g., Basin Plan criteria as outlined below), waste load allocations (WLAs), and numeric water quality-based effluent limitations (WQBELs). Specific efforts to provide permit conformance and reduce runoff and pollutant discharges to the maximum extent practicable (MEP) involve methods such as: (1) using jurisdictional planning efforts (e.g., discretionary general plan approvals) to provide water quality protection; (2) requiring coordination between individual jurisdictions to provide watershedbased water quality protection; (3) implementing appropriate BMPs, including LID measures, to avoid, minimize, and/or mitigate effects such as increased erosion and off-site sediment transport (sedimentation), hydromodification and the discharge of pollutants in urban runoff; and (4) using appropriate monitoring/assessment, reporting, and enforcement efforts to ensure proper implementation, documentation, and (as appropriate) modification of permit requirements.

## **UC San Diego Design Guidelines**

The UC San Diego Design Guidelines, dated October 5, 2018, provide design criteria for University projects for planning, design, and construction. Design requirements include avoiding disturbing areas of high erosion, and installing slope protection, energy dissipaters, and channel stabilizers as needed to minimize erosion and impacts to receiving waters.

Division II of the guidelines also requires storm water BMPs to be implemented in accordance with UC San Diego's NDPES Phase II Small MS4 General Permit (2013-0001-DWQ) and/or Storm Water Management Program. Guidelines also require that construction projects that disturb less than one acre during construction and that are not subject to Construction General Permit requirements, are required to prepare a Water Pollution Control Plan (WPCP) that depicts BMPs to be implemented during

UC San Diego 3.5-10 February 2021

<sup>&</sup>lt;sup>1</sup> Hydromodification is generally defined in the Municipal Permit as the change in natural watershed hydrologic processes and runoff characteristics (interception, infiltration, and overland/groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and sediment transport.

construction to reduce/eliminate discharges of pollutants to the storm drain conveyance system. Projects that create or replace more than 2,500 SF of impervious surface are also subject to LID measures, including runoff reduction, and post-construction storm water management requirements. Projects increasing impervious surfaces by 10,000 SF or more are also required to maintain the peak runoff at the pre-project rate for the 10-year, six-hour storm event post-construction.

Compliance with Design Guidelines is determined through review and approval from UC San Diego Civil Engineers as well as Environment Health & Safety (EH&S) staff during the planning phase, design development phase, and construction document phase. Post-construction design reporting must also be completed.

## **UC San Diego Sustainable Practices Policy**

UC San Diego's Sustainable Practices Policy was originally issued in 2004 and most recently updated in July 2020. It establishes goals in nine areas of sustainable practices: green building, clean energy, transportation, climate protection, sustainable operations, waste reduction and recycling, environmentally preferable purchasing, sustainable foodservice, and sustainable water systems. Policy procedures require that UC San Diego's Water Action Plan include a section on Storm Water Management that:

- Addresses storm water management from a watershed perspective in a location-wide, comprehensive way that recognizes storm water as a resource and aims to protect and restore the integrity of the local watershed(s);
- References the location's best management practices for preventing storm water pollution from activities that have the potential to pollute the watershed (e.g., construction; trenching; storage of outdoor equipment, materials, and waste; landscaping maintenance; outdoor cleaning practices; vehicle parking);
- Encourages storm water quality elements such as appropriate source control, site design (LID), and storm water treatment measures to be considered during the planning stages of projects in order to most efficiently incorporate measures to protect storm water quality;
- d. Cites relevant and current location storm water-related plans and permits in an appendix or reference list accompanying the Water Action Plan (if feasible); and
- e. Includes, to the extent feasible, full cost evaluation of storm water management initiatives that offset potable water use.

## 3.5.2.3 Local

## San Diego Basin Plan

The Basin Plan sets forth water quality objectives for constituents that could potentially cause an adverse effect or impact on the beneficial uses of water (SDRWQCB 2016). The beneficial uses of the receiving waters relevant to the proposed Project are listed in Table 3.5-1. Specifically, the Basin Plan is designed to accomplish the following:

- Designate beneficial uses for surface and ground waters;
- Set the narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy;
- Describe implementation programs to protect the beneficial uses of all waters within the region;
   and
- Describe surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan.
   The Basin Plan incorporates by reference all applicable SWRCB and RWQCB plans and policies.

The Basin Plan also identifies specific narrative and numeric water quality objectives for a number of physical properties (e.g., temperature, turbidity, and suspended solids); biological constituents (e.g., coliform bacteria); and chemical COCs, including inorganic parameters, trace metals, and organic compounds. Water quality objectives for toxic priority pollutants (i.e., select trace metals and synthetic organic compounds) also are identified in the Basin Plan.

## Water Quality Improvement Plan for the Mission Bay Watershed Management Area

The WQIP for the Mission Bay Watershed is a comprehensive watershed-based program designed to improve surface water quality in the Mission Bay WMA, in receiving waters and nearby beaches. It is required by Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001, NPDES Permit and WDRs for Discharges from the MS4s Draining the Watersheds within the San Diego region). The WQIP outlines a framework to improve the surface water quality in the Mission Bay WMA by identifying, prioritizing, and addressing impairments related to urban runoff discharges to protect, preserve, enhance, and restore water quality for beneficial recreational, wildlife, and other uses. On February 12, 2016, the SDRWQCB accepted an updated WQIP as meeting the requirements of the Order.

## La Jolla Shores Coastal Watershed Management Program

The La Jolla Shores marine environment contains areas designated by the SWRCB as Areas of Special Biological Significance (ASBS), including the San Diego-Scripps ASBS and the La Jolla ASBS (SWRCB 2017). The La Jolla ASBS contains 453 acres of marine habitat, including a marine protected area, the La Jolla State Marine Conservation Area (formerly called the San Diego-La Jolla Ecological Reserve). The San Diego-Scripps ASBS, has approximately 0.6 miles of shoreline in the City of San Diego and includes the San Diego-Scripps State Marine Conservation Area. These areas are considered to be among the most valuable coastal waters in the state. This coastal environment supports an abundant variety of plants and animals and attracts researchers, local beachgoers, surfers, divers, and tourists from around the world.

To protect the ASBS, UC San Diego partnered with the City of San Diego, San Diego Coastkeeper, and the SWRCB to develop and implement the La Jolla Shores Coastal Watershed Management program to reduce or prevent pollutants associated with urban runoff from going into the ocean (UC San Diego 2019b). As part of this program, UC San Diego installed and maintains innovative storm water treatment controls at Scripps Institution of Oceanography and throughout the main campus to prevent dry weather flow discharges (e.g., irrigation runoff and wash water) from reaching the ocean and remove pollutants from storm water runoff.

The existing drainage system at the Project site discharges to Rose Creek, which then drains to Mission Bay and finally the Pacific Ocean; it does not discharge to an ASBS.

# 3.5.3 Environmental Impacts and Mitigation

The following sections address potential impacts relating to hydrology and water quality that could result from implementation of the proposed Project.

## 3.5.3.1 Issue 1: Water Quality

## **Hydrology and Water Quality Issue 1 Summary**

Would implementation of the proposed Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

**Impact:** The proposed Project would not violate

water quality requirements or degrade water

quality.

Significance Before Mitigation: Less than

significant.

**Mitigation:** No mitigation is required.

Significance After Mitigation: Not applicable.

# Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the proposed Project may have a significant impact if it would violate any water quality standards or WDRs, or otherwise substantially degrade surface or groundwater quality. WDRs are developed as part of permits issued by the SWRCB or RWQCB.

#### Impact Analysis

The proposed Project has the potential to result in both short- and long-term water quality impacts. As outlined below, short-term impacts would be related to construction activities associated with erosion/sedimentation and the on-site use and storage of construction-related hazardous materials such as fuels, lubricants, and solvents; while long-term site operation and maintenance impacts would be associated with the generation and off-site discharge of contaminants from urban sources (e.g., the developed site). The Project, however, would comply with applicable permits and plans regarding water quality effects, as described below.

#### **Short-term Construction**

During Project construction, the potential for short-term impacts on surface water quality exists through activities such as site preparation and building demolition, clearing and grading, subsurface excavation for the below-grade parking garage, stockpiling of soils and materials, concrete construction, interior installations, painting, and asphalt paving and surfacing. Pollutants associated with stockpiled soils, construction equipment, and construction materials that could result in water quality impacts include soils, debris, other materials generated during demolition and clearing, fuels and other fluids associated with the construction equipment, paints, other hazardous materials, concrete slurries, and asphalt

materials. These pollutants could impact water quality if they are washed offsite by storm water or non-storm water. Pollutants are likely to drain into the Rose Canyon Creek receiving water identified for the Project site, which is impaired by toxicity, benthic community effects, and selenium. Under these impairments, the receiving water cannot assimilate or accommodate additional loading of pollutants and any increases would contribute to the impairment. As a result, potentially significant short-term impacts to water quality from uncontrolled sediment and pollutants from the Project construction site could occur.

All dischargers with project sites greater than one acre in size are required to obtain coverage under the NPDES General Construction Storm Water Permit Order 2009-0009-DWQ adopted on September 2, 2009, modified on February 16, 2017, and extended effective June 27, 2019 until February 16, 2022. The General Construction Storm Water Permit requires the development and implementation of a SWPPP. The SWPPP must list BMPs that would be used to control storm water runoff and identify the locations of those BMPs. The Post-Construction BMPs must also be included in the SWPPP as an attachment that is uploaded into the SWRCB's Stormwater Multiple Application Tracking System (SMARTS), an online tool to assist dischargers in submitting their notices, annual reports and to address/document long-term water quality treatment controls for the Project.

The proposed Project, which would disturb 1.2 acres, would comply with the requirements of the General Construction Storm Water Permit. While specific BMPs would be determined during the NPDES permit process based on site-specific characteristics, the following typical measures also may be applicable to the proposed Project:

#### Erosion and Sedimentation

Proposed construction-related activities could potentially result in erosion and off-site sediment transport (sedimentation). Construction-related erosion could result in the influx of sediment into downstream receiving waters, with associated water quality effects such as turbidity and transport of other contaminants that tend to adhere onto sediment particles (such as hydrocarbons).

While areas exposed during construction activities would be stabilized through efforts such as installation of hardscape (paving, structures, etc.) and landscaping, erosion potential would be higher in the short-term than for existing conditions. Developed areas would be especially susceptible to erosion between the beginning of construction and the installation of hardscape or establishment of permanent cover in landscaped areas. Erosion and sedimentation are not considered to be significant long-term concerns once the Project is developed. The Project would also incorporate long-term water quality controls pursuant to NPDES guidelines, including (among other efforts) measures that would avoid or reduce off-site sediment transport. Specifically, this would include efforts such as the use of irrigation controls, vegetation installation, bioretention facilities, and retention and/or detention structures. Additional discussion of long-term water quality measures is provided below under Long-term (Postconstruction) Operation and Maintenance. The short-term water quality effects from constructionrelated erosion and sedimentation described above could potentially impact downstream waters and associated wildlife habitats. Short-term erosion and sedimentation impacts would be addressed through Project-specific mitigation outlined below, in addition to required conformance with the NPDES Construction General Permit, including SWPPP preparation and implementation (as well as applicable construction activity requirements under the current Phase II Small MS4 Permit).

A SWPPP containing appropriate construction site erosion and sedimentation control BMPs would be prepared and implemented at the beginning of Project construction. The current permit conformance requirements are outlined above under Regulatory Framework and would include a complete program of specific construction-related BMPs to minimize erosion and prevent sedimentation generated during construction. While specific BMPs would be determined during the NPDES permit process based on site specific characteristics (soils, etc.), typical measures to address potential construction-related erosion and sedimentation impacts could include use of the following:

- Silt Fences
- Gravel bags
- Fiber rolls
- Check dams
- Stabilized construction entrance(s) and exit(s)
- Dust control and good housekeeping practices

Several additional measures from the Construction General Permit may also be applicable to the proposed Project, as outlined below:

- Storage of BMP materials in applicable on-site areas to provide "standby" capacity adequate to provide complete protection of exposed areas and prevent off-site sediment transport.
- Training of applicable personnel to ensure proper BMP installation and maintenance.
- Proper containment and disposal of all construction debris.
- Installation of permanent landscaping, with emphasis on native and/or drought-tolerant varieties, as soon as feasible during or after construction.
- Implementation of sampling/analysis, reporting and post-construction management/ maintenance programs per NPDES requirements.
- Implementation of additional BMPs as necessary (and required by appropriate regulatory agencies) to ensure adequate erosion and sediment control.

Continual inspection and maintenance of all specified BMPs would be conducted through the duration of construction, and erosion control plans with specific notes and locations of construction BMPs would be included on the final construction documents. Based on implementation of appropriate erosion and sediment control BMPs as part of (and in conformance with) NPDES permit criteria and associated Project SWPPP, in addition to implementation of project-specific water quality mitigation outlined below, the Project would result in less than significant impacts associated with construction-related erosion and sedimentation.

#### Construction-related Hazardous Materials

Project construction would involve the on-site use and/or storage of hazardous materials such as fuels, lubricants, solvents, concrete, paint, and portable septic system wastes. In addition, Project grading and construction could potentially involve disturbance of soils contaminated with hydrocarbons (i.e., diesel fuel), or metals. The accidental discharge of such materials during Project construction could potentially result in significant impacts if these pollutants reach downstream receiving waters, particularly materials

such as petroleum compounds that in low concentrations are potentially toxic to aquatic species. Potential impacts from construction-related hazardous materials impacts would be addressed through required conformance with the NPDES Construction General Storm Water Permit (as well as applicable construction activity requirements under the Phase II Small MS4 Permit). These requirements would include implementing a SWPPP and related efforts that identify detailed measures to avoid or mitigate potential impacts related to the use and possible discharge of construction-related hazardous materials. While specific BMPs would be determined during the NPDES permit process, proper storage, use, and disposal of construction materials would partially address potential construction-related hazardous materials impacts.

Additional measures from the Construction General Permit would also be applicable to the proposed Project, as outlined below:

- Restrict paving operations during wet weather and employ sediment control devices downstream of paving activities.
- Properly contain and dispose of paving wastes and slurry from sources including concrete, drywall, and paint, by using properly designed and contained washout areas.
- Minimize the amount of hazardous materials stored on-site and restrict storage/use locations to areas at least 50 feet from storm drains and surface waters.
- Use raised (e.g., on pallets), covered, and/or enclosed storage facilities for all hazardous materials.
- Properly maintain all construction equipment and vehicles.
- Maintain accurate and up-to-date written inventories and labels for all stored hazardous materials.
- Use berms, ditches, and/or impervious liners (or other applicable methods) in material storage and vehicle/equipment maintenance and fueling areas to provide a containment volume of 1.5 times the volume of stored/used materials and prevent discharge in the event of a spill.
- Place warning signs in areas of hazardous material use or storage and along drainages and storm drains (or other appropriate locations) to avoid inadvertent hazardous material disposal.
- Provide training for applicable employees in the proper use, handling, and disposal of hazardous materials, as well as appropriate action to take in the event of a spill.
- Store absorbent and clean-up materials in readily accessible on-site locations.
- Properly locate and maintain construction-related trash and wastewater facilities.
- Use recycled or less hazardous materials whenever feasible.
- Post regulatory agency telephone numbers and a summary guide of clean-up procedures in a conspicuous location at or near the job site trailer.

 Regularly (at least weekly) monitor and maintain hazardous material use/storage facilities and operations to ensure proper working order.

Contaminated soils encountered during construction would be handled in accordance with state and federal regulatory requirements, taking into consideration potential impacts to downstream water quality.

The depth of groundwater on the site averages about 34 feet below the existing ground surface and the deepest depth of excavation is planned to be 29 feet below the existing ground surface, providing a typically recommended separation of 5 feet below the highest groundwater level and deepest depth of excavation. Groundwater levels measured in recent test borings and reported from a nearby monitoring well ranged between 235 and 242 feet AMSL (Group Delta 2020), or about 29 to 36 feet below ground surface (assuming an average ground surface elevation of 271 feet AMSL). The bottom of excavation around the perimeter of the Project site is at an elevation of 246 feet AMSL, with the exception of the middle area, where the bottom of excavation is at an elevation of 242 feet AMSL elevation due to the elevator core in this area. Therefore, the Project is not likely to encounter groundwater during construction. However, as described in Section 2.4.2.5 of the Project Description, in the unlikely event that dewatering becomes necessary, all dewatering activities would be conducted in compliance with a detailed dewatering plan and all applicable regulations. The detailed dewatering plan would be prepared by a California registered Civil Engineer with support as needed from a Geotechnical Engineer and/or Hydrogeologist prior to the commencement of excavation activities. The dewatering plan would include a detailed plan, schedule, and description for dewatering of excavations, piezometers, estimated dewatering rates, volume, and equipment requirements.

Based on implementation of appropriate BMPs as part of (and in conformance with) NPDES permit criteria, the associated Project SWPPP and related measures, and UC San Diego policies and procedures, the proposed Project would be consistent with applicable water quality requirements and potential short-term water quality impacts associated with construction-related hazardous materials would be less than significant.

#### Long-term (Post-construction) Operation and Maintenance

As noted above, potential long-term site operation and maintenance impacts would be associated with the discharge of contaminants from urban sources. The existing storm drain infrastructure that the Project would connect to discharges runoff to Rose Creek, which then drains to Mission Bay and finally the Pacific Ocean. The nearest ASBS is the San Diego-Scripps ASBS, to which the Project would not discharge runoff.

Anticipated and potential pollutants associated with Project operations and maintenance include nutrients, oxygen-demanding substances, heavy metals, sediment discharge, organic compounds, trash and debris, oil and grease, bacteria and viruses, and pesticides. Such potential long-term impacts would be addressed for the proposed Project pursuant to the City's Storm Water Standards Manual, and the Project SWQMP, as described below.

The City of San Diego's Storm Water Standards Manual, updated in 2018, as well as the Project-specific SWQMP would apply to Project operations. The City of San Diego's Storm Water Standards Manual includes measures from the BMP Design Manual to meet the requirements of the MS4 Permit. Project conformance with the City of San Diego's Storm Water Standards Manual and Project-specific SWQMP

could entail implementing additional LID, source control and treatment control BMPs; typical measures that may be applicable to the proposed Project are outlined below.

#### Low Impact Development BMPs

The LID process is intended to mimic predevelopment hydrologic conditions to the MEP by using design practices and techniques to effectively capture, filter, store, evaporate, detain, and infiltrate runoff close to its source. BMPs would be expected to include the measures described above. LID BMPs include the following: retaining existing soils when feasible; using green roofs and/or permeable surfaces in applicable areas; minimizing directly connected impervious surfaces wherever feasible; using native or drought-tolerant plant varieties in applicable locations to reduce irrigation requirements; routing flows through natural vegetation/landscaping or vegetated drainage features; and use of detention basins to regulate flows to pre-Project levels would help reduce long-term urban contaminant generation by minimizing runoff volumes and velocities, reducing irrigation requirements, and increasing on-site filtering and infiltration. The proposed BioClean modular wetland system near the southern Project boundary and the belowground stormtrap storage vault within the lower level of the garage would also provide treatment control, with additional information included below under the discussion of treatment control BMPs.

#### Source Control BMPs

Source control BMPs are intended to avoid or minimize the introduction of contaminants and urban pollutants into storm drains and natural drainages by reducing on-site contaminant generation and offsite contaminant transport to the MEP. Source control BMPs applicable to the proposed Project are identified in the Project-specific SWQMP; typical measures in addition to those previously listed are outlined below:

- All new storm drain inlets and catch basins within the Project site must be marked with prohibitive language and/or graphical icons to discourage illegal dumping per UC San Diego standards.
- Outdoor areas for storage of materials that may contribute pollutants to the storm water conveyance system must be covered and protected by secondary containment.
- All trash container areas must be enclosed to prevent off-site transport of trash and drainage shall be directed to the sanitary sewer system or the containers shall be covered to prevent exposure of trash to precipitation. UC San Diego must be actively engaged in regular trash pick-up and sweeping of the property.
- Native and drought tolerant plants must be used for decorative landscape applications to reduce water usage and fertilizer needs.
- Provide self-containment (e.g., drainage collection sumps), pre-treatment (e.g., clarifiers), and/or sanitary sewer connections for loading docks.
- Implement a landscape maintenance plan that includes regular sweeping of impervious surfaces (i.e., sidewalks, driveways, and gutters), litter pick-up, and the provision of convenient trash receptacles for public use.

- Interior drains, fire sprinkler systems, wash water, boiler drain lines, condensate drain lines, rooftop equipment, and drainage sumps must be connected to the sanitary sewer system or collected for reuse (may not be connected to the storm water conveyance system).
- Discourage the washing of equipment on site; minimize/restrict the use of water, soaps, and chemicals; and use a commercial wash-rack facility whenever feasible.
- Properly maintain landscape equipment by fixing all leaks promptly (preferably off site or in designated equipment maintenance areas away from storm water inlets, using drip pans/drip cloths when draining and replacing fluids), and dispose of fluids properly.
- Facilities maintenance staff must be trained in appropriate pest management and fertilizer use on an annual basis. BMPs such as pest control information packets must be distributed to future residents and facilities staff at new occupancy, new hire, or on an as-needed basis.
- Manage the handling, delivery, application, and disposal of materials with the potential to
  pollute runoff (i.e., soils, pesticides, herbicides, fertilizers, detergents, petroleum products, etc.)
  according to manufacturer's labeled directions and in accordance with all federal, state, and
  local regulations.

The above-described source control BMPs would improve long-term water quality within and downstream from the Project site by avoiding or minimizing contaminant generation and exposure to storm flows at the source.

#### Treatment Control BMPs

Treatment control (or structural) BMPs are designed to remove pollutants from urban runoff to the MEP, through means such as storage, filtration, or infiltration. Conformance with the Phase II Small MS4 Permit requires the use of appropriate, permanent post-construction treatment control BMPs. As indicated above, the use of identified LID measures and source control BMPs is intended to reduce treatment requirements, both by reducing runoff volumes and velocities, and preventing pollutants from entering storm water runoff. Implementation of treatment control BMPs would incorporate either volume- or flow-based treatment control design standards to treat runoff prior to entering the storm drain system. The following typical treatment control measures would be included in the Project design:

- Using roof drains to direct flows from structures into landscaped areas or vegetated bioretention swales, which provide filtering;
- Using permeable materials (e.g., pavers) in appropriate locations to induce infiltration and reduce runoff; and
- Designing retention/detention basin(s) and bioretention swales to provide water quality treatment.

To meet current drainage and water quality regulations, bioretention facilities must meet appropriate standards for both LID and hydromodification control. The facilities must provide "high" removal efficiencies for sediment, trash, metals, bacteria, oil and grease, and organic materials; "medium" level is sufficient for removal efficiency of nutrients. The above-described treatment control BMPs would help improve long-term water quality within and downstream of the Project site by treating/removing

contaminants from urban runoff prior to offsite discharge. As previously noted, treatment control BMPs would incorporate appropriate volume- or flow-based criteria, pursuant to applicable NPDES Phase II Small MS4 Permit standards.

As a result of implementation of appropriate LID, source control, and treatment control BMPs as part of (and in conformance with) NPDES Phase II Small MS4 Permit requirements, the Project would not result in significant impacts regarding the violation of water quality standards, impacts would remain less than significant, and no mitigation is required.

## **Mitigation Measures**

Impacts related to the violation of water quality standards would be less than significant, and no mitigation is required.

#### 3.5.3.2 Issue 2: Groundwater

#### Hydrology and Water Quality Issue 2 Summary

Would implementation of the proposed Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

Mitigation: No mitigation is required.

**Impact:** The proposed Project would not result

in substantial decreases in groundwater supplies or interfere substantially with

groundwater recharge.

**Significance Before Mitigation:** No impact. **Significance After Mitigation:** Not applicable.

## Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the proposed Project may have a significant impact if it would substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.

# **Impact Analysis**

No removal of groundwater is proposed, as the Project would use potable and recycled water supplied by the City of San Diego Public Utilities Department. The City receives deliveries of imported water from the San Diego County Water Authority (SDCWA) to satisfy potable water demand. Under the proposed Project, implementation of LID measures that promote, rather than interfere with, the infiltration of groundwater would be required. Consequently, no impacts to groundwater supplies would occur. In addition, the Project would result in a reduction of impervious surfaces, which would potentially increase groundwater recharge. Impacts would not occur, and no mitigation is required.

## **Mitigation Measures**

Impacts related to groundwater would not occur, and no mitigation is required.

## 3.5.3.3 Issue 3: Site Drainage and Hydrology

# **Hydrology and Water Quality Issue 3 Summary**

Would implementation of the proposed Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:

- (i) Result in substantial erosion or siltation on- or off-site;
- (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- (iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or
- (iv) Impede or redirect flows?

**Impact:** The proposed Project would not result in an increase in impervious surfaces and would not exceed the capacity of the storm water drainage systems or cause substantial erosion.

**Mitigation:** No mitigation is required.

Significance Before Mitigation: Less than

**Significance After Mitigation:** Not applicable.

significant.

# Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the proposed Project may have a significant impact to drainage or hydrology if it would:

- Substantially alter the existing drainage pattern of the site or area, including through the
  alteration of the course of a stream or river or through the addition of impervious surfaces, or
  substantially increase the rate or amount of surface runoff in a manner that would result in
  flooding on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the
  alteration of the course of a stream or river or through the addition of impervious surfaces, in a
  manner that would result in substantial erosion or siltation on- or off-site:
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.

UC San Diego 3.5-21 February 2021

## **Impact Analysis**

The change in the natural watershed hydrologic processes and runoff characteristics (i.e., interception, infiltration, overland flow, interflow, and groundwater flow) caused by land disturbance activities such as vegetation removal or grading, and other land use changes such as drainage modifications and changes in impervious surfaces is called "hydromodification." Hydromodification intensifies the erosion process and the transport of sediments and may result in increased storm water runoff flow and volumes, and discharges to receiving waters.

## **Construction Impacts**

Land-disturbing construction activities associated with implementation of the proposed Project, such as building, pavement, and landscaping removal, as well as preparation for the subterranean parking garage, could result in localized alteration of drainage patterns and temporarily increase erosion and sedimentation in the construction area.

Temporary ponding and/or flooding could also result from construction activities from temporary alterations of the drainage system (reducing its capacity of carrying runoff), including the proposed changes to the subterranean parking garage. Alterations may temporarily result in increased erosion and siltation if flows were substantially increased or routed to facilities or channels without capacity to carry the additional flow.

All construction activities implemented under the proposed Project would be required to comply with UC San Diego Design Guidelines, UC Sustainable Practices Policy, and additional Storm Water Management Requirements for Construction Projects, which have been developed in part to reduce the potential adverse effects associated with construction activities.

The proposed Project would disturb approximately 1.2 acres and would be subject to NPDES Construction General Permit requirements, including the preparation of a SWPPP and implementation of BMPs to reduce the likelihood of alterations in drainage and adverse effects associated with hydromodification. A SWPPP would be prepared for the Project and would include BMPs to achieve the following:

- **Minimizing Disturbed Areas.** Clearing of land is limited to that which would be actively under construction in the near term, new land disturbance during the rainy season is minimized, and disturbance to sensitive areas or areas that would not be affected by construction is minimized.
- Stabilizing Disturbed Areas. Temporary stabilization of disturbed soils is provided whenever
  active construction is not occurring on a portion of the site, and permanent stabilization is
  provided by finish grading and permanent landscaping.
- **Controlling the Site Perimeter.** Upstream runoff is diverted around or safely conveyed through the Project site and is kept free of excessive sediment and other constituents.
- Controlling Internal Erosion. Sediment-laden waters from disturbed, active areas within the site
  are detained.

With the continued implementation of the applicable UC San Diego Design Guidelines, policies, and regulatory requirements discussed under Issue 1, above, which include the implementation of erosion

and sediment control BMPs, potential short-term impacts resulting from alterations of drainage and hydrology during construction would be less than significant, and no mitigation is required.

#### **Operational Impacts**

As described in Chapter 2 of this EIR, the Project would involve the demolition of an existing building and the development of a seven-story above-grade building that would include five levels of UC San Diego Health Sciences and UC San Diego Extension uses and two levels of parking, as well as two subterranean parking levels (four parking levels total), a small 1,420-GSF retail (such as a café), and outdoor space over 18 months. The proposed Project would primarily involve redevelopment of the existing Project site and would potentially affect the rate of surface runoff, absorption or infiltration rate, and drainage patterns. The rate of surface flow is how quickly water that is not absorbed travels within a drainage system to receiving waters. An absorption rate is the time required for pervious ground to absorb rainwater. Drainage patterns are the footprint of travel of unabsorbed rainwater from high elevations to lower elevations. Additional development can increase surface runoff rates by creating more impervious surfaces such as pavement and buildings where none were before. Impervious surfaces do not allow percolation of water into the soil. Water is instead forced directly into storm drain systems or streams, where increases in erosion and siltation could result, as well as increased flood risks. These alterations could also result in exceeding the existing capacity of storm water facilities if substantial drainage is rerouted or storm water flow or velocities are substantially increased.

The Project site is treated as six distinct drainage basins. Proposed improvements would generally maintain existing drainage patterns as the site is developed and paved. Impervious surfaces would be reduced from 49,720 SF to 49,675 SF (Latitude 33 2020 and 2021b). Drainage at the Project site would be managed by connecting proposed drainage infrastructure to existing stormwater systems at and adjacent to the Project site to accommodate runoff during Project operations. Specifically, the Project design includes roof drains on the proposed buildings, a BioClean modular wetland system, and a storm drain curb inlet, all of which would connect to an existing storm drain line at the southern Project boundary. In the northern part of the Project site, a belowground stormtrap storage vault is proposed to connect to an existing storm drain line.

Redevelopment of the Project site would alter drainage flows; however, overall site drainage patterns and directions would be similar to existing conditions. Post-Project runoff from the site would continue to be routed to existing storm drain facilities adjacent to the Project site and the existing POCs at the northeast, south, and western edges of the Project site would remain. During a 100-year, 6-hour peak flow event, the drainage basins for the Project site under existing conditions experience a peak flow rate of 12.07 CFS. With the implementation of the proposed Project and drainage improvements, operational flow rates would be reduced by 0.10 CFS to 11.97, as shown in Table 3.5-3, Existing Flow Rates during Flood Years (6-Hour Event) and Table 3.5-4, Proposed Flow Rates during Flood Years (6-Hour Event). Proposed flow rates and drainage characteristics are also depicted on Figure 2-10. Because operational flow rates would be reduced with implementation of the Project, no impacts to the surrounding public storm drain infrastructure would occur. Runoff within Basin P1 would be controlled via the installation of roof drains and treatment facilities prior to discharging to existing curb inlets at La Jolla Village Drive and Villa La Jolla Drive at POC-1. Runoff within Basin P2 would sheet flow across impervious surfaces or would be captured in area drains and directed to treatment facilities prior to discharging to an existing 18-inch CMP pipe at POC-2. Drainage in Bypass 1 would continue to sheet flow to the public right-of-way in Villa La Jolla Drive and would enter the storm drain via curb inlet at POC-1. Bypass 2 runoff would be

intercepted by a catch basin connected to an existing storm drain system that currently bypasses the Project site at POC-2. Runoff within Bypass 3 would drain to an existing catch basin west of the Project site and flows would be redirected to POC-3. The existing catch basin is approximately 24 inches by 24 inches in size on the west side of the existing parking lot. Lastly, runoff within a landscaped area referred to as De-Minimis 1 would continue to sheet flow to Villa La Jolla Drive and enter the public storm drain via curb inlet.

Table 3.5-3
EXISTING FLOW RATES DURING FLOOD YEARS (6-HOUR EVENT)

Drainage Facility	Area (acres)	10-Year (CFS)	100-Year (CFS)
Basin E1	0.70	4.29	5.31
Basin E2	0.57	3.51	4.35
Basin E3	0.32	1.95	2.41
Total	1.59	9.75	12.07

Source: Appendix E1 CFS = cubic feet per second

Table 3.5-4
PROPOSED FLOW RATES DURING FLOOD YEARS (6-HOUR EVENT)

Drainage Facility	Area (acres)	10-Year (CFS)	100-Year (CFS)
Basin P1	0.80	4.92	6.09
Basin P2	0.34	2.09	2.59
Bypass 1	0.10	0.62	0.76
Bypass 2	0.09	0.55	0.69
Bypass 3	0.23	1.42	1.75
De-Minimis 1	0.03	0.08	0.09
Total	1.59	9.68	11.97

Source: Appendix E1 CFS = cubic feet per second

The proposed Project storm drain system is designed to accommodate and regulate flows in accordance with the most recent UC San Diego requirements and those of the Phase II Small MS4 NPDES permit. As such, permanent on-site facilities would have adequate capacity to convey post-Project flows and no net increase in post-Project flows from the site would occur. As described above in EIR subsection 3.5.3.1, LID strategies would be implemented to regulate storm water flows at the Project site and would be identified in the Project-specific SWQMP. LID strategies would incorporate the following assessment and management requirements: a site assessment to evaluate Project-specific constraints and identify opportunities for capturing and treating runoff; drainage management areas and specific treatment options; and typical site design measures, notably the roof drains, BioClean modular wetland system, and stormtrap storage vault for on-site storm water treatment and hydromodification management.

A number of additional (non-LID) measures may also be employed in the Project site design to reduce post-Project runoff, including: (1) using efficient irrigation practices, such as automatic irrigation systems (i.e., water sensors, programmable irrigation times, automatic shut-off valves, etc.), subsurface drip irrigation, and other low-water irrigation methods; and (2) implementing a runoff-minimizing landscape

UC San Diego 3.5-24 February 2021

design that groups plants with similar water requirements to reduce excess irrigation runoff and promote surface infiltration.

The proposed Project would result in a decrease in impervious surfaces. A preliminary assessment of potential hydromodification effects for the Project site identifies conditions and conclusions that render the Project in conformance with applicable LID and hydromodification regulations based on the following considerations: (1) the proposed site drainage design includes the installation of a BioClean modular wetland system and belowground stormtrap storage vault, with the net post-Project construction storm flows from the site to be maintained at or below pre-Project levels; (2) the Project design incorporates additional measures to reduce post-Project flows and maintain existing hydrologic conditions, such as LID BMPs, irrigation management, and LEED design criteria; and (3) proposed drainage facilities meet appropriate standards for both LID and hydromodification control.

With the continued implementation of UC San Diego Design Guidelines, policies, and regulatory requirements, which include the implementation of erosion and sediment control BMPs, as well as the proposed drainage improvements at the Project site that would not increase post-Project runoff rates, potential long-term impacts resulting from alterations of drainage and hydrology during operation would be less than significant. No mitigation is required.

# **Mitigation Measures**

Impacts related to the capacity of the storm water drainage systems or erosion would be less than significant, and no mitigation is required.

#### 3.5.3.4 Issue 4: Inundation

## **Hydrology and Water Quality Issue 4 Summary**

Would implementation of the proposed Project risk release of pollutants due to inundation in flood hazard, tsunami, or seiche zones?

**Impact:** The Project site is not subject to **Mitigation:** No mitigation is required.

inundation by flood hazard, tsunami, or seiche.

Significance Before Mitigation: No impact. Significance After Mitigation: Not applicable.

## Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the proposed Project may have a significant impact if it would risk release of pollutants due to inundation in flood hazard, tsunami, or seiche zones.

### **Impact Analysis**

The Project site is not subject to inundation by flood hazard, tsunami, or seiche. According to the 2017 SanGIS data, the Project site is in Flood Zone X, which is outside of the 100-year and 500-year flood hazard areas or any County-identified flood hazard areas (SanGIS 2017). A tsunami (or seismic sea wave) is a secondary effect of major offshore events such as earthquakes or volcanic eruptions; however, the

Project site is not located in a Tsunami Inundation Area as determined by the City (City 2017). Lastly, a seiche is a phenomenon typically associated with land locked bodies of water, none of which occur near the Project site. Therefore, implementation of the proposed Project would not result in the release of pollutants due to inundation caused by a flood hazard, tsunami or seiche.

## **Mitigation Measures**

The Project would not result in impacts related to inundation due to a flood, tsunami, or seiche, and no mitigation is required.

# 3.5.3.5 Issue 5: Water Quality Control Plan or Sustainable Groundwater Management

## **Hydrology and Water Quality Issue 5 Summary**

Would implementation of the proposed Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact: The proposed Project would have the potential to generate pollutants during construction and post-construction activities; however, compliance with applicable regulations would ensure that it would not conflict with or obstruct the implementation of the San Diego Basin Plan.

**Mitigation:** No mitigation is required.

**Significance Before Mitigation:** Less than significant.

**Significance After Mitigation:** Not applicable.

## Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the proposed Project may have a significant impact to drainage or hydrology if it would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

## **Impact Analysis**

The Project site is located within the Peñasquitos HU as defined by the SDRWQCB and is further located within the Miramar HA. The Miramar HA drains into Rose Canyon Creek and subsequently discharges into Mission Bay. The major receiving water for the Project site is Rose Canyon Creek. The Project site is not located in a groundwater management plan and there is no sustainable groundwater management plan that includes the Project site (City 2020).

The designated beneficial uses for Rose Canyon Creek are provided in Table 3.5-1. These include Contact Water Recreation, Non-Contact Water Recreation, Warm Freshwater Habitat, and Wildlife Habitat. The highest water quality priority within the Mission Bay WMA is to reduce sediment and bacteria loads in receiving water that discharge into the Pacific Ocean.

As discussed for Issue 1, above, construction and operation associated with the Project could result in an increase in potential discharge of pollutants to receiving water, including waters designated as impaired for certain COCs. Hydromodification could increase storm water runoff and intensify erosion and the transport of sediments and other pollutants.

### **Construction Impacts**

Construction activities associated with the Project would involve various types of equipment such as bulldozers, excavators, backhoes, and other earth-moving equipment; cranes; trucks; and loaders. Pollutants associated with these construction activities that could result in water quality impacts include soils, debris, other materials generated during demolition and clearing, fuels and other fluids associated with the equipment used for construction, paints, other hazardous materials, concrete slurries, and asphalt materials. Due to the extent of construction anticipated under the proposed Project, implementation could result in significant short-term impacts to water quality impacts from uncontrolled sediment and pollutants in storm water runoff that could conflict with the policies of the Basin Plan.

Compliance with the Basin Plan would be achieved by complying with the UC San Diego Design Guidelines, policies, SWMP, and other regulatory requirements related to storm water runoff and would result in minimizing the potential for pollutants to enter receiving waters. The Project would be required to comply with General Construction Storm Water Permit requirements, including the development and implementation of a SWPPP. The SWPPP must identify BMPs that the discharger would actively use to protect storm water runoff from pollutants and the placement of those BMPs to ensure storm water would not leave active construction sites. Construction-related BMPs are discussed above in Issue 1.

With the continued implementation of UC San Diego Design Guidelines, policies, and regulatory requirements, which include the implementation of construction-period BMPs to address potential discharges of pollutants to storm water, any short-term water quality impacts during construction under the proposed Project would be minimized and would not cause a conflict with or obstruct implementation of the San Diego Basin Plan. Therefore, potential impacts would be less than significant, and no mitigation is required.

# **Operational Impacts**

Implementation of the proposed Project would result in the redevelopment of a developed site, which would have the potential to generate pollutants that could degrade the surface water quality of downstream receiving waters. Pollutant sources for the proposed Project would include landscaping, rooftops, parking/driveways, roadways, general use areas, and trash storage areas. Pollutants would generally include sediment, trash and debris, pesticides/herbicides, and oil/grease, and other contaminants similar to those produced under existing conditions. Therefore, operation of the Project could result in significant long-term water quality impacts from uncontrolled pollutants in storm water runoff that could conflict with the policies of the Basin Plan.

As discussed in Issue 1, the Project is required to implement site design, source control, and treatment control BMPs to prevent pollutants from reaching receiving waters. Site design BMPs, including LID measures, would reduce runoff or pollutants at the source. Source control BMPs would eliminate post-project runoff and control sources of pollutants. Treatment control BMPs would utilize treatment mechanisms with performance standards to remove targeted pollutants that have entered storm water runoff.

With the incorporation of the proposed site design, source control and treatment control BMPs and the continued implementation of UC San Diego Design Guidelines, policies, SWMP, and other regulatory requirements, water quality impacts associated with changes in storm water runoff would be minimized and operation of the Project would not conflict with or obstruct implementation of the Basin Plan. Therefore, impacts would be less than significant, and no mitigation is required.

## **Mitigation Measures**

Impacts related to conflicts with the Basin Plan would be less than significant, and no mitigation is required.

# 3.5.4 Cumulative Impacts and Mitigation

# **Hydrology and Water Quality Cumulative Issue Summary**

Would implementation of the proposed Project have a cumulatively considerable contribution to a cumulative hydrology and water quality impact considering past, present, and probable future projects?

Significance Less than significant.	Project Contribution Less than significant.
No impact.	No impact.
Less than significant.	Less than significant.
No impact.	No impact.
Less than significant.	Less than significant.
	Less than significant. No impact.  Less than significant. No impact.  Less than

The geographic context for the cumulative impact analysis concerning hydrology and water quality is the Peñasquitos HU, within which the Project site is located. This HU is composed of the following HAs: Miramar Reservoir, Poway, Scripps, Miramar, and Tecolote. The cumulative impact analysis accounts for anticipated cumulative growth within this geographic area, including development proposed under the 2018 La Jolla LRDP, individual UC San Diego projects, the SANDAG Mid-Coast Trolley Project, and future growth under the University Community Plan Update.

## **Water Quality Standards**

Urban development within the Peñasquitos HU would increase impervious areas and activities that generate pollutants, and consequently could result in additional water quality impacts from storm water

runoff to receiving waters in the HU. Existing water quality impairments or problems within receiving waters in the Peñasquitos HU are described in Section 3.5.1.2.

Most future development projects in the San Diego region would be subject to NPDES Phase I and II regulations, which would require that LID measures be implemented and source control and nonpoint source BMPs be employed to control potential effects on water quality and that storm water treatment systems be incorporated into projects to collect sediment and other pollutants. Further, there are several other regional and local initiatives that are being implemented to meet water quality objectives, reduce pollutant loads, address high-priority pollutants, and improve surface water quality in impaired waters, such as the Mission Bay WMA.

As described in the preceding sections, water quality impacts from the implementation of the proposed Project would be considered less than significant. Cumulative water quality impacts would be less than significant because other projects in the region are subject to similar regulatory requirements associated with storm water runoff and there are several ongoing efforts to remedy water quality issues in receiving waters.

## **Groundwater Supplies**

As described in Section 3.5.3.2, no removal of groundwater is proposed, as the Project would use potable and recycled water supplied by the City of San Diego Public Utilities Department. Under the proposed Project, implementation of LID measures that promote, rather than interfere with, the infiltration of groundwater would be required, and the Project would result in a reduction of impervious surfaces, which would potentially increase groundwater recharge. None of the cumulative projects, including the growth anticipated in the 2018 LRDP, individual UC San Diego projects, University Community Plan Update, or the Mid-Coast Trolley Project are proposing to remove groundwater. Consequently, no cumulative impacts to groundwater supplies would occur.

#### Site Drainage and Hydrology

Construction of projects considered in the cumulative study area would involve grading and other earthmoving activities that could result in temporary and short-term localized soil erosion. However, these site-specific impacts are not expected to combine with the effects of other regional activities. For UC projects, compliance with UC San Diego Design Guidelines, SWMP and associated BMPs, including construction site BMPs would control erosion and construction-related contaminants at each construction site. Additionally, proposed projects by the City and SANDAG would be similarly required to incorporate construction site BMPs to control site-specific erosion as applicable. Construction-related impacts from the proposed Project and other projects considered in the cumulative analysis would be temporary and short term, and each project's construction activities would be localized. Therefore, the cumulative effects to localized soil erosion would be less than significant.

Urban development within the Peñasquitos HU and associated hydromodification could result in flooding, drainage systems capacity issues, and erosion and sedimentation problems throughout the HU. However, most future development projects in the San Diego region would be subject to similar design guidelines, such as the City's Hydraulic Design Manual, and the same NPDES storm water permit requirements as UC San Diego, including minimizing the area of impervious surfaces, implementing LID measures, and reducing runoff from project sites so that increases in peak flows and flow durations would be minimized, and controlling sources of storm water pollutants during project operations.

These existing requirements would serve to provide adequate hydromodification management and sufficiently reduce the impact associated with potential erosion and sedimentation within the region. Therefore, the cumulative impact related to hydrology and drainage is less than significant.

## Inundation by Flood Hazard, Tsunami, or Seiche

As described in Section 3.5.3.4, the Project site is not subject to inundation by flood hazard, tsunami, or seiche. Cumulative projects would not increase the likelihood of inundation or result in increased exposure to these events. No cumulative impacts related to the release of pollutants due to inundation caused by a flood hazard, tsunami, or seiche would occur.

## Water Quality Control Plan or Sustainable Groundwater Management Plan

As described in the preceding sections, the Project site is not located within a groundwater management plan boundary. Therefore, there is no sustainable groundwater management plan that applies to the Project site. In addition, the proposed Project would not conflict with the San Diego Basin Plan. Cumulative water quality impacts that would conflict with a Water Quality Certified Professional Program would be less than significant because other projects in the region are subject to similar regulatory requirements associated with storm water runoff.

# 3.5.4.1 Mitigation Measures

Cumulative impacts with respect to hydrology and water quality impacts are less than significant; therefore, no mitigation is required.

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# 3.6 LAND USE AND PLANNING

This section describes the existing land uses within the Project site and surrounding area as well as local land use plans, policies, and regulations. In addition, this section addresses the potential to physically divide an established community and cause a significant environmental impact due to a conflict with any applicable plans, policies, or regulations of an agency with jurisdiction over the Project adopted to avoid or mitigate an environmental effect.

# 3.6.1 Existing Environmental Setting

Regionally, the Project site is located in the City of San Diego within the University City community and adjacent to the UC San Diego campus. More specifically, it is situated within a larger approximately 7-acre commercial center, named The Campus on Villa La Jolla, located at the southwest intersection of La Jolla Village Drive and Villa La Jolla Drive, directly south of the UC San Diego La Jolla campus. General surrounding land uses include a combination of office, commercial, residential, outpatient medical and institutional development. The Project site itself supports a now-vacant commercial building that was formerly occupied by Rock Bottom Restaurant and Brewery, which permanently closed in March 2020.

The University Community Plan (Community Plan) identifies the Project site as being within the Central Subarea, an area that draws its identity from wide streets and superblock development patterns and as the most urban area of the Community Plan. The Community Plan Update currently underway identifies this area as Focus Area 4, an employment mixed use area suitable for continued development of mixed-uses with opportunities for intensification in the transit area.

More specifically, land uses immediately surrounding the Project site include the Health Sciences West Neighborhood of the UC San Diego La Jolla campus located north of the Project site across La Jolla Village Drive; a gas station, hotel, retail, and commercial office buildings east of the Project across Villa La Jolla Drive; the three commercial buildings; and UC San Diego Health Urgent Care located to the west and south, respectively, of the Project site within the approximately 7-acre commercial center. Other land uses in the Project vicinity include multi-family residential and hotel uses further west and south of the Project site, including the La Jolla Terrace condominium complex located to the west and the La Jolla Boardwalk Apartments located to the south. Within the UC San Diego La Jolla campus, the Rita L. Atkinson Residences student housing building is located to the northwest of the Project site and the VA Medical Center is located to the northeast of the Project site. An approximately 10-foot-wide concrete pedestrian bridge spanning La Jolla Village Drive in the north-south direction is located immediately northwest of the Project site, connecting the site to the UC San Diego La Jolla campus.

The Project site is currently within the planning jurisdiction of the City of San Diego and is zoned as CO-1-2, Commercial. The site is also within the City's Coastal Height Limit Overlay Zone, Community Plan Implementation Overlay Zone, and Parking Impact Overlay Zone. As described below, upon acquisition of the property, the Project site would be under the ownership of the UC and subject to UC land management policies, in furtherance of the UC's educational purposes.

# 3.6.2 Regulatory Framework

UC San Diego is part of the UC, a constitutionally created entity of the State of California, with "full powers of organization and government" (Cal. Const. Art. IX, Section 9). As a constitutionally-created State entity, the UC is not subject to municipal regulations of surrounding local governments, such as

the City of San Diego General Plan or land use ordinances, for uses on property owned or controlled by the UC that are in furtherance of the UC's education purposes. As part of its planning and design efforts, UC San Diego considers, for coordination and collaborative purposes, aspects of local plans and policies for the communities surrounding the campus when it is appropriate and feasible; however, is not bound by those plans and policies. UC San Diego seeks to maintain an ongoing exchange of ideas and information and to pursue mutually acceptable solutions for issues that confront both the campus and its surrounding community and the region. To foster this process and to keep the broader community apprised on ongoing planning efforts, UC San Diego participates in, and communicates with City and community organizations and, sponsors various meetings and briefings to local organizations, agencies, associations, and elected representatives to receive feedback and input. UC San Diego has voluntarily reviewed the proposed Project's consistency with regional and municipal plans; however, none of the following plans have jurisdiction over UC San Diego.

#### 3.6.2.1 State

## UC San Diego 2018 La Jolla Long Range Development Plan

The UC requires that each campus maintain an up-to-date Long Range Development Plan (LRDP). The LRDP is a general land use plan that guides the physical development of the campus. The process of periodically updating an LRDP provides The Regents an opportunity to make certain that physical plans remain solidly based on academic, research, and public service program goals. Pursuant to UC requirements, the 2018 LRDP provides the context for the development of the campus in relation to the economic, academic, and environmental landscape; equips the campus with a broad, coherent, and adaptable policy framework to achieve UC San Diego's program goals; and provides a basis for future decisions concerning land uses and capital projects through the academic year 2035-2036 (UC San Diego 2018).

The Project site is not within and would not be incorporated into the boundaries of the 2018 LRDP and would be under the ownership of the UC Regents similar to other off-campus acquisitions. In addition, as with other off-campus University projects and acquisitions, the Project would be subject to University-wide policies and regulations. These policies, along with relevant information from the 2018 LRDP, have been provided where applicable to this Land Use and Planning analysis.

## 3.6.2.2 Regional/Local

#### San Diego Association of Governments San Diego Forward: The Regional Plan

The SANDAG San Diego Forward: The Regional Plan (The Regional Plan) is a regional transportation and sustainability plan that aims to provide a blueprint for a more livable, equitable, and innovative future (SANDAG 2015). It combines and updates two previous plans, the Regional Comprehensive Plan (RCP) and the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), into one document that looks toward 2050. The Regional Plan covers a broad range of topics including air quality, borders and tribal nations, climate change, economic prosperity, emerging technologies, energy and fuels, habitat preservation, healthy communities, public facilities, shoreline preservation, transportation, and water quality.

The Regional Plan emphasizes the importance of choice of transportation in the future, such as biking, skateboarding, walking, riding a scooter, Trolley, Sprinter, COASTER, bus, or driving. It places special emphasis on active transportation, such as walking and biking, and reducing car use in order to minimize

GHG emissions, diminish air pollution, and maximize public health. The Regional Plan also includes an SCS, which identifies five main strategies to complement the goal of sustainability. The strategies are to focus on job growth and housing in urbanized areas with existing public transportation options, preserve open space, invest in a transit network that caters to everyone and includes many options, reduce GHG emissions, and address housing needs for all economic segments of the population, and to implement the Regional Plan through incentives and collaboration. The Regional Plan also identifies the University Town Center (UTC) area, east of UC San Diego East Campus and Genesee Avenue, as a regional employment cluster that will continue to grow. For this reason, the Regional Plan emphasized ongoing implementation of the Mid-Coast Trolley extension of the UC San Diego Blue Line from Santa Fe Depot in downtown San Diego to the University community via Old Town, UC San Diego, and the Westfield University Towne Centre shopping area. The goal of this effort is to encourage more people that are employed, study, or live in the University, La Jolla, or UC San Diego communities to utilize public transportation thereby reducing the needs for cars and parking.

## City of San Diego General Plan

The City of San Diego's General Plan (City 2008) is a comprehensive, long range vision document that sets forth the policy framework for how the City should plan for projected growth and development over the next 20 to 30 years. The General Plan emphasizes the need for maintaining the character of its communities, preserving its natural resources and amenities, and providing adequate public services. It emphasizes implementation of the City of Villages Strategy, which focuses on growing mixed-use activity centers that are pedestrian-friendly, centers of community that are multi-modal, and linked to the regional transit system. The General Plan's "City of Villages" strategic framework is a key component of the City's growth strategy to reduce GHG emissions because the strategy makes it possible for larger numbers of people to make fewer and shorter auto trips. The City of Villages strategy promotes a land use pattern that will help meet regional GHG emission targets by improving transportation and land use coordination and jobs/housing balance, creating more transit-oriented, compact, and walkable communities, providing more housing capacity for all income levels, and protecting environmental resource areas. UC San Diego, due to its density and access to regional transportation systems, is located in a City of San Diego subregion identified as a "smart growth opportunity area" in the city and regional plans. Although UC San Diego is included on the City maps within the boundaries of the University and La Jolla planning areas, the campus is not subject to any of the provisions in the General or Community Plans though the campus aims to be compatible wherever feasible.

## **University Community Plan**

The University Community Plan was adopted on July 7, 1987, and most recently amended on September 10, 2018, by the San Diego City Council (City 2018). A Community Plan Update is currently underway and anticipated for adoption in 2022 (City 2020). The University Community planning area encompasses approximately 8,500 acres and is bounded by Los Peñasquitos Lagoon and the toe of the east-facing slopes of Sorrento Valley on the north; the tracks of the Atchison, Topeka, and Santa Fe Railroad, Marine Corps Air Station Miramar, and I-805 on the east; SR 52 on the south; and I-5, Gilman Drive, North Torrey Pines Road, La Jolla Farms, and the Pacific Ocean on the west. The University Community Plan serves to further the overarching policies and goals of the City General Plan while tailoring to the specific characteristics of a more defined geographic area. Further, in terms of land use, the Project site is located in what is identified as the Central Subarea, the most urban of all four subareas of the University Community Plan. The Community Plan Update currently underway identifies

the area as Focus Area 4, an area for study of intensification of mixed uses acknowledging the close proximity to the campus and transit.

# 3.6.3 Environmental Impacts and Mitigation

# 3.6.3.1 Issue 1: Divide an Established Community

## Land Use and Planning Issue 1 Summary

Would implementation of the proposed Project physically divide an established community?

**Impact:** The proposed Project would not divide

Mitigation: No mitigation is required.

an established community.

Significance Before Mitigation: No impact.

**Significance After Mitigation:** Not applicable.

## Standard of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the proposed Project may have a significant impact if it would physically divide an established community.

## **Impact Analysis**

The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad tracks, or removal of a means of access, such as a local road or bridge that would impact mobility within an existing community or between a community and outlying area.

The Project would result in the demolition of the existing vacant structure and the development of a seven-story building with two additional subterranean levels. The Project would be developed within the footprint of the existing restaurant building and associated parking areas and is intended to complement the existing commercial and medical office land uses that are within the approximately 7-acre commercial center.

As discussed in Section 2.2.2, Project Objectives, of this EIR, the Project is intended in part to integrate with the surrounding land uses by strengthening the connection between the UC San Diego La Jolla campus and its Health Sciences West Neighborhood at a location that is public-facing and easily accessible to patients and research participants as well as faculty and other personnel located primarily on campus. An additional objective is to redevelop a currently vacant and underutilized site within an area that has abundant alternative transportation options, including access to the UC San Diego Blue Line LRT system and bike and pedestrian access to the La Jolla campus and VA Medical Center. Currently the pedestrian bridge that spans La Jolla Village Drive serves to connect the Project site with the West Campus area of UC San Diego. In addition to the existing bridge, the Project would further improve pedestrian access by providing a new sidewalk connection to La Jolla Village Drive (see Figure 2-12). The new sidewalk would be paved along the western and southern frontages of the building and connect to a new ADA-accessible access ramp from the Project site to the sidewalk on Villa La Jolla Drive along the eastern side of the building. The proposed subdivision of the 7-acre parcel would not divide a residential

community, as The Campus on Villa La Jolla is a commercial center and would still be accessible upon completion of the Project (no physical barriers are proposed).

Construction of the proposed Project, access improvements, and the parcel subdivision would not physically divide an established community and no impact would occur. No mitigation is required.

# **Mitigation Measures**

The proposed Project would result in no impact related to the physical division of an established community, and no mitigation is required.

## 3.6.3.2 Issue 2: Consistency with Applicable Plans

# Land Use and Planning Issue 2 Summary

Would implementation of the proposed Project cause 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?

**Impact:** The Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation for the purposes of avoiding an environmental effect.

Significance Before Mitigation: Less than

significant.

**Mitigation:** No mitigation is required.

**Significance After Mitigation:** Not applicable.

# Standard of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the proposed Project may have a significant impact if it would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to, the City General Plan, specific plan, Local Coastal Program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

# **Impact Analysis**

The site is currently within the jurisdiction of the City of San Diego, zoned as CO-1-2, Commercial, and is within the University Community Plan area, City's Coastal Height Limit Overlay Zone, Community Plan Implementation Overlay Zone, and Parking Impact Overlay Zone. The approximately 7-acre commercial center property is proposed to be subdivided with the approximately 0.9-acre Project parcel subsequently sold to UC to be under UC ownership.

As a constitutionally created State entity, UC is not subject to municipal regulations of surrounding local governments, such as the City of San Diego General Plan or land use ordinances, for uses on property owned or controlled by UC that are in furtherance of the UC's education purposes. Thus, upon

acquisition of the property, the Project site would be under the ownership of UC and subject to UC land management policies.

#### 2018 LRDP and University Policies/Regulations

As previously stated, the Project site is not within and would not be incorporated into the boundaries of the 2018 LRDP. As with other off-campus properties owned by the University, the Project would be subject to University-wide policies and regulations. These policies, along with relevant information from the 2018 LRDP, have been provided where applicable to this land use and planning analysis.

Although the Project would not be governed by the 2018 LRDP, it would generally be consistent with the goals, objectives and policies established therein. The following objectives from the 2018 LRDP align with the proposed Project:

- Site future development to allow for the co-location and strengthening of campus programs, facilities, and activities, to continue the exchange of ideas between academics and scientists, and to create synergy between shared resources and services.
- Activate and enliven the campus through strategic mixed-use and transit-oriented development, improved public spaces, expanded campus services, and additional on-campus housing to facilitate a living-learning campus environment.
- Expand and enhance research and training facilities and core services at UC Health in support of the region's only academic medical center.
- Expand multi-modal connections and TDM programs to optimize trip reduction benefits of the light rail transit system, reduce automobile commuting, and coordinate with regional transportation programs.
- Minimize environmental impacts through sustainable development practices related to campus planning, building siting, design, construction, and operations.

Though not formally within the 2018 LRDP land use plan, the Project would be consistent with the Academic land use described in the 2018 LRDP. Academic use areas primarily include classrooms and ancillary support facilities (such as administrative/office uses and other facilities that support academic operations). Given the mix of commercial, medical, academic, and residential uses adjacent and surrounding the Project site, the Project would be compatible with surrounding uses.

The Project would also be consistent with University-wide policies that are applicable to buildings owned by UC San Diego. For example, as described in Chapter 2, Project Description, of this EIR, the new building would be developed to be consistent with the UC Seismic Safety Policy, which requires new buildings occupied or leased by the University to be developed at an level of earthquake safety for students, employees, and the public that goes beyond requirements at the state and local level. UC San Diego building users occupying the new building would also comply with the UC Sustainable Practices Policy. The Project would also comply with program directives of the UC Sustainable Practices Policy, which are aimed at reducing GHG emissions system wide and include energy and water usage reduction measures. For example, the new building would be developed to meet a minimum LEED Silver rating and would reduce water usage by 35 percent compared to a building of similar size. Thus, the Project

would not cause a significant impact due to a conflict with University policies adopted for the purpose of avoiding an environmental effect.

#### San Diego Forward: The Regional Plan

The Project site would be easily accessible from two LRT stations currently under construction as part of the San Diego Trolley's Mid-Coast Trolley expansion project for the UC San Diego Blue Line LRT: Nobel Drive, located approximately 0.33-mile southeast of the Project, and VA Medical Center, located approximately 0.33-mile northeast of the Project. The Trolley expansion project is anticipated to be in operation in late 2021. The Project would be consistent with the goals of SANDAG's Regional Plan pertaining to reducing VMT and associated GHG emissions and increasing density within a TPA. The Project site is also close to other forms of transit. The nearest public transit bus stop is on La Jolla Village Drive approximately 200 feet east of the intersection of Via La Jolla Drive. There are four Metropolitan Transit System (MTS) bus routes that serve that stop, including Routes 30, 41, 150 and 921. Two Super Loop stops are also located in the vicinity of the Project site on Nobel Drive (Routes 201 and 202). Additionally, UC San Diego's Triton Transit provides a shuttle fleet to serve the University and nearby neighborhoods for students and faculty. The nearest Triton Transit shuttle stop is a weekend service stop approximately 0.3 mile southeast of the Project site. The nearest daily Triton Transit service is the campus loop shuttle, located approximately 0.5-mile north of the Project within the West Campus.

Increasing the availability of transit opportunities facilitates community use, reducing the number of individual commuter trips and distances that commuters need to travel. This results in an overall reduction of vehicle trips on roadways and corresponding GHG emissions associated with vehicles. As discussed in Section 3.8, Transportation, of this EIR, the Project's VMT would be 19.1 miles, more than 15 percent below the regional average. The Project's GHG emissions would be lower than the 2024 efficiency target, as described in Section 3.4, Greenhouse Gas Emissions, of this EIR. Therefore, the Project would not result in a significant impact due to a conflict with SANDAG's Regional Plan for the purposes of avoiding an environmental effect.

## City of San Diego General Plan and University Community Plan

Similarly, the Project would be consistent with the goals that the City has established within the General Plan on a city-wide level and within the University Community Plan. These goals include reducing regional GHG emissions by increasing density within TPAs, implementing sustainability measures that increase efficiency of energy and water use, and promoting alternative transportation. As noted previously, the Project would be providing a use that would be close to public transit, increase density with in a TPA, and incorporating sustainable features to comply with the UC Sustainable Practices Policy and meet a minimum Silver LEED rating. Therefore, the Project would not result in a significant impact due to a conflict with the City of San Diego General Plan or University Community Plan for the purposes of avoiding an environmental effect.

# **Mitigation Measures**

No mitigation measures are required.

# 3.6.4 Cumulative Impacts and Mitigation

## **Land Use and Planning Cumulative Issue Summary**

Would implementation of the proposed project have a cumulatively considerable contribution to a cumulative air quality impact considering past, present, and probable future projects?

Cumulative Impact	<b>Significance</b>	<b>Project Contribution</b>
Physically divide an established community.	No impact.	No impact.
Conflict with Applicable Plans adopted to	Less than	Less than significant.
avoid or mitigate an environmental effect.	significant.	

## Physically Divide an Established Community

The study area for the cumulative impacts on land use and planning is the West Campus area of UC San Diego, the area defined as South of West Campus in the LRDP, and the Central Subarea of the University Community Plan. Development of the proposed Project, in conjunction with other cumulative projects within the 2018 LRDP and University Community Plan, would occur within the context of a developed urban environment. The Project would not introduce any barriers that would serve to divide a physically established community, such as a new linear project that would sever established land use patterns in the Project area. As discussed in Section 3.6.3.1, the Project would contribute to a greater cohesiveness within the community by strengthening pedestrian and transit network connections as well as consolidating educational facilities and providing better community access to them. Therefore, when considering the cumulative growth associated with the LRDP and University Community Plan update combined with the proposed Project, no cumulative impacts would occur relative to physically dividing a community.

## Conflict with Applicable Plans Adopted to Avoid or Mitigate an Environmental Effect

Although the San Diego General Plan and University Community Plan have no authority over the land uses on the UC San Diego campus and the Project site, they are relevant when considering the campus' consistency with policies that apply to adjacent land uses and for cumulative land use analysis. Potential cumulative development on campus would be governed by the 2018 LRDP. The LRDP is a comprehensive land use plan for the campus and projects that occur within the planning boundaries of the LRDP undergo review for consistency with the approved policies and goals. Through this review process, projects are vetted for consistency with the LRDP's approved policies and goals. Where inconsistencies occur, projects would either be altered or mitigated to bring forth conformity with the LRDP.

It is anticipated that development within the City of San Diego University Community Plan area would result in changes to the existing land use environment in the Project area through the conversion of vacant land or low-density uses to higher-density uses, or through conversions of existing land use, such as residential to commercial or mixed-use. Such future off-campus development would be required to be consistent with the University Community Plan (and updated plan when available), City of San Diego's General Plan, The Regional Plan, and other applicable planning documents, such as for the VA Medical Center. In addition, all future projects would also be required to be developed in compliance with the City of San Diego Municipal Code. These planning and regulatory documents would ensure off-campus development projects would substantially comply with zoning, density, development

standards, design review, and, when applicable, conduct subsequent CEQA analysis to mitigate potential impacts.

Therefore, when considering the cumulative growth associated with the LRDP, University Community Plan and Community Plan Update, combined with the proposed Project, cumulative impacts associated with consistency with applicable plans would be less than significant.

# **Mitigation Measures**

Cumulative impacts with respect to land use and planning are less than significant; therefore, no mitigation is required.

No mitigation measures are required.

#### 3.6.5 References

City of San Diego (City). 2020. University Community Plan Update. Available at: https://www.planuniversity.org/.

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# 3.7 NOISE

This section describes existing noise conditions for the Project site and vicinity, identifies applicable plans and policies applicable to the discussion of noise issues, evaluates the potential for significant impacts under pertinent criteria, and identifies mitigation measures where appropriate.

# 3.7.1 Existing Environmental Setting

#### 3.7.1.1 Noise Basics

## **Noise and Sound Level Descriptors**

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound, which interferes with normal activities, causes physical harm, or has adverse health effects.

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A-weighting (dBA) to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol L<sub>EQ</sub>, with a specified duration. The Community Noise Equivalent Level (CNEL) is a 24-hour average, where noise levels during the evening hours of 7:00 p.m. to 10:00 p.m. have an added 5 dBA weighting, and noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dBA weighting. This is similar to the Day Night sound level (L<sub>DN</sub>), which is a 24-hour average with an added 10 dBA weighting on the same nighttime hours but no added weighting on the evening hours. Sound levels expressed in CNEL are always based on dBA. These metrics are used to express noise levels for both measurement and municipal regulations, as well as for land use guidelines and enforcement of noise ordinances.

#### Sound Pressure Levels and Addition of Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.0000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this wide range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of dBA. The threshold of hearing for the human ear is about 0 dBA, which corresponds to 20 mPa.

Because decibels are logarithmic units, SPL cannot be added or subtracted through standard arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than from one source under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dBA; rather, they would combine to produce 73 dBA. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dBA louder than one source. To understand the decibel range, typical A-weighted noise levels are listed in Table 3.7-1, *Typical A-Weighted Noise Levels*.

Table 3.7-1
TYPICAL A-WEIGHTED NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	<b>— 110 —</b>	Rock band
Jet fly-over at 1,000 feet		
	<b>— 100 —</b>	
Gas lawn mower at 3 feet		
	<b>—</b> 90 <b>—</b>	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	<b>—</b> 50 <b>—</b>	Dishwasher next room
Quiet urban nighttime	<b>— 40 —</b>	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night
	<b>— 20 —</b>	
		Broadcast/recording studio
	<b>— 10 —</b>	
Lowest threshold of human hearing	<b>-0-</b>	Lowest threshold of human hearing
Source: Caltrans 2012		

Source: Caltrans 2013

Additionally, the decibel level of a sound decreases (or attenuates) exponentially as the distance from the source of that sound increases. For a single point source such as a piece of mechanical equipment, the sound level normally decreases by about 6 dBA for each doubling of distance from the source. Sound that originates from a linear, or "line" source such as a heavily traveled traffic corridor, attenuates by approximately 3 dBA per doubling of distance, provided that the surrounding site conditions lack ground effects or obstacles that either scatter or reflect noise. Noise from roadways in environments with major ground effects due to vegetation and loose soils may either absorb or scatter the sound yielding attenuation rates as high as 4.5 dBA for each doubling of distance. Other contributing factors that affect sound reception include meteorological conditions and the presence of human-made obstacles such as buildings and sound barriers.

#### **Noise Effects**

Noise has a significant effect on the quality of life. An individual's reaction to a particular noise depends on many factors such as the source of the noise, its loudness relative to the background noise level, and the time of day. The reaction to noise can also be highly subjective; the perceived effect of a particular noise can vary widely among individuals in a community. Because of the nature of the human ear, a

sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 5 dBA change in community noise levels is clearly noticeable, and a 3 dBA change is the smallest increment that is perceivable by most receivers. Generally, 1 to 2 dBA changes are not detectable. Although the reaction to noise may vary, it is clear that noise is a significant component of the environment, and excessively noisy conditions can affect an individual's health and well-being. The effects of noise are often only transitory, but adverse effects can be cumulative with prolonged or repeated exposure. The effects of noise on a community can be organized into six broad categories: sleep disturbance; permanent hearing loss; human performance and behavior; social interaction or communication; extra-auditory health effects; and general annoyance.

No known studies have directly correlated the ability of a healthy human ear to discern specific levels of change in traffic noise over a 24-hour period. Many ordinances, however, specify a change of 3 dBA CNEL as the significant impact threshold. This is based on the concept of a doubling in noise energy resulting in a 3 dBA change in noise, which is the amount of change in noise necessary for the increase to be perceptible to the average healthy human ear.

#### 3.7.1.2 Environmental Vibration Basics

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The peak particle velocity (PPV) and root-mean-square (RMS) velocity are normally described in inches per second (in/sec). The Federal Transit Administration (FTA) defines PPV as the maximum instantaneous positive or negative peak of a vibration signal, and is the metric often used to describe blasting vibration and other vibration sources that may result in structural stresses in buildings (FTA 2006).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response to ground vibrations. It takes some time for the human body to respond to vibration signals; therefore, average vibration amplitude (the RMS velocity) is the most appropriate descriptor for gauging human response to the typical ground vibration. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a period of 1 second. As with airborne sound, the RMS velocity is often expressed in dB notation as vibration dB (VdB), which serves to compress the range of numbers required to describe vibration. This VdB scale is based on a reference value of 1 micro-inch per second. The background vibration-velocity level typical of residential areas is approximately 50 VdB per FTA guidance (FTA 2006).

Groundborne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Table 3.7-2, *Human Response to Groundborne Vibration*, summarizes the general human response to different levels of groundborne vibration.

Table 3.7-2
<b>HUMAN RESPONSE TO GROUNDBORNE VIBRATION</b>

Vibration-Velocity Level (VdB)	Human Reaction
65	Approximate threshold of perception.
75	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85	Vibration acceptable only if there is an infrequent number of events per day.

Source: FTA 2006

VdB = vibration decibels referenced to 1 micro-inch per second and based on the root-mean-square vibration velocity.

# 3.7.1.3 Existing Noise Conditions

### **Noise Measurements**

Ambient noise levels on the UC San Diego campus vary with location, but measured noise levels range from 53 to 69 dBA CNEL (UC San Diego 2018). As a part of the Project's noise analysis, HELIX conducted two short-term noise measurements on the Project site in October 2020.<sup>1</sup> The site survey sheets are included in Appendix G of this EIR. The noise measurements identified the following noise levels: 60.3 dBA LEQ on the southeastern portion of the Project site near Villa La Jolla Drive, and 62.6 dBA LEQ on the northwestern portion of the site near La Jolla Village Drive. Ambient noise conditions in the Project vicinity are influenced by traffic noise from the nearby roadways.

#### **Noise-Sensitive Land Uses**

A land use is considered noise-sensitive if it is associated with indoor and/or outdoor activities that may be subject to stress and/or significant interference from noise. Noise-sensitive receptors are specific locations where noise-sensitive uses occur. Noise-sensitive land uses (NSLUs) include dormitories, residences, lodging, contemplative spaces, libraries, inpatient medical care facilities (beds present), and classrooms. NSLUs in the area surrounding the Project site include the Rita L. Atkinson Residences (located approximately 340 feet northwest), the La Jolla Boardwalk Apartments multi-family residential development along Villa La Jolla Drive (located approximately 370 feet south), the Residence Inn by Marriott (located approximately 560 feet west), the Sheraton La Jolla Hotel (located approximately 650 feet east), and the VA Medical Center (located approximately 900 feet northeast). The UC San Diego Health Center and Urgent Care would not be considered a noise-sensitive land use as it does not offer inpatient medical care.

### **Vibration-Sensitive Land Uses**

Land uses in which groundborne vibration could potentially interfere with operations or equipment, such as research, manufacturing, hospitals, and university research operations are considered vibration-sensitive (FTA 2006). The degree of sensitivity depends on the specific equipment that would be

<sup>&</sup>lt;sup>1</sup> These measurements were taken during the COVID-19 pandemic, which has led to reduced traffic throughout the region. Because of this, traffic noise levels are likely lower than what would be expected.

affected by the groundborne vibration. Excessive levels of groundborne vibration of either a regular or an intermittent nature can result in annoyance to residential uses. The nearby UC San Diego Health Center and Urgent Care would be considered a vibration-sensitive receptor due to the use of sensitive medical equipment, such as computer equipment and low-power optical microscopes (up to 20X magnification).

# 3.7.2 Regulatory Framework

Applicable federal and state regulations and local (non-regulatory) plans pertaining to noise are discussed below.

#### 3.7.2.1 Federal

# **U.S. Environmental Protection Agency**

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. Section 42 USC 4903, Federal Programs, states that federal agency activities that may result in emission of noise shall comply with applicable federal, state, interstate, and local requirements related to control and abatement of environmental noise. Additionally, the Noise Control Act states that it is the primary responsibility of state and local governments to control noise.

#### **Federal Transit Administration**

Although the FTA standards are intended for federally funded mass transit projects, the impact assessment procedures and criteria included in the FTA Transit Noise and Vibration Impact Assessment Manual (FTA 2006) are routinely used for projects proposed by local jurisdictions. The FTA have published guidelines for assessing the impacts of groundborne vibration associated with rail projects, which have been applied by other jurisdictions to other types of projects. The vibration criteria established by the FTA in the Transit Noise Impact and Vibration Assessment is provided in Table 3.7-3, FTA Groundborne Vibration Impact Criteria.

Table 3.7-3
FTA GROUNDBORNE VIBRATION IMPACT CRITERIA

Land Use Category	Impact Levels (VdB) Frequent Events <sup>1</sup>	Impact Levels (VdB) Occasional Events <sup>2</sup>	Impact Levels (VdB) Infrequent Events <sup>3</sup>
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

Source: FTA 2018

Note: VdB = vibration decibels

Vibration levels are measured in or near the vibration-sensitive use.

- <sup>1</sup> "Frequent Events" is defined as more than 70 vibration events of the same source per day.
- <sup>2</sup> "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.
- <sup>3</sup> "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.

### 3.7.2.2 State

### California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, find that excessive noise is a serious hazard to public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the state to provide an environment for all Californians free from noise that jeopardizes their health or welfare. Section 46050.1 of the Act mandates development guidelines for the preparation and content of noise elements.

# California Building Code

The UC has adopted the CBC as its building code for UC projects. Title 24, Part 11, Section 5.507 specifies environmental comfort with regard to noise exposure for non-residential buildings. Excepting buildings having few or no occupants, or where occupants are not likely to be affected by exterior noise, the subsections therein provide means of acoustical controls through which building assembly and component requirements are used to assess exterior noise issues. Section 5.507.4 stipulates two compliance approaches. The prescriptive method is utilized when occupied structures are planned with a 65 dBA CNEL contour of an airport, railroad, highway traffic, or industrial noise source. In this case, the wall and roof-ceiling assemblies are required to achieve a composite STC rating of at least 50, or a composite OITC rating of not less than 40. Additionally, exterior windows are required to be rated with a minimum STC of 40, or OITC of 30. The performance method does not require specific STC and OITC ratings; however, it requires that the interior noise environment attributable to outdoor noise sources not exceed an hourly LEQ of 50 dBA. This noise level can be achieved by means of building envelope construction and/or exterior features such as noise walls or berms. The performance method requires an acoustical analysis documenting compliance with the interior sound level limits, prepared and approved by the architect or engineer of record. For public schools and community colleges, Section 5.507.4 is applied only to new construction.

#### 3.7.2.3 Local

Although the Project would not be required to adhere to the City's General Plan or noise ordinance, the following information is provided herein for context and reference.

### City of San Diego General Plan

The City General Plan Noise Element (City 2008, amended 2015) establishes noise compatibility guidelines for uses affected by traffic noise, as shown in Table 3.7-4, City of San Diego Land Use Noise Compatibility Guidelines. The conditionally compatible noise levels for off-site land uses near the Project include 65 dBA CNEL for hospital/nursing facilities, 70 dBA CNEL for multi-family residential, and 75 dBA CNEL for hotels (visitor accommodations). For outdoor uses at a conditionally compatible land use, feasible noise mitigation techniques should be analyzed and incorporated to reduce noise levels to make the outdoor activities acceptable. For indoor uses at a conditionally compatible land use, exterior noise must be attenuated to 45 dBA CNEL for the interior environment.

Table 3.7-4
CITY OF SAN DIEGO LAND USE NOISE COMPATIBILITY GUIDELINES<sup>1</sup>

	Land (	Use Category		<60*	60-65*	65-70*	70-75*	75+*
Parks	Parks and Recreational					_		
	Active and Passive Recreat	ion						
	or Spectator Sports, Golf Co		al Facilities:					
	Recreation Facilities		,					
Agricu								
	Raising & Farming; Commur	nity Gardens. Aquaculture	e. Dairies:					
Horticulture Nurseries & Greenhouses; Animal Raising, Maintain &								
	ng; Commercial Stables	,						
Reside							ı	
	Dwelling Units; Mobile Hor	nes			45			
	le Dwelling Units				45	45		
Institu				1				
	als; Nursing Facilities; Inter	mediate Care Facilities: k	(-12					
	tional Facilities; Libraries; N				45			
	Educational Facilities include							
	es, and Universities)	5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	<del>-</del>		45	45		
Cemet	· · · · · · · · · · · · · · · · · · ·							
Retail								
Buildir	ng Supplies/Equipment; Gro	oceries: Pets & Pet Suppli	es: Sundries.					
	aceutical, & Convenience S					50	50	
-	ercial Services	,  -						
Buildir	ng Services; Business Suppo	rt: Eating & Drinking: Fin	ancial					
	tions; Maintenance & Repa	_						
	ainment (includes public ar					50	50	
	sion Studios; Golf Course Su							
	Accommodations				45	45	45	
Office	s			•			•	
Busine	ess & Professional; Governn	nent; Medical, Dental & F	Health			F0	F0	
Practit	ioner; Regional & Corporat	e Headquarters				50	50	
Vehicl	e and Vehicular Equipmen	t Sales and Services Use						
Vehicle	e Repair & Maintenance; V	ehicle Sales & Rentals; Ve	hicle					
Equipr	nent & Supplies Sales & Re	ntals; Vehicle Parking						
Whole	sale, Distribution, Storage	Use Category						
Equipr	nent & Materials Storage Y	ards; Moving & Storage F	acilities;					
Wareh	ouse; Wholesale Distributi	on						
Indust	rial							
Heavy	Manufacturing; Light Manu	ufacturing; Marine Indust	ry; Trucking &					
Transp	ortation Terminals; Mining	& Extractive Industries						
Resear	rch & Development						50	
	Indoor Uses Standard o			ruction m	ethods sho	uld attenuat	te exterior	noise to
	Compatible		an acceptable i					
	Outdoor Uses Activities asso							
			Building structure must attenuate exterior noise to the indoor					
	Conditionally	Indoor Uses	noise level indicated by the number (45 or 50) for occupied areas.			d areas.		
Compatible		Conditionally indicated by the number for occupied areas.						
	Outdoor Uses inc		Feasible noise mitigation techniques should be analyzed and					
			incorporated to make the outdoor activities acceptable.					
	Incompatible	Indoor Uses	New construction should not be undertaken.					
incompatible		Outdoor Uses	Severe noise interference makes outdoor activities unacceptable.					

Source: City 2008 (as amended in 2015)

UC San Diego 3.7-7 February 2021

<sup>\*</sup> Exterior Noise Exposure (dBA CNEL)

Compatible noise levels and land use definitions reflect amendments to the City's General Plan approved in 2015.

# City of San Diego Noise Ordinance

Section 59.5.0404 of the City's Municipal Code, referred to as the Noise Ordinance, regulates construction noise for projects within the City's jurisdiction. As noted above, these regulations would not apply to the Project but are provided here for reference.

The Noise Ordinance prohibits noise generated by construction activities between the hours of 7:00 p.m. and 7:00 a.m. of any day and all day on Sundays and holidays. However, the City Noise Abatement and Control Administrator could permit construction at night where noise levels could be in excess of 75 dBA on a limited basis where nighttime construction is deemed necessary and the construction is found to be in the public interest. Additionally, construction noise levels at or beyond the property lines of any property zoned residential are not permitted to exceed an average sound level greater than 75 decibels during the 12-hour period from 7:00 a.m. to 7:00 p.m. Monday through Saturday. Table 3.7-5, *City of San Diego Applicable Noise Limits*, shows the operational noise limits to nearby land uses.

Table 3.7-5
CITY OF SAN DIEGO APPLICABLE NOISE LIMITS

Land Use Zone	Time of Day	One-hour Average Sound Level (dBA)
Single Family Residential	7:00 a.m. to 7:00 p.m.	50
	7:00 p.m. to 10:00 p.m.	45
	10:00 p.m. to 7:00 a.m.	40
Multi-Family Residential (up to a maximum density of 1/2000)	7:00 a.m. to 7:00 p.m.	55
	7:00 p.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
All other Residential	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
Commercial	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	60
Industrial or Agricultural	anytime	75

Source: City of San Diego Municipal Code, Chapter 5, Article 9.5, Division 4, §59.5.0401, Sound Level Limits Note: The limit shall not exceed the noise limits at any location in the City on or beyond the boundaries of the property on which the noise is produced. The noise subject to these limits is that part of the total noise at the specified location that is due solely to the action of said person. The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts.

# 3.7.3 Environmental Impacts and Mitigation

#### 3.7.3.1 Issue 1: Exceed Noise Standards

### **Noise Issue 1 Summary**

Would implementation of the proposed 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?

**Impact:** Implementation of the proposed Project would not significantly increase traffic noise or generate noise levels from stationary sources or construction sources that would expose NSLUs to excessive noise levels.

Significance Before Mitigation: Less than

significant.

**Mitigation:** No mitigation required.

Significance After Mitigation: Not applicable.

# Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Project would have a significant impact if it would 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. As a result of implementation of the Project, a significant impact would occur if transportation, stationary, or construction noise were to exceed the criteria listed in Table 3.7-6, Summary of Applicable Noise Impact Significance Criteria.

Table 3.7-6
SUMMARY OF APPLICABLE NOISE IMPACT SIGNIFICANCE CRITERIA

Noise or Vibration Source	Exterior and Interior Noise Level Criterion for NSLU	Substantial Increase in Noise Level
On-Campus NSLU <sup>1</sup>		
Transportation Noise Sources	Housing, Temporary Lodging, Inpatient Medical Care Facilities, Classrooms, Child Development Center, Libraries (and related Learning Spaces) exteriors: 65 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 65 dBA CNEL
	Housing, Temporary Lodging, Inpatient Medical Care Facilities interiors: 45 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 45 dBA CNEL
	Classrooms, Child Development Center, Libraries (and related Learning Spaces) interiors: 50 dBA CNEL	Not Applicable

# Table 3.7-6 (cont.) SUMMARY OF APPLICABLE NOISE IMPACT SIGNIFICANCE CRITERIA

Noise or Vibration Source	Exterior and Interior Noise Level Criterion for NSLU	Substantial Increase in Noise Level
On-Campus NSLU <sup>1</sup>		
Stationary Noise Sources (e.g., HVAC equipment, utility plants, ventilated parking garages)	Housing, Temporary Lodging, Inpatient Medical Care Facilities, Classrooms, Child Development Center, Libraries (and related Learning Spaces) exteriors: 65 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 65 dBA CNEL
	Housing, Temporary Lodging, Inpatient Medical Care Facilities interiors: 45 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 45 dBA CNEL
	Classrooms, Child Development Center, Libraries (and related Learning Spaces) interiors: 50 dBA CNEL	Not Applicable
Construction	Housing, Temporary Lodging, Inpatient Medical Care Facilities exteriors: 75 dBA LEQ averaged over a 12-hour period between 7:00 a.m. and 7:00 p.m. Monday through Saturday at any sensitive receptor	> 3 dBA CNEL if existing noise level exceeds 75 dBA CNEL
Off-Campus Receptors <sup>2</sup>		
Transportation Noise Sources	Single-family residences, multi-family residences, schools, libraries, hospitals, day care, hotels, motels, parks, convalescent homes exteriors: 65 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 65 dBA CNEL
	Single-family residences, multi-family residences, schools, libraries, hospitals, day care, hotels, motels, parks, convalescent homes interiors: 45 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 45 dBA CNEL
	Offices, Churches, Business, Professional Uses exteriors: 70 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 70 dBA CNEL
	Commercial, Retail, Industrial, Outdoor Spectator Sports Uses exteriors: 75 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 75 dBA CNEL
Stationary Noise Sources (e.g., HVAC equipment, utility plants, ventilated parking garages)	Single-family residence: project generated 40 dBA LEQ (nighttime) or 65 dBA CNEL at residential property line	> 3 dBA CNEL if existing noise level exceeds 65 dBA CNEL
	Multi-family residential (up to maximum density of 1/2000): project generated 45 dBA hourly LEQ at residential property line	> 3 dBA CNEL if existing noise level exceeds 45 dBA CNEL
	All other residential: project generated 50 dBA hourly LEQ at residential property line	> 3 dBA CNEL if existing noise level exceeds 50 dBA CNEL

# Table 3.7-6 (cont.) SUMMARY OF APPLICABLE NOISE IMPACT SIGNIFICANCE CRITERIA

Noise or Vibration Source	Exterior and Interior Noise Level Criterion for NSLU	Substantial Increase in Noise Level
Construction	75 dBA $L_{EQ}$ averaged over a 12-hour period between 7:00 a.m. and 7:00 p.m. Monday through Saturday at any residentially zoned property	> 3 dBA CNEL if existing noise level exceeds 75 dBA CNEL

Source: UC San Diego 2018

- 1 Exterior balconies and courtyards on campus are considered active use areas and are not noise sensitive.
- <sup>2</sup> Consistent with the City's Noise Ordinance and CEQA Significance Thresholds.

CNEL = Community Noise Equivalent Level; dBA = A-weighted decibel; HVAC = heating, ventilation, and air conditioning; NSLU = noise sensitive land use

### **Impact Analysis**

# **Transportation Noise**

The roadways that would be primarily affected by Project traffic are La Jolla Village Drive and Villa La Jolla Drive. Existing and future exterior noise levels along these roadways were modeled using the Federal Highway Administration (FHWA) Traffic Noise Model Version 2.5. Existing and future traffic data is estimated based on volumes from SANDAG's Traffic Forecast Information Center (TFIC; SANDAG 2020) and the Project's TIA (LLG 2021). The noise levels were modeled for the following scenarios: Existing and Existing Plus Project. The Existing Plus Project scenario conservatively assumes all Project trips are new to the roadways and does not subtract any existing trips by the recently closed Rock Bottom Restaurant and Brewery. The roadway noise modeling represents a conservative analysis that does not consider topography or attenuation provided by existing structures. Furthermore, this analysis conservatively assumes every trip generated by the Project would traverse each modeled segment. Noise levels for offsite NSLUs were calculated at the distances to the nearest noise-sensitive receptor along four roadway segments: La Jolla Village Drive east and west of Villa La Jolla Drive and Villa La Jolla Drive north and south of La Jolla Village Drive. Noise levels to assess the Project's land use compatibility were modeled at the building façade.

Input variables included projected traffic volumes, estimated truck composition percentages (assumed to be a typical traffic distribution of 94 percent automobiles, 4 percent medium trucks, and 2 percent heavy trucks) (UC San Diego 2017), and vehicle speeds (40 mph for La Jolla Village Drive and 35 mph for Villa La Jolla Drive).

Peak-hour traffic volumes are estimated based on the assumption that approximately 10 percent of the average daily traffic would occur during a peak hour. The Project would generate 1,920 average ADT, or 192 peak hour trips. The one-hour  $L_{EQ}$  noise level is calculated utilizing this peak-hour traffic. In order to analyze traffic noise against the standards of significance, hourly noise levels must be converted to the CNEL 24-hour average. The  $L_{EQ}$  can then be converted to CNEL using the following equation, where  $L_{EQ}(h)pk$  is the peak hour  $L_{EQ}$ , P is the peak hour volume percentage of the ADT, d and e are divisions of the daytime fraction of ADT to account for daytime and evening hours, and N is the nighttime fraction of ADT:

CNEL = LEQ(h)pk + 10log10 + 4.17/P + 10log10(d + 4.77e + 10N)

The model-calculated one-hour L<sub>EQ</sub> noise output is therefore approximately equal to the CNEL (Caltrans 2013).

#### On-site Noise Levels

To assess the Project's compatibility with the land use noise thresholds shown in Table 3.7-6, noise levels at the third-floor building façade were modeled at the Project's northeastern corner. The Project would provide classroom space throughout floors three to seven of the Project building, which would require interior noise levels to not exceed 50 dBA CNEL. At the building façade, noise levels were modeled at approximately 66.5 dBA CNEL. However, the building's construction materials (such as wall and roof assemblies and windows) would attenuate outside noise levels by the 16.5 dBA CNEL required to bring interior noise levels to 50 dBA CNEL.

As described in Section 2.3.6 of this EIR, all UC projects are required to adhere to the CBC, which states that buildings can either incorporate features that include specific sound transmission ratings (prescriptive method) or demonstrate compliance with an interior noise standard of 50 A-weighted decibels (dBA) (performance method). For the prescriptive method, wall and roof-ceiling assemblies would have a composite sound transmission class (STC) rating of at least 50, or a composite outdoor-indoor transmission class (OITC) rating of not less than 40. Additionally, exterior windows would be rated with a minimum STC of 40, or OITC of 30. The performance method requires an acoustical analysis documenting compliance with the interior sound level limits, prepared and approved by the architect or engineer of record. This noise level can be achieved by means of building envelope construction and/or exterior features such as noise walls or berms. These methods would attenuate noise that would reduce interior noise levels to 50 dBA CNEL or below within the classrooms. The Project would not significantly increase traffic noise or generate noise levels from stationary sources that would expose on-site NSLUs to excessive noise levels and, therefore, the Project would result in a less than significant impact.

### Off-site Noise Levels

Off-site NSLUs would be subjected to increased traffic noise from La Jolla Village Drive and Villa La Jolla Drive. The modeling results for these two roadways are shown in Table 3.7-7, *Existing Plus Project Traffic Noise Levels*. The table provides the nearest NSLU type, distance from the roadway, and the changes in exterior noise levels with and without the Project for each segment. The traffic inputs and noise modeling outputs are provided in Appendix G, Construction and Off-site Traffic Noise Data.

Table 3.7-7
<b>EXISTING PLUS PROJECT TRAFFIC NOISE LEVELS</b>

Roadway Segment	Nearest NSLU <sup>1</sup>	Distance to Nearest NSLU (feet) <sup>2</sup>	Existing*	Existing Plus Project*	Change in dBA CNEL*	Impact?*
La Jolla Village Drive						_
East of Villa La Jolla Drive	HT	270	65.2	65.4	+0.2	No
West of Villa La Jolla Drive	MF	150	66.8	67.0	+0.2	No
Villa La Jolla Drive						
North of La Jolla Village Drive	НО	380	57.6	57.9	+0.3	No
South of La Jolla Village Drive	MF	100	64.0	64.4	+0.4	No

Source: Appendix G

Note: Exterior noise level standard is 65 dBA CNEL for multi-family and hotel uses. For hospital uses, the exterior noise standard is 65 dBA CNEL. If noise levels exceed the standard without the project, a significant impact would occur if the project results in an increase of 3 dBA CNEL or more.

dBA=A-weighted decibel; CNEL=Community Noise Equivalent Level; NSLU=noise-sensitive land use

The nearest off-site NSLUs along La Jolla Village Drive and Villa La Jolla Drive include multi-family residences and a hotel. For hospital, hotel, and residential uses, the exterior noise standard is 65 dBA CNEL. As shown in Table 3.7-7, noise levels under both the Existing and Existing Plus Project scenarios exceed 65 dBA CNEL along La Jolla Village Drive west of the Villa La Jolla Drive segment, along which the Rita L. Atkinson Residences (multi-family/dormitory) are located, and along La Jolla Village Drive east of the Villa La Jolla Drive segment, along which the hotel use is located. Exterior noise levels along all other segments do not exceed 65 dBA CNEL under the Existing or Existing Plus Project scenarios.

For roadways where the exterior noise level already exceeds the applicable standard without the Project, a significant increase would occur if the Project results in an increase of 3 dBA CNEL or more. Increases from the Project range from 0.1 dBA to 0.9 dBA CNEL. Along all analyzed roadway segments, the noise increase due to the Project would be less than one decibel, which would not be a discernable increase to the human ear. While traffic noise levels along the La Jolla Village Drive segments east and west of Villa La Jolla Drive would exceed 65 dBA CNEL, Project-added trips would not increase existing noise levels by 3 dBA CNEL. Therefore, direct exterior transportation noise impacts to off-site land uses would be less than significant.

The interior noise standard for single-family and multi-family residential and hotel land uses is 45 dBA CNEL. Typical residential construction materials (walls, ceilings, and windows) are expected to attenuate noise levels by 15 dBA CNEL; therefore, if noise levels are above 60 dBA CNEL at the building façades, a significant interior impact would occur. If noise levels under the existing conditions without the Project already exceed the applicable significance thresholds, a significant impact would occur for the Existing Plus Project scenario if the Project's contribution would be 3 dBA CNEL or greater. Although existing noise levels in the Project scenarios exceed 60 dBA CNEL as shown in Table 3.7-7, the increase in noise levels from Project-added traffic (0.1 to 0.9 dBA CNEL) would be less than 3 dBA CNEL. Therefore, the Project's transportation noise would not cause significant direct impacts to off-site land uses related to interior noise. No mitigation is required.

<sup>\*</sup> dBA CNEL at Nearest NSLU

<sup>&</sup>lt;sup>1</sup> MF = multi-family/dormitory; HO = hospital; HT = hotel.

<sup>&</sup>lt;sup>2</sup> Distance measured from roadway centerline to the nearest NSLUs.

### **General Construction Activities**

Construction activities associated with the proposed Project would result in temporary increases in ambient noise levels due to operation of construction equipment and short-term delivery and haul truck traffic. The nearest noise-sensitive receptors to general construction activities at the Project site include the Rita L. Atkinson Residences (located approximately 340 feet northwest), the La Jolla Boardwalk Apartments multi-family residential development along Villa La Jolla Drive (located approximately 370 feet south), the Residence Inn by Marriott (located approximately 560 feet west), the Sheraton La Jolla Hotel (located approximately 650 feet east), and the VA Medical Center (located approximately 900 feet northeast). Elevated noise levels would be primarily experienced close to the noise source and the magnitude of the impact would depend on the type of construction activity, noise level generated by various pieces of construction equipment, duration of the construction phase, distance between the noise source and receiver, and intervening structures.

Impacts related to temporary increases in ambient noise levels from operation of construction equipment is assessed using reference sound levels from typical construction equipment provided by the FHWA in the Roadway Construction Noise Model (RCNM) (FHWA 2008). Project construction equipment per phase was provided by GPI Companies. Construction would require the use of heavy equipment during each construction phase. Table 3.7-8, *Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

Table 3.7-8
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Phase	Equipment	Number
Demolition/Site Preparation	Concrete/Industrial Saw	1
	Rubber Tired Dozer	1
	Tractor/Loader/Backhoe	3
Trenching	Excavator	1
	Tractor/Loader/Backhoe	2
Shoring, Excavation, and Piles	Excavator	2
	Rubber Tired Dozer	1
	Tractor/Loader/Backhoe	2
Structure	Aerial Lift	1
	Crane	1
	Forklift	2
	Generator Set	1
	Tractor/Loader/Backhoe	1
	Welder	3
Finishes	Air Compressor	1

Source: GPI Companies (data, including equipment horsepower, is provided in Appendix G)

During the demolition and site preparation phase, equipment would include one concrete saw, one bulldozer, and three backhoes. During the excavation phase, equipment would include two excavators, two backhoes, and one bulldozer. Excavation is typically the loudest construction phase. Not all construction equipment would operate at the same time and equipment would be moved across the Project site; therefore, equipment would not remain at one constant distance to a NSLU during the day. Additionally, all equipment was conservatively modeled to be in use for each hour of a given workday. As a conservative analysis, it was assumed that a bulldozer, excavator, and backhoe were in operation

simultaneously. The bulldozer, excavator, and backhoe were modeled to be in operation for 40 percent of an hour for each hour of a given workday.

The closest housing, temporary lodging, or inpatient medical care facility to the Project is the Rita L. Atkinson Residences, approximately 340 feet to the northwest. At this distance, construction noise levels for a bulldozer, excavator, and backhoe would be 64.5 dBA  $L_{EQ}$  (12-hour). Individual equipment noise levels would range from 53.4 to 66 dBA  $L_{EQ}$  (12-hour). Table 3.7-9, *Construction Noise Levels*, presents noise levels for each equipment type.

Table 3.7-9
CONSTRUCTION NOISE LEVELS

Equipment	Percentage Use Per Hour	Noise Level (dBA L <sub>EQ</sub> [12-hour])
Dump Truck	40	55.9
Excavator	40	60.1
Loader	40	58.5
Portable generator	50	60.9
Welder	40	53.4
Backhoe	40	57.0
Paver	50	57.5
Bulldozer	40	61.1
Crane	16	56.0
Concrete Saw	20	66.0
Bulldozer/Excavator/Backhoe	40	64.5

Source: RCNM; Appendix G

Note: All equipment types are assumed to be in use for each hour of a 12-hour work day. Noise level is estimated at the nearest NSLU at a 340 feet distance.

General construction noise levels would not exceed 75 dBA  $L_{EQ}$  (12-hour) at the nearest NSLU, the UC Rita L. Atkinson Residences. Accordingly, NSLUs located further from the Project site would experience lower levels of noise from Project construction, if any. Noise impacts from general construction equipment would be less than significant, and no mitigation is required.

Construction would also require 18,700 CY of cut and 240 CY of fill, resulting in a net export of 18,460 CY of material from the site. The shoring, excavation, and pile foundation phase would last 40 days. Assuming each truck hauls 15 CY of material, the required export of material would be accomplished via approximately 1,240 haul trucks. Each truck would make one trip to the site to pick up material and another trip from the site, thus resulting in a total of approximately 2,480 trips. Over 40 working days, approximately 62 trips would be required each day. Haul trips would be expected to utilize Villa La Jolla Drive and La Jolla Village Drive to access I-5. The closest NSLU to these roadways would be the Sheraton La Jolla Hotel, located 250 feet south of La Jolla Village Drive. La Jolla Village Drive currently carries approximately 56,500 trips per day (SANDAG 2020). Using the FHWA's Traffic Noise Model, an additional 62 haul truck trips would increase noise levels by approximately 0.5 dBA CNEL (see Appendix G for modeling results). Trucks would therefore not increase noise levels by 3 dBA CNEL and construction traffic would not generate a noticeable noise increase. Furthermore, construction traffic would be temporary. Impacts would be less than significant, and no mitigation is required.

UC San Diego 3.7-15 February 2021

# Heating, Ventilation, and Air Conditioning Systems

Typically, the loudest sources of continuous noise from a building are the operation of HVAC systems and other electromechanical equipment, which emit sound levels that can exceed noise criteria and thus create a noise impact when located in sufficient proximity to NSLUs. If the HVAC noise for a new building exceeds the outdoor criteria (65 dBA CNEL or increases existing ambient noise levels by more than 3 dBA), then an impact would occur, and noise mitigation would be required to reduce the impact to a less than significant level. If the predicted noise level at the nearest NSLU would not exceed the impact criteria, then noise levels would be considered less than significant.

Should a NSLU be exposed to noise levels exceeding 65 dBA CNEL from HVAC equipment, the potential would exist for a significant noise impact. As the HVAC equipment would be enclosed to provide attenuation and located on the building rooftop, the additional distance and attenuating material would reduce noise levels at nearby NSLUs. A typical enclosed commercial HVAC unit would have the potential to generate noise levels averaging 60 dBA  $L_{EQ}$  (one hour) at a distance of 100 feet (PDH Center 2012). If the HVAC unit were in use for a 24-hour period, the 60 dBA  $L_{EQ}$  reference noise level would be 66.7 dBA CNEL. The Rita L. Atkinson Residences are the nearest residential use to the Project and are therefore the closest NSLU. Located at a distance of 340 feet from the Project, HVAC noise generated by the Project would not exceed the 65 dBA CNEL threshold. Impacts would be less than significant, and no mitigation is required.

# **Parking Structures**

Noise sources associated with the operation and use of parking structures include both intermittent and continuous sources of noise. The most prevalent intermittent sources include tire noise, car alarms, vehicle engine idling, shutting of vehicle doors, and vehicle loudspeaker systems; all of which are typically momentary and irregular with little potential to result in a continuous noise level over a 24-hour period that would exceed the outdoor criteria (65 dBA CNEL or no more than 3 dBA increase in the existing ambient noise levels). The dominant continuous source of noise typically associated with such structures is the operation of exhaust fans that deliver required mechanical ventilation. Fan noise from the parking structure would be expected to yield 65 dBA CNEL at a distance of 250 feet. As shown in Table 3.7-6, the exterior noise level threshold for stationary noise sources, such as ventilated parking structures, is 65 dBA CNEL. The closest residential use, the Rita L. Atkinson Residences, is located at a distance of 340 feet from the Project and any Project-related fan equipment. At this distance, noise levels would not exceed 65 dBA CNEL. Impacts would be less than significant, and no mitigation is required.

### 3.7.3.2 Issue 2: Excessive Groundborne Vibration and Noise

# **Noise Issue 2 Summary**

Would implementation of the proposed Project result in the generation of excessive groundborne vibration or groundborne noise levels?

Impact: Vibration-sensitive land uses may be subject to vibration levels in excess of established guidelines. Construction of the proposed Project may require heavy equipment or pile-driving activities that may cause damage, disruption, or interruption of vibration-sensitive land uses.

**Mitigation:** Conduct site-specific vibration monitoring prior to the beginning of construction activities (NOI-1).

**Significance Before Mitigation:** Potentially significant.

**Significance After Mitigation:** Less than significant.

### Standards of Significance

Implementation of the proposed Project may have a significant impact if it generates groundborne vibration in excess of Caltrans or FTA criteria as shown in Table 3.7-3. The Caltrans Transportation and Construction Vibration Guidance Manual (Caltrans 2013) provides guidance for the analysis of vibratory impacts generated by transportation and construction projects by providing thresholds for structural damage risk. Table 3.7-10, *Vibration Impact Significance Criteria with Respect to Vibration-Sensitive Activities*, provides the vibration thresholds for high-sensitivity land uses, including operating rooms and buildings containing vibration-sensitive laboratory equipment and processes. Table 3.7-11, *Vibration Impact Screening Distances*, provides the vibration thresholds for different land uses and the calculated distance between the source and receptor where impacts would potentially occur, referred to as the screening distance. Table 3.7-12, *Vibration Source Levels for Construction Equipment*, provides vibration source levels for construction equipment.

Table 3.7-10
VIBRATION IMPACT SIGNIFICANCE CRITERIA WITH RESPECT TO
VIBRATION-SENSITIVE ACTIVITIES

Space Usage of Vibration Criterion (VC)	Maximum Level (VdB)	Description of Use or Receptor
Computer equipment	78	Adequate for computer equipment and low-power optical microscopes (up to 20X magnification).
Operating rooms	72	Suitable for medium-power optical microscopes (100X) and similar equipment.
VC-A	66	Adequate for medium- to high-power optical microscopes (400X), microbalances, optical balances, and similar specialized equipment.
VC-B	60	Adequate for high-power optical microscopes (1000X), inspection and lithography equipment to 3-micron line widths.
VC-C	54	Appropriate for most lithography and inspection equipment to 1 micron detail size.
VC-D	48	Suitable in most instances for the most demanding equipment, including electron microscopes operating to the limits of their capability.
VC-E	42	The most demanding criterion for extremely vibration-sensitive equipment.

Source: FTA 2018

VC = vibration criterion; VdB = vibration decibels

Table 3.7-11 VIBRATION IMPACT SCREENING DISTANCES

Type of Receptor	Type of Impact	Threshold (VdB)	Screening Distance – Normal Construction (feet)	Screening Distance – Pile Driving (feet)
Older Residential Buildings	Structural Damage	102	N/A	30
Land Use Category 2 – Residences, or other land use where people normally sleep	Human annoyance	80	75	160
Land Use Category 3 – Institutional or daytime use	Human annoyance	83	60	125
VC-A type vibration-sensitive equipment	Interference with use	66	210	450

Source: UC San Diego 2019 VdB = vibration decibels

Equipment	Approx. VdB at 25 feet	Approx. VdB at 30 feet <sup>1</sup>	Approx. VdB at 60 feet1	Approx. VdB at 75 feet <sup>1</sup>	Approx. VdB at 125 feet <sup>1</sup>	Approx. VdB at 160 feet <sup>1</sup>	Approx. VdB at 210 feet1	Approx. VdB at 450 feet1
Pile Driver	104	102	93	90	83	80	76	66
Large Bulldozer	87	85	76	73	66	63	59	49
Caisson drilling	87	85	76	73	66	63	59	49
Loaded Trucks	86	84	75	72	65	62	58	48
Jackhammer	79	77	68	65	58	55	51	41
Small Bulldozer	58	56	47	44	37	34	30	20
Vibratory Roller	94	92	83	80	73	70	66	56

Table 3.7-12
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Source: FTA 2018

Notes: VdB = vibration decibels

# **Impact Analysis**

### **Stationary Vibration**

Stationary noise sources, such as the rooftop HVAC systems, would not be expected to generate substantial levels of vibration or groundborne noise. Such equipment is typically designed, manufactured, and operated with reciprocating or rotational moving parts that are well balanced and create negligible vibration—in fact, the monitored occurrence of excessive vibration on such mechanical equipment is usually a fault indicator that would prompt service and restoration of normal operating conditions and associated low vibration levels.

### **Construction-related Vibration**

The Project does not propose a land use that may generate substantial operational vibration, but construction activities would have the potential to generate levels of groundborne vibration that could adversely affect nearby sensitive land uses, buildings that are structurally sensitive to groundborne vibration, and facilities where equipment and/or activities may be sensitive to vibratory influences. The level of vibration received by these land uses would depend both on the vibrational energy-generating capability of the construction equipment or process, and the type of surface soils and strata through which the vibration transmit from the source to the receiver. Vibration-sensitive land uses in the Project vicinity include the UC San Diego Health Center and Urgent Care and the La Jolla Boardwalk Apartments south of the Project site along Villa La Jolla Drive. The use of pile driving equipment and a vibratory roller represent the largest sources of construction vibration.

Table 3.7-11 shows predicted screening distances for construction activities. Pile driving equipment could be used to achieve soil compaction as part of the foundation construction. The nearest

<sup>&</sup>lt;sup>1</sup> Based on the formula VdB = VdB(25 feet)  $- 30\log(d/25)$  provided by the FTA (2018).

vibration-sensitive land use, the UC San Diego Urgent Care—La Jolla, is located approximately 75 feet south of the Project foundation perimeter. As a vibration-sensitive land use would be located within the standard screening distance from the proposed Project, impacts associated with construction-generated vibration could therefore exceed the threshold of 78 VdB (for computer equipment) as shown in Table 3.7-10. Therefore, impacts are assessed as potentially significant. Implementation of Mitigation Measure NOI-1 requiring vibration monitoring would be required to reduce Project-related impacts to a less than significant level.

# **Mitigation Measures**

- **NOI-1 Construction Vibration Monitoring.** Prior to the commencement of construction activities that would involve impact-type pile driving within the applicable screening distance, the contractor shall retain a qualified acoustician to monitor construction vibration and reduce vibration resulting from construction activities through the following:
  - i. Vibration monitoring shall be performed during construction to establish the level of vibration produced by high impact activities. Monitoring shall be conducted when pile driving would occur within the 450 feet of off-site locations with vibration-sensitive equipment. Monitoring shall be conducted using portable vibration-monitoring instrumentation that provides a calibrated record of local ground movement/accelerations. If construction vibration exceeds the 78 VdB threshold for computer equipment and low-power optical microscopes (up to 20X magnification), and other equipment as applicable, work should be stopped and resumed when alternative work methods and equipment can be implemented to ensure the construction vibration does not exceed 78 VdB. Baseline vibration levels at specified locations shall be established prior to the construction activity.
  - ii. Building occupants of vibration-sensitive land uses within the applicable screening distance shall be notified at least two weeks prior to the start of construction.

# **Significance After Mitigation**

Implementation of Mitigation Measure NOI-1 would reduce construction vibration impacts to a less than significant level.

### 3.7.3.3 Issue 3: Aircraft Noise

### **Noise Issue 3 Summary**

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would implementation of the proposed Project expose people residing or working in the project area to excessive noise levels?

**Mitigation:** No mitigation required.

**Impact:** The Project site is not located in the vicinity of a public airport or private airstrip that would expose people working in the Project to excessive noise levels.

Significance Before Mitigation: Less than Significance After Mitigation: Not applicable.

significant.

# Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Project would have a significant impact if it would expose people residing or working in the Project area to excessive noise 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 use airport or private airstrip.

### **Impact Analysis**

The Project site is not located within two miles of a public airport, public use airport, or private airstrip. The Project site is subject to periodic overflights by civil and commercial aviation. MCAS Miramar is located approximately 3.5 miles west of the Project site. However, as shown in the 2018 LRDP EIR, the Project site is not located within the 60 dBA CNEL contour of any airport, including MCAS Miramar operations. Although periodic overflights by military operations would be expected to continue, the Project site would not be subject to aircraft noise in excess of the regulatory limits. In addition, the Torrey Pines Gliderport, a public-owned private-use airport operating fixed-wing gliders and sailplanes, is located 1.5 miles northeast of the Project site. This intermittent short-term use of sailplanes and gliders would not generate noise typically associated with motorized aircraft. As a result, implementation of the proposed Project would not result in exposure of people residing or working in the Project area to excessive noise levels generated by aircraft noise. Impacts would be less than significant, and no mitigation is required.

### **Mitigation Measures**

The proposed Project would have a less than significant impact related to aircraft noise; therefore, no mitigation is required.

# 3.7.4 Cumulative Impacts and Mitigation

### **Noise Cumulative Issue Summary**

Would implementation of the proposed Project have a cumulatively considerable contribution to a cumulative noise impact considering past, present, and probable future projects?

Cumulative Impact	<b>Significance</b>	<b>Project Contribution</b>	
Exceed noise standards	Less than significant.	Less than significant.	
Excessive groundborne vibration and noise	Less than significant.	Less than significant.	
Aircraft noise	No impact.	No impact.	

### **Exceed Noise Standards**

The geographic context for the analysis of cumulative noise impacts varies based on the type of noise impact being analyzed. The study area for the analysis of cumulative construction noise impacts include the immediate Project vicinity including the two roadways adjacent to the Project. Potential cumulative construction noise would be generated by projects developed under implementation of the 2018 LRDP and projects that may be constructed under the University Community Plan. The nearby Erosion Repair and Parking Lot Project (located approximately 500 feet northeast of the Project south of the VA), the Seismic Deficiency - Spinal Cord Injury and Community Living Center Project (located approximately 0.25-mile northeast of the Project), and the Theatre District Living and Learning Neighborhood (located 0.5-mile west of the Project) may introduce additional construction traffic noise. Construction from these Projects may lead to an increase in noise generated by hauling trucks requiring use of La Jolla Village Drive and Villa La Jolla Drive. As UC San Diego Projects, the Erosion Repair and Parking Lot Project, Theatre District Living and Learning Neighborhood, and the proposed Project would require coordination between construction projects associated with UC San Diego and would provide TCPs. Furthermore, grading operations have been completed at the North Torrey Pines Living and Learning Neighborhood and the Mid-Coast Trolley projects, and it is not anticipated that grading for other cumulative projects would occur simultaneously with the Project's 40-day grading phase.

One of the cumulative projects requiring haul trips may occur during the same time frames as the Project's grading. The Theatre District Living and Learning Neighborhood would require the export of approximately 200,000 CY of material during grading operations (UC San Diego 2020a). Approximately 93,000 CY of material requiring export for that project would be deposited at the Erosion Repair and Parking Lot (South of VA) north of the Project site (UC San Diego 2020b). Therefore, approximately 107,000 CY of remaining material from the Theatre District Living and Learning Neighborhood would potentially route haul trucks to the same segment of La Jolla Village Drive as the Project's haul trucks. The 107,000 CY of material is assumed to be exported throughout that project's approximately six-month grading period. Assuming each truck hauls 15 CY of material, the required export of material from the Theatre District Living and Learning Neighborhood would be accomplished via approximately 7,133 haul trucks. Each truck would make one trip to the site to pick up material and another trip from the site, thus resulting in a total of approximately 14,266 trips. Over an approximate six-month grading

period, approximately 108 trips would be required each workday. Combined with the Project's 62 trips, cumulative haul trucks may require 170 heavy truck trips per day.

Using the Traffic Noise Model, it was estimated that combined trips from both projects would increase noise levels along the segment of La Jolla Village Drive east of the Villa La Jolla Drive by 1.2 dBA CNEL. This would be less than 3 dBA CNEL and is therefore not considered a noticeable increase. Because these roadways handle large amounts of existing traffic, additional construction traffic combined with the Project's construction noise is not anticipated to be significant, and the Project's construction noise would be less than significant.

Cumulative noise from construction equipment is not expected to be significant for off-site NSLUs, as the Project's construction noise levels would be less than significant. Potential construction for the Erosion Repair and Parking Lot (South of VA) Project and the Seismic Deficiency - Spinal Cord Injury and Community Living Center Project would be located at distances exceeding 500 feet from the Project, greatly reducing noise levels. Furthermore, construction of all projects would be required to adhere to the 12-hour 75 dBA LEQ standard common to both UC San Diego and the City of San Diego, to ensure noise levels are reduced to less than significant levels.

Operational noise levels from implementation of the 2018 LRDP, including the Theatre District Living and Learning Neighborhood, the Seismic Deficiency - Spinal Cord Injury and Community Living Center Project, as well as projects developed under the University Community Plan would generate elevated traffic noise levels throughout the community, including along La Jolla Village Drive and Villa La Jolla Drive. However, as described in Section 3.7.3.1, the Project's noise impacts to both of these roadways would be less than significant and would therefore not be cumulatively considerable. The only cumulative project in the immediate vicinity of the Project is Erosion Repair and Parking Lot (South of VA) Project, which as stated previously, is not anticipated to generate substantial operational noise once constructed.

Therefore, cumulative noise impacts with respect to exceedance of standards would be less than significant.

### **Excessive Groundborne Vibration and Noise**

Potential vibration impacts attributable to construction activities such as pile driving are generally limited to buildings and structures located close to the construction site. No cumulative projects requiring the use of pile driving are located in the immediate vicinity of the Project or neighboring properties. Furthermore, implementation of Mitigation Measure NOI-1, which requires construction monitoring to ensure that vibration levels do not exceed standards, would reduce vibration impacts from the Project to a less than significant level. Therefore, cumulative impacts associated with excessive groundborne vibration and noise are less than significant.

### **Aircraft Noise**

The Project site is not located in the vicinity of a public airport or private airstrip that would expose people working in the Project to excessive noise levels. No nearby projects would contribute to the exposure of aircraft noise, and there would be no cumulative impact.

# 3.7.4.1 Mitigation Measures

Cumulative impacts with respect to noise and vibration are less than significant; therefore, no mitigation is required.

### 3.7.5 References

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Traffic Volumes.

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2020b. Erosion Repair and Parking Lot (South of VA) Project. December.

2019. University of California San Diego 2019 Long Range Development Plan Hillcrest Campus Final Environmental Impact Report SCH No. 2018031003. November.

2018. University of California San Diego 2018 Long Range Development Plan La Jolla Campus Final Environmental Impact Report SCH No. 2016111019. November.

2017. North Torrey Pines Living and Learning Neighborhood Environmental Impact Report.

# 3.8 TRANSPORTATION

This section describes the existing transportation conditions for the Project site and vicinity, identifies plans and policies applicable to the discussion of transportation issues, evaluates potential Project-related impacts for significance, and identifies mitigation measures where appropriate. The information in this section is summarized, in part, from information contained in the Project-specific Transportation Impact Analysis (TIA) prepared by LLG in January 2021, included as Appendix H to this EIR.

# 3.8.1 Existing Environmental Setting

The Project site is located within an existing approximately 7-acre commercial center. Regional access to the center and the Project site is provided by Villa La Jolla Drive to the east and La Jolla Village Drive to the north. La Jolla Village Drive has a direct connection to I-5, approximately one-quarter mile to the east. Vehicular access t to the Project site is also provided by two existing driveways connecting to Villa La Jolla Drive to the east and Villa Norte to the south.

Pedestrian access to the Project site is provided by sidewalks along La Jolla Village Drive and Villa La Jolla Drive. A pedestrian bridge spanning La Jolla Village Drive also connects the Project site and surrounding land uses to the UC San Diego La Jolla Campus to the north.

According to the San Diego Bicycle Master Plan (Alta Planning 2013), the nearest bicycle routes to the Project site are the existing Class II bike lanes along Gilman Drive and the Class III bike lanes along Nobel Drive. The plan also identifies a high priority Class II bike lane proposed along Villa La Jolla Drive adjacent to the Project site, and along La Jolla Village Drive to the east of the Project site. As part of the Coastal Rail Trail project, one-way protected cycle track (Class IV) improvements are proposed along both directions of Gilman Drive, west of the Project (City 2021).

The nearest public transit bus stop is on La Jolla Village Drive approximately 200 feet east of the intersection of Villa La Jolla Drive. There are four MTS bus routes that serve that stop, including Routes 30, 41, 150 and 921. Two Super Loop stops are also located in the vicinity of the Project site on Nobel Drive (Routes 201 and 202). Additionally, UC San Diego's Triton Transit provides a shuttle fleet to serve the University and nearby neighborhoods for students and faculty. The nearest Triton Transit shuttle stop is a weekend service stop approximately 0.3 mile southeast of the Project site. The nearest daily Triton Transit service is the campus loop shuttle, located approximately 0.5 mile north of the Project within the West Campus. The Project site is also located within 0.33-mile of two future UC San Diego Blue Line LRT stations, which are currently under construction as part of SANDAG's Mid-Coast Trolley Project and expected to begin service in late 2021. One station would be located at the VA Medical Center and the other would be located near Nobel Drive.

# 3.8.2 Regulatory Framework

Transportation and traffic on and around the Project site are guided by plans and policies developed by the federal government, State of California, and regional transportation programs. Applicable regulations that pertain to the proposed Project are described below.

### 3.8.2.1 Federal

### Americans with Disabilities Act of 1990

The Americans with Disabilities Act (ADA) prohibits discrimination on the basis of disability in employment, state and local government, public accommodations, commercial facilities, transportation, and telecommunications. To be protected by the ADA, one must have a disability or have a relationship or association with an individual with a disability. An individual with a disability is defined by the ADA as a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such impairment, or a person who is perceived by others as having such impairment. The ADA does not specifically name all of the impairments that are covered. Numerous standards and guidance documents have been developed to facilitate the proper implementation of the ADA. Title 28, Part 36, of the Code of Federal Regulations prohibits discrimination on the basis of disability by public accommodations and requires places of public accommodation and commercial facilities to be designed, constructed, and altered in compliance with the accessibility standards established by this part. The regulation includes Appendix A of Part 36, Standards for Accessible Design, establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. As a public institution, UC San Diego must make each of its programs, services, and activities accessible to and usable by qualified persons with disabilities. Accordingly, UC San Diego has created the UC San Diego Disability Access Guidelines to enable compliance with the federal ADA mandates, which includes information about different types of disabilities, typical access problems, how to accommodate persons who have disabilities, and how to make campus programs and public areas of UC San Diego accessible.

### 3.8.2.2 State

# Senate Bill 743

In September 2013, the Governor's Office signed SB 743 into law, starting a process that fundamentally changes the way transportation impact analyses are conducted under CEQA. In response to the passage of SB 743, the Governor's Office of Planning and Research (OPR) was required to amend the CEQA Guidelines to provide a new approach to evaluating traffic impacts. These changes include the elimination of auto delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. The mandate of SB 743 was to devise an alternative traffic impact evaluation criterion that would promote the reduction of GHG emissions as well as foster the development of multi-modal transportation networks and a diversity of land uses. SB 743 further suggested that a measurement such as VMT would be an appropriate method to evaluate traffic impacts (CEQA Guidelines Section 15064.3). VMT is defined as a measurement of miles traveled by vehicles within a specified region and for a specified time period. VMTs are calculated based on individual vehicle trips generated and their associated trip lengths. The justification for this paradigm shift is that auto delay/LOS impacts may lead to improvements that increase roadway capacity and therefore sometimes induce more traffic and greenhouse gas emissions as a result. In contrast, constructing projects in VMT-efficient locations assists California in meeting GHG emissions targets. Therefore, consistent with SB 743 and CEQA Guidelines 15064.3, the CEQA significance determination for the Project is based only on VMT and not on LOS.

In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update, including the Guidelines section implementing Senate Bill 743 (Section 15064.3).

# UC San Diego 2018 La Jolla Long Range Development Plan

Although the Project is not located on the UC San Diego La Jolla Campus and will not be incorporated into the boundaries of the 2018 LRDP, the Project will apply UC San Diego standards and guidelines, as applicable. The 2018 LRDP provides the context for the development of the adjacent La Jolla campus in relation to the economic, academic, and environmental landscape; equips the campus with a broad, coherent, and adaptable policy framework to achieve UC San Diego's program goals; and provides a basis for future decisions concerning land uses and capital projects. The 2018 LRDP EIR includes programmatic mitigation to improve vehicular circulation in the vicinity of the campus. This mitigation program was expanded by the University to further benefit both the campus and surrounding communities even beyond the requirements of the program EIR. Among other improvements, the program includes the installation of adaptive traffic signal controls ("smart signals") to improve and maximize traffic flow along the La Jolla Village Drive and Regents Road corridors and has recently been expanded to the North Torrey Pines Road corridor as an additional community benefit.

In relation to transportation, the 2018 LRDP promotes an expanded framework for pedestrian and bicycle routes that has been designed to create a desirable physical environment, support health and wellness, reduce automobile dependency, and link with mass transit stations including the LRT system extension to the campus, which is currently under construction and would include two new LRT stations at the university (and three other stations in close proximity). To support this framework, the 2018 LRDP has set forth a set of pedestrian, bicycle, and alternative transportation goals, the following of which are relevant to the proposed Project:

- Encourage active transportation by improving pedestrian and bicycle infrastructure which reduces concerns over personal safety and improves sense of community.
- Locate vehicle parking at the perimeter except where proximate access is necessary, to create a more pedestrian-oriented urban core.
- Improve safety by reducing conflicts between vehicles, bicycles, and pedestrians through thoughtful design and clarity in circulation.
- Design new buildings to enhance pedestrian connections to adjacent sites and provide appropriate bicycle connections and infrastructure.
- Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce single-occupant vehicle traffic.
- Encourage walking and bicycle usage on campus through continued infrastructure improvements and implementation of supporting programs and policies.

The Project site would generally be consistent with the goals, objectives and policies established in the 2018 LRDP. As with other off-campus properties owned by the University, the Project would be subject to University-wide policies and regulations. These policies, along with relevant information from the 2018 LRDP, are identified where applicable to this Transportation analysis.

# 3.8.2.3 Regional and Local (Non-Regulatory)

### **SANDAG**

SANDAG serves as the forum for decision-making on regional issues such as growth, transportation, land use, the economy, and the environment. SANDAG builds consensus, makes strategic plans, obtains and allocates resources, and provides information on a broad range of topics pertinent to the region's quality of life. SANDAG is governed by a Board of Directors composed of mayors, council members, and supervisors from each of the San Diego region's 19 local governments.

SANDAG has produced the following documents that identify transportation plans and policies in the San Diego area.

### San Diego Forward: The Regional Plan

SANDAG adopted the San Diego Forward: The Regional Plan on October 9, 2015 (SANDAG 2015). This plan combines the Regional Comprehensive Plan and the RTP and its SCS. The future focus is on smart growth and sustainable development, with the provision of transportation choices. This planning effort combines land use planning with transportation goals and state-mandated GHG reduction targets. The 2021 Regional Plan update is currently being prepared and is anticipated to be adopted in Fall 2021 (SANDAG 2021).

# **Congestion Management Plan**

The purpose of the state-mandated Congestion Management Plan (CMP) is to monitor roadway congestion and assess the overall performance of the region's transportation system. Based on this assessment, the CMP contains specific strategies and improvements to reduce traffic congestion and improve the performance of a multi-modal transportation system (SANDAG 2018). SANDAG provided regular updates for the state CMP from 1991 through 2008. However, in October 2009, the San Diego region elected to be exempt from the state-mandated CMP. Since this decision, SANDAG has been meeting the federal congestion management provisions through existing SANDAG planning and performance monitoring activities, such as the RTP and other multi-modal performance monitoring efforts.

### City of San Diego

As discussed in other sections of this EIR, UC San Diego is part of the UC, a constitutionally created entity of the State of California, with "full powers of organization and government" (Cal. Const. Art. IX, Section 9). As a constitutionally created state entity, the UC is not subject to municipal regulations of surrounding local governments, such as the City's General Plan or land use ordinances, for uses on property owned or controlled by the UC that are in furtherance of the UC's education purposes. However, UC San Diego may consider, for coordination purposes, aspects of local plans and policies for the communities surrounding the campus when it is appropriate and feasible, even though it is not bound by those plans and policies in its planning efforts. Thus, a summary of the local plans and policies for the City related to transportation and traffic are discussed below.

### City of San Diego General Plan (2008)

The City's General Plan Mobility Element identifies transportation planning goals and policies related to pedestrian, transit, street and freeway systems, Intelligent Transportation Systems, TDM, bicycling, parking management, airports, passenger rail, goods movement/freight, and regional coordination and financing. The element discusses several key topics related to pedestrian-oriented planning, trafficcalming techniques, bicycle network improvements, and transit priorities. The General Plan's "City of Villages" strategic framework is a key component of the City's growth strategy. According to the General Plan, "The City of Villages strategy is to focus growth into mixed-use activity centers that are pedestrianfriendly, centers of community, and linked to the regional transit system." Further, the City of Villages strategy is an important component of the City's effort to reduce GHG emissions, because the strategy makes it possible for larger numbers of people to make fewer and shorter auto trips. The City of Villages strategy promotes a land use pattern that will help meet regional GHG emission targets by improving transportation and land use coordination and jobs/housing balance, creating more transit-oriented, compact, and walkable communities, providing more housing capacity for all income levels, and protecting environmental resource areas. UC San Diego and the proposed Project are located in a City of San Diego sub-region that is identified as a "smart growth opportunity area" in the city and regional plans, due to its density and access to regional transportation systems.

### **University Community Plan**

The University Community Plan was adopted by the City on July 7, 1987. It was most recently amended by the San Diego City Council on September 10, 2018. The Transportation Element reflects recent planned mobility improvements that have been approved or completed, including the removal of the planned Genesee Avenue Widening and the Regents Road Bridge (City 2018). The Transportation Element of the University Community Plan identifies UC San Diego as a regional traffic generator and includes provisions for the expansion (currently under construction) of the Blue Line LRT to the UC San Diego and University community areas. In addition, the Transportation Element notes that many students choose to park in the community area and that UC San Diego provides a shuttle system. It emphasizes that UC San Diego should continue to communicate with transit authorities regarding the shuttle system and other public transit improvements. The City is currently in the process of updating the University Community Plan. The Community Plan Update underway identifies the proposed Project area as Focus Area 4 an area that is being considered for the for study of intensification of mixed uses given its proximity to transit alternatives acknowledging the close proximity to the campus.

# 3.8.3 Environmental Impacts and Mitigation

# 3.8.3.1 Issue 1: Compliance with Applicable Circulation Plan

### **Transportation Issue 1 Summary**

Would implementation of the proposed Project cause a conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Impact: The Project would not conflict with an

applicable circulation plan.

**Mitigation:** No mitigation is required.

Significance Before Mitigation: Less than

Significance before wildgation. Less that

**Significance After Mitigation:** Not applicable.

significant.

# **Impact Analysis**

As previously discussed in Chapter 2.0, Project Description of this EIR, as a constitutionally created State entity, the UC is not subject to municipal regulations of surrounding local governments, such as the City of San Diego General Plan or land use ordinances, for uses on property owned or controlled by the UC that are in furtherance of the UC's education purposes. Thus, upon acquisition of the property, the Project site would be under the ownership of the UC Regents and subject to UC land management policies. Therefore, in relation to conflicts with a program plan, ordinance, or policy, the Project would have a significant impact if it were not in conformance with University land management policies.

The Project site is not within the boundaries of the 2018 LRDP nor would the Project be incorporated into the boundaries of the 2018 LRDP; however, the Project would be generally consistent with the plan. Information from the 2018 LRDP has been provided where applicable to this analysis. For example, the 2018 LRDP identifies the major roadways within the circulation network and bicycle network surrounding the campus. Specifically, La Jolla Village Drive and Villa La Jolla Drive north and east of the Project site are identified as primary roadways and the intersection of La Jolla Village Drive and Villa La Jolla Drive is identified as an important campus entry. The 2018 LRDP further identifies Gilman Drive both north and west of the Project site as the nearest existing bicycle route and the existing pedestrian bridge over La Jolla Village Drive adjacent to the Project site as the nearest pedestrian connection.

In addition to identifying specific facilities, the University has established several alternative transportation goals aimed at reducing single-occupancy vehicle trips to and from university campuses and off-campus properties owned by the University. The Project's design in relation to consistency with the relevant transportation goals is discussed in Table 3.8-1, *University Transportation Goals and Project Consistency*.

Table 3.8-1
UNIVERSITY TRANSPORTATION GOALS AND PROJECT CONSISTENCY

Encourage active transportation by improving pedestrian and bicycle infrastructure which reduces concerns over personal safety and improves sense of community.  Improve safety by reducing conflicts between vehicles, bicycles, and pedestrians through thoughtful design and clarity in circulation.  Collaborate with local agencies to enhance and improve pedestrian and bicycle access to/from the campus and within the surrounding communities.  Design new buildings to enhance pedestrian connections to adjacent sites and provide appropriate bicycle connections and infrastructure.  Locate vehicle parking at the perimeter of the campus, except where proximate access is necessary, to create a more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  The Project would be located outside the UC San Diego La Jolla campus, but would incorporate pedestrian links within the site connecting to off-campus public sidewalks, crossings, and pedestrian birdges. The Project would incorporate pedestrian birdges. The Project would incorporate bicycle parking and storage to provide ease of use for alternative transportation options.  The Project would provide off-campus vehicular parking to serve the proximate parking needs of the Project's users.  The Project would be within walking distance of local community transit options, including buses, campus shuttles, and the UC San Diego Blue Line LRT.	2018 LRDP Transportation Goals	Project Consistency
personal safety and improves sense of community.  Improve safety by reducing conflicts between vehicles, bicycles, and pedestrians through thoughtful design and clarity in circulation.  Collaborate with local agencies to enhance and improve pedestrian and bicycle access to/from the campus and within the surrounding communities.  Design new buildings to enhance pedestrian connections to adjacent sites and provide appropriate bicycle connections and infrastructure.  Locate vehicle parking at the perimeter of the campus, except where proximate access is necessary, to create a more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce	Encourage active transportation by improving pedestrian	The Project would be located outside the UC San
Improve safety by reducing conflicts between vehicles, bicycles, and pedestrians through thoughtful design and clarity in circulation.  Collaborate with local agencies to enhance and improve pedestrian and bicycle access to/from the campus and within the surrounding communities.  Design new buildings to enhance pedestrian connections to adjacent sites and provide appropriate bicycle connections and infrastructure.  Locate vehicle parking at the perimeter of the campus, except where proximate access is necessary, to create a more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce	and bicycle infrastructure which reduces concerns over	Diego La Jolla campus, but would incorporate
Improve safety by reducing conflicts between vehicles, bicycles, and pedestrians through thoughtful design and clarity in circulation.  Collaborate with local agencies to enhance and improve pedestrian and bicycle access to/from the campus and within the surrounding communities.  Design new buildings to enhance pedestrian connections to adjacent sites and provide appropriate bicycle connections and infrastructure.  Locate vehicle parking at the perimeter of the campus, except where proximate access is necessary, to create a more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce	personal safety and improves sense of community.	·
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pedestrian and bicycle access to/from the campus and within the surrounding communities.  Design new buildings to enhance pedestrian connections to adjacent sites and provide appropriate bicycle connections and infrastructure.  Locate vehicle parking at the perimeter of the campus, except where proximate access is necessary, to create a more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce	Collaborate with local agencies to enhance and improve	
Design new buildings to enhance pedestrian connections to adjacent sites and provide appropriate bicycle connections and infrastructure.  Locate vehicle parking at the perimeter of the campus, except where proximate access is necessary, to create a more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  The Project site would provide off-campus vehicular parking to serve the proximate parking needs of the Project's users.  The Project would be within walking distance of local community transit options, including buses, campus shuttles, and the UC San Diego Blue Line LRT.	<del>-</del>	
Design new buildings to enhance pedestrian connections to adjacent sites and provide appropriate bicycle connections and infrastructure.  Locate vehicle parking at the perimeter of the campus, except where proximate access is necessary, to create a more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce		
to adjacent sites and provide appropriate bicycle connections and infrastructure.  Locate vehicle parking at the perimeter of the campus, except where proximate access is necessary, to create a more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce  The Project site would provide off-campus vehicular parking to serve the proximate parking needs of the Project's users.  The Project would be within walking distance of local community transit options, including buses, campus shuttles, and the UC San Diego Blue Line LRT.	within the surrounding communities.	
Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce  The Project site would provide off-campus vehicular parking to serve the proximate parking needs of the Project's users.  The Project would be within walking distance of local community transit options, including buses, campus shuttles, and the UC San Diego Blue Line LRT.	Design new buildings to enhance pedestrian connections	
Locate vehicle parking at the perimeter of the campus, except where proximate access is necessary, to create a more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce  The Project site would provide off-campus vehicular parking to serve the proximate parking needs of the Project's users.  The Project would be within walking distance of local community transit options, including buses, campus shuttles, and the UC San Diego Blue Line LRT.	to adjacent sites and provide appropriate bicycle	
except where proximate access is necessary, to create a more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce  parking to serve the proximate parking needs of the Project's users.  The Project would be within walking distance of local community transit options, including buses, campus shuttles, and the UC San Diego Blue Line LRT.	connections and infrastructure.	
more pedestrian- oriented urban core.  Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce  Project's users.  The Project would be within walking distance of local community transit options, including buses, campus shuttles, and the UC San Diego Blue Line LRT.		
Continue collaborative partnerships with local transit agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  The Project would be within walking distance of local community transit options, including buses, campus shuttles, and the UC San Diego Blue Line LRT.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce		1
agencies to enhance and effectively coordinate services provided to the UC San Diego campus and surrounding community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce		,
provided to the UC San Diego campus and surrounding community.  Shuttles, and the UC San Diego Blue Line LRT.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce		
community.  Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce	=	
Continue to support and encourage alternative modes of travel including Light Rail Transit to further reduce		shuttles, and the UC San Diego Blue Line LRT.
travel including Light Rail Transit to further reduce	community.	
travel including Light Rail Transit to further reduce	Continue to support and encourage alternative modes of	

Source: UC San Diego 2018a

Vehicular access to the Project site would continue to be provided by the two existing driveways to the commercial center from Villa La Jolla Drive and the Villa Norte cul-de-sac. Regional access is provided by Villa La Jolla Drive to the east of the site and La Jolla Village Drive to the north, which has a direct connection to I-5. No improvements are proposed to these roadways. Access to the parking garage would be provided by one entrance driveway near the southwestern corner of the proposed building. Refer to Figure 2-12, *Vehicular and Pedestrian Access* for an overview of the Project's access and transportation connections.

Currently the City-owned pedestrian bridge over La Jolla Village Drive connects the Project site with the West Campus area. Implementation of the Project would not alter the existing bridge. The Project would also improve pedestrian access to the site by providing a new sidewalk connection through the Project site connecting to La Jolla Village Drive. The new sidewalk connection would be paved along the western and southern sides of the building and would connect to a new ADA-accessible access ramp from the Project site to the Villa La Jolla Drive sidewalk along the eastern side of the building. A set of stairs would also be provided off the eastern building stairwell to connect that exit to the Villa La Jolla Drive sidewalk.

The Project site would be accessible from two Trolley stations currently under construction as part of the San Diego Trolley's Mid-Coast Trolley expansion project: Nobel Drive, located approximately 0.33-mile southeast of the Project, and VA Medical Center, located approximately 0.33-mile northeast of

the Project. The Mid-Coast Trolley project will expand alternative transportation options in the I-5 corridor, providing a campus-commuting alternative and improving public transit services between the UC San Diego campus and other areas of San Diego County served by existing LRT routes. The Mid-Coast Trolley project is scheduled to be operational in late 2021.

Thus, in relation to the University's goals aimed at encouraging alternative transportation, the Project would enhance pedestrian access to the site with new sidewalk connections and ADA accessibility, improving safety and promoting a pedestrian oriented environment. Although there are no designated 2018 LRDP bicycle or pedestrian facilities in the immediate vicinity of the Project, Project-related improvements would further serve to connect the Project site to the campus. The Project would provide bicycle parking and storage and would allow users of the site to easily bike or walk to and from the site to the surrounding existing campus facilities north of the site and vice versa. The Project's location in proximity to two new LRT stations would also allow site users to access the proposed Project without being auto dependent. Therefore, the Project would support and encourage alternative modes of travel thereby further reducing traffic associated with single-occupant vehicles. The Project would result in less than significant impacts related to conflicts with the University goals related to transportation, and no mitigation is required.

Regarding Project construction, as noted in the Project Description, a TCP would be prepared and implemented to allow safe and effective circulation of all road users (i.e., motorists, bicyclists, and pedestrians) through and/or around temporary traffic control zones). Traffic management controls would include measures determined based on site-specific conditions, including, but not limited to, the use of construction signs, flaggers, delineators, and lane closures. Through implementation of the TCP, the Project would not cause temporary conflicts with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant, and no mitigation is required.

# **Mitigation Measures**

Impacts related to conflicts with an applicable circulation plan would be less than significant; therefore, no mitigation is required.

#### 3.8.3.2 Issue 2: Induce Substantial Vehicle Miles Traveled

# **Transportation Issue 2 Summary**

Would implementation of the proposed Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

**Impact:** The Project would not conflict or be inconsistent with CEQA Guidelines section

15064.3, subdivision(b).

Significance Before Mitigation: Less than

significant.

Mitigation: No mitigation is required.

**Significance After Mitigation:** Not applicable.

# **Impact Analysis**

To satisfy the CEQA guidelines as promulgated through the passage of SB 743, the potential transportation impacts of the proposed Project are based on VMT. As such, LLG prepared a VMT analysis and the discussion below includes a summary of the findings presented in the TIA (included as Appendix H to this EIR).

#### **Vehicle Miles Traveled**

In compliance with SB 743, the TIA was prepared to evaluate the potential VMT impacts for the Project (see Appendix G of this EIR). San Diego's local Institute of Transportation Engineers (ITE) SB 743 Subcommittee published *Guidelines for Transportation Impact Studies in the San Diego Region* in May 2020. The City published a draft *Transportation Study Manual* in June 2020 that provides significance determination thresholds for VMT and analysis methodologies. Although the City's draft *Transportation Study Manual* has not yet been adopted by the City Council, it was utilized in this document as it provides the best currently available guidance for the VMT analysis. The draft *Transportation Study Manual* provides the transportation VMT thresholds of significance shown in Table 3.8-2, *City of San Diego Draft VMT Significance Thresholds*.

Table 3.8-2
CITY OF SAN DIEGO DRAFT VMT SIGNIFICANCE THRESHOLDS

Land Use Type <sup>1</sup>	Thresholds for Determination of a Significant Transportation VMT Impact <sup>2</sup>
Residential	15% below regional average <sup>3</sup> resident VMT/Capita
Commercial Employment	15% below regional average <sup>3</sup> employee VMT/Employee
Industrial Employment	Regional average <sup>3</sup> employee VMT/Employee
Regional Retail	Zero net increase in total regional VMT <sup>3</sup>
Hotel	See Commercial Employment
Regional Recreational	See Regional Retail
Regional Public Facilities	See Regional Retail
Mixed-Use	Analyze each land use individually per above categories
Redevelopment	Apply the relevant threshold based on proposed land use (ignore
	the existing land use)
Transportation Projects	Zero net increase in total regional VMT <sup>3</sup>

Source: City 2020; LLG 2021

- <sup>1</sup> See Appendix B of the draft Transportation Study Manual for specific land use designations.
- <sup>2</sup> Projects that exceed these thresholds would have a significant impact.
- The regional average and total regional VMT are determined using the SANDAG Regional Travel Demand Model. The specific model version and model year will be identified by the Development Services Department's Transportation Development Section.

The Project would incorporate three land use types as defined by the draft TSM: Commercial Employment, Regional Retail, and Regional Public Facilities for the Project's classrooms.

In addition, while the requirements to prepare a detailed transportation VMT analysis apply to all land development projects, the Transportation Study Manual also includes a set of screening criteria that apply to various types of development. Screening criteria for land use and transportation projects are provided to determine whether VMT analysis is required. A project that meets at least one of the TSM screening criteria would be presumed to have a less than significant VMT impact due to project

characteristics and/or location. A full list of the screening criteria is provided in the TIA in Appendix H of this EIR. None of the TSM screening criteria are applicable to the Project, and therefore a VMT analysis was completed for the Project.

To calculate the VMT per office employee for the baseline and the Project, the SANDAG Series 13 Year 2020 TDM was used. The model generates a land use-specific average trip length as well as an average daily volume, which ultimately calculates the total VMT per employee, both for the region and for the Project. The SANDAG Series 13 Year 2020 TDM results are included in Appendix H.

Table 3.8-3, Office Use Employee VMT Analysis, summarizes the regional average baseline VMT results for the office components of the Project provided by SANDAG. As seen in Table 3.8-3, the regional average baseline VMT per employee is 25.9. As discussed, for a project to have a less than significant impact, the VMT per employee cannot exceed 85 percent of the regional baseline For the Project, that would equate to a VMT per employee of 22.02 or less. As identified in Table 3.8-3, the Project's office component's VMT per employee is 19.1, or approximately 74 percent of the regional average baseline. Thus, as the Project VMT per employee is less than 85 percent of the regional average, the office component of the Project would result in less than significant impact in relation to this issue, and no mitigation is required.

Table 3.8-3
OFFICE USE EMPLOYEE VMT ANALYSIS

Scenario	Regional Baseline	Significance Threshold <sup>1</sup>	Project VMT	Exceed Threshold?
VMT per employee	25.9 miles	22.02 miles	19.1 miles	No

Source: LLG 2021

The Project also proposes 27,176 SF of classroom space and 1,420 SF of retail space. These uses were analyzed together using the zero net increase in total regional VMT significance threshold. Two models were obtained: a total gross regionwide VMT report for baseline (without Project) conditions, and a total gross regionwide VMT report including the proposed Project (with Project). As shown in Table 3.8-4, *Total Regional VMT Analysis for Classroom and Retail Use*, the regionwide VMT with the Project was modeled to be reduced by 852,457. This reduction can be attributed to the reduced trip lengths for those participating in secondary education throughout the region. This results in a reduction of 0.010 percent of the regional VMT. As the Project does not result in a net increase in the total regional VMT, the classroom and retail components are determined to have a less than significant impact, and no mitigation is required.

Table 3.8-4
TOTAL REGIONAL VMT ANALYSIS FOR CLASSROOM AND RETAIL USE

Total Gross Regionwide VMT (without Project)	Total Gross Regionwide VMT (with Project)	Change in VMT	Significant Impact?
84,682,067	83,829,610	-852,457	No

Source: LLG 2021

VMT = vehicle miles traveled

<sup>85</sup> percent of regional baseline VMT = vehicle miles traveled

Overall, based on the VMT analysis, the Project VMT per employee for the proposed office uses is less than 85 percent of the regional average (approximately 74 percent) and the proposed educational and retail uses result in a net decrease in the total regional VMT. Therefore, the Project would have a less-than-significant impact with respect to CEQA Guidelines Section 15064.3 and no mitigation is needed.

# **Mitigation Measures**

Impacts related to conflicts with CEQA Guidelines section 15064.3, subdivision(b) would be less than significant; therefore, no mitigation is required.

## 3.8.3.3 Issue 3: Hazardous Design Features

### **Transportation Issue 3 Summary**

Would implementation of the proposed Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**Impact:** The Project would not substantially increase hazards or introduce incompatible

uses.

Significance Before Mitigation: Less than

significant.

Mitigation: No mitigation is required.

Significance After Mitigation: Not applicable.

# **Impact Analysis**

Refer to Figure 2-12, for an overview of the Project's access and transportation connections. As discussed under Section 3.8.3.1, vehicular access to the Project site would be provided by the two existing driveways to the commercial center from Villa La Jolla Drive and Villa Norte. No improvements are proposed to these roadways. Access to the parking garage would be provided by one entrance driveway at ground level near the southwestern corner of the building. The Project would not alter existing conditions with relation to design of surrounding roadways and as a classroom/office use, would not be introducing incompatible uses to the vicinity. The Project would have a less than significant impact in relation to a substantial increase in circulation hazards, and no mitigation is required.

As described in the Project Description, a TCP would be prepared prior to Project construction and implemented to allow safe and effective circulation of all road users (i.e., motorists, bicyclists, and pedestrians) through and/or around temporary traffic control zones). Traffic management controls would include measures determined based on site-specific conditions, including, but not limited to, the use of construction signs, flaggers, delineators, and lane closures. Through implementation of the TCP, the Project would not substantially increase hazards or incompatible uses (e.g., farm equipment). Therefore, no mitigation is required.

### **Mitigation Measures**

Impacts related to transportation hazards or introduction of incompatible uses would be less than significant; therefore, no mitigation is required.

# 3.8.3.4 Issue 4: Emergency Access

# **Transportation Issue 4 Summary**

### Would implementation of the proposed Project result in inadequate emergency access?

**Impact:** The Project would not interfere with

Mitigation: No mitigation is required.

emergency access.

**Significance After Mitigation:** Not applicable.

Significance Before Mitigation: Less than

significant.

# **Impact Analysis**

As noted previously, Figure 2-12 shows the Project's access and transportation connections. Following Project implementation, the primary emergency access route to the Project site would continue to be from Villa La Jolla Drive and Villa Norte. Project access would be reviewed by the UC San Diego Fire Marshal for the required consistency to applicable fire lanes, turning radii, signage, and other emergency access requirements to adequately allow for the movement of emergency vehicles and proper identification and any requirements would be integrated into the Project design. Plan review and inspections would also be performed in accordance with current California building and fire codes. Therefore, given that the Project would not alter the existing emergency access and design is subject to the approval of the Fire Marshal, the Project would have a less than significant impact in relation to this issue, and no mitigation is required.

A TCP would be prepared prior to Project construction and implemented to allow safe and effective circulation of all road users (i.e., motorists, bicyclists, and pedestrians) through and/or around temporary traffic control zones). Traffic management controls would include measures determined based on site-specific conditions, including, but not limited to, the use of construction signs, flaggers, delineators, and lane closures. Emergency access would be maintained to the Project site and surrounding land uses. Impacts would be less than significant, and no mitigation is required.

# **Mitigation Measures**

Impacts related to emergency access would be less than significant; therefore, no mitigation is required.

# 3.8.4 Cumulative Impacts and Mitigation

### **Transportation Cumulative Issue Summary**

Would implementation of the proposed Project have a cumulatively considerable contribution to a cumulative transportation/traffic impact considering past, present, and probable future projects?

Cumulative Impact Compliance with applicable circulation plans.	Significance Potentially significant.	<u>Project Contribution</u> Not cumulatively considerable.
Induce substantial vehicle miles traveled.	Less than significant.	Less than significant.
Hazardous design features.	Less than significant.	Less than significant.
Emergency access.	Less than significant.	Less than significant.

The geographic scope for the cumulative analysis related to the circulation system, VMT, traffic hazards, and emergency access is the circulation network within and adjacent to the Project site and the UC San Diego La Jolla campus. Cumulative projects, including those developed as part of the 2018 LRDP (e.g., Theatre District Living and Learning Neighborhood, and the Erosion Repair and Parking Lot [South of VA] Project), the Seismic Deficiency - Spinal Cord Injury and Community Living Center Project, the SANDAG Mid-Coast Trolley Project, and projects developed under the University Community Plan would have the capability to generate additional vehicular traffic on the regional and local roadway systems within the geographic scope.

### Compliance with Applicable Circulation Plan

All projects developed both within campus and outside of campus within the University Community Plan area and for SANDAG would be required to be developed under their respective planning guidelines. The 2018 LRDP EIR concluded that although on-campus projects developed under the 2018 LRDP would be required to be consistent with applicable policies, plans, and programs pertaining to alternative transportation, impacts from implementation of the 2018 LRDP would be significant and unavoidable because implementation of mitigation could not be guaranteed. Therefore, the baseline cumulative impact for the area is considered potentially significant.

As described in Section 3.8.3.1, the Project would not conflict with applicable circulation plans. Further, the Project would be developed within 0.33 mile of two future LRT stations and is designated within a TPA in the San Diego Regional Transportation Plan, which encourages greater density within these areas. The site is also well served by public transit with several bus routes in close proximity. The Project would also provide pedestrian access via a sidewalk connection to La Jolla Village Drive and via an existing Cityowned pedestrian bridge across La Jolla Village Drive. Therefore, the Project's contributions to a cumulative impact with respect to compliance with an applicable circulation would not be considerable.

### Induce Substantial Vehicle Miles Traveled

As described in Section 3.8.3.2, the Project's VMT for office employees would be less than 85 percent of the regional average, and the Project's VMT for retail and classroom uses would result in a net decrease in annual VMT by 852,457. Based on implementation of alternative transportation measures including the Mid-Coast Trolley Project, proximity of cumulative development to other forms of transit, the Project combined with the cumulative development (including the Theatre District Living and Learning Neighborhood, the North Torrey Pines Living and Learning Neighborhood, and Erosion Repair and Parking Lot [South of VA[), the Seismic Deficiency - Spinal Cord Injury and Community Living Center Project, and projects implemented under the University Community Plan would result in a less than significant cumulative impact with respect to inducing substantial VMT.

# **Hazardous Design Features**

Developments in the Community Plan area and those associated with the 2018 LRDP are in a largely urbanized area with no farming, rural, or other incompatible uses. The UC San Diego campus roadway system is largely in place, and the 2018 LRDP would not include plans to substantially change the campus circulation system or change off-campus circulation. Similarly, off-campus circulation network is largely developed, and local roadway changes are not expected that would increase hazards. Furthermore, the 2018 LRDP EIR concluded that on-campus projects developed under the 2018 LRDP would have no impact with respect to increasing hazards due to design features or incompatible uses, similar to the conclusion reached to the proposed Project. Therefore, when considering the proposed Project in combination with development associated with the 2018 LRDP (including the Theatre District Living and Learning Neighborhood, and Erosion Repair and Parking Lot [South of VA]), the Seismic Deficiency - Spinal Cord Injury and Community Living Center Project, and projects implemented under the University Community Plan, cumulative impacts would be less than significant.

### **Emergency Access**

As discussed, the Project, would be subject to review by the UC San Diego Fire Marshal and staff, who are responsible for in part, building plan review and construction inspections. Similarly, cumulative projects that are on campus would be subject to review by the UC San Diego Fire Marshal, and off campus projects would be subject to review by the City of San Diego. Plan review and inspections are performed in accordance with current California building and fire codes, including requirements for width, grade, clearance, turnouts, dead-end length, and turnarounds. As identified in the LRDP EIR, when new on-campus development, redevelopment, or site improvements occur, UC San Diego would amend the campus emergency access route map to ensure that adequate fire protection equipment access is always maintained on campus (UC San Diego 2018b). Thus, there would be no cumulative impact in relation to emergency access.

# 3.8.4.1 Mitigation Measures

Cumulative impacts with respect to transportation impacts are less than significant or not cumulatively considerable; therefore, no mitigation is required.

### 3.8.5 References

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2018b. University of California San Diego 2018 Long Range Development Plan La Jolla Campus Final Environmental Impact Report SCH No. 2016111019. November.

UC San Diego 3.8-15 February 2021

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# 4.0 OTHER CEQA CONSIDERATIONS

Section 15128 of CEQA Guidelines requires that an EIR contain a brief statement disclosing the reasons why various possible significant effects of a proposed project were found not to be significant and, therefore, would not be discussed in detail in the EIR. These effects are discussed below in Section 4.1.

Section 15126 of the CEQA Guidelines requires that all phases of a project be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the EIR must identify the following three components, which are also addressed in this chapter:

- Growth-inducing impacts of the proposed Project (addressed in Section 4.2);
- Significant environmental effects that cannot be avoided if the proposed Project is implemented (addressed in Section 4.3); and
- Significant irreversible environmental effects that would be involved in the proposed Project should it be implemented (addressed in Section 4.4).

# 4.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

Based upon initial environmental review, it has been determined that the Project would not have the potential to cause significant impacts associated with the following issue areas:

- Agriculture and Forestry Resources
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

# 4.1.1 Agriculture and Forestry Resources

Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Project site is currently developed with a 13,213-SF restaurant building and associated landscaping, paving, and parking. According to the Farmland Mapping and Monitoring Program of the California Department of Conservation (CDC), the Project site is classified as Urban and Built-Up Land and does not

contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (CDC 2016). The surrounding areas within one mile of the Project site are mapped as Urban and Built Up Land or Other Land, which do not contain agricultural resources. Additionally, the Project site is not subject to a Williamson Act Contract and is zoned as "Commercial." No impacts to agricultural resources would occur.

Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Would the Project result in the loss of forest land or conversion of forest land to non-forest use?

Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

There is no forest land, timberland, or timberland zoned Timberland Production located within or adjacent to the Project site. As discussed above, the Project site is not currently used for or planned for agricultural purposes and there are no current or planned agricultural or forest uses in the immediate Project vicinity. Therefore, implementation of the Project would not conflict with existing zoning for agricultural or forest land or result in the loss or conversion of farmland or forest land to other uses. No impacts to forest land or farmland would occur.

# 4.1.2 Biological Resources

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

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

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

The Project site is entirely disturbed and surrounded by urban land uses consisting of commercial, retail, educational, and residential development. Onsite vegetation consists of trees and other ornamental plantings in landscaped areas. Approximately 10,100 SF of landscaping would be removed with Project implementation, including ornamental trees and planter areas along the northern and eastern site boundaries and landscaped medians within the parking area. Vegetation present on site could support nesting birds, which are protected under the federal Migratory Bird Treaty Act and California Fish and Game Code. As noted in Section 2.4.2.2 of the Project Description, because Project construction is anticipated to begin in summer 2021, grubbing, trimming, or clearing is likely to occur during the general avian breeding season (February 15 through August 31). Therefore, as described in Section 2.4.2.2 of this EIR, a qualified biologist would as part of Project construction perform a pre-construction nesting bird survey no more than seven days prior to the commencement of vegetation clearing or grubbing to

determine if active bird nests are present in the affected areas. Should an active migratory bird nest be located, the Project biologist will direct vegetation clearing away from the nest until it has been determined by the Project biologist that the young have fledged, or the nest has failed. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within the survey area, clearing, grubbing, and grading shall be allowed to proceed.

The Project site does not support any vegetation communities considered sensitive biological resources under the City of San Diego's Environmentally Sensitive Lands (ESL) regulations. The distance from the Project site to the nearest sensitive habitat is 420 feet. This habitat is coastal sage scrub occurring in restoration lands west of Via La Jolla Drive. Occurrences of coastal sage scrub east of Via La Jolla Drive by the VA is 688 feet away. The nearest designated open space to the Project site is 155 linear feet, consisting of eucalyptus trees within restoration lands north of La Jolla Village Drive. The nearest ecological reserves are within the Scripps area (2,878 feet away) and within Central Canyon in the East Campus (1,925 feet away). The Project would not impact any state or federally endangered, threatened, or rare species, or listed species habitats. No state or federally protected wetlands occur within or in close proximity to the Project site. Therefore, impacts associated with sensitive biological resources would be less than significant.

Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The Project site is not located near any water body which could impact any native resident or migratory fish of wildlife species. In addition, the Project site is not used as a wildlife corridor and thus would not interfere with the movement of any resident or migratory fish or wildlife species, or diminish habitat for fish, wildlife, or plants. No impacts would occur.

Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

UC San Diego is a part of UC, a constitutionally created unit of the State of California. As a state entity, UC is not subject to municipal plans, policies, and regulations, such as County and City General Plans or local ordinances. Therefore, no local policy conflicts would arise with implementation of the proposed Project.

Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Project site is within the City's Multiple Species Conservation Program (MSCP; City 1997) Subarea Plan. The Project site is not located within or immediately adjacent to land that is included in the Multi-Habitat Planning Area (MHPA) and no MHPA exists in the Project vicinity. The site does not support covered vegetation communities or covered species. There are no direct wildlife corridors on the Project site. It should be noted that UC San Diego is not an enrolled agency in the Natural Community Conservation Program (NCCP), nor is UC San Diego required to comply with the City's MSCP preservation goals or objectives. Therefore, no impacts to the City's MSCP or the NCCP Program would occur.

#### 4.1.3 Cultural Resources

Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?

A Cultural Resources Study was prepared for the Project to analyze potential impacts to cultural resources resulting from implementation of the Project (HELIX 2020; Appendix C). The report conducted a cultural resources records search of the California Historical Resources Information System (CHRIS), obtained from the South Coastal Information Center (SCIC), in May 2020. According to the records search, no cultural resources have been recorded within the Project site; however, seven cultural resource sites have been recorded within one-half-mile of the site. Three of these sites are prehistoric: P-37-008469 (CA-SDI-8469) consists of a prehistoric shell scatter; P-37-005456 (CA-SDI-5456) consists of a sandstone milling feature and a mano, a scraper, and a possibly utilized flake that were collected in 1978; and P-37-034754 is an isolate consisting of a whole, shaped, unifacial sandstone metate in a highly disturbed area near an SDG&E utility pole. The remaining four sites are historic in nature: P-37-032491 consists of a rectangular concrete foundation possibly associated with the Camp Calvin B. Matthews Marine Corps rifle range; P-37-032492 (CA-SDI-20616) is the remains of a concrete culvert possibly associated with the Camp Calvin B. Matthews Marine Corps rifle range; P-37-034431 is a continuous concrete bridge, built in 1966 and widened in 1990, that spans over I-5; and P-37-034431 is a continuous concrete bridge over I-5 that was built in 1966 and widened in 1992.

In addition to the cultural resource records search, a Sacred Lands File search was obtained from the NAHC. The NAHC indicated in a response dated May 11, 2020 that the results of the Sacred Lands File search were negative for Native American cultural resources; a list of 19 Native American tribes who may have knowledge of cultural resources in the Project area was provided. Formal Native American tribal outreach per the requirements of AB 52, was initiated on Friday, December 4, 2020. A letter from the San Pasqual Band of Mission Indians was received on December 28, 2020. The tribe determined that the Project is not located within the boundaries of the San Pasqual Indian Reservation. However, the Project is located within the boundaries of the tribe's Traditional Use Area. Therefore, the San Pasqual Band of Mission Indians requested to receive Project updates and recommended archaeological monitoring pending the results of site surveys and records searches. UC San Diego responded to this request with information on the results of the records search as well as notification of availability of the Draft EIR. Because the records results and Sacred Lands File search did not identify any cultural resources on the site, and due to the developed nature of the site, no site survey was conducted, and tribal monitoring is not anticipated. However, UC San Diego will continue to engage with the tribe on this Project and allow access for tribal monitoring during construction if requested. No additional responses have been received at this time.

Historic aerial photographs indicate that the Project site was graded by 1966, although no buildings appear on the Project site until after 1975 (NETR Online 2020). Therefore, the existing on-site buildings

are not of sufficient age to warrant evaluation as historic properties, and past grading appears to have removed the potential for subsurface cultural resources.

Due to the lack of historical and archaeological resources on the site, in addition to the low potential for subsurface cultural resources to occur onsite due to past grading, potential impacts to cultural resources would be less than significant. Further, if human remains are unexpectedly discovered, work will halt in that area and the procedures detailed in the California Health and Safety Code (Section 7050.5) and the California PRC [Public Resources Code] (Section 5097.98) and will be followed.

# 4.1.4 Geology and Soils

Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
- ii) Strong seismic ground shaking?
- iii) Seismic-related ground failure, including liquefaction?
- iv) Landslides?

The information in this section is based on the Geotechnical Investigation Report that was prepared for the Project by Group Delta Consultants and is attached to this EIR as Appendix D.

#### Earthquake Faults

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone. However, the City of San Diego Seismic Safety Study maps the southeast corner of the site in a Fault Zone. The Seismic Safety Study indicates the fault within this zone is "potentially active, presumed inactive, or activity unknown." Site-specific evidence of this fault was not observed in the Geotechnical Investigation (Group Delta 2020). The closest known Holocene active fault is the San Diego section of the Newport Inglewood Rose Canyon fault zone, which is approximately 1 mile southwest of the Project site. Accordingly, due to the lack of evidence of the concealed fault and the distance from the closest known Holocene fault potential for surface fault rupture is low. Impacts related to earthquake faults would be less than significant.

#### Seismic Ground Shaking

The site could be subject to moderate to strong ground shaking from nearby or more distant, large magnitude earthquakes occurring during the expected life span of the building. This hazard is managed by structural design of the building per the latest edition of the CBC. In addition, UC San Diego routinely prepares all building plans for compliance with the CBC and the campus also follows the UC Policy on Seismic Safety that requires compliance with the CBC as well as independent review of structural seismic design of new construction projects. Impacts related to seismic ground shaking would be less than significant.

Seismic Related Ground Failure Including Liquefaction

The soil and groundwater conditions that could trigger seismic-related ground failure, including liquefaction and its secondary effects (e.g., settlement and lateral spreading) were not interpreted from the findings of the Geotechnical Investigation (Group Delta 2020). The potential for liquefaction and secondary effects would be very low. Impacts related to seismic-related ground failure, including liquefaction, would be less than significant.

#### Landslides

No evidence of landslides or slope instabilities were interpreted from the findings of the Geotechnical Investigation (Group Delta 2020). The topography of the Project site is relatively flat and will remain so following redevelopment. Impacts related to landslides and slope instability would be less than significant.

Summary of Seismic-Related Impacts

Based on the above analysis, the potential for adverse seismic-related impacts would be less than significant and would be further minimized through a number of methods, including following the recommendations in the Project's Geotechnical Investigation; reviewing and approving all building plans for compliance with the CBC, which includes specific structural seismic safety provisions; compliance with the UC Seismic Safety Policy, which requires anchorage for seismic resistance of nonstructural building elements such as furnishings, fixtures, material storage facilities, and utilities that could create a hazard if dislodged during an earthquake; and incorporation of seismic-related emergency procedures into departmental emergency response plans.

Would the Project result in substantial soil erosion or the loss of topsoil?

Soil exposed by construction activities, such as excavation, could be subject to erosion if exposed to heavy rain, winds, or other storm events. However, earth-disturbing activities associated with construction would be temporary and the Project would adhere to dust control measures consistent with APCD regulations. The Project would also comply with the UC San Diego Design Guidelines, which include the incorporation of LID and erosion and sediment control BMPs, and UC San Diego's Stormwater Management Program. Additionally, the Project would be subject to the pertinent requirements under the Construction General Permit, issued by the SWRCB, that would require the implementation of a SWPPP and associated CSMP. Compliance with these regulations, plans, and programs would ensure that the Project would not result in substantial soil erosion or the loss of topsoil.

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?

As described in Section 2.3.8, Seismic and Geologic Safety Features, of this EIR, the reinforced concrete mat foundation that would support the building would be appropriate for the underlying material beneath the site comprising claystones and sandstones (types of sedimentary rocks) as well as gravel conglomerates (formed by the breaking down of older rocks) of the Scripps Formation geologic unit. The mat foundation would comply with the CBC to perform adequately considering the shear strength and stiffness for these materials (Group Delta 2020). Impacts related to a geologic unit or soil that is unstable, or that would become unstable as a result of the Project would be less than significant.

Potential project-related impacts associated with landslides, liquefaction, lateral spreading, and slope instability are discussed above and were determined to be less than significant.

The geologic unit that will support the building is not prone to subsidence or collapse from natural processes or human activities. Impacts related to subsidence or collapse would be less than significant.

Would the Project be located on expansive soil, as defined in 1803.5.3 Expansive Soil of the California Building Code (2019), creating substantial risks to life or property?

As part of the Geotechnical Investigation, eight Expansion Index (EI) tests were conducted on disturbed soil samples obtained at various depths throughout potential cut areas at the site. The tests indicate the soils should have a "Very Low" to "Medium" expansion potential. Expansive soils can increase lateral pressures on retaining walls and they also have the potential to heave slabs-on-grade. As recommended in the Geotechnical Investigation (Group Delta 2020), the expansive soils that exist on the site can be addressed by selective grading, where they are placed in areas, or at depths away from the proposed improvements to attenuate the heave potential of these materials. As noted in Section 2.3.8, Seismic and Geologic Safety Measures, the Project would implement recommendations in the Geotechnical Investigation. Impacts related to expansive soils and creating substantial risks to life or property would therefore be less than significant.

Would the Project 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?

The Project does not propose the use of septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact related to the use of septic tanks or alternative waste water systems.

Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Based on the mapping and analysis contained in the Project-specific Geotechnical Investigation, the Project site is underlain by Scripps Formation (assigned a high paleontological sensitivity). The Scripps Formation is considered potentially fossiliferous and typically includes the remains of marine organisms (e.g., clams, snails, crabs, sharks, rays, and bony fishes), marine reptiles (e.g., crocodile and turtle), land mammals, and fossil wood. Proposed earthwork would require approximately 18,700 CY of cut and the maximum depth of excavation is anticipated to be 29 feet. This could result in the disturbance of highly sensitive geologic formations. Implementation of paleontological monitoring would be included as part of Project construction, as described in Section 2.4.2.3 of this EIR, and which would minimize the potential for significant impacts to paleontological resources. Impacts related to paleontological resources would be less than significant.

#### 4.1.5 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?

A Project-specific Environmental Site Assessment (ESA) was prepared by Terraphase Engineering and is attached to this EIR as Appendix F. The Project would not involve the development of a hazardous waste facility. Construction activities associated with the proposed Project would require transportation and

use of limited quantities of fuel, oil, sealants, and other hazardous materials related to construction. The use of hazardous materials and substances during construction would be subject to federal, state, and local health and safety requirements for handling, storage, and disposal. As a result, hazardous material impacts related to construction activities would be less than significant.

Operation of the Project would involve routine activities that would incorporate the use of general products that may contain hazardous materials for general maintenance and landscaping. UC San Diego would require compliance with safety regulations, guidelines, and policies applicable to hazardous materials. Therefore, the impact of the increased routine use, disposal, and transport of hazardous materials as a result of this Project would be less than significant, because it would comply with UC San Diego environmental health and safety practices that implement pertinent state and federal laws.

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?

The proposed Project would involve the demolition of an existing restaurant building and associated landscaping, paving, and parking. The Phase I ESA prepared for the Project (Appendix F) does not identify potential concerns regarding the release of hazardous materials during demolition (Terraphase Engineering 2018). Still, UC San Diego performs lead surveys for all demolition projects to determine if there is a risk to human health and safety. If lead is detected, the Project would comply with all applicable federal, state, and local rules and regulations to minimize potential impacts related to lead.

During construction, limited quantities of hazardous materials such as gasoline, diesel, oils, and lubricants may be required to operate the construction equipment. Construction activities would be short-term, and the use of these materials would cease once construction is complete. The hazardous substances used during construction would be required to comply with existing federal, state, and local regulations regarding the use and disposal of these materials. In the event of an accidental release during construction, containment and clean up would be in accordance with existing applicable regulatory requirements. Should construction activities result in accidental release or encounter unknown soil contamination, the construction contractor would work with the UC San Diego Environmental Health and Safety office to ensure the appropriate protocol is followed, including testing and remediation.

Project operation may require the use of hazardous materials. However, UC San Diego would continue to implement existing campus health and safety practices and would comply with federal, state, and local regulations related to the use, transport, and disposal of hazardous materials, minimizing the potential for release, and providing for prompt and effective cleanup if an accidental release would occur. Further, UC San Diego has prepared a Consolidated Emergency Response/Contingency Plan, which addresses the campus community's planned response to various levels of human-made or natural emergency situations including the release of hazardous materials. The UC would have contractual arrangements in place with private entities to ensure compliance with all applicable federal and state regulations pertaining to the use of hazardous materials, including the County of San Diego Department of Environmental Health, Hazardous Materials Division safety regulations and National Institutes of Health (NIH) biosafety principles, guidelines, and policies applicable to the use and storage of hazardous materials. The Project would adhere to these requirements, and therefore would not cause a significant hazard to the public or environment through reasonably foreseeable upset involving the release of hazardous materials.

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?

No existing K-12 schools are within one-quarter mile of the Project site. The nearest K-12 schools are La Jolla Montessori School and Doyle Elementary School, located approximately 0.5 mile southeast and 0.9 mile southwest of the Project site, respectively. The nearest childcare facility is the UC San Diego Early Childhood Education Center, located approximately 0.3-mile northeast of the site. Hazardous materials and waste from the Project would not be expected to be handled within 0.25 mile of an existing or proposed K-12 school or childcare facility. Further, hazardous materials and waste from the Project would not exist in quantities significant enough to pose a risk to occupants of the school or the campus community. The Project is not expected to require the handling of acutely hazardous materials. Compliance with local, state, and federal regulations pertaining to hazardous wastes, including the CEQA Guidelines Section 15186, along with the Project's contractual agreements would ensure that risks associated with hazardous emissions or materials to existing or proposed schools located 0.25 mile from the campus would remain less that 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 a result, would it create a significant hazard to the public or the environment?

The Department of Toxic Substances Control (DTSC) EnviroStor database was used to evaluate the Project site, and neither the Project site nor properties within 1,000 feet are listed within it. The SWRCB GeoTracker database was also used to evaluate the Project site. The Project site did not have a listing in the GeoTracker database, but there were three sites of potential concern within 1,000 feet of the site. One site included a Cleanup Program Site at the La Jolla Village Professional Center, which is adjacent to the south side of the Project site. The other two were leaking underground storage tank (LUST) Cleanup Sites occurring at the La Jolla Mobil Gas Station, east of the Project site. However, all of these cases are currently closed, and no further assessment is needed. The Phase I ESA prepared for the Project site identified one recognized environmental condition (REC) also occurring at the La Jolla Mobil Gas Station (Terraphase Engineering 2018). The REC consists of a release of gasoline that impacted both soil and groundwater; however, further evaluation determined that the impacted groundwater plume is stable, has not moved beneath the Project site, and is actually decreasing in extent. Therefore, significant impacts regarding the REC would not occur.

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 for people residing or working in the project area?

The Project site is not located within two miles of a public airport or public use airport, but it is located within approximately 2.5 miles of MCAS Miramar. The federal Department of Defense (DOD) has established Accident Potential Zones (APZs) for the air station; APZs define the areas that would be more likely to be affected by aircraft accidents. The Project site is not located within any APZs for MCAS Miramar. Therefore, the Project would not result in a safety hazard for people residing or working in the Project area.

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

During construction, the existing driveway entrance to the commercial center off Villa La Jolla Drive would be temporarily inaccessible to the public and utilized for site deliveries and construction worker access; public access to the commercial center would be maintained from Villa Norte. Temporary closure of the west lane of Villa La Jolla Drive adjacent to the Project site may be required, as needed; however, lane closure would be managed in accordance with a TCP that would be implemented during construction, as discussed in Section 2.4.2.1 of this EIR. Implementation of the TCP would also ensure emergency response access would be maintained during construction. Therefore, the Project would not interfere with an adopted emergency response plan or emergency evacuation plan during construction.

UC San Diego has an Emergency Operations Plan that addresses planned responses, instructions, and procedures to various levels of human-made or natural emergency situations for all campus staff, students, and visitors. The Emergency Operations Plan provides information for building evacuation, emergency supplies, and related emergency contacts and information sources. The proposed Project would adhere to UC San Diego Emergency Operations Plan to maintain sufficient emergency access and evacuation plans. The UC San Diego Fire Marshal would meet with the City Deputy Fire Marshal as needed to review site plans to adequately serve the campus. Therefore, the Project would not interfere with an adopted emergency response plan or emergency evacuation plan during operation.

Would the Project expose people or structures to a significant risk of loss, injury or death involving wildland fires?

The coastal influence on temperature and humidity is important in determining the frequency of critical fire weather in San Diego County. Structures near the UC San Diego area are rated lower in terms of fire hazard severity due to favorable geographic proximity to the coast, as compared to locations further inland (e.g., east of I-805) where the potential for fire hazard ramps up quickly. The Project site is located within this favorable geographic proximity to the coast. Further, the Project is located within a developed area and is not located within or adjacent to wildlands that would be at a higher risk of wildland fires.

The proposed Project would include sprinklers and would maintain appropriate access/egress routes for firefighting and evacuation. The UC San Diego Fire Marshal is responsible for campus-wide fire prevention and provision of services such as plan review and construction inspections to ensure conformance with California building and fire codes and would be responsible for reviewing and approving plans for this Project. The UC San Diego Fire Marshal meets regularly with the City Deputy Fire Chief to maintain a site plan/access plan which will adequately serve the campus. The campus would also continue to implement the UC San Diego Emergency Management Plan and campus-wide fire prevention programs, which are mandated by state and federal law. The proposed Project would comply with all fire safety regulations and code requirements to ensure the potential for wildland fires is less than significant.

#### 4.1.6 Mineral Resources

Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Geological formation and soil conditions underlying the Project site are not suitable for the extraction of sand and gravel resources. According to the Conservation Element of the City of San Diego General Plan, the Project site is designated as Mineral Resource Zone One (MRZ-1; City 2008). MRZ-1 is defined as an area where available geologic information indicates that little likelihood exists for the presence of significant mineral resources. Additionally, the Project site is developed with an existing restaurant building in an urbanized area and is zoned as "Commercial." Implementation of the Project would not result in the loss of availability of a known mineral resource nor a locally important mineral resource recovery site. Therefore, no impact to mineral resources would occur.

# 4.1.7 Population and Housing

Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The proposed Project would not result in the displacement of existing people or housing, nor would it necessitate the need for construction of replacement housing elsewhere. The existing site consists of a formerly occupied restaurant building and associated landscaping, paving, and parking; no housing exists on the site. Therefore, substantial numbers of existing housing or residents would not be displaced.

The Project proposes the construction of a building supporting office and classroom uses with a small café, parking, and associated landscaping and hardscape. The proposed building would be occupied by the UC School of Medicine and UC Extension, with an estimated occupancy of 947. The Project does not include housing or other facilities that would result in a direct population increase. Additionally, the Project does not include infrastructure with excess capacity or the removal of an obstacle to growth that would indirectly result in unplanned population growth in the area. Therefore, implementation of the Project would not result in a substantial unplanned direct or indirect population increase.

#### 4.1.8 Public Services

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- a) Fire protection?
- b) Police protection?
- c) Schools?
- d) Parks?
- e) Other public facilities?

The Project does not propose new residential development and would not induce population growth, and thus would not create an increased demand on parks and recreation facilities, schools, or libraries and does not create a need for new facilities in these resource areas. Although the Project site would no longer be subject to City zoning requirements, the proposed land use is generally consistent with what

would be allowable under the City's zoning designation of Commercial (CO-1-2) and therefore is within what was anticipated by the City to be developed on the site. Therefore, the existing police and fire protection facilities would continue to have adequate capacity to serve the Project site and would not require additional services. In addition, the Project would not displace or result in deterioration of existing parks or other public facilities. Therefore, implementation of the Project would not result in impacts related to parks and recreation facilities, schools, or libraries.

#### 4.1.9 Recreation

Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The Project site is currently developed with a formerly occupied restaurant building and associated landscaping, paving, and parking. The Project proposes the construction of a building supporting office and classroom uses with a small café, parking, and associated outdoor landscaping and hardscape. The Project does not include the construction of recreational facilities. Additionally, the Project would not introduce residents that would use existing recreational facilities or create the need for new facilities. Implementation of the Project would not result in physical deterioration of existing recreation facilities and would not require the expansion of existing facilities. Therefore, no impacts related to recreation would occur.

#### 4.1.10 Tribal Cultural Resources

On July 1, 2015, AB 52 (Gatto 2014) went into effect and established a new category of resources in CEQA called Tribal Cultural Resources (TCRs). Public Resources Code Section 21074 defines TCRs as either of the following:

- (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - a) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
  - b) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also created a process for consultation with California Native American Tribes in the CEQA process. Tribal Governments can request consultation with a lead agency and give input into potential impacts to tribal cultural resources before the agency decides what kind of environmental assessment is

appropriate for a proposed project. The Public Resources Code now requires avoiding damage to tribal cultural resources, if feasible. If not, lead agencies must mitigate impacts to TCRs to the extent feasible.

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:

- a) 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
- b) 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

As discussed in Section 4.1.3 above, the SCIC records search indicated that seven cultural resources have been recorded within one-half mile of the Project site, including three prehistoric resources and four historic resources. However, no resources have been recorded on the Project site. Additionally, a Sacred Lands File search for the Project site and adjacent area completed by the NAHC yielded negative results for Native American cultural resources. The NAHC provided a list of 19 Native American tribes who may have knowledge of cultural resources in the Project area. Formal Native American tribal outreach per the requirements of AB 52, was initiated on Friday, December 4, 2020. A letter was received from the San Pasqual Band of Mission Indians was received on December 28, 2020. The tribe determined that the Project is not located within the boundaries of the San Pasqual Indian Reservation. However, the Project is located within the boundaries of the tribe's Traditional Use Area. Therefore, the San Pasqual Band of Mission Indians requested to receive Project updates and recommended archaeological monitoring pending the results of site surveys and records searches. UC San Diego responded to this request with information on the results of the records search as well as notification of availability of the Draft EIR. Because the records results and Sacred Lands File search did not identify any cultural resources on the site, and due to the developed nature of the site, no site survey was conducted, and tribal monitoring is not anticipated. However, UC San Diego will continue to engage with the tribe on this Project and allow access for tribal monitoring during construction if requested. No additional responses have been received at this time.

#### 4.1.11 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?

As noted in the Project Description, domestic water systems would include the building's distribution system to plumbing fixtures, hose bibs, and water heaters. Zone valves, branch valves, and isolation valves would be provided for the interior water distribution network. A packaged booster pump system would be included to maintain design pressure. Building water supply would connect to a new on-site water main, which would connect to the existing municipal water main located within Villa La Jolla Drive

at the southeastern corner of the building. Dual fire and water connections would be provided at the southwestern corner of the building, adjacent to the parking garage access.

Wastewater generated on site would be collected in new 8-inch sewer lateral pipelines that would tie into the existing system. Sanitary sewer laterals would connect to the existing sewer main that traverses the southern edge of the building within a City of San Diego utility easement and connects to an existing main within La Jolla Village Drive. The effects of the installation of new water and wastewater facilities have been included in the environmental analysis within this EIR. For example, refer to Section 3.2, *Air Quality*, and Section 3.5, *Hydrology and Water Quality*, for potential effects associated with trenching and connection of these new facilities.

Additionally, the Project would connect to and be served by SDG&E. The main electrical service would include an indoor switchboard connected to an outdoor SDG&E pad-mounted transformer. Emergency power would be served from a standby diesel generator, sized at approximately 250 kilowatts. The generator would feed the life safety and legally required loads, including the fire pump. Natural gas would not be required for the Project.

Proposed storm drain and treatment facilities for the Project include area drains for landscape and hardscape; a 24-inch by 24-inch Brooks catch basin; an underground polyvinyl chloride (PVC) storm drain system; and a 4-foot by 6-foot BioClean modular wetlands system for biofiltration. All runoff contained within the Project site limits would enter the BioClean modular wetlands system unit for treatment via the underground storm drain system, ultimately being discharged to the public storm drain system. These improvements to drainage would result in a decrease in the total peak flow runoff compared to existing conditions (see section 3.5, Hydrology and Water Quality, for additional details), which would ensure that Project implementation would not result in impacts to the public storm drain infrastructure surrounding the site (Latitude 33 2021). Additionally, the proposed on-site storm drainage system is designed to meet University standards and would meet or exceed campus design guidelines, including implementation of sustainability features that comply with the UC Sustainable Practices Policy (see Section 2.3.4 of this EIR).

Overall, Project construction would include the installation of new connections and features associated with water, storm water drainage, and electricity. However, the construction of these facilities would not result in significant environmental effects. No new natural gas or telecommunications facilities or expansions would be required.

Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The proposed Project land use is generally consistent with the existing City zoning for the site and therefore it is reasonable to assume that the anticipated water demand for the Project was considered within the City's General Plan. See discussion above for the additional facilities the Project would incorporate to serve the anticipated water demand, which is estimated to be approximately 9.9 million gallons per year, based on general assumptions for water demand included in the CalEEMod modeling for the Project (see Appendix B). The estimation includes the implementation of the water use sustainability features discussed in Section 2.3.4 of this EIR, which would ensure efficient water usage. Therefore, the Project would have sufficient water supplies available to serve the Project and foreseeable future development during normal, dry, and multiple dry years. Impacts would be 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?

Implementation of the Project would increase the amount of building space and occupancy at the site, which would result in increased wastewater generation and discharge at the Point Loma Wastewater Treatment Plant (PLWTP) operated by the City. According to the City, it is anticipated that the PLWTP will have the capacity to receive and treat wastewater from UC San Diego, and the City is planning to meet wastewater treatment capacity in the region through the year 2050. Although the Project site would no longer be subject to City zoning requirements, the proposed land use is generally consistent with the City's zoning designation of Commercial (CO-1-2) and therefore is within what was anticipated by the City to be developed on the site when planning wastewater treatment within the General Plan for the area. Based on general assumptions for wastewater generation included in the CalEEMod modeling for the Project, which estimates wastewater generation based on potable water use, the wastewater generated would be approximately 9.9 million gallons per year (see Appendix B). The PLWTP currently treats approximately 175 million gallons of wastewater per day from a 450-square mile area, which includes the UC San Diego campus. However, the PLWTP has the capacity to treat up to 240 million gallons of wastewater per day, or 65 million gallons per day more than it treats currently. Thus, it can be concluded that the PLWTP would have more than adequate capacity to receive and treat wastewater from the proposed Project. Further, the Project would incorporate the water conservation efforts adopted by UC San Diego to minimize wastewater generation. The Project would not exceed wastewater treatment requirements or require the construction of new wastewater treatment facilities.

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?

Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

During pre-construction demolition, clearing/grubbing, and grading activities, the Project would produce excavated soils, green waste, asphalt/concrete, and other construction and demolition waste. The following types of demolition debris would likely be generated during construction: metals, concrete/asphalt, brick/masonry, wood, drywall, carpet/carpet padding, ceramic tile, roofing materials, doors, windows, and fixtures. During Project operation, the building would contribute additional non-recyclable/non-reusable waste to be deposited at Miramar Landfill, after accounting for waste reduction and diversion. To minimize the amount of solid waste generated during demolition, construction, and operation, the Project would incorporate a Construction Waste Management Plan that would comply with the LEED Rating system for the Project.

Although UC is not obligated (but is encouraged) to adopt waste diversion goals that are in line with the state's goals established in AB 939 and AB 341, the UC has established waste management programs to minimize waste disposed as landfills. For example, the UC Sustainable Practices Policy has set the goal that the UC system would divert 75 percent of its municipal solid waste from landfills by June 2012 with an ultimate goal of zero waste by 2020. Complementing the 2020 zero waste goal, revisions to the Sustainable Practices Policy set waste reduction goals for each campus. Each campus will reduce per capita municipal solid waste by 25 percent by 2025, and 50 percent by 2030, compared to its year 2015-2016 baseline. UC San Diego prepares annual reports to track progress toward these goals and maintains a Zero Waste Plan to further reduce waste. Furthermore, although the UC is not subject to

state or local regulations pertaining to solid waste management and diversion, the UC has adopted and is implementing reduction measures similar to those imposed on local agencies to do their part in managing and reducing waste. Implementation of such programs has minimized the waste generated during the construction and operation of UC projects. Collectively, UC campuses and medical centers diverted 58 percent of municipal solid waste from landfills in 2015-16. Including construction and demolition (C&D) waste, the total diversion rate was 69 percent in 2017-2018 (UC 2018).

The proposed Project would adhere to waste reduction measures outlined by the UC during construction and operation, which would minimize waste generated. In accordance with the UC San Diego ZWP (UC San Diego 2019) the Project would strive to meet an operational diversion level of 90 percent. During construction, the Project would recycle, reuse, or divert 75 percent of construction and demolition debris in accordance with the LEED rating system (2 points), which exceeds the City's 65 percent Construction and Demolition (C&D) Debris Diversion Deposit Ordinance (San Diego Municipal Code [SDMC] Section 66.0601). A portion of the Project-related construction and demolition debris would be diverted from local landfills by means of recycling or redirecting to appropriate entities that could utilize those materials. Operation of the proposed Project would contribute to UC San Diego's achievement of its waste-reduction goals by providing numerous opportunities for students and staff to reduce waste. The Project would provide dedicated areas for the storage and collection of recyclables, and recycling bins throughout the development. The Project would also comply with the recommendations of the campus' ZWP to the extent practicable and would report data on building waste quantities to the UC San Diego Sustainability Office and Zero Waste Working group on an annual basis. While not all programs recommended by the ZWP have been implemented, the UC San Diego Zero Waste Working Group is actively working to roll out its programs and campus-wide requirements. As programs become available, UC San Diego building users would be required to participate. The ZWP includes waste reduction, reuse, and diversion as well as educational programs to encourage campus users to reduce waste streams. Through implementation of these measures and other programs supported by UC San Diego, solid waste generated by the proposed Project, would have a less than significant impact with regard to landfill capacity and applicable statutes and regulations.

#### **4.1.12** Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The Project site is not located in or near state responsibility areas or lands classified as a very high fire hazard severity zone. The Project would therefore not substantially impair an adopted emergency response plan or evacuation plan. Impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

As noted above, the Project site is not located in or near state responsibility areas or lands classified as a very high fire hazard severity zone. Further, the Project site is currently developed with a 13,213-SF restaurant building and associated landscaping, paving, and parking. The Project would not introduce

new land uses that would alter slopes, prevailing winds or other factors that may exacerbate wildfire risks. Impacts would be less than significant.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The Project proposes the construction of a building supporting office and classroom uses with a small cafe, parking, and associated outdoor landscaping and hardscape. No installation or maintenance of associated infrastructure is proposed that would exacerbate fire risks. Impacts would be less than significant.

d) 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?

As described in Section 3.5, *Hydrology and Water Quality*, the Project would not significantly alter slopes or drainage. The exposure of people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes would be less than significant.

# 4.2 GROWTH INDUCEMENT

Growth-inducing impacts refer to the ways in which a proposed project may directly or indirectly influence or foster economic development, population growth, or the construction of additional housing in the Project area, as well as its impacts to the surrounding environment (CEQA Guidelines Section 15126.2[e]). Growth can be induced in a number of ways, including the elimination of obstacles to growth, or through the stimulation of economic activity within the region. The discussion of removing obstacles to growth relates directly to the removal of infrastructure limitations or regulatory constraints that could result in growth unforeseen at the time of project approval. According to CEQA Guidelines Section 15126.2(e), "it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

The proposed building would be occupied by the UC School of Medicine and UC Extension, which would relocate from their current locations. Building occupancy is estimated at approximately 947 individuals based upon anticipated uses. The Project does not include housing or other facilities that would result in a direct population increase. Additionally, the Project does not include infrastructure with excess capacity or the removal of an obstacle to growth.

As described above in Section 4.1.11, *Utilities and Service Systems*, the proposed Project's utilities would not be enlarged to serve development outside the Project site or lead to urban growth outside the boundary of the campus. Therefore, the Project would not remove obstacles to growth or encourage growth through the provision of new and essential public services or access opportunities. The Project would not result in urbanization of land in a remote location, resulting in "leapfrog" development, because the Project site is an infill project, located in an urbanized area that is served by an extensive existing network of electricity, water, sewer, storm drain, communications, roadways, and other infrastructure sized to accommodate or allow existing and planned future growth.

No new growth-inducing effects would be expected as a result of implementing the proposed Project. As such, no associated mitigation is necessary.

UC San Diego 4-17 February 2021

# 4.3 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

Pursuant to Section 15126.2(c) of the CEQA Guidelines, this section identifies significant impacts that would not be avoided, even with the implementation of feasible mitigation measures. The final determination of significance of impacts and of the feasibility of mitigation measures will be made by The Regents as part of their EIR certification action. Sections 3.1 through 3.8 of this EIR provide a comprehensive identification of the proposed Project's potentially significant adverse environmental effects and any necessary mitigation measures, as well as the level of significance both before and after mitigation. This EIR has not identified any impacts that would be significant and unavoidable.

# 4.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

Section 15126.2(d) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed Project. Specifically, Section 15126.2(d) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project involves uses in which irreversible damage would result from any potential environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Resources that would be permanently and continually consumed by construction and operation of the Project include water, electricity, natural gas, fossil fuels, timber, metal, and other construction materials; however, the amount and rate of consumption of these resources would not result in a large commitment of these resources or the unnecessary, inefficient, or wasteful use of resources. In addition, construction activities would result in the use of minor amounts of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobiles and construction equipment, which would not result in a significant irreversible environmental effect. Further, as described in Section 3.3, *Energy*, of this EIR, the Project would implement mitigation measure ENE-1, which would ensure that construction practices that encourage efficient use of fuel beyond typical demand are implemented.

With respect to operational activities, assuming compliance with all applicable building codes, green building practices, and mitigation measures as identified in this EIR, the Project would ensure that natural resources are conserved to the maximum extent practicable. In addition, the Project proposes to achieve a LEED Silver certification. LEED promotes a whole-building approach to sustainability by recognizing performance in six key areas of human and environmental health: location and transport, sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. The Project would incorporate a variety of practices from each of these key areas, ensuring that the Project would use sustainable energy practices to the extent feasible. For additional discussion about LEED practices and proposed sustainability features of the proposed Project, see Section 2.3.3, Sustainability Features, of this EIR.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with the Project. Section 4.1.5, *Hazards and Hazardous Materials*, addresses potential construction-related impacts to human health and ecological health in light of potential hazards associated with implementation of the Project. As discussed in Section 4.1.5, the Project could include activities associated with hazardous materials during general operation and maintenance, landscaping, and construction. UC San Diego would require compliance with University safety regulations, guidelines, and policies applicable to all hazardous materials associated with the Project and related maintenance, landscaping, and construction activities. Accordingly, the Project is unlikely to result in an accident that would result in irreversible environmental damage and impacts would be less than significant.

# 4.5 REFERENCES

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# 5.0 PROJECT ALTERNATIVES

# 5.1 INTRODUCTION

CEQA requires that an EIR describe and evaluate a range of reasonable alternatives to the proposed Project, or alternatives to the location of the Project. The purpose of the alternatives analysis is to explore ways that most of the basic objectives of the proposed Project could be attained while reducing or avoiding significant environmental impacts of the Project. This approach is intended to foster informed decision-making and public participation in the environmental review process.

This chapter evaluates alternatives to the proposed Project and examines the potential environmental impacts associated with each alternative. Pursuant to Section 15126.6(a) of the CEQA Guidelines, EIRs are required to evaluate a "...range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project." Not every conceivable alternative must be addressed, nor do infeasible alternatives need to be considered. Section 15126.6(d) of the CEQA Guidelines further states that "the EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." Significant environmental effects for each alternative identified must be discussed and should provide adequate perspective to allow decision-makers to make a reasonable choice.

When addressing feasibility, Section 15126.6(f) of the CEQA Guidelines states that the factors that may be taken into account when addressing the feasibility of alternatives include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site (if an off-site alternative is evaluated). The CEQA Guidelines also state that the discussion of alternatives should focus on "...alternatives capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives could impede to some degree the attainment of the project objectives or would be more costly" (Section 15126.6[b] CEQA Guidelines). CEQA further directs that "...the significant effects of the alternatives shall be discussed, but in less detail than the significant effects of the project as proposed" (Section 15126.6[d] CEQA Guidelines). The following sections discuss the Project alternatives that were considered pursuant to CEQA.

# 5.2 SUMMARY OF PROJECT OBJECTIVES AND SIGNIFICANT IMPACTS

# 5.2.1 Project Objectives

The following objectives have been identified for the Project, as listed in Section 2.2.2, *Project Objectives*, of this EIR:

 Provide a facility that aligns with the UC Seismic Safety Policy, allowing UC San Diego Health Sciences and UC San Diego Extension programs to relocate from approximately 102,500 GSF of existing space that is non-compliant with UC Seismic Safety Policy.

- 2. Create programmatic and space efficiencies that allow for future UC San Diego Health Sciences and UC San Diego Extension program growth, including use of shared amenities by consolidating programs currently spread out over multiple locations into one building.
- 3. Provide leasable office space proximate to the VA Medical Center and the UC San Diego Health Sciences West Neighborhood for UC San Diego Health Sciences programs (including UC San Diego Health and School of Medicine) at a location that is public-facing and easily accessible to patients and research participants as well as faculty and other personnel located primarily on campus.
- 4. Provide leasable classroom and office space for UC San Diego Extension programs at a location that is public-facing and conveniently accessible to both campus and community constituents as well as faculty and other personnel located primarily on campus.
- Redevelop a currently vacant and underutilized site within a TPA that has abundant alternative transportation options, including access to the UC San Diego Blue Line LRT system and bike and pedestrian access to the UC San Diego La Jolla campus and VA Medical Center.
- 6. Incorporate sustainable design features to achieve LEED Silver rating or better for the Project, thereby reducing energy consumption, conserving natural resources, and complying with the UC Sustainable Practices Policy.
- 7. Develop a financially feasible project through a strategic public-private partnership opportunity that develops a facility with leasable office and educational space that complies with UC building policies.

# 5.2.2 Significant Impacts of the Proposed Project

Based on the environmental analysis contained in Section 3.0, *Environmental Analysis and Mitigation*, of this EIR, the proposed Project would result in potentially significant impacts to the environmental resources areas discussed below. Mitigation measures that would avoid or reduce potential temporary impacts associated with construction to below a level of significance are identified for all issues.

#### **Energy**

Implementation of the proposed Project could result in a potentially significant short-term environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during construction. As identified in Section 3.3, *Energy*, of this EIR, implementation of mitigation measure ENE-1 would minimize construction equipment diesel fuel and gasoline consumption by using equipment efficiently. This mitigation measure would reduce the short-term impact to a less than significant level during construction.

#### Noise

Implementation of the proposed Project would result in construction activities that could expose neighboring uses to vibration levels in excess of established guidelines. As identified in Section 3.7, *Noise*, implementation of mitigation measure NOI-1 would require the implementation of construction vibration mitigation measures. With implementation of the mitigation measure, construction vibration impacts would be less than significant.

# 5.3 ALTERNATIVES CONSIDERED BUT REJECTED

State CEQA Guideline 15126.6(c) requires that an EIR identify alternatives that were considered and rejected as infeasible, and briefly explain the reasons for their rejection.

Alternatives considered during the early planning stages of the proposed Project but rejected from further study include off- and on-campus alternative locations as well as reduced height and maximum buildout options. These alternatives were found to be infeasible and rejected from further consideration for failing to meet basic Project objectives and viability, as described below.

# 5.3.1 Alternative Off-Campus Location

Under this alternative, UC San Diego would not purchase the 0.9-acre parcel at the proposed site location and instead would pursue another location to build the Project that is not adjacent to the La Jolla campus. This alternative was rejected because a primary objective of the Project is to provide a walkable location (within 0.25 mile) to the VA Medical Center, the UC San Diego La Jolla campus Health Sciences West Neighborhood, and the LRT stations that are scheduled to open in late 2021. No other off-site properties that meet the Project objectives with respect to a public-facing and proximate location to the La Jolla campus are currently available that meet these critical Project objectives. Further, a project of comparable size would result in similar impacts as the Project in the proposed location. Therefore, this alternative was rejected from further consideration.

# 5.3.2 Alternative On-Campus Location

Under this alternative, UC San Diego would not purchase the 0.9-acre parcel at the proposed site location but would instead find a site within the existing UC San Diego La Jolla campus. As part of the 2018 LRDP process, UC San Diego reviewed the available development and redevelopment sites within the campus boundaries and all sites have already been planned for other necessary uses based on objectives identified by the 2018 LRDP to meet current and projected needs through the year 2035. It is also important to note that the 2018 LRDP effort was completed prior to UC San Diego's seismic building review pursuant to the UC Seismic Safety Policy, so it did not account for the UC San Diego Health Sciences uses that have since been required to be relocated due to the seismic policy. Should a development or redevelopment site within the La Jolla campus be used for the proposed Project, it would displace a planned future use intended to accommodate projected growth. This displacement would potentially result in the need for another off-site location for the planned use that the proposed Project would be displacing, likely resulting in similar impacts. Therefore, this alternative was rejected from further consideration.

# 5.3.3 Reduced Height Project (Same Size)

This alternative would develop the proposed Project at the same location and size as currently proposed but would attempt to reduce the height above ground level. This would be accomplished by placing more levels underground; for example, by placing all four levels of parking underground, thereby reducing the height by two stories. However, as described in the Geotechnical Investigation (Appendix D), this alternative would not be feasible due to the underlying soil and groundwater issues and existing City utility infrastructure that prevent deeper excavation than is currently proposed. Therefore, this alternative was rejected from further consideration.

# 5.3.4 Maximum Buildout Project

This alternative would develop the proposed Project at the same location as currently proposed but would maximize buildout of the parcel, providing a larger building that would allow for the relocation of the UC San Diego Health Sciences and Extension programs plus additional capacity for future expansion of these programs or other UC San Diego uses. The maximum buildout project would include 27,176 SF of secondary education/classroom uses and 1,420 SF of ground floor retail (café), similar to the proposed Project, but would expand the building area of office, support, and circulation uses to 133,138 SF, an increase of 57,000 SF compared to the proposed Project. The total area of building uses would be 161,734 SF, compared to 104,734 SF for the proposed Project. To provide adequate parking, 475 spaces would be required. Overall, three additional office floors and three additional parking levels compared to the proposed Project would be necessary, increasing the height of the building to 13 stories and 172 feet above grade (compared to 7 stories and 100 feet for the proposed Project). The larger size of the building would require deeper excavation for the footings and foundation compared to the proposed Project. However, this would not be feasible due to the underlying soil and groundwater issues and existing City infrastructure that prevent deeper excavation than currently proposed. A deeper foundation than proposed could create too much soil compaction on the adjacent sewer line and would likely encounter the water table. Therefore, this alternative was rejected from further consideration.

#### 5.4 ALTERNATIVES ANALYZED

Three alternatives to the proposed Project were identified for further analysis. These alternatives were selected to avoid or minimize significant impacts associated with implementing the proposed Project. The following Project alternatives are analyzed in this EIR:

- The No Project Alternative assumes that the current land use of the site would be retained, specifically re-use of the existing building as a restaurant.
- The Two-Level Office Building Alternative assumes that the site would be redeveloped with a two level (maximum 30 feet in height) office building and associated parking.
- The Two-Level Educational Building Alternative assumes that the site would be redeveloped with two levels of educational uses and associated parking.

A description of the alternatives and their environmental impacts as compared to the proposed Project is provided below. In addition, an analysis of each alternative's ability to achieve the Project objectives is provided.

# 5.4.1 No Project Alternative (Existing Restaurant Use)

#### **Description**

Under the No Project Alternative, the Project would not be pursued by UC and would not be redeveloped with office, educational and parking uses. Although the existing building is currently vacant, the No Project Alternative assumes that the building would be leased to a new tenant under its existing land use as a restaurant.

The UC San Diego Extension and UC San Diego Health Sciences user groups would continue to operate in their existing locations on the UC San Diego campus and in leased space at a different off-campus location when the leases expire.

#### **Comparative Environmental Analysis**

#### **Aesthetics**

Under the No Project Alternative, the existing building would remain on the site and it is assumed that it would be occupied by a new restaurant operator. While minor remodeling may occur with the new tenant, no major restructuring of the building would be anticipated, and the visual character would be similar to the former brewery/restaurant. Impacts associated with aesthetics and visual character would be reduced in comparison to the proposed Project and there would be no impacts under the No Project Alternative.

#### **Air Quality**

The No Project Alternative would not result in substantial construction-related air pollutant emissions because while there may be some remodeling associated with a new tenant, it is assumed that no major demolition, grading, or building construction would occur. As this alternative would be similar as baseline conditions (the existing land use), criteria air pollutant emissions associated with daily operations would be similar to those disclosed in Table 3.2-2, *Existing Land Use (Restaurant) Maximum Daily Operational Emissions*, in Section 3.2, *Air Quality*. Impacts associated with air quality would be reduced in comparison to the proposed Project and would be less than significant.

#### **Energy**

Similar to the discussion under Air Quality, the No Project Alternative would not result in energy use associated with construction because no demolition, grading, or building construction would occur. Therefore, this alternative would not have the potential to increase energy use from the site during construction as would occur with the proposed Project. Mitigation measure ENE-1 requiring the implementation of construction practices that encourage efficient use of fuel beyond typical demand would be avoided under this alternative. While operational energy use would be similar to the former restaurant, the building would not be upgraded to comply with 2019 CALGreen or Title 24 standards and therefore operational energy use would not be as efficient as the proposed Project. Impacts associated with energy would be reduced under the No Project Alternative in comparison to the proposed Project and no mitigation would be required.

#### **Greenhouse Gas Emissions**

Similar to the discussion under Air Quality and Energy, the No Project Alternative would not result in construction-related GHG emissions because no demolition, grading, or building construction would occur. As this alternative would be similar as baseline conditions (the existing land use), GHG emissions associated with daily operations would be similar to those disclosed in Table 3.4-4, *Existing Land Use (Restaurant) Operational GHG Emissions*, in Section 3.4, *Greenhouse Gas Emissions*.

While operational energy use would be similar to the former restaurant, the building would not be upgraded to comply with 2019 CALGreen or Title 24 standards and therefore operational energy use would not be as efficient as the proposed Project. The No Project Alternative would not have the

potential to increase GHG emissions from the site as would occur with the proposed Project. GHG impacts would be reduced in comparison to the proposed Project.

#### **Hydrology and Water Quality**

Under the No Project Alternative, construction-related impacts associated with hydrology and water quality would not occur because no demolition, grading, or building construction would be involved. There would be no change from existing conditions in terms of alteration of drainage patterns, groundwater recharge, or degradation of water quality. While hydrology and water quality impacts would be less than significant under the proposed Project, impacts would be further reduced under the No Project Alternative.

#### Land Use and Planning

As no redevelopment would occur under the No Project Alternative, there would be no change compared to existing conditions, and therefore it would have no impact with respect to physically dividing an established community and conflicts with existing City plans and regulations. Therefore, the No Project Alternative would be similar to the proposed Project with respect to physically dividing a community (no impact for both the proposed Project and the No Project Alternative) and slightly reduced impacts associated with consistency with applicable plans (no impact compared to the Project's less than significant impact).

#### **Noise**

The No Project Alternative would not result in construction-related noise because no demolition, grading, or building construction would occur. The potentially significant construction vibration impacts associated with the proposed Project would be avoided. Therefore, mitigation measure NOI-1 would not be required under the No Project Alternative.

The No Project Alternative assumes that the site would have a similar use as the formerly occupied restaurant and therefore traffic noise would not be expected to substantially change from baseline conditions and impacts would be less than significant. Overall, noise and vibration impacts would be reduced under the No Project Alternative in comparison to the proposed Project and would be less than significant.

#### **Transportation**

The No Project Alternative assumes that the site would have a similar use as the formerly occupied restaurant (retail use) and VMT would not be expected to result in a regional increase in VMT. There would be no impact associated with conflicts with circulation plans, hazardous design features or emergency access. Transportation impacts would be less than significant under the No Project Alternative, similar to the proposed Project.

#### Ability of Alternative to Accomplish Project Objectives

The No Project Alternative would not achieve any of the Project objectives identified in Section 5.1.1. It would not provide a facility that would allow the UC San Diego Health Sciences and UC San Diego Extension programs to be relocated into a building that is compliant with the UC Seismic Safety Policy, UC building policies, and the UC Sustainable Practices Policy (Objective 1 and 6). It would not create

programmatic and space efficiencies in shared amenities by consolidating programs currently spread out over multiple locations into one building (Objective 2). The No Project Alternative would not provide leasable office space proximate to the VA Medical Center and the UC San Diego Health Sciences West Neighborhood for UC San Diego Health Sciences programs (including UC San Diego Health and School of Medicine) or provide leasable classroom and office space for Extension programs at a location that is public-facing and easily accessible to patients, research participants, and those seeking educational opportunities provided by UC San Diego Extension (Objectives 3 and 4). The currently vacant site would not be revitalized, and the objective of redeveloping an underutilized site proximate to two new LRT stations would not occur (Objective 5). Finally, the University would not be able to develop a financially feasible project through a public-private partnership (Objective 7).

# 5.4.2 Two-Level Office Building Alternative

#### **Description**

The Two-Level Office Building Alternative assumes no subdivision of the parcel and subsequent purchase by UC and that the current owner redevelops the 0.9-acre area with a two-level office building, limiting the structure to the City's 30-foot height limit. Under the Two-Level Office Building Alternative, a two-story building with 45,345 SF of general office uses would be constructed, with one subgrade parking level, providing 115 parking spaces in addition to the 69 surface parking spaces to meet the City's parking ratio requirements. It is assumed that the building would not be leased to the UC and therefore the Two-Level Office Building Alternative would not be required to meet the UC Seismic Policy or other UC policies and building codes.

The UC San Diego Extension and UC San Diego Health Sciences user groups would continue to operate in their existing locations on the UC San Diego campus and in leased space located off campus until their current leases expire.

#### **Comparative Environmental Analysis**

#### **Aesthetics**

Under the Two-Level Office Building Alternative, the existing restaurant building would be demolished and redeveloped with a two-story office building with subterranean parking. Similar to the proposed Project, no impacts would be associated with scenic vistas or scenic resources as the site is not designated as a scenic vista or corridor, is not located along a scenic highway, and would not obstruct scenic views.

Because the site would be redeveloped with a new structure, it would have the potential to degrade the existing community character; however, it is assumed that the design would be required to conform to existing City regulations and guidelines. The building would be a lower height than the proposed Project, which would be closer in massing and scale to the buildings in the immediate vicinity, such as the other buildings within The Campus on Villa La Jolla and the UC San Diego Health Urgent Care Center.

Impacts associated with light and glare would be similar to the proposed Project, as the site is located in an urban, well-lit area. The Two-Level Office Alternative would be required to conform to City lighting standards and impacts would be less than significant.

Under the Two-Level Office Alternative, impacts associated with aesthetics and visual character would be somewhat reduced in comparison to the proposed Project due to the lowered height, but would remain less than significant, similar to the proposed Project.

#### **Air Quality**

The Two-Level Office Building Alternative would result in proportionally reduced air pollutant emissions when compared to the proposed Project because this alternative would require a shorter construction period and generate less traffic. Thus, this alternative would reduce the less-than-significant air quality impacts that would result from the proposed Project during construction and operation.

#### **Energy**

The Two-Level Office Building Alternative would result in proportionally reduced energy demand when compared to the proposed Project, because this alternative would require a shorter construction period and generate less traffic. Mitigation measure ENE-1 requiring the implementation of construction practices that encourage efficient use of fuel beyond typical demand would likely still be required under this alternative. Impacts associated with operational energy use would be proportionally reduced under the Two-Level Office Building Alternative in comparison to the proposed Project; impacts would remain less than significant, and no mitigation would be required.

#### **Greenhouse Gas Emissions**

Similar to the discussion under Air Quality, the Two-Level Office Building Alternative would result in proportionally reduced GHG emissions during construction and operation compared to the proposed Project because of the smaller size and occupancy. Because the site would remain within the jurisdiction of the City, the alternative would be required to comply with the City's Climate Action Plan. However, it would not be required to comply with the UC Sustainable Practices Policy, which is in some instances more stringent than what the City requires (such as requiring the use of 100 percent clean energy sources by 2025) and would not be required to achieve a minimum LEED Silver certification rating. Overall, impacts would be anticipated to be less than significant, similar to the proposed Project.

#### **Hydrology and Water Quality**

The Two-Level Office Building Alternative would have a similar impact on hydrology and water quality as the proposed Project. Although the building height would be reduced under this alternative, the overall footprint would be similar and requirements associated with water quality and stormwater regulations would remain. Therefore, impacts would be less than significant, similar when compared to the proposed Project.

# Land Use and Planning

Under the Two-Level Office Building Alternative, there would be no impact with respect to physically dividing an established community and less than significant impacts related to conflicts with existing City plans and regulations adopted for the purpose of minimizing an environmental effect. Therefore, the Two-Level Office Alternative would be similar to the proposed Project with respect to physically dividing a community (no impact) and consistency with applicable plans (less than significant impact).

#### **Noise**

Temporary construction noise and vibration would be somewhat reduced due to a shortened construction period under the Two-Level Office Building Alternative. However, on a single day, construction-related noise impacts would be similar to the proposed Project as similar types of equipment would be used and mitigation to reduce vibration impacts would still be required.

The Two-Level Office Building Alternative would still be required to comply with the City's noise standards with respect to exterior and interior noise limits. Once constructed, the less-than-significant traffic-related operational noise impacts would also be reduced compared to the Project due to a decrease in daily traffic trips along area roadways.

Overall, noise impacts would be similar to the proposed Project, and would require mitigation to reduce construction vibration impacts to a less than significant level.

#### **Transportation**

Because the site is in the same location as the proposed Project, the office use associated with the Two-Level Office Building Project alternative would be in the same traffic analysis zone and VMT per employee would be lower than the regional baseline, resulting in a less than significant impact associated with VMT impacts.

This alternative would likely have a less than significant impact associated with conflicts with circulation plans, hazardous design features, and emergency access. Transportation impacts would be less than significant under the Two-Level Office Building Alternative, similar to the proposed Project.

#### Ability of Alternative to Accomplish Project Objectives

The Two-Level Office Building Alternative would achieve one out of the seven Project objectives identified in Section 5.1.1. The currently vacant, underutilized site would be revitalized within a site proximate to two new LRT stations (Objective 5). However, it would not provide a facility that would allow the UC San Diego Health Sciences and UC San Diego Extension programs to relocate into a building that is compliant with the UC Seismic Safety Policy, building codes, and UC Sustainable Practices Policy (such as incorporating sustainable design features to achieve a LEED silver rating) (Objectives 1 and 6). It would not create programmatic and space efficiencies in shared amenities by consolidating programs currently spread out over multiple locations into one building (Objective 2). It would also not allow for future expansion of either UC San Diego Health Sciences or Extension programs in this space. The Two-Level Office Building Alternative would not provide leasable office space proximate to the VA Medical Center and the UC San Diego Health Sciences West Neighborhood for UC San Diego Health Sciences programs (including UC San Diego Health and School of Medicine) or provide leasable classroom and office space for Extension programs at a location that is public-facing and easily accessible to patients, research participants and those seeking education opportunities from UC San Diego Extension (Objectives 3 and 4). Finally, the University would not be able to develop a financially feasible project through a public-private partnership (Objective 7).

# 5.4.3 Two-Level Educational Building Alternative

#### **Description**

Under the Two-Level Educational Building Alternative, the 0.9-acre parcel would be sold to UC and a two-story building, limiting the structure to the City's 30-foot height limit with 39,670 SF of office/educational uses limited to UC San Diego Extension would be constructed, providing 115 parking spaces in addition to the 69 surface parking spaces. The retail component (café) would not be included to maximize educational space. The Two-Level Educational Building Alternative would include the same sustainability features as the proposed Project, as applicable, and would achieve LEED Silver certification.

The UC San Diego Health Sciences programs, including support for UC San Diego Health Sciences and UC San Diego School of Medicine would continue to operate in their existing locations on the UC San Diego campus and in leased space located off campus until their lease term expires, after which they would need to relocate to alternate lease space that complies with UC Seismic Safety Policy and building policies.

# **Comparative Environmental Analysis**

#### **Aesthetics**

Under the Two-Level Educational Building Alternative, the existing restaurant building would be demolished and redeveloped with a two-story building with subterranean parking. Similar to the proposed Project, no impacts would be associated with scenic vistas or scenic resources as the site is not designated as a scenic vista or corridor, is not located along a scenic highway, and would not obstruct scenic views.

Because the site would be redeveloped with a new structure, it would have the potential to degrade the existing community character. The building would be a lower height (maximum height of 30 feet) than the proposed Project (maximum height of 100 feet), which would be closer in massing and scale to the buildings in the immediate vicinity, such as the other buildings within The Campus on Villa la Jolla and UC San Diego Health Urgent Care Center.

Impacts associated with light and glare would be similar to the proposed Project, as the site is located in an urban, well-lit area. The Two-Level Educational Building Alternative would include similar anti-reflective glass and shielded light fixtures.

Under the Two-Level Educational Building Alternative, impacts associated with aesthetics and visual character would be somewhat reduced in comparison to the proposed Project due to the lowered height, but would remain less than significant, similar to the proposed Project.

#### Air Quality

The Two-Level Educational Building Alternative would result in proportionally reduced air pollutant emissions when compared to the proposed Project, because this alternative would require a shorter construction period and generate less traffic. Thus, this alternative would reduce the less-than-significant air quality impacts that would result from the proposed Project during construction.

#### **Energy**

The Two-Level Educational Building Alternative would result in proportionally reduced energy demand when compared to the proposed Project, because this alternative would require a shorter construction period and generate less traffic. Mitigation measure ENE-1 requiring the implementation of construction practices that encourage efficient use of fuel beyond typical demand would likely still be required under this alternative.

As a UC project, the Two-Level Educational Building Alternative would still be required to conform to the UC Sustainable Practices Policy. Impacts associated with operational energy use would be proportionally reduced under the Two-Level Educational Building Alternative in comparison to the proposed Project and impacts would remain less than significant.

#### **Greenhouse Gas Emissions**

Similar to the discussion under Air Quality, the Two-Level Educational Building Alternative would result in proportionally reduced GHG emissions during construction and operation compared to the proposed Project because of the smaller size and occupancy. As a UC project, the Two-Level Educational Building Alternative would still be required to conform to the UC Sustainable Practices Policy. Overall, impacts would be anticipated to be less than significant, similar to the proposed Project.

#### **Hydrology and Water Quality**

The Two-Level Educational Building Alternative would have a similar impact on hydrology and water quality as the proposed Project. Although the building height would be reduced under this alternative, the overall footprint would be similar and requirements associated with water quality and stormwater regulations would remain. Therefore, impacts would be similar when compared to the proposed Project and would be less than significant.

#### Land Use and Planning

Under the Two-Level Educational Building Alternative, there would be no impact with respect to physically dividing an established community and less than significant impacts related to conflicts with existing City plans and regulations adopted for the purpose of minimizing an environmental effect. Therefore, the Two-Level Educational Alternative would be similar to the proposed Project with respect to physically dividing a community (no impact) and consistency with applicable plans (less than significant impact).

#### **Noise**

Temporary construction noise and vibration would be somewhat reduced due to a shortened construction period under the Two-Level Educational Building Alternative. However, on a single day, construction-related noise impacts would be similar to the proposed Project as similar types of equipment would be used and mitigation to reduce vibration impacts would still be required.

The Two-Level Educational Building Alternative would still be required to comply with the City's noise standards with respect to exterior and interior noise limits. Once constructed, the less than significant traffic-related operational noise impacts would also be reduced compared to the Project due to a decrease in daily traffic trips.

Overall, noise impacts would be similar to the proposed Project, and would require mitigation to reduce vibration impacts to a less than significant level.

#### **Transportation**

Because the site is in the same location as the proposed Project, the office component of the Two-Level Educational Building Alternative would be in the same traffic analysis zone and VMT per employee would be lower than the regional baseline, resulting in a less than significant impact. The classroom component of the Two-Level Educational Building Alternative would be smaller than what is currently proposed and possibly would not result in the same synergy of land uses as the proposed Project; however, it is likely that it would not result in an increase in regionwide VMT and impacts would be less than significant.

This alternative would likely have a less than significant impact associated with conflicts with circulation plans, hazardous design features or emergency access. Overall, transportation impacts would be less than significant under the Two-Level Educational Building Alternative, similar to the proposed Project.

# Ability of Alternative to Accomplish Project Objectives

The Two-Level Educational Building Alternative would meet three and partially achieve two out of the seven Project objectives identified in Section 5.1.1. While it would allow the University to develop a project through a public-private partnership and provide a facility that aligns with the UC Seismic Safety Policy, it would not include capacity required for UC San Diego Health Sciences and other office uses, and therefore would not fully satisfy the goal of relocating all of the 102,500 SF of existing space that is non-compliant with the UC building code (Objective 1). Because the Two-Level Educational Building Alternative would only include uses associated with UC San Diego Extension, it would only partially satisfy the goal of creating programmatic and space efficiencies including use of shared amenities by consolidating programs currently spread out over multiple locations into one building (Objective 2). It would not allow for future expansion of either UC San Diego Health Sciences or Extension programs in this space.

The Two-Level Educational Building Alternative would provide leasable classroom and office space for UC San Diego Extension programs at a location that is public-facing and conveniently accessible to both campus and community constituents as well as faculty and other campus personnel though not to the extent as the proposed Project (Objective 4). The alternative would redevelop a currently vacant and underutilized site within a TPA that has abundant alternative transportation options (Objective 5) and incorporate sustainable design features to achieve LEED Silver rating or better for the Project (Objective 6).

The Two-Level Educational Building Alternative would not provide leasable office space proximate to the VA Medical Center and the UC San Diego Health Sciences West Neighborhood for UC San Diego Health Sciences programs (Objective 3). Therefore, the UC San Diego Health Sciences programs would necessitate finding another location for these uses, which may not be available at a location that is public-facing, in proximity to the UC San Diego La Jolla campus and easily accessible to patients and research participants. Finally, the University would not be able to develop a financially feasible project, and consequently would not consider this alternative to develop the site (Objective 7).

# 5.5 SUMMARY OF PROJECT ALTERNATIVES

Table 5-1, Summary Analysis for Alternatives to the Proposed Project, compares the significance of the potential impacts of the proposed Project with the impacts of the three alternatives considered in detail. Table 5-2, Ability of Alternatives to Meet Project Objectives, demonstrates the ability of the analyzed alternatives to meet the project objectives, with the No Project Alternative meeting none of the seven objectives; the Two-Level Office Building Alternative meeting one out of the seven objectives; and the Two-Level Educational Building Alternative meeting three objectives, though to a lesser extent than the proposed Project, and partially meeting two objectives.

Table 5-1
SUMMARY OF ANALYSIS FOR ALTERNATIVES TO THE PROPOSED PROJECT

EIR Issues Addressed for the Proposed Project	Proposed Project Without Mitigation	Proposed Project With Mitigation	No Project Alternative (Existing Restaurant Use)	Two-Level Office Building Alternative	Two-Level Educational Building Alternative	
Aesthetics						
Scenic Vistas	NI	NI	▼	▼	▼	
Scenic Resources within a State Scenic Highway	NI	NI	•	•	•	
Degradation of Existing Community Character or Conflict with Zoning and Other Regulations for Scenic Quality	LS	LS	•	•	•	
Lighting and Glare	LS	LS	▼	▼	▼	
Air Quality		•	•		•	
Consistency with Applicable Air Quality Plan	LS	LS	•	=	=	
Cumulative Increase in Criteria Pollutant Emissions	LS	LS	▼	▼	•	
Sensitive Receptors	LS	LS	▼	▼	▼	
Other Emissions	LS	LS	▼	▼	▼	
Energy						
Energy Consumption	PS	LS	▼			
Consistency with Applicable Energy Plans	LS	LS	•	=	=	
Greenhouse Gas Emissions						
Generate GHG Emissions	LS	LS	▼	▼	▼	
Consistency with Applicable Plan	LS	LS	▼	=	=	
Hydrology and Water Quality	Hydrology and Water Quality					
Water Quality	LS	LS	▼	=	=	
Groundwater	N	N	▼	=	=	
Site Drainage and Hydrology	LS	LS	▼	=	=	
Inundation	N	N	▼	=	=	
Water Quality Control Plan or Sustainable Groundwater Management Plan	LS	LS	▼	=	=	

Table 5-1 (cont.)
SUMMARY OF ANALYSIS FOR ALTERNATIVES TO THE PROPOSED PROJECT

EIR Issues Addressed for the Proposed Project	Proposed Project Without Mitigation	Proposed Project With Mitigation	No Project Alternative (Existing Restaurant Use)	Two-Level Office Building Alternative	Two-Level Educational Building Alternative
Land Use					
Divide an Established Community	NI	NI	=	=	=
Consistency with Applicable Plans	LS	LS	=	=	=
Noise					
Exceed Noise Standards	LS	LS	▼		•
Excessive Groundborne Vibration and Noise	PS	LS	•	•	
Aircraft Noise	LS	LS	▼	=	=
Transportation					
Compliance with Applicable Circulation Plan	LS	LS	•	=	=
Induce Substantial Vehicle Miles Traveled	LS	LS	▼	=	=
Hazardous Design Features	LS	LS	▼	=	=
Emergency Access	LS	LS	▼	=	=

PS – potentially significant impact; LS – less than significant impact; SU – potentially significant and unavoidable impact; NI – no impact

- ▲ Alternative would result in an increased level of impact when compared to the proposed Project.
- = Alternative would result in a similar level of impact when compared to proposed Project.
- Alternative would result in a reduced level of impact when compared to the proposed Project but would still require mitigation to reduce potential impacts to a less than significant level.
- Alternative would result in a reduced level of impact when compared to proposed Project and would not require mitigation.

Table 5-2
ABILITY OF ALTERNATIVES TO MEET PROJECT OBJECTIVES

	Project Objectives	No Project Alternative (Existing Restaurant Use)	Two-Level Office Building Alternative	Two-Level Educational Building Alternative
1	Provide a facility that aligns with the UC Seismic Safety	No	No	Partial
	Policy, allowing UC San Diego Health Sciences and UC San			
	Diego Extension programs to relocate from approximately			
	102,500 GSF of existing space that is non-compliant with the			
	UC Seismic Safety Policy.			
2	Create programmatic and space efficiencies that allow for	No	No	Partial
	future UC San Diego Health Sciences and UC San Diego			
	Extension program growth, including use of shared			
	amenities by consolidating programs currently spread out			
	over multiple locations into one building.			

# Table 5-2 (cont.) ABILITY OF ALTERNATIVES TO MEET PROJECT OBJECTIVES

	Project Objectives	No Project Alternative (Existing Restaurant Use)	Two-Level Office Building Alternative	Two-Level Educational Building Alternative
3	Provide leasable office space proximate to the VA Medical Center and the UC San Diego Health Sciences West Neighborhood for UC San Diego Health Sciences programs (including UC San Diego Health and School of Medicine) at a location that is public-facing and easily accessible to patients and research participants as well as faculty and other personnel located primarily on campus.	No	No	No
4	Provide leasable classroom and office space for UC San Diego Extension programs at a location that is public-facing and conveniently accessible to both campus and community constituents as well as faculty and other personnel located primarily on campus.	No	No	Yes
5	Redevelop a currently vacant and underutilized site within a TPA that has abundant alternative transportation options, including access to the UC San Diego Blue Line LRT system and bike and pedestrian access to the UC San Diego La Jolla campus and VA Medical Center.	No	Yes	Yes
6	Incorporate sustainable design features to achieve Leadership in Energy and Environmental Design (LEED) Silver rating or better for the Project, thereby reducing energy consumption, conserving natural resources, and complying with the UC Sustainable Practices Policy.	No	No	Yes
7	Develop a financially feasible project through a strategic public-private partnership opportunity that develops a facility with leasable office and educational space that complies with UC building policies.	No	No	No

# 5.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative (the alternative having the potential for the fewest significant environmental impacts) from among the range of reasonable alternatives that are evaluated. Table 5-1 provides a summary comparison of the alternatives with the proposed Project with the purpose of highlighting whether the alternatives would result in a similar, greater, or lesser impact, than the proposed Project. The No Project Alternative (Existing Restaurant Use) would avoid the potentially significant but mitigable temporary construction impacts identified for the proposed Project related to energy and vibration. Further, the No Project Alternative would not meet any of the Project objectives.

Although the No Project Alternative could result in minimal environmental impacts, CEQA Guidelines requires identification of an alternative other than the No Project Alternative as environmentally superior. Based upon the discussion above, the Two-Level Educational Building Alternative would be considered Environmentally Superior Alternative for its ability to reduce the adverse effects (while still requiring mitigation) on energy (use of fuel-efficient construction equipment) and vibration (construction vibration), while meeting more of the Project objectives than the Two-Level Office Building Alternative.

The Two-Level Educational Building Alternative would meet three of the Project objectives, though to a lesser extent than the proposed Project. It would not include capacity to consolidate the UC San Diego School of Medicine uses as the proposed Project, so it would only partially achieve the following critical Project objectives:

- Provide a facility that aligns with the UC Seismic Safety Policy, allowing UC San Diego Health Sciences and UC San Diego Extension programs to relocate from approximately 102,500 SF of existing space that is non-compliant with UC building code (Objective 1).
- Create programmatic and space efficiencies including use of shared amenities by consolidating programs currently spread out over multiple locations into one building (Objective 2).

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