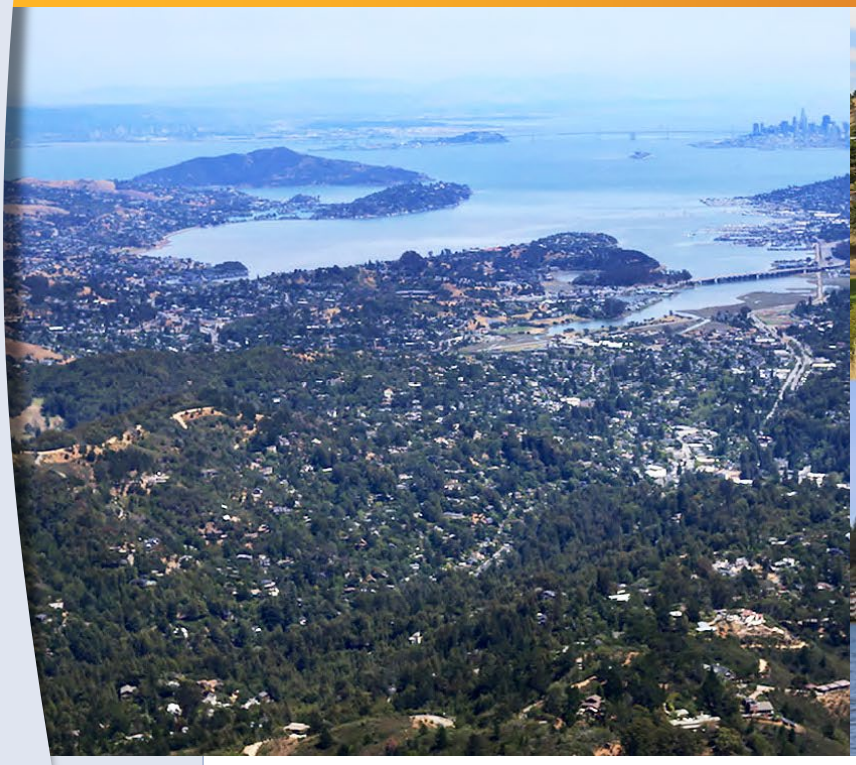
DRAFT ENVIRONMENTAL IMPACT REPORT

North Coast Land Holdings Master Plan and Community Plan Amendment Project (Project ID: P1490)

SCH No. 2020090488



Prepared for:

COUNTY OF MARIN

Community Development Agency

July 2024

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LIST OF ABBREVIATIONS

°F	degrees Fahrenheit
1953 CUP	1953 Conditional Use Permit
2008 update	2003 *Energy Action Plan*
2022 Scoping Plan	*Final 2022 Scoping Plan for Achieving Carbon Neutrality*
2022 SIP	2022 State SIP Strategy
AB	Assembly Bill
ABAG	Association of Bay Area Governments
Action Plan 2010	stormwater management plan
AF	acre-feet
AFV	alternative fuel vehicle
AFY	acre-feet per year
Alquist-Priolo Act	Alquist-Priolo Earthquake Fault Zoning Act of 1972
ALUC	Marin County Airport Land Use Commission
ALUP	airport land use plan
amsl	above mean sea level
APN	Assessor's Parcel Numbers
applicant	North Coast Land Holdings, LLC
Area Plan	Marin County Hazardous Materials Area Plan
ASTM	American Society of Testing Materials
BAAQMD	Bay Area Air Quality Management District
Basin Plan	water quality control plan
BayWAVE	Bay Waterfront Adaptation and Vulnerability Evaluation
BCDC	San Francisco Bay Conservation and Development Commission
BMP	best management practice
Board	Board of Supervisors
BP	before present
CA SDWA	California Safe Drinking Water Act
CAA	federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
cal BP	calibrated years before present
Cal OES	California Governor's Office of Emergency Services

Cal/OSHA	California Occupational Safety and Health Administration
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen Code	California Green Building Standards Code
CALGreen	California Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CA-MUTCD	California Manual on Uniform Traffic Control Devices
CAP	climate action plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCA	Community Choice Aggregate
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDP	census designated place
CEC	California Energy Commission
CEQA Guide	*2022 CEQA Guidelines*
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Code of Regulations
CGS	California Geological Survey
CHP	California Highway Patrol
CI	carbon intensity
CIWMA	California Integrated Waste Management Act
CMTCM	Coast Miwok Tribal Council of Marin
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2	carbon dioxide
County	County of Marin
CREC	Controlled Recognized Environmental Condition
CRHR	California Register of Historical Resources
CUP	1953 Conditional Use Permit
CUPA	Certified Unified Program Agencies

CWA	Clean Water Act
CWC	California Water Code
CWPP	Community Wildfire Protection Plan
CY	cubic yards
dB	decibels
DHA	Donald Herzog Associates
DHS	California Department of Health Services
diesel PM	particulate matter exhaust from diesel engines
District	Marin Municipal Water District
DOF	California Department of Finance
DOT	U.S. Department of Transportation
Draft EIR	draft environmental impact report
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EMS	emergency medical service
EO	Executive Order
EOC	Emergency Operations Center
EOP	*Marin Operational Area Emergency Operations Plan*
EPA	U.S. Environmental Protection Agency
EPAct	Energy Policy Act of 1992
EPCRA	Emergency Planning and Community Right-to-Know Act of 1986
ESA	federal Endangered Species Act
EV	electric vehicles
FAA	Federal Aviation Administration
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FICON	Federal Interagency Committee on Noise
FIGR	Federated Indians of Graton Rancheria
Final EIR	Final EIR
FRA	federal responsibility areas
FRAP	Fire and Resource Assessment Program
FTA	Federal Transit Administration
GGBTS	Golden Gate Baptist Theological Seminary
GGT	Golden Gate Transit

GHG	greenhouse gas
GHGRP	greenhouse gas reduction plan
gpd	gallons per day
HAP	hazardous air pollutant
HCV	Housing Choice Voucher
HMIS	Hazardous Materials Inventory Statement
HMMP	Hazardous Material Management Plan
HOA	homeowners association
HRA	health risk assessment
HREC	Historic Recognized Environmental Condition
HVAC	heating, ventilation and air conditioning
Hz	hertz
IEPR	Integrated Energy Policy Report
in/sec	inches/second
JPA	joint-powers authority
KOP	Key Observation Point
kWH	kilowatt hours
lb/day	pounds per day
LCFS	Low Carbon Fuel Standard
L_{dn}	day-night level
L_{eq}	equivalent continuous sound level
LHMP	local hazard mitigation plans
L_{max}	maximum sound level
LOS	level of service
LRA	local responsibility area
Marin Water	Marin Municipal Water District
MBTA	Migratory Bird Treaty Act
MCE	Marin Clean Energy
MCFD	Marin County Fire Department
MCL	maximum contaminant level
MCSTOPPP	Marin County Stormwater Pollution Prevention Program
MEI	maximally exposed individual
mgd	million gallons of water per day

mgy	million gallons per year
MHA	Marin Housing Authority
MLHMP	Marin County Multi-Jurisdictional Local Hazard Mitigation Plan
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
mPa	micro-Pascals
MPO	metropolitan planning organization
MRRC	Marin Resource Recovery Center
MS4	municipal separate storm sewer system
MTC	Metropolitan Transportation Commission
$MTCO_2e$	metric tons of carbon dioxide equivalent
MWPA	Marin Wildfire Prevention Authority
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEHRP	National Earthquake Hazards Reduction Program
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NIC	Natural Investigations Company
NO	nitric oxide
NO_2	nitrogen dioxide
NOP	notice of preparation
North Coast	North Coast Land Holdings, LLC
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OEHHA	Office of Environmental Health Hazard Assessment
OEM	Marin County Sheriff's Office of Emergency Management
OES	Office of Emergency Services
OPR	California Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl
PG&E	Pacific Gas & Electric Company
PM	particulate matter
PM_{10}	respirable particulate matter with an aerodynamic diameter of 10 micrometers or less
$PM_{2.5}$	fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less

Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1970
PPV	peak particle velocity
PRA	Purcell, Rhodes & Associates
PRC	Public Resources Code
Project	North Coast Land Holdings
PV	photo voltaic
REC	Recognized Environmental Condition
RHNA	Regional Housing Needs Allocation
RMS	root-mean-square
ROG	reactive organic gases
RTP	regional transportation plan
RWQCB	regional water quality control board
SARA Title III	Superfund Amendments and Reauthorization Act of 1986
SASM	Sewerage Agency of Southern Marin
SB	Senate Bill
SCS	sustainable communities strategy
SCWA	Sonoma County Water Agency
SDWA	Safe Drinking Water Act
Seminary	Golden Gate Baptist Theological Seminary
SEMS	standardized Emergency Management System
sf	square feet
SFBAAB	San Francisco Bay Area Air Basin
SGMA	Sustainable Groundwater Management Act of 2014
Sheriff's Office	Marin County Sheriff's Office
SIP	state implementation plan
SLR	sea level rise
SMEMPS	Southern Marin Emergency Medical-Paramedic System
SMFD	Southern Marin Fire Protection District
SO_X	oxides of sulfur
SPCC	Spill Prevention, Control, and Countermeasure
SPL	sound pressure level
SR 131	State Route 131
SR	State Route
SRA	state responsibility area
State Water Board	State Water Resources Control Board
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board

TAC	toxic air contaminants
TAMDM	Transportation Authority of Marin Demand Model
TBR	Tenant Bill of Rights
TIS	*North Coast Land Holdings Transportation Impact Study*
TISG	*Vehicle Miles Traveled-Focused Transportation Impact Study Guide*
TMDL	total maximum daily load
TTC	temporary traffic control
U.S. 101	U.S. Highway 101
U.S.	U.S. Highway
UCMP	University of California Museum of Paleontology
US 101	US Highway 101
USACE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tanks
UWMP	urban water management plan
UWMPA	Urban Water Management Planning Act
VdB	vibration decibel
VEC	Vapor Encroachment Condition
VMT	vehicle miles traveled
WDR	waste discharge requirement
WQO	Water Quality Objective
WSA	water supply assessment
WSCP	water shortage contingency plan
WUI	Wildland Urban Interface
WWTP	wastewater treatment plant master plan
ZEV	zero-emission vehicle

EXECUTIVE SUMMARY

ES.1 INTRODUCTION

This summary is provided in accordance with California Environmental Quality Act (CEQA) Guidelines (State CEQA Guidelines) Section 15123. As stated in Section 15123(a), "an EIR [environmental impact report] shall contain a brief summary of the proposed action and its consequences. The language of the summary should be as clear and simple as reasonably practical." As required by the guidelines, this chapter includes (1) a summary description of the North Coast Land Holdings Project, (2) a synopsis of environmental impacts and recommended mitigation measures (Table ES-1), (3) identification of the alternatives evaluated and of the environmentally superior alternative, and (4) a discussion of the areas of controversy associated with the project.

ES.2 SUMMARY DESCRIPTION OF THE PROJECT

ES.2.1 Project Location

The proposed North Coast Land Holdings Project site (project site) is located on the former Golden Gate Baptist Theological Seminary campus property in the community of Strawberry, a census-designated place in unincorporated Marin County, California, adjacent to the City of Mill Valley (Figure 2-1, "Regional Location"). The campus address is 201 Seminary Drive on the Strawberry Peninsula. The campus consists of ten Assessor's Parcels, two of which have boundaries that extend into Richardson Bay (the "Richardson Bay Parcels").

The campus encompasses approximately 127 acres, generally bounded by Richardson Drive, Seminary Drive, and East Strawberry Drive (Figure 2-2, "Project Site"). The properties composing the project site total approximately 101 acres and include Assessor's Parcel Numbers (APN) 043-261-25, 043-261-26, 043-401-05, 043-401-10, 043-401-16, 043-402-03, 043-402-05, and 043-402-06. No development is proposed on the Richardson Bay Parcels (APN 043-262-03 and 043-262-06) and, thus, they are not included as part of the project. Furthermore, because the Richardson Bay Parcels consist of submerged lands and other undeveloped areas that are not publicly accessible, it is not anticipated that the project will result in increased use of the Richardson Bay Parcels.

Regional access to the project site is available from US Highway 101 (US 101) and State Route 131 (SR 131; Tiburon Boulevard). From US 101 off-ramps, ingress to the project site is available through the Redwood Highway Frontage Road to Seminary Drive and egress returning to the freeway on-ramps is available through Seminary Drive and the Highway Frontage Road to US 101 on-ramp. The project site is accessible from Seminary Drive, both at Hodges Drive and Gilbert Drive. Other access points to the project site include Mission Drive, East Strawberry Drive, Chapel Drive, and Reed Boulevard.

ES.2.2 Background and Need for the Project

The Golden Gate Baptist Theological Seminary originally developed the project site pursuant to a 1953 Conditional Use Permit (1953 CUP or CUP), which governs the development and operation of the seminary. The 1953 CUP allows for a campus operation with up to 1,000 students supported by faculty and staff. By 1982, 132 student apartments, 19 faculty/staff apartments and 60 dormitory rooms were constructed, as well as the administration building, library, cafeteria, and academic classrooms. In 1984, the Board of Supervisors approved a Master Plan for the campus; however, additional buildings and residential units approved under the 1984 Master Plan were never developed. Use of the site as the Golden Gate Baptist Theological Seminary peaked with enrollment of 910 students in 1987, with most students, faculty, and staff living nearby in the surrounding community. In 2014, after the Seminary relocated to Southern California, the applicant acquired the project site. The 1984 Master Plan expired on January 1, 2018.

The applicant is currently requesting approvals from the County to redevelop the campus, remove some residences, retain and improve several existing structures, and construct new housing as well as accessory childcare and fitness facilities. North Coast first submitted an application in 2015 and provided a revised application in early 2020 with plan modifications in response to community input. The Strawberry Design Review Board reviewed the 2020 application and recommended denial. In late 2020, a decision by the County Environmental Planning Manager to proceed with an EIR was appealed to the Board of Supervisors by the community group, Seminary Neighborhood Association. The Board accepted the Environmental Planning Manager's decision and denied the appeal, allowing the EIR to proceed (Marin County 2020). The preparation of an EIR was initiated by the County.

ES.2.3 Project Objectives

The purpose of the project is to redevelop the property under a new Master Plan focused on supporting an academic institution, providing amenities to the surrounding community, and developing a diversity of housing types. The basic objectives of the proposed project are to:

- Create an intergenerational community for residents to live, work, and learn;
- Support a thriving campus use that offers amenities to the surrounding community and academic value for the region;
- Continue to provide undisturbed views and visual access to the Bay through retainment of undeveloped open space areas within the project site and preservation of existing viewsheds and local ridgelines;
- Support a housing balance in the Strawberry community while creating a unique space with the potential to improve and transform the social fabric of the site and local community;
- Support implementation of Countywide Plan Housing Element goals and policies (including Housing Goal 1 and supporting policies 1.1 through 1.3 as well as Housing Goal 2 and supporting policies 2.1, 2.4 and 2.5) to provide a mix of housing units, including affordable units, that contribute to meeting the housing goals outlined in the Countywide Plan Housing Element and consistent with the Association of Bay Area Governments' Regional Housing Needs Allocation for Marin County;
- Develop the project site sensitive to and compatible with the scale and form of the surrounding area; and
- Provide improvements to circulation systems serving the Strawberry community in the form of enhanced trails, bicycle facilities, and pedestrian enhancements on the project site.

ES.2.4 Characteristics of the Project

The proposed project would include a new daycare and fitness center, new residential care facility, upgrades to existing housing and construction of new housing, renovation of academic buildings, new campus maintenance building, retention and improvements to existing open space and recreation areas, and creation of new bicycle and pedestrian paths within the project site. The proposed land uses within the project site are broken down into eight separate planning areas. These planning areas are described in detail in Chapter 2, "Project Description," and are depicted therein in Figure 2-3, "Project Site Planning Areas."

ACADEMIC CAMPUS

The existing academic campus on the project site is currently tenant-occupied by Olivet University, a private Christian university. The proposed project includes reconfiguration of the existing academic campus to improve accessibility and facilitate construction of new residential uses in the Chapel Hill and Shuck Drive Knoll Planning Areas. The proposed project would retain the existing academic building, cafeteria, and library; renovate the existing administration building, including adding building floor area; demolish the existing maintenance building and

construct a new maintenance building; and would not change the permitted enrollment maximum of 1,000 students per the 1953 CUP.

DAYCARE AND FITNESS CENTER

The proposed project includes construction of a new facility that would contain a daycare and fitness center. The daycare and fitness center would be located in a shared facility that would be situated in the central portion of the project site. The existing daycare would continue to operate on-site but would be relocated from the academic building into the new space within the proposed daycare and fitness center. The proposed daycare would allow for the enrollment of approximately 60 children and would be staffed by 16 employees. The proposed fitness center would allow limited enrollment by approximately 2-3 employees.

RESIDENTIAL

At the Seminary Point Planning Area, the proposed project would retain the existing single-family residence, demolish the 24 existing one-bedroom units, and construct 10 new buildings consisting of 8 two-bedroom units and 6 three-bedroom, single-family residences, thus resulting in a reduction in the number of dwelling units in the planning area from 25 to 15 units.

At the Hodges/Shuck planning area, the proposed project would demolish all existing dwelling units and construct 14 one-bedroom units, 44 two-bedroom units, and 56 three-bedroom units. Three six-story residential buildings would be constructed, including 8 one-bedroom units, 32 two-bedroom units, and 63 three-bedroom units. The total number of dwelling units in this planning area would increase by 124 units.

At the Reed/Storer/Shuck Planning Area, the proposed project would retain the existing single-family residence, demolish other existing units, and construct 36 three-bedroom units in three buildings, thereby increasing the number of dwelling units in this planning area by 21 units.

At the Mission Drive Planning Area, the proposed project would construct 2 four-bedroom, single-family residences and retain 10 three-bedroom units and one single-family residence, thereby increasing the number of dwelling units in the planning area by 2 units.

At the Dormitory Hill Planning Area, the proposed project would demolish the existing dormitory buildings and construct a three-story senior housing building within the residential care facility.

At the Chapel Hill Planning Area, the proposed project would construct 2 one-bedroom units, 25 two-bedroom units, 9 three-bedroom units, and 4 four-bedroom units, providing a total of 40 dwelling units in the planning area.

At the Shuck Drive Knoll Planning Area, the proposed project would construct 14 three-bedroom units, providing a total of 14 dwelling units in this planning area.

RESIDENTIAL CARE FACILITY

The proposed project would construct a residential care facility designed to serve adults 55 and older with a capacity of 170 residents in 100 independent living units and 50 assisted living/memory care residences. The facility would be staffed approximately 34 employees at varying shifts including two 24/7 staffed positions.

RECREATION AND OPEN SPACE

The proposed project would maintain about 70 percent of the project site as undeveloped space, add to the existing network of trails, and raise a 2-acre Seminary Playing Field by approximately 25-30 feet to create a landscape berm along Seminary Drive.

ES.3 ENVIRONMENTAL IMPACTS AND RECOMMENDED MITIGATION MEASURES

ES.3.1 Project-Specific Impacts

This EIR has been prepared pursuant to the CEQA (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 1500, et seq.) to evaluate the physical environmental effects of the proposed North Coast Land Holdings Project. The County of Marin (County) is the lead agency for the project. The County has the principal responsibility for approving the project and for ensuring that the requirements of CEQA have been met. After the Final EIR is prepared and the EIR public-review process is complete, the County Board of Supervisors is the party responsible for certifying that the EIR adequately evaluates the impacts of the project.

Table ES-1, presented at the end of this chapter, provides a summary of the environmental impacts for the North Coast Land Holdings Project. The table provides the level of significance of the impact before mitigation, recommended mitigation measures, and the level of significance of the impact after implementation of the mitigation measures.

ES.3.2 Significant and Unavoidable Impacts and Cumulative Impacts

The proposed project would result in significant and unavoidable impacts related to project-level and cumulatively considerable greenhouse gas (GHG) emissions, temporary construction noise, and project-level and cumulatively considerable transportation (vehicle miles traveled [VMT]) impacts. Cumulative impacts are defined in State CEQA Guidelines Section 15355 as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." See Chapter 4, "Cumulative Impacts," for a detailed description and analysis of cumulative impacts.

PROJECT-LEVEL GHG SIGNIFICANT AND UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in construction- and operation-related GHG emissions that could contribute to climate change on a cumulative basis. Construction emissions would total approximately 6,643 $MTCO_2e$ over the project's four-year construction period. The project would emit an additional approximately 2,378 $MTCO_2e$ for the first full year of operations in 2027 when compared against the project's existing baseline emissions, which include natural gas usage at existing buildings that would be retained as a component of project implementation. BAAQMD's guidance recommends various project design features to conclude less-than-significant GHG impacts under CEQA. These include meeting OPR's reduction targets as mandated by SB 743 (i.e., a 15 percent reduction from a regional average for residential and nonresidential development, and a no net increase for retail development), all electric development with the exception of permitted sources, and adhering to the Tier 2 requirements of the most recent CalGreen code as it related to EV charging. As discussed in Section 3.15, "Transportation," with the addition of the project's estimated VMT, the residential components of the project would not meet OPR's reduction target for Marin County; however, the nonresidential components of the project would result in a 30 percent decrease from regional VMT. Because the project's residential components would not meet OPR's 15 percent reduction target, the project would not be considered a VMT efficient project. Additionally, while compliance with Section 19.04.135 of the Marin County Code would require the proposed multi-family residential development to comply with the Tier 2 requirements of the CalGreen Code, Section 19.04.135 does not meet the Tier 2 requirements of the CalGreen Code as it pertains to nonresidential development. Moreover, the project has not been designed to be fully electric per BAAQMD's recommendations or CARB's recommendations in Appendix D of the 2022 Scoping Plan.

Implementation of Mitigation Measure 3.7-1a would provide the necessary EV charging infrastructure for the electrification of the state's mobile source sector. This measure is necessary to demonstrate that a project is doing its "fair share" in assisting the state in meeting its long-term GHG reduction goals of carbon neutrality by 2045 as

mandated by AB 1279. Mitigation Measure 3.7-1b would provide the applicant with the flexibility to either construct the project without natural gas infrastructure (i.e., fully electric), or at a minimum have all-electric appliances and, under specific circumstances as noted above, rely on carbon offsets as a mechanism to close the gap of GHG emissions generated from natural gas combustion through a qualified offset registry. If all-electric development is infeasible and the County has adopted an offset policy and implementation program, the purchasing of sufficient GHG offsets would demonstrate that the project would be aligned with the carbon neutrality goal of AB 1279. However, it cannot be assured at this time that Mitigation Measure 3.7-1b is feasible. For instance, the cost or availability of offsets that meet the criteria of being real, quantifiable, permanent, verifiable, enforceable, and in addition to any GHG emission reductions otherwise required by law or regulation is unknown. In addition, Mitigation Measure 3.14-2a would require the project applicant to implement a Transportation Demand Management (TDM) Program for the proposed market rate residential uses to achieve a 39 percent reduction in weekday home-based VMT per capita. Furthermore, Mitigation Measure 3.14-2b would require the dedication of housing to campus-affiliated residents to further reduce vehicle trips and associated VMT associated with the residential uses of the project. However, it cannot be assured that implementation of these mitigation measures would be sufficient to achieve the required VMT reduction target. Therefore, while implementation of Mitigation Measure 3.7-1a would satisfy BAAQMD's qualitative thresholds with respect to the electrification of the mobile source sector, implementation of Mitigation Measures 3.7-1b, 3.14-2a, and 3.14-2b would not be sufficient to meet BAAQMD's VMT reduction requirements or building decarbonization goals. Therefore, the project's contribution of GHGs would conflict with the 2022 Scoping Plan and this project-level impact would be **significant and unavoidable**.

PROJECT-LEVEL NOISE SIGNIFICANT AND UNAVOIDABLE IMPACTS

Hourly noise levels during construction activities would range from approximately 77 decibels (dBA) to 86 dBA at adjacent residential receptors, which is as much as 39 dBA over existing ambient noise levels. Construction noise would intermittently constitute a substantial increase, a perceived more than doubling of existing noise levels, for an extended period of construction time estimated to be four years. Mitigation Measure 3.11-1 would reduce noise by locating equipment as far away from sensitive receptors as possible, requiring the proper use of available noise-reduction equipment, including use of alternatively powered equipment, exhaust mufflers, engine shrouds, equipment enclosures, and barriers for activities in the vicinity of noise-sensitive uses, and require on-site monitoring to ensure noise levels do not exceed allowable limits. Implementation of these noise-reduction features can reduce construction noise levels by approximately 10 dBA, or more (NCCHP 1999). With mitigation, construction-generated noise levels would be substantially reduced. However, construction noise levels would exceed ambient levels by up to 39 dBA and a reduction in noise of 10 dBA would still result in an increase in noise by 29 dBA, which would exceed 5 dBA above existing conditions and is considered distinctly perceptible by most people. Thus, even with implementation of all feasible mitigation, construction noise could still result in significant noise impacts intermittently for sensitive receptors. Therefore, the construction noise impact would remain **significant and unavoidable**.

PROJECT-LEVEL TRANSPORTATION SIGNIFICANT AND UNAVOIDABLE IMPACTS

The modeling of operational VMT for the project determined that the VMT per capita for the residential uses under Existing plus Project conditions would be approximately 3 percent below the regional average of 19.6 miles, and therefore would not meet the 30 percent below existing average regional VMT per capita threshold. Although implementation of Mitigation Measures 3.14-2a and 3.14-2b would require the development of a TDM program and dedication of a portion of the residential uses to campus-affiliated residents to reduce vehicle trips and, therefore, VMT associated with the residential uses of the project, the effectiveness of potential VMT reduction strategies cannot be reliably quantified nor assured at this time. Traditional TDM measures could reasonably reduce VMT by 5 percent, based on typical performance; however, a significant number of housing units would need to be dedicated to campus employee or student housing for the project's campus to result in more substantial VMT reductions. Thus, the proposed residential uses would likely not achieve the required VMT reduction level to meet the threshold of 30 percent below existing average regional VMT per capita. For these reasons, the project's VMT impact would be **significant and unavoidable**.

CUMULATIVELY CONSIDERABLE SIGNIFICANT AND UNAVOIDABLE IMPACTS

The proposed project would result in a significant and unavoidable cumulative GHG impact. As discussed in Chapter 4, "Cumulative Impacts," even with the implementation of Mitigation Measures 3.14-2a and 3.14-2b, the project would not fully satisfy BAAQMD's VMT reduction requirements and the project's contribution of GHGs would conflict with the 2022 Scoping Plan. Therefore, the project, in conjunction with worldwide cumulative GHG impacts from past, present, and probable future projects, would be significant, and the impacts of the project itself, even with mitigation, would be **cumulatively considerable**.

Lastly, the proposed project would result in significant and unavoidable cumulative transportation impact related to the generation of VMT. As discussed in Chapter 4, "Cumulative Impacts," proposed campus uses would result in VMT per service population that is 30 percent below the VMT per service population for existing campus uses. Therefore, the project's cumulative impacts related to VMT from campus uses would not be cumulatively considerable. However, VMT per capita for the project would not meet the 30 percent below existing regional average threshold. For these reasons, the proposed project's contribution to cumulative VMT impacts would be **cumulatively considerable.**

ES.4 ALTERNATIVES TO THE PROPOSED PROJECT

The following provides brief descriptions of the alternatives evaluated in detail in Chapter 5, "Alternatives," of this EIR. Table ES-2 presents a comparison of the environmental impacts between the alternatives and the proposed project.

- **Alternative 1: No Project/No Build Alternative** assumes the continuation of baseline conditions with no development or redevelopment of the project site. The project site would remain in its current condition and existing uses would continue. Under this alternative, it is assumed that Olivet University (or an equivalent college) would remain on the project site because the existing facilities are suitable. In addition, this alternative assumes that the university enrollment would increase to up to 1,000 students consistent with the 1953 CUP.
- **Alternative 2: Potential Alternative Locations** have been evaluated based on a search for sites of comparable size, plan designation/zoning, access, public services/utilities, and feasible availability.
- **Alternative 3: Community Plan Consistent Alternative** involves denial of the proposed Community Plan Amendment and approval of a new Master Plan, and assumes that development of the site could occur consistent with the currently adopted Strawberry Community Plan and the same number of units would be developed as the proposed project (i.e., 324 new/replacement units and 3.3 dwelling units per acre). Because the 1984 Master Plan for the Seminary property expired in 2018, a new Master Plan would be required. This alternative assumes that Olivet University (or an equivalent college) would remain on the site because the existing facilities are suitable for this use, the facilities could be upgraded consistent with existing plans and zoning and the new Master Plan, and lease renewal would be reasonably foreseeable. In addition, Alternative 3 also assumes that university enrollment would increase up to 1,000 students consistent with the 1953 CUP.
- **Alternative 4: Mitigated Plan Alternative** would involve modifications to the development plan (e.g., configuration of uses) from the project application to reduce environmental impacts, based on the analysis of the impacts of the project as proposed. These modifications go beyond the mitigation measures proposed for the project itself. Based on the environmental impact analysis contained in Sections 3.1 through 3.15 of the Draft EIR, the proposed project would result in potentially significant impacts on aesthetics, air quality, archaeological and tribal cultural resources, biological resources, geology and soils, greenhouse gas emissions, noise, public services, and transportation. Moreover, with the implementation of mitigation measures, the proposed project would result in significant and unavoidable impacts related to GHG emissions, construction noise, and VMT. Because the mitigated plan alternative focuses on reconfiguration of the proposed layout, it addresses impacts related to direct physical landscape alteration, rather than operational impacts (i.e., GHG emissions and VMT). Alternative 4 proposes relocating the proposed residential units on Chapel Hill to lower elevations within the project site to reduce local ridgeline visual impacts. In addition, Alternative 4 proposes incorporating various design features to ensure conformance with County policies related to visual resources and reduce color contrast and glare impacts, including the incorporation of light and slightly darker-valued earth-toned building materials that are flat and

non-reflective, use of albedo surfaces that maximum reflectance coefficient of 0.6, and planting of screening shrubs and trees. To address potentially significant impacts related to disturbance or loss of monarch butterfly (should pre-construction surveys find the project site is used for monarch butterfly overwintering in the Shuck Drive Knoll and Seminary Point Planning Areas) Alternative 4 would avoid removal of healthy live overstory Monterey Pine that may contribute to suitable overwintering habitat. If this restriction prohibits construction of residential dwellings in these planning areas, the dwelling units would be relocated to any other planning area. In addition, to address potentially significant impacts related to slope stability and landslide hazards, development would be relocated and focused within Slope Stability Zone 1 with its generally gentler slopes, as identified in Figure 3.6-2, "Relative Slope Stability." To address potentially significant impacts related to safety hazards and emergency access, this alternative would also widen Gilbert Drive and Hodges Drive to County standards and construct a roundabout at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol. Alternative 4 would also require a minimum of 90 and a maximum of 100 housing units to be reserved for student housing to serve the University student population onsite. Lastly, this alternative would include a new onsite gym that would be exclusively available for use by university students and faculty. These requirements are consistent with the existing Strawberry Community Plan.

ES.4.1 Environmentally-Superior Alternative

Because the No Project/No Build Alternative (described above in Section 5.4.1) would avoid almost all adverse impacts resulting from construction and operation of the proposed project analyzed in Chapter 3, with the exception of transportation impacts which would be greater, it is the environmentally superior alternative. However, the No Project/No Build Alternative would not meet most of the project objectives.

When the environmentally superior alternative is the No Project Alternative, the State CEQA Guidelines (Section 15126[d][2]) require selection of an environmentally superior alternative other than the No Project Alternative from among the other action alternatives evaluated. As illustrated in Table ES-2, below, the Mitigated Plan Alternative would be the environmentally superior action alternative because although the majority of environmental impacts would be similar to those of the proposed project, and no significant and unavoidable impacts would be completely rendered less than significant, the proposed modified development plan would reduce potentially significant impacts related to visual resources, biological resources, slope stability and landslide hazards, and safety hazards and emergency access. It should be noted that further geotechnical engineering would be required to confirm development and design level stability requirements. In addition, while impacts overall would be reduced, Alternative 4 would result in potentially greater impacts related to water quality and stormwater drainage. In addition, impacts would be incrementally higher for energy and GHGs as a result of construction and operation of the onsite gym. Thus, while Alternative 4, on balance, is environmentally superior to the proposed project, both Alternative 4 and the project represent different environmental tradeoffs, with some being greater, and some being lesser, for each policy choice. The Board of Supervisors, when considering the proposed project, will have to weigh and balance these tradeoffs.

ES.5 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

A notice of preparation (NOP) was first distributed for the proposed project on September 25, 2020, for a minimum 30-day period to responsible agencies, interested parties, and organizations, as well as private organizations and individuals that may have an interest in the project. On November 20, 2020, notice was given that the NOP had been revised and the comment period had been extended to February 1, 2021. On April 23, 2021, notice was given that a public scoping meeting would be held on May 18, 2021 and the NOP and comment period was extended to May 25, 2021. The purpose of the NOP and the scoping meeting was to provide notification that an EIR for was being prepared for the project and to solicit input on the scope and content of the environmental document. The NOP and all subsequent related notices are included in Appendix A of this EIR. Key concerns and issues that were expressed during the scoping process included the following:

- **Aesthetics**: visibility from surrounding vantage points; consistency with existing policies; scenic vistas including ridgelines, Seminary Point, Seminary Knoll, and Chapel Hill; visual compatibility with surrounding character; lighting; and raising the athletic field.
- **Air Quality**: air quality emissions and health effects from increased traffic during construction as well as exhaust from cars idling at intersections; operational traffic particulate emissions; and dust monitoring during construction.
- **Biological Resources**: historic biological conditions on the project site; use of the site for butterfly overwintering; impacts on wildlife habitat and impacts from tree removal; consideration of special-status species and mitigation measures; re-forestation following construction; missing data in County records for biological resources and consultation with local organizations and agencies; wildlife corridors; and a potential vernal pool in the Shuck Knoll area.
- **Cultural Resources and Tribal Cultural Resources**: ensuring consultation with Native American Tribes pursuant to Assembly Bill 52; and recommendations for addressing potential impacts on cultural and tribal cultural resources.
- **Energy**: energy consumption during project operation and how new buildings will meet energy efficiency goals.
- **Geology and Soils**: landslides, potential for debris flow, liquefaction risk, fill materials present on site, and structural integrity of development in terms of seismological risk.
- **Greenhouse Gas Emissions and Climate Vulnerability**: emissions from increased traffic and idling; greenhouse gas emissions from students and workers commuting to the project site; and consideration of the risks of sea level rise following guidance from the State of California Sea-Level Rise Guidance/2018 Update and Marin Shoreline Sea Level Rise Vulnerability Assessment/Bay Waterfront Adaptation & Vulnerability Evaluation.
- **Hazards and Hazardous Materials**: underground storage tank and abandoned hydraulic lift identified in a previous Phase I ESA for the site; senior living facility operations and use of medical supply and waste; asbestos present in imported soils and lead paint contaminations around structures; and debris, drums, and oil containers in the maintenance shed area and Shuck Knoll shed area.
- **Hydrology and Water Quality**: seepages potentially qualifying as jurisdictional wetlands, stormwater impacts to neighboring properties, existing drainage facilities, impacts on shoreline flooding, and sea level rise.
- **Land Use and Planning**: consistency with the Strawberry Community Plan, the zoning code and RMP (Residential, Multiple Planned District) zoning designation, the San Francisco Bay Plan, and McAteer-Petris Act.
- **Noise**: construction noise and monitoring; traffic noise; and restrictions on event noise.
- **Population and Housing**: displacement of people currently living on the project site, as well as the displacement of affordable housing.
- **Recreation**: impacts on existing public access; accessibility to public spaces for elderly residents in the assisted care facility; and potential increased use of public access areas.
- **Transportation**: bicycle and pedestrian safety and access, increased traffic, and transportation hazards during construction and operations.
- **Utilities and Service Systems**: water supply; wastewater; solid waste; need for new utilities including drainage to Richardson Bay; and water pressure for firefighting services.

These issues are each addressed in this Draft EIR. With the exception of construction noise impacts, any impacts related to these issues are either identified as less than significant, or less than significant after mitigation. Because the potential exists for construction noise to result in a significant and unavoidable impact, this issue remains an area of controversy.

Table ES-1 Summary of Impacts and Mitigation Measures

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Aesthetics			
Impact 3.1-1 Conflict with Applicable Zoning and other Regulations Governing Scenic Quality Key elements of the project's development that would affect its ability to conform to County policies are development color palette, bulk, and relationship to the project site's local ridgelines as seen from lower elevations. This impact would be potentially significant.	PS	**Mitigation Measure 3.1-1a: Buffer Views** To visually buffer views into the project from adjacent streets, in compliance with County defensible space and landscape plan requirements, project plans shall specify evergreen shrubs and trees along the north side of Chapel Drive, including the south slopes of Chapel Hill extending from Mission Drive to Willis Drive that: ▶ Screen and/or block views of the project housing on the sides of Chapel Hill when driving along Chapel Drive. ▶ Screen and/or block views into the central area of the project on the south side of Chapel Drive west of Chapel Hill. ▶ Maintain a view corridor to Richardson and San Francisco Bays from Chapel Hill. Figure 3.1-27, "Mitigation Planning Areas," identifies planting areas where this measure shall be implemented. **Mitigation Measure 3.1-1b: Screen Views** To screen views of the residential care facility as seen from Seminary Drive (KOP #3), project plans, in compliance with County defensible space and landscape plan requirements, shall specify native shade trees on the hillside created by fill placement immediately adjacent to Seminary Drive to extend over the top of the fill and onto the playing field level. Project plans shall also specify a naturalistic hedgerow of screening shrubs along the top edge of the slope to further block views uphill. Figure 3.1-27, Mitigation Planning Areas, identifies planting areas where this measure shall be implemented. **Mitigation Measure 3.1-1c: Specify Fast-Growing Trees** To mitigate the sky-lining effects of the residential care facility as seen from the west and southwest, project plans, in compliance with County defensible space and landscape plan requirements, shall specify a variety of fast-growing trees planted on the north and east sides of the facility so that, with time, a natural-appearing backdrop is created. **Mitigation Measure 3.1-1d: Reduce Color Contrast** To reduce the color contrast with the surrounding natural landscape and community setting created by the use of only light-valued cement plaster building material, project building materials shall use a variety of light and slightly darker-valued earth-toned materials that are flat and non-reflective (either integral to the material or painted).	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.1-2 Create a New Source of Substantial Light or Glare that would Adversely Affect Day or Nighttime Views in the Area Project implementation would result in an incremental increase in the amount of light and glare on the project site which would affect nighttime views in the area. However, the project would adhere to the County's outdoor lighting standards which require that lighting sources be designed and constructed in a manner that is consistent with Marin County's Design Review Standards and Development Code to avoid light spillage and glare on adjacent properties and in private spaces. Further, implementation of Mitigation Measure 3.1-2 would ensure that the project would not create a new source of substantial glare that would adversely affect day or nighttime views in the area. This impact would be potentially significant.	PS	**Mitigation Measure 3.1-2: Reflectance Coefficients for Albedo Surfaces** The reflectance coefficients for albedo surfaces (streets, pedestrian walks and plazas, and roofs) used for the project shall not exceed a maximum coefficient of 0.6 as higher values would entail glare issues. Compliance with this maximum coefficient shall be verified by the Architect of Record as part of the design review process.	LTS
Air Quality			
Impact 3.2-1 Generate Short-Term Construction-Related Emissions of ROG, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ Considering the Bay Area Air Quality Management District's (BAAQMD) guidance, average daily construction-generated emissions were quantified for the project. The project would not generate construction emissions of Reactive Organic Gases (ROG), particulate matter ten microns in diameter or less (PM_{10}), particulate matter 2.5 microns in diameter or less ($PM_{2.5}$), and exhaust exceeding BAAQMD's average daily mass emissions thresholds of significance. However, the project would emit Nitrogen Oxide (NO_X) emissions exceeding BAAQMD's mass emissions thresholds. These thresholds are inherently tied to long-term regional air quality planning (i.e., BAAQMD's 2017 Spare the Air AQMP), which demonstrates that the project could conflict with the applicable air quality plans for ozone generation. The project would incorporate BAAQMD's Basic Best Management Practices (BMPs) for Construction-Related Fugitive Dust Emissions as required by Section 22.20.040 of Title 22 of the Marin County Code. Nevertheless, the project's NO_X emissions would exceed BAAQMD's average daily mass emissions thresholds. Therefore, this impact would be potentially significant.	PS	**Mitigation Measure 3.2-1: Apply Tier 4 Emission Standards to All Diesel-Powered Off-Road Equipment** The project applicant shall require the construction contractor to only use off-road construction equipment that meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and to comply with the appropriate test procedures and provisions as contained in 40 CFR Parts 1065 and 1068. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Implementation of this measure shall be required in the contract the project applicant establishes with its construction contractors. The applicant shall demonstrate its plan to fulfill the requirements of this measure in a report or in project improvement plan details submitted to the County prior to the use of any off-road, diesel-powered construction equipment on the site.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.2-2 Generate Long-Term Operational Emissions for ROG, NO_x, SO_x, PM_{10}, and $PM_{2.5}$ Considering BAAQMD's guidance, average daily operation-generated emissions were quantified for the project. The project would not generate operational emissions of criteria air pollutants and ozone precursors exceeding BAAQMD's average daily mass emissions thresholds of significance. Because operational emissions of criteria air pollutants and ozone precursors would be less than BAAQMD's daily mass emissions threshold, impacts would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.2-3 Expose Receptors to TAC Concentrations Adversely Affecting a Substantial Number of People Based on the HRA prepared for the project, construction of the project would produce significant diesel PM or other Toxic Air Contaminants (TACs) such that BAAQMD's thresholds for TAC cancer risk exposure of 10 in 1 million or an acute or chronic Hazard Index of 1 for the Maximally Exposed Individual (MEI) for non-carcinogens would be exceeded. Using these numerical thresholds established by BAAQMD, the project would generate substantial emissions of TACs causing an adverse health impact from TAC exposure. This impact would be potentially significant.	PS	Implement Mitigation Measure 3.2-1 described above.	LTS
Impact 3.2-4 Result in Other Emissions (Such as Those Leading to Odors) Adversely Affecting a Substantial Number of People The project would introduce construction-related sources of odors; however, these sources would be intermittent and would disperse rapidly from the source. Construction-related odors would be subject to BAAQMD Regulation 7, which would reduce the potential for receptors to be exposed to odors. Given the temporary and intermittent nature of odor-generating construction activities and coverage by BAAQMD's Regulation 7, construction of the land uses developed under the project would not expose a substantial number of people to objectionable odors for an extended period. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Archaeological, Historical, and Tribal Cultural Resources			
Impact 3.3-1 Cause a Substantial Adverse Change in the Significance of Built-Environment Historical Resources No new built-environment historical resources were identified as a result of surveys conducted on the project site. The Golden Gate Baptist Theological Seminary (GGBTS) does not meet the significance criteria necessary for listing in the National	NI	No mitigation is required.	NI

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR). Because the property is not a historical resource pursuant to Section 15064.5, there would be no impact.			
Impact 3.3-2 Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Historical Resource of an Archaeological Nature Based on the records search, pedestrian survey, and subsurface testing, one unique precontact archaeological site is located in the project site. Although project activities would avoid this site, it is possible that ground-disturbing activities could result in discovery or damage of yet undiscovered archaeological resources as defined in State CEQA Guidelines Section 15064.5. This would be a potentially significant impact.	PS	**Mitigation Measure 3.3-2: For All Ground-Disturbing Construction Activities, Halt Ground Disturbance Upon Discovery of Subsurface Archaeological Features** Consistent with Marin County Code Chapter 22.20.040 Section E, if any precontact or historic-era subsurface archaeological features or deposits (e.g., ceramic shard, trash scatters), including locally darkened soil ("midden"), which may conceal cultural deposits, are discovered during construction, all ground-disturbing activity within 100 feet of the resources shall be halted, and a qualified professional archaeologist (one who meets the Secretary of the Interior's Professional Qualification Standards for archaeology) shall be retained to assess the significance of the find (i.e., whether the find may contain unique archaeological resources, historical resources of an archaeological nature, or tribal cultural resources). If the qualified archaeologist determines the archaeological material to be Native American in nature, the archaeologist under contract to North Coast Land Holdings shall contact the Federated Indians of Graton Rancheria. A tribal representative from Federated Indians of Graton Rancheria may make recommendations for further evaluation and treatment as necessary and provide input on the preferred treatment of the find. If the find is determined to be significant by the archaeologist or the tribal representative (i.e., because it is determined to constitute a unique archaeological resource, an historical resource of an archaeological nature, or a tribal cultural resource, as appropriate), the archaeologist and tribal representative, as appropriate, shall develop, for consideration and approval (possibly with modifications) by the Director of Marin County Community Development Agency (Director) or his or her designee, appropriate mitigation procedures to protect the integrity of the resource and ensure that no additional resources are affected. (a) Where the find is determined to be a tribal cultural resource, the Director or designee shall obtain the approval of the representative from Federated Indians of Graton Rancheria, or provide a reasonable opportunity to solicit and obtain such approval, before approving the proposed mitigation procedures and requiring North Coast Land Holdings or another appropriate party to implement them. (b) Where the find is a unique archaeological resource but not an historical resource of an archaeological character, mitigation procedures shall be developed	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		and implemented in accordance with PRC Section 21083.2, subdivisions (b) through (f), except as provided below. (c) Where the find is an historical resource of an archaeological character, mitigation procedures shall be developed and implemented consistent with Section 15126.4(b) of the State CEQA Guidelines, with a preference for preservation in place. Avoidance or preservation of unique archaeological resources or historical resources of an archaeological nature shall not be required where such avoidance or preservation in place would preclude the construction of important structures or infrastructure or require exorbitant expenditures, as determined by the Director or designee. Where avoidance or preservation are not appropriate for these reasons, the professional archaeologist, in consultation with the Director or designee, shall prepare a detailed recommended treatment plan for consideration and approval by the Director or designee, which may include data recovery. Work may not resume within the no-work radius until the Director or designee, in consultation with the professional archaeologist, determines that the site either: 1) does not contain unique archaeological resources or historical resources of an archaeological nature; or 2) that the preservation and/or treatment measures have been completed to the satisfaction of the Director or designee.	
Impact 3.3-3 Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource Tribal consultation under Assembly Bill (AB) 52 has not resulted in the identification of tribal cultural resources on the project site, however precontact archaeological resources are located on the project site. Additionally, excavation activities associated with project construction may disturb or destroy previously undiscovered significant subsurface tribal cultural resources. This impact would be potentially significant.	PS	**Mitigation Measure 3.3-3: Retain Archaeological and Tribal Monitors for Culturally Sensitive Areas** A minimum of three weeks prior to ground disturbance within 100 feet of the precontact archaeological sites identified within the project site (the Culturally Sensitive Areas), North Coast Land Holdings shall retain and compensate for the services of an archaeological monitor. This archaeological monitor shall contract directly with the Federated Indians of Graton Rancheria for tribal monitoring services. The archaeological monitor shall contact the Tribal representatives a minimum of 14 days prior to beginning earthwork or other ground disturbing activities within the Culturally Sensitive Areas; construction activities shall proceed if no response is received from the Federated Indians of Graton Rancheria 48 hours prior to ground disturbing activities. The monitors shall only be present onsite during the construction phases that involve ground disturbing activities within the Culturally Sensitive Areas. The monitors shall complete daily monitoring logs that describe each day's activities, including construction activities, locations, soil, and any cultural materials identified.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.3-4 Disturb Human Remains Based on documentary research, no evidence suggests that any precontact or historic-era marked or un-marked human interments are present within or in the immediate vicinity of the project site. However, ground-disturbing construction activities could uncover previously unknown human remains. Compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097 would make this impact less than significant.	LTS	No mitigation is required.	LTS
Biological Resources			
Impact 3.4-1 Potential Disturbance or Loss of Special-Status Plants Project construction activities would result in ground disturbance in habitat potentially suitable for special-status plants, which could result in the crushing or removal of individual plants or damage to special-status plants due to construction dust, if these species are present. Additionally, ground disturbance for project components could cause the introduction and spread of invasive plants that could outcompete special-status plants for resources. Furthermore, construction of project components and associated landscaping would result in a loss of habitat suitable for special-status plants. The crushing, removal, and damage of special-status plants, introduction and spread of invasive plants, and loss of habitat due to implementation of the project would have the potential to substantially reduce the number of individuals and range of these species, which would be a potentially substantial adverse effect on the local and regional populations, and therefore this impact would be potentially significant.	PS	**Mitigation Measure 3.4-1a: Avoid and Minimize Impacts to Special-Status Plants** To avoid and minimize potential impacts to special-status botanical species, prior to construction the applicant shall implement the following measures: ▶ Prior to site preparation, vegetation removal, or construction, a qualified botanist shall conduct surveys following the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (current version dated March 20, 2018) (CDFW 2018) during the blooming period for the species shown in Table 3.4-1 in areas where potentially suitable habitat for these species would be disturbed by project activities (e.g., perennial and annual grasslands, coastal scrub, coastal oak woodland, closed-cone pine-cypress) (Figure 3.4-1, "Land Cover on the Project Site"). Surveys are not required in habitat that does not have the potential to support special-status plants (i.e., developed, disturbed, and landscaped areas). ▶ If special-status botanical species are found on the project site but are located outside of work areas or can be avoided, the applicant shall establish and maintain a 15-foot buffer around special-status plants to be retained, to prevent direct and indirect disturbance to the plants. The size of the buffer may be modified by a qualified botanist considering the species present, the work to be performed adjacent to the plants, and other appropriate variables. ▶ If special-status plants are found during rare plant surveys and cannot be avoided, the applicant's qualified biologist shall make a formal recommendation in writing to the County of Marin for review, regarding the appropriate compensation to offset the loss of occupied habitat or individuals. Mitigation measures may include, but are not limited to, measures such as preserving and enhancing existing populations in portions of the project site outside of the development footprint (the Woodland Buffer [Figure 2-3, "Project Site Planning	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Areas"]), creating off-site populations on mitigation sites through seed collection or transplantation at a 1:1 ratio, and restoring or creating suitable habitat in sufficient quantities to achieve a minimum of a no net loss 1:1 replacement of occupied habitat and individuals. Potential mitigation sites could include suitable locations within or outside of the project site. The implementing party shall develop and implement a site-specific mitigation strategy describing how unavoidable losses of special-status plants shall be compensated. Success criteria for preserved and compensatory populations shall include: The extent of occupied area and plant density (number of plants per unit area) in compensatory populations shall be equal to or greater than the affected occupied habitat for a no net loss of occupied habitat. Compensatory and preserved populations shall be self-producing. Populations shall be considered self-producing when: ▪ plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and ▪ reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the Project vicinity. If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures shall be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations. The applicant shall provide the County of Marin with the results of surveys conducted. If special-status plants are found during surveys and measures are taken to avoid or compensate for removal of these plants, the applicant shall send a report detailing the measures taken to the County of Marin. **Mitigation Measure 3.4-1b: Avoid and Minimize Introduction and Spread of Invasive Plants** To avoid and minimize potential impacts from the introduction and spread of invasive plants on special-status plants, the applicant shall implement the following measures.	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ Prior to project implementation, a qualified biologist will conduct training with construction and forestry crews on the methods to be implemented to avoid the introduction and spread of invasive plants. ▶ Construction crews shall inspect all heavy equipment, vehicles, and tools for sand, mud, or other signs that invasive plant seeds or propagules could be present prior to use on the project site. If equipment is clean, then it may be used off road on the project site. ▶ Pressure wash or otherwise decontaminate all heavy equipment, vehicles and tools at a designated weed-cleaning station prior to use on the project site unless the equipment has been inspected and determined to be clean and free of sand, mud or other signs that invasive plant seeds or propagules could be present. ▶ Prior to project implementation, a qualified biologist shall identify and map significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture). A report detailing the locations of any significant infestations of invasive plant species shall be provided to the County of Marin prior to project implementation. Stage equipment in areas free of invasive plant infestations identified and mapped by the qualified biologist unless there are no uninfested areas present on the project site.	
Impact 3.4-2 Potential Disturbance or Loss of Monarch Butterfly Construction of the project and related activities may result in the injury, mortality, or disruption of reproduction of the monarch butterfly. In addition, the modification of habitat used for overwintering by monarch butterfly may result in loss of this habitat suitability. This could substantially reduce the habitat for this species, cause the local populations of monarch butterfly to be reduced below locally self-sustaining levels, and substantially reduce the numbers of monarch butterfly. Therefore, the impact on monarch butterfly would be potentially significant.	PS	**Mitigation Measure 3.4-2a: Avoid Disturbance of Overwintering Monarch Butterflies** To avoid or minimize impacts to monarch butterflies, the applicant shall implement the following measures. ▶ Prior to site preparation and vegetation removal, the applicant shall retain a qualified biologist to conduct monitoring within the stands of mature trees along the Woodland Buffer and within the Seminary Point Planning Area for monarch butterflies during the overwintering period (October through March) (Xerces Society 2017) to determine use of the site by the species. The results of monitoring shall be documented and submitted to the County prior to any vegetation removal. ▶ If monarch butterflies are found to be using stands on the project site, the applicant shall avoid vegetation removal within occupied stands during the overwintering period (October through March).	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Mitigation Measure 3.4-2b: Minimize Loss of Monarch Butterfly Overwintering Stands To minimize impacts to monarch butterfly overwintering habitat, the applicant shall implement the following measures. ▶ If monarch butterflies are detected during monitoring pursuant to Mitigation 3.4-2a, prior to any site preparation or vegetation removal within suitable monarch overwintering stands, the applicant shall, in coordination with the County and USFWS (upon formal listing of the monarch butterfly under the Endangered Species Act), follow the guidelines in *Protecting California's Butterfly Groves, Management Guidelines for Monarch Butterfly Overwintering Habitat* (Xerces 2017) to maintain or improve the suitability of stands within undeveloped portions of the project site for overwintering monarchs. ▪ These actions shall include requirements and specifications for maintaining or improving key habitat variables, removal or trimming of trees to facilitate solar radiation within the stand and to remove hazards, and the planting of trees where appropriate, and shall maintain or improve habitat structure for overwintering monarchs within undeveloped portions of the Woodland Buffer and within the Seminary Point Planning Area on the project site.	
Impact 3.4-3 Potential Disturbance or Loss of Special-Status Fish Species While the project would include grading and other ground disturbing activities, sediment control through the application of a required storm water pollution prevention plan and new storm drain systems would avoid discharge of contaminants to special-status fish habitat. Therefore, due to the lack of bay habitat within the project site, and the implementation of construction water quality best management practices as well as use of swales and other stormwater treatment techniques, the project would not substantially reduce the habitat for fish species, cause the population to drop below self-sustaining levels, threaten to eliminate a fishery, or substantially reduce the number of restrict the range of special-status fish. Therefore, the potential impact on special-status fishes would be less than significant.	LTS	No mitigation required.	LTS
Impact 3.4-4 Potential Disturbance or Loss of White-Tailed Kite and Other Common Nesting Birds The adverse effects of project construction on common nesting birds would be avoided by the requirements of Marin County Code Section 22.20.040, which	PS	**Mitigation Measure 3.4-4: Avoid Disturbance of White-Tailed Kite** To avoid or minimize impacts to nests of white-tailed kite, the applicant shall implement the following measures.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
includes nesting season surveys, and non-disturbance buffers around nests. However, construction of the project and related activities may result in the injury, mortality, or disruption of reproduction of white-tailed kite. The nesting season for White-tailed kite extends beyond the nesting season requirements of Section 22.20.040, and the disturbance of white-tailed kite nests may still occur with the implementation of the avoidance measures in the section. The loss of eggs and young would be a potentially substantial adverse effect on white-tailed kite. Therefore, the impact of the project on white-tailed kite would be potentially significant.		▶ The applicant may choose to schedule site preparation, construction, demolition, grading, or vegetation clearing after October 31 or before February 1 to avoid the nesting period for white-tailed kite within or adjacent to suitable nesting habitat for the species (e.g., the Woodland Buffer and along Seminary Drive). ▶ If work is required during the white-tailed kite nesting season (February 1 to October 31), a qualified biologist, retained by the applicant, shall conduct a pre-construction survey prior to site preparation, demolition, grading, or vegetation clearing to identify white-tailed kite nests within 500 feet of work area as access allows. The survey shall be conducted no more than 7 calendar days before the beginning of construction demolition, grading, or vegetation clearing. If project activity ceases for 7 days or longer, resurvey shall be conducted prior to restarting activities. ▶ If white-tailed kite nests are located, no construction shall occur within 500 feet of the nest during the nesting season or until the young have fledged, as determined by a qualified biologist. ▶ A report describing the methods and results of any nest pre-construction surveys conducted, and any nest buffers implemented shall be submitted to the County.	
Impact 3.4-5 Potential Disturbance or Loss of Special-Status and Common Bat Maternity and Hibernation Roosts Construction of the project and related activities may result in the injury, mortality, or disruption of reproduction of special-status and common bat species through disturbance or loss of maternity and hibernation roosts. The loss of adult bats and pups may cause local bat populations to drop below self-sustaining levels, and may result in a substantial reduction in the local populations of special-status bat species. Therefore, the impact of the project on special-status and common bats would be potentially significant.	PS	**Mitigation Measure 3.4-5: Avoid Disturbance of Special-Status and Common Bat Maternity and Hibernation Roosts** To avoid and minimize impacts to special-status and common bats the applicant shall implement the following measures which meet and exceed the protections in Marin County Code Section 22.20.040(F). ▶ Within 14 days prior to initiating site preparation, demolition, grading, or vegetation clearing, a qualified bat biologist shall inspect the area of disturbance and areas adjacent (within 50 feet) for bat roosts (most likely buildings and mature trees with crevices, cavities and dense vegetation of broad leaves). Surveys shall consist of a daytime pedestrian survey by a qualified bat biologist looking for evidence of bat use (e.g., guano) and/or an evening emergence survey to note the presence or absence of bats. If no bat roosts are found, then no further study is required. If evidence of bat use is observed, the approximate number and species of bats using the roost would be determined. Acoustic bat detectors may be used to supplement survey efforts but are not required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ If roosts of bats are determined to be present within buildings and other structures, direct disturbance to the roost, such as demolition or renovation of buildings, shall be avoided during the maternity season (April 15 through August 31) and hibernation season (September 1 through October 15). Eviction and exclusion of bats may be implemented using daytime installation of one-way exits and blocking material during the period of March 1 through April 15, or September 1 through October 15 outside of the of the maternity season and hibernation season. ▶ If roosts of bats are determined to be present within trees on the project site, any project-related removal or pruning of trees occupied by bats shall occur during the period of March 1 through April 15, or September 1 through October 15 outside of the of the maternity season and hibernation season, and consistent with scoping comments provided by CDFW. To remove whole trees, pruning of branches and limbs that do not provide habitat shall occur the day prior to removal of the bole of the tree; this initial planned disturbance may prompt and allow bats to leave the tree during the night between limb and bole removal. The bole of the tree may be removed the following day. ▶ A report describing the methods and results of any bat surveys conducted, and any nest buffers implemented shall be submitted to the County.	
Impact 3.4-6 Potential Degradation or Loss of Sensitive Natural Communities Identified by CDFW or USFWS Fuels management, grading, construction of new buildings, roads, trails, and other project components are not likely to adversely affect Monterey pine forest, California bay forest, needle grass – melic grass grassland or coyote brush scrub / (needle grass, blue wild rye, California brome). Therefore, the project would not threaten to eliminate a plant community, and the impact from the project on these sensitive natural communities would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.4-7 Potential Degradation or Loss of Oak Woodlands Fuels management, grading, construction of new buildings, roads, trails, and other project components could spread sudden oak death into the project site and result in substantial loss of oak woodland, and threatens to locally eliminate this plant community, which would be a potentially significant impact.	PS	**Mitigation Measure 3.4-7: Avoid and Minimize Introduction and Spread of Sudden Oak Death** To avoid loss of oak woodland by avoiding or minimizing the introduction and spread of sudden oak death, when working in oak woodlands on the project site, the applicant shall implement the following best management practices. ▶ Clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at the project site.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ Include training on sudden oak death by a qualified biologist or certified arborist in worker awareness training. ▶ Minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment for forest management activities. ▶ Follow the relevant procedures listed in the *Guidelines to Minimize Phytophthora Contamination in Restoration Projects* (Working Group for Phytopthoras in Native Habitats 2016) when working within oak woodlands on the project site. ▶ A report detailing the procedures implemented to prevent the introduction of sudden oak death shall be submitted to the County on an annual basis.	
Impact 3.4-8 Potential Disturbance or Loss of State or Federally Protected Wetlands or Other Waters The project site contains 0.04 acre of the freshwater emergent wetland land cover type. Two of the three wet areas are located within the proposed disturbance area. An aquatic resources delineation has not been performed for the project site. Therefore, the status of these wet areas as jurisdictional has not been formally established. Based on the size, isolation, and composition of the features within the disturbance area, these wetlands do not provide substantial water quality benefits or important habitat for wildlife, and the disturbance of these features would not constitute a substantial adverse effect; substantially reduce the habitat of a fish or wildlife species; or cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, or threatened species. Therefore, the impact of the project would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.4-9 Potential to Impede Wildlife Movement and the Use of Native Wildlife Nursery Sites The project site is unlikely to support regional wildlife movement corridors, and no habitat connectivity corridors are documented to occur onsite. Therefore, the project is not likely to have a substantial adverse effect on wildlife movement through the project site. Use of the site as a nursery habitat for shorebirds, marine mammals, and mule deer is unlikely, given the existing and ongoing human disturbance on the project site. Therefore, the project would have a less than significant impact.	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.4-10 Potential Conflict with Local Policies or Ordinances Protecting Biological Resources The Marin Countywide Plan contains policies related to habitat for special-status species, sensitive natural communities, wildlife nursery areas and movement corridors, and woodland and forested habitats. The plan also contains policies related to invasive plants, plant pathogens, use of herbicides and insecticides, as well as restrictions on disturbance in sensitive habitat during nesting season. The potential for adverse effects on these resources are addressed in Impacts 3.4-1, 3.4-2, 3.4-4, and 3.4-5 of the EIR. Policy BIO-3.1 of the Marin Countywide Plan includes buffers and other requirements for the protection of jurisdictional wetlands. Three wet areas do not appear to qualify as jurisdictional, so the requirements of Policy BIO-3.1 would not apply. The Marin County Code contains protections for certain trees. The project would remove 89 protected trees and a tree removal permit and replacement of these trees would be required. The project would comply with all required permits and policies, and for these reasons, implementation of the project would not conflict with any local policies or ordinances and the impact would be less than significant.	LTS	No mitigation is required.	LTS
Energy			
Impact 3.5-1 Wasteful, Inefficient, or Unnecessary Consumption of Energy, During Project Construction or Operation Implementation of the project would result in the consumption of additional energy supplies during construction in the form of gasoline and diesel fuel. However, this energy expenditure would not be considered wasteful, because construction would be temporary, and standard construction practices would be implemented. Project operations would result in additional energy consumption. The project would include various sustainability features including on-site photovoltaic solar systems to supply electricity to the project site. In addition, the project would include bicycle infrastructure for visitors and employees and design features to reduce the project's energy consumption resulting from the urban heat island effect. Therefore, the project would not result in wasteful, inefficient, or unnecessary consumption of energy during project construction or operations. This impact would be less than significant.	LTS	No mitigation is required.	LTS

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Impact 3.5-2 Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency The Marin County CAP recommends various project-level measures that have been applied to the project as a component of the project's inherent design. The project would include EV chargers in accordance with County Code Section 19.04.135, which amends the mandatory requirements of the CalGreen Code in the form of a County-specific reach code. The project would include bicycle infrastructure consistent with Strategies LCT-C1 and LCT-C2 of the County's CAP. Additionally, the project would include on-site solar consistent with direction provided in Strategy RE-C1. Moreover, the project would be designed to use high albedo pavements and roofs to reduce the urban heat island effect, in accordance with CAP Strategy EE-C3. The incorporation of these policies demonstrates that the project would not conflict with the County of Marin's CAP. These measures are generally consistent with the direction provided to local governments in Appendix D of the 2022 Scoping Plan, which directs projects to reduce VMT, promote renewable energy, and provide EV charging meeting the Tier 2 requirements of the CalGreen Code. Therefore, the project would not conflict with the 2022 Scoping Plan. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Geology and Soils			
Impact 3.6-1 Directly or Indirectly Cause Potential Substantial Adverse Impacts to Structures or People, Including the Risk of Loss, Injury, or Death Through Seismic Ground Shaking Strong seismic ground shaking would expose structures and occupants to potential adverse effects including risk of loss, injury, or death. Several active fault systems, including the San Andreas, San Gregorio, Hayward-Rodgers Creek, and others, lie in close proximity to the project site and are likely to generate strong seismic ground shaking during the expected design life of the project. However, the proposed project would not cause any change in the risk of loss of injury, because it would not exacerbate the existing environmental hazard and would adhere to CBC and Marin County Code requirements. This conclusion is provided for informational purposes but is not within the purview of CEQA for a determination of impact significance.	Not within the purview of CEQA for a determination of impact significance.	No mitigation is required.	Not within the purview of CEQA for a determination of impact significance

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Impact 3.6-2 Directly or Indirectly Cause Potential Substantial Adverse Impacts to People or Structures, Including the Risk of Loss, Injury, or Death, Through Seismically-Induced Ground/Structural Failure Including Slope Instability, Liquefaction, and Lateral Spreading Due to the presence of areas mapped within the project site as "fill," "colluvium," and "earthflows," as well as, areas regionally mapped with steep slopes, bay mud, or as potentially liquefiable, seismically-induced ground failure is an existing environmental condition and has the potential to occur within the effective design life of the project, which would expose structures and occupants to adverse effects potentially including risk of loss, injury, or death. Several active fault systems, including the San Andreas, San Gregorio, Hayward-Rodgers Creek, and others, lie in close proximity to the project site and have the potential to induce ground failure during the expected design life of the project. The construction of the new playfield and bioretention and stormwater dissipation facilities would be located within or proximal to previously-mapped areas of instability (Figure 3.6-2, "Relative Slope Stability"), and thus could exacerbate potential risks associated with this instability from seismically-induced ground failure. Additionally, new cut and fill slopes, as well as the discharge of additional storm water can reduce slope stability which would increase the potential for seismically induced instability and lateral displacements. Thus, the proposed project could exacerbate existing environmental hazards related to seismically-induced ground failure resulting in exposure of structures and occupants to risk of loss, injury, or death. Impacts would be potentially significant.	PS	**Mitigation Measure 3.6-2: Geotechnical Engineering to Address Seismically Induced Ground/Structural Failure** The PRA reports recommended that geotechnical engineering of potential seismic induced slope instability areas be included in the design-level geotechnical report to be prepared as part of compliance with Marin County Code, Section 23.08. These additional engineering measures shall include exploration and laboratory testing of soil samples in or near mapped potentially liquefiable areas or areas mapped as underlain by bay mud. Geotechnical engineering shall be performed to confirm a factor of safety above 1.0 is achieved for the design level seismic acceleration. If the calculated factor of safety is less than 1.0, seismic displacement analyses shall be performed as part of geotechnical engineering to confirm seismic induce displacements are equal or less than pre-construction conditions, and will not affect planned or existing improvements. If the calculated displacement caused by the project exceeds the pre-project condition, engineering improvements shall be implemented to reduce seismic deformations to acceptable levels. For CEQA purposes, the performance standard for the engineering improvements to mitigate the impact would be to maintain risks of lateral spreading and instability at the same or less than existing conditions. The engineering improvements must also meet building codes for safety and structural integrity, which would provide an additional margin of safety for avoiding lateral spreading and instability. The design-level geotechnical engineering shall include geotechnical seismic design recommendations and criteria per the most recent version of the CBC for structures in Seismic Zone 4. In addition, the geotechnical report shall include seismic surcharge loads for retaining structures over 7 feet. While the specific engineering improvements to reduce the risk of lateral spreading and instability would be determined based on project site conditions, typical examples of design features potentially effective in meeting the performance standard could include: retaining walls to hold back spreading soil or downslope movement; surface and subsurface drainage features to direct stormwater away from areas of instability; soil stabilization techniques like surcharging, compaction, or geosynthetic reinforcement; creating terraces or stepped slopes with gabion or retaining wall support; slope contouring to reduce slope angle or profile; and replanting of stabilizing vegetation.	LTS
Impact 3.6-3 Result in Substantial Soil Erosion Erosion would occur throughout the design life of the project as a result of natural rainfall, sloping site conditions, and exposed surface soils. Erosion may be	LTS	No mitigation is required.	LTS

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exacerbated by alteration of natural drainage patterns, local concentration of stormwater runoff, denudement of previously-vegetated slopes, or site grading. However, the erosion factor (or K value) for the project site ranges from 0.28 to 0.32. Therefore, the susceptibility of soil to erosion and the rate of runoff is considered relatively low. While the greatest risk of erosion would be during construction, requirements to comply with the Construction General Permit and Section 23.18 of the Marin County Code, which requires the development of a SWPPP and implementation of BMPs would decrease the potential for erosion. Additionally, the project would include a storm drain system and all disturbed areas would be stabilized per permit conditions which would minimize the risk of erosion during project operations. Therefore, this impact would be less than significant.			
Impact 3.6-4 Directly or Indirectly Cause Potential Substantial Adverse Impacts to People or Structures, Including the Risk of Loss, Injury, or Death Through Slope Instability / Landsliding Slope instability and landsliding is common throughout Marin County. Existing landslides and other potentially unstable deposits (weak colluvial soils) underlie various portions of the project site, including areas which have been historically filled. Application of new fill soil or building loads, grading and alteration of slopes, and redirection or alteration of existing drainage patterns, could exacerbate/re-activate existing areas of slope instability or generate new slope instability. Thus, impacts related to slope instability and landsliding would be potentially significant.	PS	**Mitigation Measure 3.6-4: Geotechnical Engineering to Address Slope Instability and Landsliding** To minimize potential risks of the project exacerbating existing hazards related to slope instability and landsliding, the project shall be designed and constructed in accordance with the geotechnical engineering design requirements as part of compliance with Marin County Code, Section 22.100.040, as well as all applicable provisions of the PRA report and latest edition of the California Building Code (or any superseding local code in effect) at the time of building permit application. Currently, the 2023 CBC is the latest applicable site grading design code including setback distances from graded slopes, and drainage terraces for taller slopes. The geotechnical engineering design shall provide grading requirements for keying, benching, fill compaction, subsurface drainage, and maximum inclinations of both temporary and permanent cut and fill slopes. Specific foundation design shall be provided for structures on fill or weak soils. The project Civil Engineer shall provide surface drainage collection and/or drainage terraces above and on graded slopes. An updated, site-specific geologic map shall be prepared and included in the geotechnical engineering design that clearly identifies and delineates the limits of the geologic materials present at the site, including all existing landslides, colluvial deposits, undocumented fills, or other areas of instability. The applicant's geotechnical engineer shall also individually catalogue and evaluate mapped areas of instability and undocumented fills and assign each a "Risk Level" in the geotechnical engineering design. Risk level A landslides would include active and dormant landslides within 100 feet of a building envelope, debris flow source areas, and flow paths that crosses	LTS

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		building envelopes / residential use areas, or active landslides that could impact public or private property. Risk Level B landslides would present a lower risk of damage and include all active, dormant or potential landslide areas on the property that do not have the potential to significantly damage property or improvements within or outside the property. In most instances, Risk Level B landslides would be located in proposed open space areas or in areas outside of any building envelope and any residential use area. The risk level assignments shall guide site-specific geotechnical engineering design. The geotechnical consultant shall perform supplemental subsurface exploration, laboratory testing, and engineering analyses to define the slope stabilization and landslide avoidance, improvement, or repair required in the design of project features in each catalogued area of instability. In general, landslides that have a higher potential of being mobilized by construction (Risk Level A landslides) should be improved or repaired, while Level B landslides should be improved or avoided in accordance with the definitions below: ▶ Landslide Avoidance - requires locating structures and improvements an adequate distance from an existing landslide so that any future movement of the landslide would not affect the structures or improvements. ▶ Landslide Improvement - requires increasing the slope stability to a level such that the calculated factor of safety is at least 1.2 for static conditions. Improvement may also include the construction of protective structures below the landslide to protect down slope improvements. ▶ Landslide Repair – shall improve the slope stability of the landslide area such that the calculated factor of safety defined as the ratio of the resisting forces to the driving forces) is at least 1.5 for static conditions and greater than 1.0 for pseudo-static (seismic) conditions. The improved stability may be accomplished by various methods including: (1) excavation of unstable material, installation of subsurface drainage and construction of a compacted earth fill buttress; (2) design and construction of retaining structures; (3) de-watering with subsurface drainage; (4) removal of the entire unstable landslide mass; or (5) other methods for landslide stabilization acceptable to the County of Marin. Examples of repair and/or improvement of landslides may include one or a combination of the following methods, or other engineering strategies defined during geotechnical engineering design:	

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		▶ excavation of unstable material, installation of subsurface drainage and construction of a compact earth fill buttress; ▶ design and construction of retaining structures (above and below ground pile walls and shear keys); ▶ de-watering with subsurface drainage; ▶ removal of the entire unstable landslide mass; or ▶ other methods as deemed acceptable to Marin County. Design drainage facilities shall also be documented during geotechnical engineering. On cut and fill slopes, terrace drains shall be included at intervals necessary to adequately drain slopes, such as every 30 feet of vertical height. The terrace drains shall have a minimum flowline gradient of six percent to make them self-cleaning (per the California Building Code). Storm drainage facilities shall convey surface water away from areas of instability and discharge into the storm drainage system. The Geotechnical Engineer shall review the planned storm water discharge locations (bio-swales and dissipators) and identify design requirements to avoid the potential for this water to exacerbate any existing areas of mapped instability or induce new instability as confirmed during Marin County engineering review of the applicant's geotechnical engineering design.	
Impact 3.6-5 Locate Project Facilities on Expansive Soils Expansive soils may be locally present at the site. Where utilized for new fill slopes, expansive soils can cause lateral extension and settlement, and where present at subgrade in flat-lying areas can cause differential heave/settlement of foundations, flatwork, pavements, drainage facilities, and other surface improvements, all of which could present some risk of loss, injury, or property damage. However, the proposed project would not exacerbate an existing environmental hazard and would adhere to the California Building Code (CBC) and Marin County Code requirements, therefore, impacts related to expansive soils would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.6-6 Locate Project Facilities on a Geologic Unit that is Unstable or that Would Become Unstable as a Result of Subsidence Subsidence as a result of natural processes, such as groundwater/subsurface resource withdrawal or bedrock dissolution, is not likely within the development area. Subsidence can also occur where new loads are applied to compressible soils, such as bay mud. The bay mud areas on the project site are limited to near the	LTS	No mitigation is required.	LTS

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shoreline area, as well as the southern edge of the planned playfield. Subsidence may also occur as a result of differential settlement where new loads are applied across a transition between geologic materials of differing support characteristics. While the greatest risk of subsidence would occur post construction, requirements to comply with Marin County Code and CBC would decrease the potential for subsidence. Such compliance with regulatory requirements would ensure that the potential for subsidence would not change as a result of implementation of the project. Therefore, the impact would be less than significant.			
Impact 3.6-7 Potential for Disturbance of Paleontological Resources Paleontological resources are the fossilized remains or impressions of plants and animals, including vertebrates, invertebrates, and microscopic plants and animals. Fossils can be used to determine the relative ages of the depositional layers in which they occur and of the geologic events that created those deposits. The proposed project would involve extensive subsurface disturbance that could potentially encounter and damage previously undiscovered buried paleontological resources or unique geological features. However, the Franciscan Complex found at the project site would not contain identifiable fossils and it would be highly unlikely to encounter paleontological resources within the geologic units to be excavated within the confines of the project site. Moreover, in the event of an unanticipated discovery of paleontological resources, the project would be required to comply with County Code 22.20.040. Therefore, impacts associated with the potential for disturbance of paleontological resources would be less than significant.	LTS	No mitigation is required.	LTS
Greenhouse Gas Emissions and Climate Change Vulnerability			
Impact 3.7-1 Generate GHG Emissions, Either Directly or Indirectly, that May Have a Significant Impact on the Environment Implementation of the proposed project would result in construction- and operation-related GHG emissions that could contribute to climate change on a cumulative basis. Construction emissions would total approximately 6,643 $MTCO_2e$ over the project's four-year construction period. The project would emit an additional approximately 2,378 $MTCO_2e$ for the first full year of operations in 2027 when compared against the project's existing baseline emissions, which include natural gas usage at existing buildings that would be retained as a component of project implementation. BAAQMD's guidance recommends various project design features to conclude less-than-significant GHG impacts under CEQA. These include	PS	**Mitigation Measure 3.7-1a: Installation of EV Charging Stations Meeting the Tier 2 Requirements of the Most Recent CALGreen Code** Prior to the issuance of construction permits, the project applicant shall incorporate the appropriate number of EV chargers to meet the Tier 2 requirements of Part 11 of the Title 24 California Building Code (CalGreen code) in effect at the time of project construction. The Tier 2 requirements of the 2022 CalGreen code require that nonresidential projects (which includes academic land uses) introducing more than 201 parking spaces require 45 percent of all parking spaces be EV capable and 33 percent be EV Charging Stations (EVCS) – EV capable with installed chargers. Furthermore, EVCS parking spaces count towards EV Capable Spaces. Considering the project's	SU

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meeting OPR's reduction targets as mandated by SB 743 (i.e., a 15 percent reduction from a regional average for residential and nonresidential development, and a no net increase for retail development), all electric development with the exception of permitted sources, and adhering to the Tier 2 requirements of the most recent CalGreen code as it related to EV charging. As discussed in Section 3.15, "Transportation," with the addition of the project's estimated VMT, the residential components of the project would not meet OPR's reduction target for Marin County; however, the nonresidential components of the project would result in a 30 percent decrease from regional VMT. Because the project's residential components would not meet OPR's 15 percent reduction target, the project would not be considered a VMT efficient project. Additionally, while compliance with Section 19.04.135 of the Marin County Code would require the proposed multi-family residential development to comply with the Tier 2 requirements of the CalGreen Code, Section 19.04.135 does not meet the Tier 2 requirements of the CalGreen Code as it pertains to nonresidential development. Moreover, the project has not been designed to be fully electric per BAAQMD's recommendations or CARB's recommendations in Appendix D of the 2022 Scoping Plan. Therefore, because the project would allow for natural gas infrastructure, the nonresidential components of the project would not include BAAQMD's recommended standards for EV charging meeting the Tier 2 requirements of the CalGreen Code, and the project would not meet the VMT reduction targets of SB 743, the project does not demonstrate that it would be doing its "fair share" in assisting the state in meeting its long-term goal of carbon neutrality by 2045. For this reason, the project's emissions of GHGs would be potentially significant.		proposed 241 spaces for academic uses, the project shall install 109 EV capable spaces (spaces equipped with the electrical infrastructure to support an EV charger), 80 of which shall have EVSE. In other words, the project shall install 109 EV capable spaces, 80 of which shall have EVCS. **Mitigation 3.7-1b: Mitigation Measure 3.7-1b: Decarbonize Buildings or Purchase Offsets If Marin County Has an Adopted GHG Offset Policy and Program** The applicant shall reduce GHG emissions from buildings to the maximum extent feasible. As one option, the applicant may voluntarily commit to the County that the new buildings in the project will be constructed entirely without natural gas infrastructure or, if not fully avoiding natural gas infrastructure, new buildings will use all-electric appliances (e.g., heating and cooling systems, stoves/ovens, dishwashers, and water heaters) to the extent feasible. The applicant shall provide the information necessary for the County to confirm that the applicant has met this voluntary commitment prior to the issuance of occupancy permits, as demonstrated by constructed buildings or approved design plans. If new buildings in the project will rely on natural gas, which contributes to GHG emissions, the applicant shall provide other GHG-reducing measures consistent with BAAQMD and CARB recommendations to reduce building-related GHG emissions to the maximum extent feasible. The Bay Area Air Quality Management District (BAAQMD) and California Air Resources Board (CARB) recommend that lead agencies prioritize on-site design features, such as those listed under Mitigation Measure 3.7-1a and Mitigation Measure 3.14-2, and direct investments in GHG reductions within the communities surrounding the project site to provide potential local air quality and economic co-benefits. While emissions of GHGs and their contribution to climate change is a global problem, emissions of air pollutants, which have an adverse localized effect, are often emitted from similar activities that generate GHG emissions (i.e., mobile, energy, and area sources), so reductions in GHG emissions can also result in the accessory benefit of reduced local air pollutant emissions. For example, direct investment in a local building retrofit program in existing nearby Marin County communities could pay for cool roofs, solar panels, solar water heaters, smart meters, energy efficient lighting, energy efficient appliances, energy efficient windows, insulation, and water conservation measures for homes within the vicinity of the project. Directing local investments to low-income and middle-income households can address equity in the investments. Other examples of local direct investments include financing the installation of regional EV charging stations, paying for electrification of public school buses, and	

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		investing in local urban forests. These investments would help achieve GHG reductions as well as improve regional and local ambient air quality. The actions to reduce GHG emissions must meet the criteria of being real, quantifiable, permanent, verifiable, enforceable, and in addition to any GHG emission reductions otherwise required by law or regulation, consistent with the standards set forth in Health and Safety Code section 38562, subdivisions (d)(1) and (d)(2). At this time, Marin County has no identifiable GHG emission off-set policy or program that has been codified and/or adopted for development purposes. However, if at the time of the project's consideration for approval by the Board of Supervisors, if Marin County has adopted a GHG offset policy and implementation program, the applicant shall define offsets that feasibly meet the County program requirements and state protocols and standards. If a County policy and implementation program do not exist at the time of project consideration for approval, use of GHG offsets would be administratively infeasible to monitor and enforce. Such credits shall comply with protocols approved by CARB, consistent with Section 95972 of Title 17 of the California Code of Regulations. Credits must be purchased through one of the following: (i) a CARB-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard; (ii) any registry approved by CARB to act as a registry under the California Cap and Trade program; or (iii) through the California Air Pollution Control Officers Association's (CAPCOA's) GHG Rx and BAAQMD, if available.	
Hazards, Hazardous Materials, and Wildfire			
Impact 3.8-1 Create a Hazard to the Public or Environment through the Routine Transport, Use, or Disposal of Hazardous Materials Construction activities for the proposed project would involve the routine transport, use, and disposal of hazardous materials typically used in construction, including paints, oils, solvents, fuels, lubricants, asphalt products, and other materials. All hazardous materials would be transported, used, stored, handled, and disposed of according to the manufacturers' recommendations and in accordance with local, State, and federal regulations and plans. Additionally, ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts were all identified as non-RECs that are potentially present on the project site, which could be released into the environment during the demolition and renovation of existing structures. However, compliance with applicable regulations would ensure that ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts	LTS	No mitigation is required.	LTS

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are handled and disposed of properly. The proposed project does not include any uses that would involve the routine use, transport, or disposal of hazardous materials during operations. All medical supplies and waste generated by the residential care facility would be stored, used, handled, and disposed of in accordance with applicable federal, state, and local regulations. Further, the project would not result in any changes to campus operations, and the use and transport of any hazardous materials on the campus for academic purposes (e.g., science labs) would continue to comply with all hazardous materials standards and would occur under the oversight of the Marin County Public Works Department, the CUPA in Marin County. This impact would be less than significant.			
Impact 3.8-2 Create a Hazard to the Public or Environment through Reasonably Foreseeable Upset or Accident Conditions There are no known sites with contamination on or near the project site identified on SWRCB's GeoTracker or DTSC's EnviroStor databases. Additionally, the project site was not identified on any other databases searched as part of the Phase I ESA. However, ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts were all identified as non-RECs that are potentially present on the project site. As such, the demolition and renovation of existing structures could result in the release of these materials into the environment. Compliance with applicable regulations would ensure that ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts are handled and disposed of properly and would not create a significant hazard to the public or the environment. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.8-3: Safety Hazard or Excessive Noise Related to Proximity to an Airport The project site is not located within the ALUP for Gnoss Airfield or within 2 miles of a public airport or public use airport. However, the privately owned and operated Commodore Center Heliport and Commodore Center Seaplane Base are both located approximately 0.4-mile southwest of the project site. Because private airports are not required to prepare land use plans and the Marin County ALUC authority is limited to Gnoss Airfield, the proposed project has the potential to result in airport safety hazards associated with the Commodore Center Heliport and Commodore Center Seaplane Base. Compliance with FAA notification requirements would ensure that the project would not result in any air safety hazards. This impact would be less than significant.	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.8-4 Impair Implementation of, or Physically Interfere with, an Adopted Emergency Response Plan or Emergency Evacuation Plan Construction of the proposed project could temporarily obstruct or interfere with emergency response due to the presence of large construction equipment or the temporary, partial closure of roadways during certain construction activities. However, participants in construction activities would be subject to Section 3310.1 of the 2019 California Fire Code, which identifies minimum requirements to provide required emergency access during construction activities. Additionally, the proposed project does not include any components that would impair or interfere with the use of existing emergency notification systems or tools in the event of an emergency, nor would it impede the ability of first responders to implement the Operational Area EOP or MLHMP. Therefore, for the reasons described above, construction and operation of the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.8.5 Exacerbate Wildfire Risk and Expose Project Occupants to Pollutant Concentrations or People or Structures to Significant Loss, Injury, or Death Involving Wildfire According to the FHSZ maps for Marin County, the project site and surrounding area are within an LRA and are designated as "urban, unzoned." There are no Moderate, High, or Very High FHSZs mapped within or surrounding the project site. In addition, the project site is not located within or adjacent to the WUI. Although the project site is not within or adjacent to WUI areas or a Moderate, High, or Very High FSHZ, the project site supports fire-prone vegetation, including dead and declining tree species, scrub habitat, and grasslands. As such, the project site is subject to the potential risk of wildfire. As part of the project, a defensible safe zone would be established, including 30-foot and 100-foot fuel management zones, all invasive species of brush would be removed, and remaining shrubs native shrubs would be pruned or removed to ensure no continuity with other shrub masses or trees. Additionally, the project site would be replanted with native species and trees replanted on-site would be sited accordingly in conformance with the Southern Marin County Fire Protection District's fire protection standards related to vegetation management (e.g., defensible space). No fire-prone species would be planted in fuel management zones. The implementation of vegetation management procedures and the maintenance of defensible spaces would reduce the existing level of potential wildfire risk at the project site, resulting in a net benefit with respect to this issue. Therefore, this impact would be less than significant.	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.8-6 Installation or Maintenance of Associated Infrastructure that May Exacerbate Fire Risk or Result in Temporary or Ongoing Impacts to the Environment Wildfire-related infrastructure associated with the proposed project would include fuel breaks and vegetation management. The effects of the installation or maintenance of wildfire-related infrastructure on other environmental resources are addressed in the applicable resource sections throughout this EIR and are considered as part of the overall development of the proposed project. The effects associated with installation or maintenance of such infrastructure are varied and may affect certain resources, including biological resources (addressed in Section 3.4, "Biological Resources"). See Section 3.4 for a discussion of potential impacts of fuel management activities on biological resources. However, the implementation of fuel breaks and vegetation management would not exacerbate wildfire risk, but rather would reduce the existing level of wildfire risk at the project site. Therefore, this impact would be less than significant, resulting in a net benefit with respect to this issue.	LTS	No mitigation is required.	LTS
Impact 3.8-7 Expose People or Structures to Significant Post-Wildfire Risks The project site and surrounding area are not in or near an SRA, but rather are within an LRA and are designated as "urban, unzoned" according to the FHSZ maps for Marin County. There are no Moderate, High, or Very High FHSZs mapped within or surrounding the project site. In addition, the project site is not located within or adjacent to the WUI. However, the project site supports fire-prone vegetation, including dead and declining tree species, scrub habitat, and grasslands. As such, the potential risk of wildfire exists at the project site. The proposed project includes the establishment of defensible safe zones, including 30-foot and 100-foot fuel management zones, as well as the removal of dead and declining trees from the project site, some of which are protected species under Marin County Code. These changes in existing conditions would make the project site safer from a fire risk standpoint than it currently is, resulting in a net benefit with respect to this issue. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Hydrology and Water Quality			
Impact 3.9-1: Substantially Degrade Surface Water or Groundwater Quality Although development of the proposed project on the 127-acre former Golden Gate Baptist Theological Seminary property has the potential to diminish water quality within the project site and in Richardson Bay, standard construction requirements would protect local and regional water quality. Vegetation clearing, grading, and excavation increase the potential for erosion and sedimentation. The	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
use of equipment during construction could cause spills or leaks of fuel, oil, and other fluids. Wet areas with hydric vegetation have been identified in the project site, which could experience construction related water quality impacts. Once constructed, the project site would be stabilized and would not degrade water quality. The origin of standard construction requirements for the project would be from compliance with Marin County Grading Code Chapter 23.18 and the California Construction General Permit Order 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012-0006-DWQ), including implementation of a stormwater pollution prevention plan and best management practices. These measures would avoid the potential for construction to substantially degrade water quality. The impact of the proposed project on water quality would be **less than significant**.			
Impact 3.9-2: Substantially Decrease Groundwater Supplies or Interfere with Groundwater Recharge Such That the Project May Impede Sustainable Groundwater Management of the Basin The project is not located in a groundwater basin and groundwater resources are not extracted from beneath the project site. The project would be served by Marin Municipal Water District, which sources its water from surface water and would not deplete groundwater resources. Although the proposed project would increase impervious surfaces by approximately 5.3 acres over current conditions, bioretention areas and stormwater detention tanks are proposed onsite to allow for the infiltration of stormwater throughout the project site, retaining groundwater recharge opportunities. For these reasons, implementing the project would have a less-than-significant impact on groundwater resources and recharge.	LTS	No mitigation is required	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.9-3: Substantially Alter the Existing Drainage Pattern of Project Area There are no streams or rivers in the project site. The proposed storm drain system incorporates stormwater bioretention and detention as required by Marin County Code (Sections 24.04.520 and 24.04.627) and BASMAA. While the project would increase impervious area and alter the existing storm drain system, which would change the rate and timing of stormwater drainage and could result in erosion, siltation, flooding, and exceedance of adjacent storm drain systems and drainageways, compliance with the standard requirements of county ordinance requirements would avoid substantial changes. These storm water management measures would detain stormwater runoff and maintain flow rates such that post-project peak runoff flow rates would be less than pre-project levels (CSW|ST2 2021). Therefore, the project would not result in substantial off-site erosion, flooding, or contribute runoff that would exceed existing storm drain systems. The impact would be less than significant.	LTS	No mitigation required.	LTS
Impact 3.9-4: Risk Release of Pollutants due to Project Inundation from Flood Hazard, Dam Failure, Tsunami, or Seiche The project site is not located within a mapped Federal Emergency Management Agency (FEMA) flood zone and is not located in a dam failure inundation area. In addition, the project site would not have a potential for being inundated by a tsunami or seiche, though low-lying areas adjacent to the project site could be inundated by tsunami. Because the project is not located in a mapped FEMA flood zone or dam inundation area and is located above the area that could be impacted by a tsunami or seiche, the risk of release of pollutants due to flooding would be less than significant.	LTS	No mitigation required.	LTS
Impact 3.9-5: Conflict with or Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan The project would adhere to all applicable plans, permits, and regulations regarding water quality. The project would not require the use of groundwater. During construction and operation, the project would comply with the Marin County Code Chapter 23.18, the Construction General Permit, as well as all SWPPP requirements including temporary and permanent BMPs. Further, the implementation of stormwater bioretention areas and detention facilities would control stormwater flow and discharges and prevent contamination of surface water resources. For these reasons, the project would not conflict with or obstruct	LTS	No mitigation required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
implementation of a water quality control plan or sustainable groundwater management plan. This impact would be less than significant.			
Impact 3.9-6: Exacerbate any Existing and/or Projected Damage to the Environment, Including Existing Structures, Human Health, and Sensitive Resources, Associated with Reasonably Foreseeable Future Sea Level Rise and Peak High Tides As the Earth warms due to climate change, sea-level rise (SLR) and peak high tides have the potential to exacerbate existing and/or projected damage to the environment, including existing structures, human health, and sensitive resources. The proposed project site is located adjacent to the San Francisco Bay, which is likely to experience sea level rise in the future (OPC 2018). There are no buildings or roadways in the proposed project site vulnerable to future SLR in the long-term scenario even with 60-inches of SLR and 100-year storm event in the proposed project site (CSW|ST2 2021). The frontage roads leading to the project site currently experience peak tide flooding. Increases in traffic exposure to the existing hazard would occur with construction of the project. The project would not exacerbate any existing and or projected damage to the environment associated with future sea level rise and peak high tides. Therefore, the impact would be less than significant.	LTS	No mitigation required	LTS
Land Use and Planning			
Impact 3.10-1 Conflict with Land Use Plans, Policies, or Regulations Adopted to Avoid or Mitigate Environmental Effects Potentially significant land use impacts would result when inconsistencies with goals and policies adopted to avoid or mitigate environmental effects would occur where such inconsistencies would result in a potentially significant physical impact on the environment. Inconsistencies identified as resulting in potentially significant environmental impact are noted as "potentially inconsistent unless mitigated" in Table 3.10-1. Because these policy inconsistencies could indicate or result in significant environmental impacts, the proposed project's land use impact related to these inconsistencies would be potentially significant.	PS	Implement the following Mitigation Measures as described above and below: Mitigation Measure 3.2-1 (Apply Tier-4 Emission Standards to All Diesel-Powered Off-Road Equipment) Mitigation Measure 3.4-1a (Avoid and Minimize Impacts to Special-Status Plants) Mitigation Measure 3.4-1b (Avoid and Minimize Introduction and Spread of Invasive Plants) Mitigation Measure 3.4-2a (Avoid Disturbance of Overwintering Monarch Butterflies) Mitigation Measure 3.4-2b (Minimize Loss of Monarch Butterfly Overwintering Stands) Mitigation Measure 3.4-4 (Avoid Disturbance of White-Tailed Kite and Common Bird Nests)	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Mitigation Measure 3.4-5 (Avoid Disturbance of Special-Status and Common Bat Maternity and Hibernation Roosts) Mitigation Measure 3.4-7 (Avoid and Minimize Introduction and Spread of Sudden Oak Death) Mitigation Measure 3.6-2 (Geotechnical Engineering to Address Seismically Induced Ground/Structural Failure) Mitigation Measure 3.6-4 (Geotechnical Engineering to Address Slope Instability and Landsliding) Mitigation Measure 3.11-1 (Prepare and Implement a Construction Noise Control Plan) Mitigation Measure 3.11-4 (Reduce Operational Stationary Source Noise)	
Noise and Vibration			
Impact 3.11-1 General Substantial Temporary Construction Noise Hourly noise levels during construction activities would range from approximately 77 dBA to 86 dBA L_{eq} at adjacent residential receptors. Based on available existing noise level data for the project site, hourly noise levels closest to the nearest sensitive receivers are quiet, at approximately 47 dBA L_{eq}. Considering that noise levels at the nearest receivers could reach as high as 86 dBA L_{eq}, (i.e., as much as 39 dBA over existing levels), construction noise would intermittently constitute a substantial increase (perceived more than doubling of the existing noise levels) for an extended period of construction time (estimated to be four years). With this combination of temporary noise level increase at nearby receivers and extended period of intermittent construction noise impacts would be significant.	S	**Mitigation Measure 3.11-1: Prepare and Implement a Construction Noise Control Plan** Prior to commencement of any construction activities and in consultation with an acoustic professional, the applicant shall prepare a construction noise control plan that demonstrates with substantial evidence, based on finalized project-specific information (e.g., specific equipment profiles, location of construction activities, precise construction durations), that construction noise would not exceed existing daytime noise levels at nearby residences by more than 5 dBA, if feasible. If it is determined infeasible to reduce construction noise to more than 5 dBA above existing daytime noise levels at nearby residents, based on the distance to sensitive receptors and construction site topography, the construction noise control plan shall provide substantial evidence of infeasibility and inclusion of all feasible measures to reduce construction noise. The construction noise control plan shall be provided to County Community Development Agency staff prior to the start of project construction to document achievement of the following standards and measures. The plan shall include, at a minimum, the following measures: ▶ All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation.	SU

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ All construction equipment with back-up alarms shall be equipped with either audible self-adjusting backup alarms or alarms that only sound when an object is detected. The self-adjusting backup alarms shall automatically adjust to 5 dBA over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels. ▶ All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses, and/or located to the extent feasible such that existing or constructed noise attenuating features (e.g., temporary noise wall or blankets) block line-of-site between affected noise-sensitive land uses and construction staging areas. ▶ The construction contractor shall use noise reducing operation measures, techniques, and equipment. This requirement shall be enforced through its inclusion on all construction bid specifications for construction contractors hired within the project site. The bid specifications shall require that construction contractors provide an equipment inventory list for all equipment within the fleet with greater than 50 horsepower engines, that includes (at a minimum), make, model, and horsepower of equipment; operating noise levels at 50 feet, available noise control device that are installed on each piece of equipment; and associated noise reduction from the installed technology. Control devices shall include, but are not limited to, high-efficiency mufflers, acoustic dampening and protected internal noise absorption layers to vibrating panels, enclosures, and electric motors. In addition, the contractor shall specify how proposed alternative construction procedures shall be employed to reduce noise at sensitive receptors compared to other more traditional methods. Examples include, but are not limited to, welding instead of riveting, mixing concrete off-site instead of on-site, and the use of thermal lance instead of drive motors and bits. In all cases, the requirement is that the best commercially available noise-reducing technology and noise-reducing alternative construction method shall be used, provided that there are no safety concerns, engineering limits, or environmental constraints preventing it from being used. If a unique circumstance does exist that prevents an alternative quieter construction method to be used, the contractor shall provide evidence to support their proposal. The noise reduction elements of construction bid submittals shall be approved by the County of Marin, in coordination with a qualified acoustical professional.	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ Combine noisy operations (e.g., riveting, cutting, hammering) to occur in the same time period (e.g., day or construction phase), such that the overall duration of these activities is reduced to the extent feasible. By performing the noisiest operations together within the same time period, the overall duration that excessive noise would occur is reduced, minimizing the disturbing effects of exposure to prolonged increased noise levels. ▶ Stationary noise sources such as generators or pumps shall be located as far away from noise-sensitive uses as feasible. ▶ Based on the site-specific construction parameters and anticipated construction noise levels, temporary noise curtains or other similar barriers may also be considered to achieve further noise reduction. Should these measures be required, they must meet the following minimum requirements: ▪ Install temporary noise curtains as close as possible to the boundary of the construction site within the direct line of sight path of the nearby sensitive receptor(s). ▪ Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot. ▶ No less than 1 week prior to the start of construction activities at a particular location, the construction contractor shall provide notification to nearby noise-sensitive land uses (e.g., residential uses) that are located within 1,200 feet (0.23 mile) of the construction site (i.e., based on the construction noise modeling, distance at which noise-sensitive receivers would experience noise levels of 5 dBA over existing ambient levels). ▶ The contractor shall designate a disturbance coordinator and post that person's telephone number conspicuously around the construction site and provide it to nearby residences. The disturbance coordinator shall receive all public complaints and be responsible for determining the cause of the complaint and implementing any feasible measures to alleviate the problem.	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.11-2 Generate Substantial Temporary Construction Vibration Levels The use of heavy-duty construction equipment can generate various levels of vibration that could result in disturbance to nearby sensitive land uses or structural damage. Based on modeling conducted, vibration levels for a vibratory roller at the nearest structure to the project site, approximately 30 feet from where the use of construction equipment could occur, would be 101 Vibration Decibels (VdB) and 0.160 Peak Particle Velocity in inches per second (PPV in/sec). Construction vibration would occur during daytime hours when people are less likely to be disturbed; thus, the potential for disturbance to nearby receptors is low. In addition, FTA's criteria of 0.2 PPV in/sec would not be exceeded at the nearest structure. Impacts would be less than significant.	LTS	No mitigation required.	LTS
Impact 3.11-3 Generate Substantial Increase in Long-Term Transportation Noise Levels Long-term increases in traffic noise could occur as a result of increased vehicular trips on local roads near the project site. Based on modeling conducted using project-specific daily traffic volumes and applying the Federal Transit Administration (FTA) allowable increase levels for transportation noise sources of 5 dB where existing levels are less than 60 dBA Community Noise Equivalent Level (CNEL) and 3 dB where existing levels range between 60 dBA CNEL and 65 dBA CNEL, based on existing noise levels of modeled roadways, these levels would not be exceeded. This impact would be less than significant.	LTS	No mitigation required.	LTS
Impact 3.11-4 Generate Substantial Long-Term Increase in Stationary Source Noise Levels Noise generated by building mechanical equipment, parking lot activity, and the playing field would not exceed established noise standards for sensitive receivers exposed to stationary noise sources. However, the operation of new building Heating Ventilation and Air Conditioning (HVAC) equipment could potentially result in a substantial increase in noise during the more sensitive times in the night. Mitigation would be required to provide shielding to reduce noise from HVAC equipment and this impact would be potentially significant.	PS	**Mitigation Measure 3.11-4: Reduce Operational Stationary Source Noise** For all new stationary equipment associated with newly constructed buildings (e.g., HVAC equipment, back-up generators), the applicant shall retain an acoustical professional to ensure compliance with the following standards: ▶ All equipment shall be located and designed such that noise generated would not exceed the County's stationary noise source criteria established in this analysis (noise standards for single family residential uses of 50 dB L_{eq} between the hours of 7:00 a.m. and 10:00 p.m. or 45 dB L_{eq} between the hours of 10:00 p.m. to 7:00 a.m.) at any nearby sensitive receptor. ▶ All equipment shall be located and designed such that noise generated at adjacent properties does not exceed the existing ambient noise levels (i.e., 36.1 dBA) by more than 5 dB. Examples of methods to reduce stationary source noise include the following: locating equipment as far away as possible from noise	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		sensitive land uses, constructing noise barriers between the equipment and noise-sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. Final design, location, and orientation, as well as compliance with County Code shall be shown in a noise study prepared by the acoustic professional and submitted to the County to confirm compliance, prior to issuance of occupancy permit.	
Population and Housing			
Impact 3.12-1: Induce Substantial Unplanned Population Growth in an Area, Either Directly (for Example, by Proposing New Homes and Businesses) or Indirectly (for Example, through Extension of Roads or Other Infrastructure) Implementing the project would increase the number of housing units on the project site by 185 new units and increase the population on the site by approximately 530 residents. A portion of the residents on-site would include students, faculty, staff, and families affiliated with the academic campus. Most of the students and university employees would live off-site, and most of them are expected to be already living in the area. A substantial number of students and other individuals are not expected to relocate to the area in response to implementation of the project. In addition, the population in the unincorporated county has declined in recent years, the County has long identified the project site as a housing opportunity site to assist with meeting its Regional Housing Needs Allocation (RHNA) requirement, as it was included in the recent Housing Element adopted in 2023, and the anticipated increase in population under the project would not be substantial compared to the growth anticipated and analyzed in the 2007 Marin Countywide Plan Update Final EIR and the 2022 Housing & Safety Element Update to the Marin Countywide Plan Final EIR. Therefore, the growth anticipated on the site under the project would be neither substantial nor unplanned. This impact would be less than significant.	LTS	No mitigation required.	LTS
Impact 3.12-2: Displace Substantial Numbers of Existing People or Homes, Necessitating the Construction of Replacement Housing Elsewhere Implementation of the project involves demolition of 139 residential units, which would result in the displacement of approximately 320 people. A recent estimate indicates that more than 3,000 housing units are available in unincorporated Marin County (DOF 2023a). Substantially more housing is available if portions of the East Bay and San Francisco are also considered in light of typical regional commute	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
distances. In addition, the County anticipates construction of 5,214 housing units with implementation of the updated Housing Element (Marin County 2023). A portion of this new housing would become available during the 4-year project construction period. Further, various benefits would be available to displaced residents. Lower-income residents, for example, would be entitled to payment of moving expenses; relocation assistance; and payment of the difference, if any, between affordable rent and rent for a "comparable" unit for up to 42 months. Although 139 residential units would be demolished under the project, the number of units lost would be replaced, and another 185 units would be added. Therefore, the number of residential units on the site, including the 13 housing units that were retained, would increase to 337 units. The expanded number of units would be sufficient to house up to approximately 850 residents—an increase of approximately 530 residents. In addition, Program 3 of the Housing Element and Housing Density Bonus Law requires that any project that involves demolition of affordable housing on a project site replace the number of affordable units lost with new affordable units; otherwise, the project is not eligible for the density bonus. Moreover, the County would require as a condition of project approval that all demolished affordable units be replaced with the same number of affordable units at the same affordability and that 20 percent of the total number of units be affordable. Approximately 30 percent of proposed project housing units would be occupied by the student, staff, and faculty population, so a portion of the students and faculty members displaced during construction would be expected to move back onto the project site following construction. Existing housing supply in the county and in neighboring regions of the Bay Area and housing anticipated in the Housing Element are much larger than the number of displaced residents, so it is expected to be sufficient to house the remaining displaced residents. Because existing housing in the region would be sufficient to house residents displaced during construction, additional housing will become available as the County proceeds with construction of 5,214 housing units anticipated under the updated Housing Element, the project site would be able to house up to approximately 850 residents (an increase of approximately 530 residents) following buildout of the project, and the County would require that all the demolished affordable units be replaced with the same number of affordable units at the same affordability and that 20 percent of the total number of units be affordable, construction of replacement housing elsewhere would not be required to address the displacement of residents from the project site. This impact would be less than significant.			

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Public Services and Recreation			
Impact 3.13-1: Result in Increased Demand for Fire Protection Facilities and Services Implementation of the proposed project would increase the number of housing units on the project site by 185 (including the residential care facility) and increase the population on-site by approximately 530 residents, increasing demand for fire protection and emergency services on-site. Operation of the residential care facility is expected to increase the demand for emergency services on the project site. The project would adhere to all applicable standards and fire codes, the project applicant would be required to pay a fire prevention fee to offset the impact of the project on the provision of fire protection services, and implementation of the project would not necessitate the construction of new or expanded fire service facilities. However, SMFD has expressed concern that traffic associated with the increase in population under the project may cause delays in emergency response in the area. Therefore, this impact would be potentially significant.	PS	Implement Mitigation Measure 3.14-4, as described below.	LTS
Impact 3.13-2: Result in Increased Demand for Police Protection Facilities and Services Implementation of the proposed project would increase the population on the site by approximately 530 residents, increasing demand for police protection services. According to the Marin County Sheriff's Office, existing staffing levels would be sufficient to address the increase in population on-site, and no reduction in service to the unincorporated county in general would be expected. In addition, no additional facilities or equipment would be required. Further, as part of the standard development review process, the project would be subject to formal Sheriff's Office review and approval. Therefore, the impact related to police protection facilities and services would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.13-3: Result in Increased Demand for Public School Facilities and Services Implementation of the project would increase the number of housing units on the project site by 185 (including the residential care facility), generating an estimated 37 students. This increase in school district populations would not be substantial, and both the Mill Valley School District and the Tamalpais Union High School District can accommodate this increase in student population. In addition, the project applicant would be required to pay school impact fees to assist the school districts with meeting the increased demand for school services. Government Code Section 65995(h) states that the payment or satisfaction of a fee, charge, or other requirement levied or imposed under Section 17620 of the Education Code is	LTS	No mitigation is required.	LTS

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deemed to be full and complete mitigation of the impact for the planning, use, development, or provision of adequate school facilities. This impact would be less than significant			
Impact 3.13-4: Result in Increased Demand for Park Facilities and Services Implementation of the proposed project would increase the population on the site by approximately 530 residents, which could result in an increased demand for park facilities and services in the area. The Marin County Development Code requires new residential developments to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. In compliance with the Subdivision Map Act, 3 acres of land for each 1,000 persons residing in a subdivision subject to the act must be devoted to neighborhood and community park and recreational purposes. The details regarding the project applicant's implementation of its obligation under the Marin County Development Code would be determined following project approval. Because the project applicant would comply with this Marin County Development Code requirement, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.13-5: Result in Increased Demand for Other Public Facilities and Services Implementation of the project would increase the population on the site by approximately 530 residents, which could result in an increase in the demand for other public facilities and services, including local libraries. Any anticipated increase in demand for local libraries or other public facilities and services would be expected to be minimal. In addition, the library system and other public facilities and services are funded primarily by their share of the revenue generated by property taxes, and the amount of property tax generated would increase with the increase in population anticipated under the project. Therefore, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.13-6: 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 Population on-site would increase by approximately 530 under the project, which could result in increased use of neighborhood and regional parks and other recreational facilities in the area. However, because the recreational opportunities available in federal, state, County, and city recreation and park facilities in the	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
project area and in the county overall are extensive and the project applicant would be required by the Marin County Development Code to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities, implementing the project would not result in the substantial physical deterioration (or acceleration of deterioration) of recreational facilities in the region. This impact would be less than significant.			
Impact 3.13-7: Include Regional Facilities or Require the Construction or Expansion of Recreational Facilities that Might Have an Adverse Physical Effect on the Environment The modification of recreation and open space features on the site that would occur as part of the project, including raising the Seminary Playing Field and improving and establishing trails and pathways, would not have a substantial adverse physical effect on the environment. Because the population increase of approximately 530 residents anticipated for the project could increase the demand for neighborhood and regional parks and other recreational facilities in the area, the project applicant would be required by the Marin County Development Code to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new demand on existing parkland and recreational facilities. Any parkland developed to meet this requirement would be created in coordination with the County and in accordance with County standards. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Transportation			
Impact 3.14-1: Conflict with a Program, Plan, Ordinance, or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle, and Pedestrian Facilities The project would provide sidewalks, trails, and Class III bicycle routes throughout the project site and to transit stops along U.S. 101. Additionally, the project would not degrade any existing pedestrian or bicycle facilities in the vicinity of the project site. Therefore, the project would not conflict with the County's goals and policies identified in the Countywide Plan or Bicycle and Pedestrian Master Plan related to increasing the use of active transportation in the county. There are no planned or programmed transit stops in the vicinity of the project site and the project would not alter any existing transit stops along U.S. 101. Although the project would likely generate transit ridership, it would not result in a substantial increase that could	LTS	No mitigation is required.	LTS

NI = No impact LTS = Less than significant PS = Potentially significant S = Significant SU = Significant and unavoidable

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
not be accommodated by existing service. Furthermore, OPR's Technical Advisory suggests that lead agencies generally should not treat the addition of new transit users as an adverse impact. For these reasons, the project would not conflict with a program, plan, ordinance, or policy addressing the transit, bicycle, or pedestrian facilities. This impact would be less than significant.			
Impact 3.14-2: Conflict or be Inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) Regarding Vehicle Miles Traveled Construction activities would be short-term and temporary in nature and thus are not expected to result in a significant increase in VMT. Based on the modeling of operational VMT, the project would exceed the threshold of significance for residential projects as established in the TIS. Therefore, the project's impact related to VMT would be significant.	S	**Mitigation Measure 3.14-2a: Develop and Implement a Transportation Demand Management Program for Market Rate Residential Uses** Prior to the issuance of the first building permit in the first phase of development, the project applicant shall develop a Transportation Demand Management (TDM) program for the proposed market rate residential units, including any anticipated phasing, and shall submit the draft TDM program to the County of Marin Public Works for review and approval. The TDM program shall attempt to achieve a 39 percent reduction in weekday home-based VMT per capita generated by the proposed market rate single family and multi-family residential uses to reduce impacts to a less-than-significant level. The project applicant shall be responsible for preparing and implementing the TDM Program. The project applicant shall be responsible for funding and overseeing the delivery of trip reduction/TDM proposed programs and strategies to achieve the maximum feasible trip reduction as determined in collaboration with County of Marin Public Works staff, which may include, but are not limited to, the following: ▶ Dedicated shuttle for residents of market units and/or academic campus employees and/or students; ▶ Establishment of carpool, buspool, or vanpool programs; ▶ Vanpool purchase incentives; ▶ Cash allowances, passes or other public transit subsidies and purchase incentives; ▶ Parking fees set at levels sufficient to incentivize alternative modes; ▶ Full or partial parking subsidies for ride-sharing vehicles; ▶ Bicycle programs including bike purchase incentives, storage, maintenance program, and on-site education program; ▶ On-site bike share program; ▶ Dedicated employee or student housing for adjacent campus; ▶ Designation of an on-site transportation coordinator for the project.	SU

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Mitigation Measure 3.14-2b: Dedicate a Portion of Residential Units to Campus-Affiliated Residents The County of Marin Board of Supervisors shall require a permanent dedication of a portion of the project's market rate residential units, within the limits of feasibility, to campus-affiliated residents (i.e., students, staff, and/or faculty) as a condition of approval.	
Impact 3.14-3: Substantially Increase Hazards due to a Geometric Design Feature (e.g., Sharp Curves or Dangerous Intersections) or Incompatible Uses (e.g., farm equipment) Construction activities may temporarily degrade the surrounding transportation network inconveniencing pedestrians, bicyclists, and drivers and potentially increasing the risk of safety hazards. Additionally, the streets within the project site do not meet County design standards regarding roadway widths. As currently planned, the project would not provide adequate parking supply for the academic campus, which could result in parking spill over on surrounding streets where sidewalks and crosswalks do not exist, thus, resulting in potential conflicts between pedestrians and vehicles. For these reasons, the project could substantially increase hazards due to a geometric design feature or incompatible uses. Therefore, this impact would be potentially significant.	PS	**Mitigation Measure 3.14-3a: Develop a Construction Traffic Control Plan** Prior to construction activities for the proposed project, the applicant shall prepare a detailed Construction Traffic Control Plan (TCP) and submit it for review and approval by the County of Marin (County) Department of Public Works. The applicant and the County shall consult with the California Department of Transportation (Caltrans), Golden Gate Transit (GGT), Marin Transit, Southern Marin Fire Protection District (SMFD) Headquarters staff, and other local emergency service providers for their input prior to approval of the TCP. Additionally, the fire district shall be notified prior to any short- or long-term obstruction of fire access roads that would potentially slow response times or require alternative routes for emergencies. At a minimum, the plan shall include: ▶ The number of truck trips, time, and day of street closures. ▶ Time of day of arrival and departure of trucks. ▶ Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting. ▶ Provision of a truck circulation pattern. ▶ Provision of a driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick-up and drop-off areas). ▶ Maintain safe and efficient access routes for emergency vehicles. ▶ Maintain safe and efficient access routes for vehicles. ▶ Manual traffic control when necessary. ▶ Proper advance warning and posted signage concerning street closures. ▶ Provisions for pedestrian safety. ▶ Contractor parking. ▶ Maintaining existing parking needs.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		A copy of the TCP shall be submitted to local emergency response agencies. Additionally, the local emergency response agencies shall be notified at least 14 days prior to the commencement of construction that would partially or fully obstruct roadways. **Mitigation Measure 3.14-3b: Widen Roads to Meet County of Marin Roadway Standards and ADA and PROWAG Guidelines for Transportation Accessibility** The project applicant shall provide roadway, parking, and pedestrian facilities that meet ADA and PROWAG guidelines. The project applicant shall incorporate the widening of both public and private roads to meet County of Marin road design standards as identified in Marin County Code Section 24.04.110. The project shall be subject to review by County of Marin Public Works staff to ensure all federal and County requirements and regulations are met and ensuring the safe movement of all modes of transportation navigating the project site. The project applicant shall submit a waiver request for any existing or planned road, pedestrian, bicycle, transit, or parking facilities or services on the site that will not meet County roadway, ADA, or PROWAG standards. **Mitigation Measure 3.14-3c: Implement Measures to Reduce Parking Demand and/or Increase Supply for the Academic Campus** The project applicant shall prioritize implementation of parking demand reduction measures for faculty, staff, and students of the academic campus to address the estimated parking deficit of 144 parking spaces. Prior to achieving 50 percent enrollment of the academic campus, the project applicant shall submit a parking report that documents academic campus parking usage and any parking overflow onto adjacent residential streets (based on surveys conducted by an independent professional transportation consultant approved by County of Marin Public Works staff), as well as the status of all parking demand reduction measures. The report shall verify that campus parking occupancy levels do not exceed 90 percent and be submitted to County of Marin Public Works. Should there be excess parking occupancy and overflow conditions, the project applicant shall implement additional parking demand reduction measures and/or new parking supply improvements to address parking shortfalls before any additional enrollment could occur beyond 50 percent. All parking shall be located on the project site and within the vicinity of the facility that it serves. Off-site overflow parking shall not be an acceptable strategy.	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.14-4: Result in Inadequate Emergency Access In the event of an emergency scenario where evacuation would be necessary, it is anticipated that Seminary Drive and East Strawberry Drive would have the capacity to accommodate vehicles under both existing conditions and with implementation of the project. The project would be designed in compliance with County of Marin design standards and would be subject to review by County staff and emergency service agencies to ensure the project would provide access to emergency vehicles in regard to physical design. The project would also generate trips in the vicinity of the project site resulting in potential delays to vehicles, including emergency response, and potentially impacting emergency access. Therefore, this impact would be potentially significant.	PS	Implement Mitigation Measure 3.14-3b as described above. **Mitigation Measure 3.14-4: Construct a Roundabout at the Intersection of Seminary Drive/Ricardo Road/Vista Del Sol** The project applicant shall construct a roundabout at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol. The design of the roundabout, and potential advance warning devices to stop traffic entering the roundabout when fire trucks are traveling through the intersection, shall be reviewed and approved by the Southern Marin Fire Protection District. An alternative mitigation measure to the addition of a roundabout would be a traffic signal at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol with interconnect to the traffic signal at the Redwood Highway Frontage Road/Seminary Drive intersection. Emergency vehicle preemption devices shall be implemented at both intersection traffic signals. If the alternative traffic signal is implemented, design of the improvements shall be reviewed and approved by the Southern Marin Fire Protection District.	LTS
Utilities and Service Systems			
Impact 3.15-1: New or Expanded Water, Wastewater Treatment, or Storm Water Drainage, Electric Power, Natural Gas, or Telecommunications Facilities Implementation of the proposed project would require the construction of utility extensions and expansions to serve the proposed new development. Development of the site would include retention of existing infrastructure as well as installation of new utility lines and infrastructure. Because these improvements are needed to accommodate project-related water demand, wastewater generation, stormwater runoff, and electricity and natural gas demand, they are included as part of the proposed project. The potential impacts associated with construction of the proposed project, including utilities, have been analyzed throughout this EIR. The proposed project would not require the construction of new or expanded offsite utilities to serve the project's demand, and no additional utilities beyond those described in Chapter 2, "Project Description" would be required. The installation of these utilities would not result in any additional impacts beyond those disclosed in this EIR. Therefore, this impact would be less than significant.	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.15-2: Have Sufficient Water Supplies Available to Serve the Project and Reasonably Foreseeable Future Development Construction and operation of the proposed project would increase water demand compared to existing conditions. The primary source of construction-related water demand would be from dust suppression during earth moving activities. Construction water is assumed to originate from municipal sources. This additional demand would be temporary and would be minimal compared to Marin Water's annual water demand. In addition, some existing uses on the project site would be temporarily and/or permanently displaced during project construction, such as the existing playing field. As such, the additional water demand for project construction would be offset because water would no longer be needed for the displaced uses on the project site, and water currently used for irrigating the field could be used for construction. Once operational, the project would be connected to the Marin Water distribution system. Based on information in the County's 2023 – 2031 Housing Element and Marin Water's Updated 2020 UWMP, there is sufficient water supply to serve the project in normal, single dry year, and multiple dry years. Additionally, the project includes several sustainability features as well as water efficient landscaping that would help reduce operational water consumption. Furthermore, the project would be required to be consistent with all applicable Countywide Plan policies related to water supply and conservation. Lastly, the County Building and Safety Division requires project applicants to provide a letter from the appropriate water district regarding availability of water service prior to issuance of a Building Permit, including district certification that a water meter exists or is available and that arrangements have been completed for water service. Therefore, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.15-3: Have Adequate Wastewater Treatment Capacity Project construction would result in the temporary generation of wastewater through the use of temporary restroom facilities. However, any wastewater generated in temporary restroom facilities would be hauled away from the project site, and the waste would be disposed of at an approved facility in accordance with 17 CCR 8007. Once operational, the project would result in an increase in wastewater generation compared to existing conditions. However, the increase in daily wastewater generated by the proposed project would represent a minimal contribution (i.e., approximately 2 percent) to the SASM Wastewater Treatment Plant's remaining daily treatment capacity. Additionally, the County Building and	LTS	No mitigation is required.	LTS

NI = No impact LTS = Less than significant PS = Potentially significant S = Significant SU = Significant and unavoidable

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Safety Division also requires project applicants to provide a letter from the appropriate sanitary district regarding availability of sewer service, including district certification that a legal connection is available. Furthermore, the proposed project would be required to be consistent with all applicable Countywide Plan policies related to wastewater. Therefore, this impact would be less than significant.			
Impact 3.15-4: Solid Waste Facilities and Compliance with Solid Waste Statutes and Regulations Construction and demolition activities associated with the proposed project would generate solid waste, including metals, plastics, wood, concrete, and other building materials. However, construction of the proposed project would be required to comply with applicable waste diversion requirements, including CALGreen Divisions 4.4 and 5.4, which requires a minimum of 65 percent of all non-hazardous construction and demolition waste for residential and non-residential development, respectively, to be recycled and/or salvaged for reuse. Once operational, the proposed project would generate solid waste that would need to be disposed of at the Redwood Landfill and Recycling Center. However, the solid waste generated by the proposed project would represent a minimal contribution (i.e., 0.09 percent) solid waste currently disposed of daily at the Redwood Landfill and Recycling Center, and therefore would not contribute to an exceedance of the landfill's permitted daily disposal capacity. Additionally, the proposed project would be required to be consistent with all applicable Countywide Plan policies related to solid waste. Furthermore, the proposed project would be required to comply with all applicable state and local management and reduction statutes and regulations related to solid waste, including AB 939, AB 341, AB 1826, and Chapter 7 of the Marin County Code. Therefore, solid waste impacts would be less than significant.	LTS	No mitigation is required.	LTS

NI = No impact LTS = Less than significant PS = Potentially significant S = Significant SU = Significant and unavoidable

Listed below are only those cumulative impacts that were determined to be significant.

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Contribute to Cumulative Greenhouse Gas Emissions and Climate Change Impacts The project would not fully satisfy BAAQMD's VMT reduction requirements or building decarbonization goals, and the project's contribution of GHGs would conflict with the 2022 Scoping Plan. Therefore, the project, in conjunction with worldwide cumulative GHG impacts from past, present, and probable future projects, would be significant, and the impacts of the project itself, even with mitigation, would be cumulatively considerable.	S	Implement Mitigation Measure 3.14-2, as described above.	SU
Contribute to Cumulative Impacts on Vehicle Miles Traveled The proposed campus uses would result in VMT per service population that is 30 percent below the VMT per service population for existing campus uses. Therefore, the project's cumulative impacts related to VMT from campus uses would not be cumulatively considerable. However, VMT per capita for the residential uses of the project would not meet the 30 percent below existing regional average threshold. Accordingly, the project's contribution to cumulative impacts related to VMT from residential uses would be cumulatively considerable.	S	Implement Mitigation Measures 3.14-2a and 3.14-2b, as described above.	SU

NI = No impact LTS = Less than significant PS = Potentially significant S = Significant SU = Significant and unavoidable

Table ES-2 Summary Environmental Impacts of the Alternatives Relative to the North Coast Land Holdings Project

Environmental Topic	Proposed Project	Alternative 1: No Project/No Build Alternative	Alternative 2: Potential Alternative Locations	Alternative 3: Community Plan Consistent Alternative	Alternative 4: Mitigated Plan Alternative
Aesthetics	LTS/M	Less NI	N/A	Similar LTS/M	Less LTS
Air Quality	LTS/M	Less LTS	N/A	Similar LTS/M	Similar LTS/M
Archaeological, Historical, and Tribal Cultural Resources	LTS/M	Less NI	N/A	Similar LTS/M	Similar LTS/M
Biological Resources	LTS/M	Less NI	N/A	Similar LTS/M	Less LTS/M
Energy	LTS	Less LTS	N/A	Similar LTS	Greater LTS
Geology and Mineral Resources	LTS/M	Less NI	N/A	Similar LTS/M	Less LTS/M
Greenhouse Gas Emissions and Climate Change Vulnerability	SU	Less LTS	N/A	Similar SU	Greater SU
Hazards, Hazardous Materials, and Wildfire	LTS	Less NI	N/A	Similar LTS	Similar LTS
Hydrology	LTS	Less NI	N/A	Similar LTS	Greater PS
Land Use and Planning	LTS/M	Less NI	N/A	Similar LTS/M	Similar LTS/M
Noise	SU	Less LTS	N/A	Similar SU	Similar SU
Population and Housing	LTS	Greater PS	N/A	Similar LTS	Similar LTS
Public Services and Recreation	LTS/M	Less LTS	N/A	Similar LTS/M	Similar LTS/M
Transportation	SU	Less PS	N/A	Similar SU	Less SU
Utilities and Service Systems	LTS	Less LTS	N/A	Similar LTS	Greater LTS

Impact Determination:

NI = No Impact

LTS = Less Than Significant Impact

PS = Potentially Significant Impact

LTS/M: Potentially Significant, reduced to LTS with mitigation

SU = Significant and Unavoidable Impact

Similar = Impacts would be similar to those of the project

Less = Impacts would be less than those of the project

Greater = Impacts would be greater than those of the project

N/A = Not Applicable

Source: Data compiled by Ascent in 2023.

1 INTRODUCTION

This draft environmental impact report (Draft EIR) evaluates the environmental impacts of the proposed North Coast Land Holdings Master Plan and Community Plan Amendment Project. The Draft EIR has been prepared under the direction of the County of Marin (County) in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq.). This chapter of the EIR provides information about the following:

- introduction of the project requiring environmental analysis;
- type, purpose, and intended uses of the Draft EIR;
- scope of the Draft EIR's environmental topics;
- agency roles and responsibilities; and
- standard terminology.

1.1 PROJECT REQUIRING ENVIRONMENTAL ANALYSIS

This Draft EIR evaluates the potential environmental impacts of the proposed renovation and redevelopment of the former Golden Gate Baptist Theological Seminary campus property on the Strawberry Peninsula in unincorporated Marin County. The project would occur on 104.8 acres of the 127-acre campus. The proposed development would include renovation of an existing academic campus, relocation of an existing daycare center, construction of a new fitness center, construction of a new residential care facility, upgrades to existing housing and construction of new housing, retention of existing open space and recreation areas, access improvements to the open space, and development of new bicycle and pedestrian paths within the property. For further information on the proposed project, see Chapter 3, "Project Description."

1.2 PURPOSE AND INTENDED USES OF THIS DRAFT EIR

According to CEQA, preparation of an EIR is required whenever it can be fairly argued, based on substantial evidence in the whole of the record, that a proposed project may result in one or more significant environmental impacts. An EIR is an informational document used to inform public-agency decision makers and the general public of the significant environmental impacts of a project, to identify potentially feasible ways to substantially lessen or avoid any significant impacts, and describe a range of reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project while substantially lessening or avoiding any of the significant environmental impacts. The alternatives evaluated should be "potentially feasible" (State CEQA Guidelines Section 15126.6[a]); thus, the inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact "feasible." Rather, the final decision regarding the "actual feasibility" of alternatives lies with the decision-makers for a given project (in this case, the Board of Supervisors), who must make the necessary findings addressing the feasibility of alternatives for substantially lessening or avoiding a project's significant environmental effects (PRC Section 21081; State CEQA Guidelines, Section 15091). (See *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 981.) Similar findings are required for the mitigation measures proposed in an EIR. (*San Diego Citizenry Group v. County of San Diego* (2013) 219 Cal.App.4th 1, 15-19.)

Public agencies are required to consider the information presented in the EIR when determining whether to approve a project. This Draft EIR has been prepared to meet the requirements of a project EIR as defined by Section 15161 of the State CEQA Guidelines. A project EIR focuses on the direct and reasonably foreseeable indirect changes in the physical environment that would result from the implementation of a project, including its construction and operation. The county's intention in preparing a project EIR is that no further environmental analysis would be

required for additional regulatory approvals following approval of the project, absent conditions requiring a subsequent EIR, a supplement to the EIR, or an addendum. (See State CEQA Guidelines Sections 15162–15164.)

1.3 SCOPE OF THIS DRAFT EIR

This Draft EIR includes an evaluation of the following 17 environmental issue areas as well as other CEQA-mandated issues (e.g., cumulative impacts, growth-inducing impacts, significant unavoidable impacts, alternatives):

- aesthetics;
- agricultural and forestry resources;
- air quality;
- archaeological, historical, and tribal cultural resources;
- biological resources;
- energy;
- geology and soils
- greenhouse gas emissions and climate change vulnerability;
- hazards, hazardous materials, and wildfire;
- hydrology;
- land use and planning;
- noise and vibration;
- mineral resources
- population and housing;
- public services and recreation;
- transportation; and
- utilities and service systems.

Under CEQA and the State CEQA Guidelines, a lead agency may limit an EIR's discussion of environmental effects when such effects are not considered potentially significant (PRC Section 21002.1[e]; State CEQA Guidelines Sections 15128, 15143). Information used to determine which impacts would be potentially significant was derived from review of the North Coast Land Holdings Master Plan and Community Plan Amendment Project and applicant-provided technical reports; review of applicable planning documents and CEQA documentation; field work; feedback from public and agency consultation; comments received during a public scoping meeting held on May 18 2021; and comments received on the Notice of Preparation (NOP) (see Appendix A of this Draft EIR). All applicant-provided information has been subject to independent review and analysis prior to its use in helping to inform the environmental analysis.

The NOP was first prepared and circulated on September 25, 2020, for a minimum 30-day period of public and agency comment. The NOP was submitted to the State Clearinghouse and Marin County Clerk-Recorder. On November 20, 2020, notice was given that the NOP had been revised and the comment period had been extended to February 1, 2021. On April 23, 2021, notice was given that a public scoping meeting would be held on May 18, 2021 and the NOP and comment period was extended to May 25, 2021. The purpose of the NOP and the scoping meeting was to provide notification that an EIR for the project was being prepared and to solicit input on the scope and content of the environmental document. As a result of the review of existing information and the scoping process, it was determined that each of the issue areas listed above should be evaluated fully in this Draft EIR. Further information on the NOP and scoping process is provided below in Section 1.5, "Public Review Process."

CEQA Guidelines Section 15128 states that "[a]n EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR." During preparation of this EIR, the project was found to result in no impacts on the environment related to agricultural and forestry resources and mineral resources. Consistent with Section 15128, these resource areas are briefly discussed in Chapter 6, "Other CEQA Sections."

1.4 AGENCY ROLES AND RESPONSIBILITIES

1.4.1 Lead Agency

The County of Marin is the lead agency responsible for approving the project and for ensuring that the requirements of CEQA have been met. After the EIR public-review process is complete, the County of Marin Board of Supervisors will determine whether to certify the EIR (see State CEQA Guidelines Sections 15090) and approve the project.

1.4.2 Responsible Agencies

Under CEQA, responsible agencies are state, regional, and local public agencies other than the lead agency that have the authority to carry out or approve a project, or that are required to approve a portion of the project for which a lead agency is preparing or has prepared an EIR. Section 15124(d)(1) requires that an EIR identify responsible agencies to the extent that they are known to the lead agency at time of Draft EIR preparation.

The following agencies are known to have responsibility for or jurisdiction over implementation of elements of the project. The following list also identifies potential permits and other approval actions that may be required before implementation of certain project elements:

- Regional Water Quality Control Board (RWQCB) (Region 2) - National Pollutant Discharge Elimination System construction stormwater permit (Notice of Intent to proceed under General Construction Permit), and issuance of Clean Water Act Section 401 Permit for any activities that may result in discharges to waters of the United States.

1.4.3 Trustee Agencies

Trustee agencies are state agencies with legal jurisdiction over resources affected by a project that are held in trust for the people of the State of California. The California Department of Fish and Wildlife (CDFW) is the trustee agency for the state's fish, wildlife, and plant resources. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitats necessary for biologically sustainable populations of those species.

1.4.4 Federal Agencies

In addition to these CEQA responsible and trustee agencies, the project may also require approvals from federal agencies. While not considered responsible agencies, as they are generally not subject to state laws including CEQA, federal agencies may use the environmental information in a CEQA document to help inform their permitting decisions and compliance with the National Environmental Policy Act. Isolated wet areas on the project site have not been formally delineated to determine jurisdiction under Section 404 of the Clean Water Act. If discharge of dredge or fill material into Section 404 jurisdiction becomes required, the U.S. Army Corps of Engineers (USACE) would need to issue a Clean Water Act 404 Permit. (For a discussion of the scope of USACE authority under Section 404, see Section 3.4.1 in Section 3.4, "Biological Resources," of this Draft EIR.)

1.5 PUBLIC REVIEW PROCESS

As identified above in Section 1.3, "Scope of this Draft EIR," in accordance with CEQA regulations, an NOP was first distributed on September 25, 2020, to responsible agencies, interested parties and organizations, and private organizations and individuals that could have interest in the project. The NOP was available online at the environmental and planning project webpages at: https://www.marincounty.org/depts/cd/divisions/planning/projects/alto-strawberry/north-coast-land-holdings-llc_mp_dp_tr_up_15_343_mv, and availability of the NOP was advertised in the Marin Independent Journal, a local newspaper. On November 20, 2020, notice was given that the

NOP comment period had been extended to February 1, 2021. On April 23, 2021, notice was given that a public scoping meeting would be held on May 18, 2021, and the NOP and comment period was extended to May 25, 2021.

The purpose of the NOP was to provide notification that an EIR for the project was being prepared and to solicit input from responsible agencies and trustee agencies on the scope and content of the document. The NOP and responses to the NOP are included in Appendix A of this Draft EIR.

This Draft EIR is being circulated for public review and comment for a period of 60 days. During this period, comments from the general public as well as organizations and agencies on environmental issues may be submitted to the lead agency. A public meeting of the Marin County Planning Commission will be held to receive input from agencies and the public on the adequacy of the Draft EIR. The Draft EIR is available online at the County's website at: https://www.marincounty.gov/departments/cda/planning/environmental-planning

All comments on the Draft EIR should be addressed to:

Rachel Reid, Environmental Planning Manager
County of Marin Community Development Agency
3501 Civic Center Drive, Suite 308
San Rafael, CA 94903

-or-

envplanning@marincounty.org

Upon completion of the public review and comment period, a Final EIR (Final EIR) will be prepared that will include both written and oral comments on the Draft EIR received during the public-review period, responses to any significant environmental issues raised in those comments, and any revisions to the Draft EIR made in response to public comments or for other reasons. The Draft EIR and Final EIR will compose the EIR for the project.

Before approving the proposed project, the lead agency decision-making body is required to certify that the EIR has been completed in compliance with CEQA, that the decision-making body reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the lead agency. For this project, the Marin County Planning Commission will first make a recommendation to the Board of Supervisors on whether to certify the Final EIR and approve the proposed project. Subsequently, the Board of Supervisors will consider certification of the Final EIR and an action on the proposed project.

1.6 DRAFT EIR ORGANIZATION

This Draft EIR is organized into chapters, as identified and briefly described below. Chapters are further divided into sections (e.g., Chapter 3, "Environmental Impacts and Mitigation Measures" and Section 3.6, "Energy"):

The "Executive Summary": This chapter introduces the proposed project; provides a summary of the environmental review process, effects found not to be significant, and key environmental issues; and lists significant impacts and mitigation measures proposed to reduce significant impacts to less-than-significant levels.

Chapter 1, "Introduction": This chapter provides a description of the lead and responsible agencies, the legal authority and purpose for the document, and the public review process.

Chapter 2, "Project Description": This chapter describes the location, background, and goals and objectives for the project, and describes the project elements in detail.

Chapter 3, "Environmental Impacts and Mitigation Measures": The sections within this chapter evaluate the expected environmental impacts generated by the proposed project, arranged by subject area (e.g., Land Use, Hydrology and Water Quality). Within each subsection of Chapter 3, the regulatory background, existing conditions, analysis methodology, and thresholds of significance are described. The anticipated changes to the existing conditions after development of the project are then evaluated for each subject area. For any significant or potentially significant impact that would result from project implementation, proposed mitigation measures are presented and the level of

impact significance after mitigation is identified. Environmental impacts are numbered sequentially within each section (e.g., Impact 3.2-1, Impact 3.2-2, etc.). Mitigation measures are numbered to correspond to the impact numbering; therefore, the mitigation measure for Impact 3.2-2 would be Mitigation Measure 3.2-2.

Chapter 4, "Cumulative Impacts": This chapter provides information required by CEQA regarding cumulative impacts that would result from implementation of the proposed project together with other past, present, and probable future projects.

Chapter 5, "Alternatives": This chapter evaluates alternatives to the proposed project, including alternatives considered but eliminated from further consideration, the No Project Alternative, two alternative development scenarios, and an alternate location option. The environmentally superior alternative is identified.

Chapter 6, "Other CEQA Sections": This chapter evaluates growth-inducing impacts and irreversible and irretrievable commitment of resources, and discloses any significant and unavoidable adverse impacts.

Chapter 7, "Report Preparers": This chapter identifies the preparers of the document.

Chapter 8, "References": This chapter identifies the organizations and persons consulted during preparation of this Draft EIR and the documents and individuals used as sources for the analysis.

1.7 STANDARD TERMINOLOGY

This Draft EIR uses the following standard terminology:

"No impact" means no change from baseline, which is the existing conditions at the time of the NOP. No mitigation is needed.

"Less-than-significant impact" means no substantial adverse change in the physical environment. No mitigation is needed.

"Potentially significant impact" means an impact that might cause a substantial adverse change in the environment. Feasible mitigation is recommended.

"Significant impact" means an impact that would cause a substantial adverse change in the physical environment. Feasible mitigation is recommended.

"Significant and unavoidable impact" means an impact that would cause a substantial adverse change in the physical environment and that cannot be avoided, even with the implementation of all feasible mitigation.

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2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

North Coast Land Holdings, LLC (North Coast or applicant) has applied for entitlements to renovate and redevelop the former Golden Gate Baptist Theological Seminary property on the Strawberry Peninsula in unincorporated Marin County. The proposed development would include renovation of existing academic buildings, relocation of an existing daycare center, construction of a new fitness center, construction of a new residential care facility, upgrades to existing housing and construction of new housing, retention of and access improvements to existing open space and recreation areas, and creation of new bicycle and pedestrian paths within the property (project). In addition, a subdivision is proposed that would not result in the creation of new parcels (there are 13 parcels on the property). It would be solely for future condominiumization purposes.

Pursuant to CEQA Guidelines Section 15124, an EIR is required to include a project description that includes the following information: project objectives, project location, a general description of the project's technical, economic and environmental characteristics, and a statement briefly describing the intended uses of the EIR including a list of agencies expected to use the EIR, a list of permits and other approvals required to implement the project, and a list of environmental review or consultation requirements that are mandated by federal, state or local laws, regulations or policies.

This chapter describes the proposed project's location, objectives, and characteristics in accordance with the CEQA Guidelines. Please note that this chapter provides an overall general description of the existing environmental conditions; however, detailed discussions of the existing setting in compliance with Section 15125 of the CEQA Guidelines, as it relates to each given potential impact area, is included in each technical section of this EIR.

2.2 PROJECT LOCATION

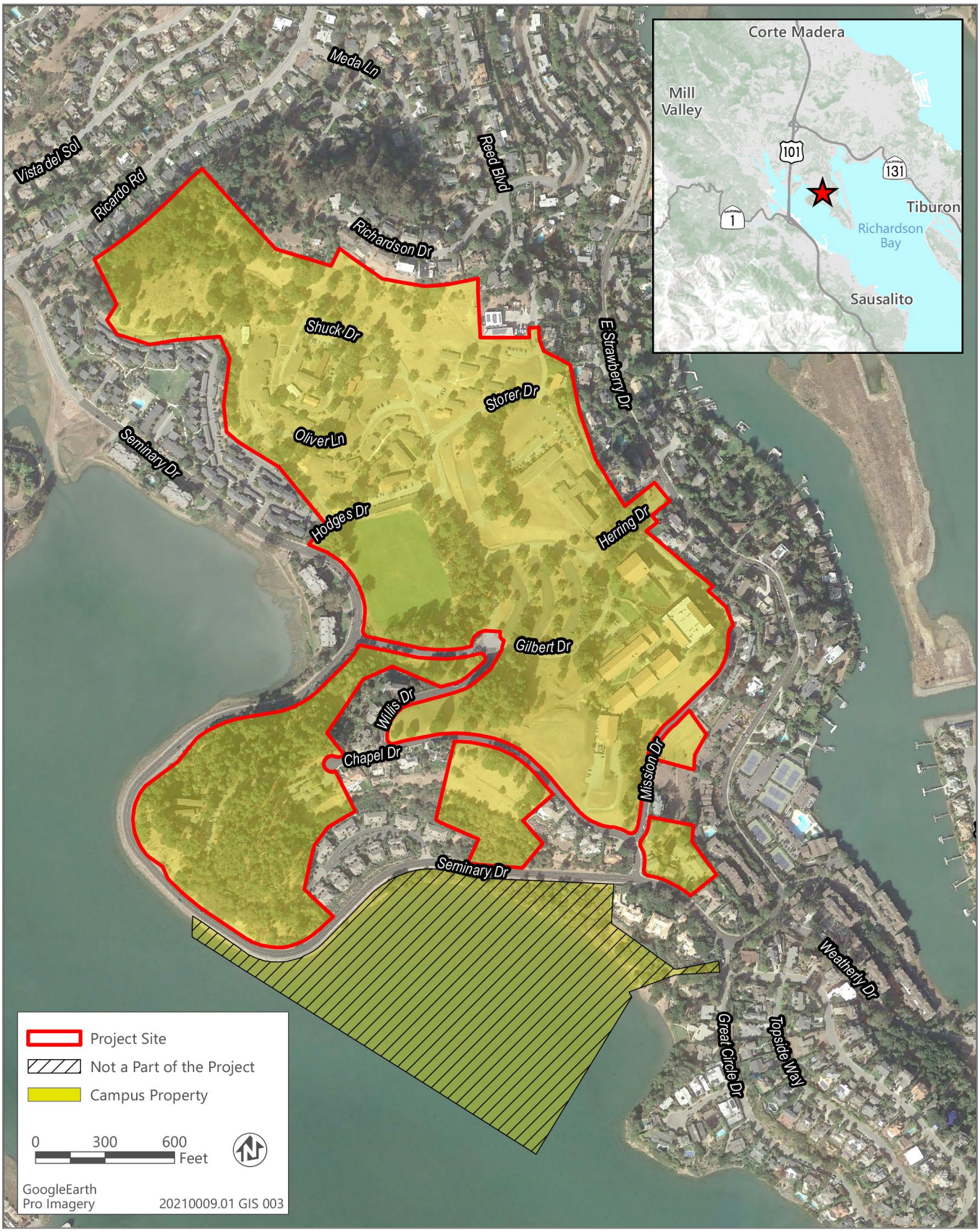
The project site is located on the former Golden Gate Baptist Theological Seminary campus property in the community of Strawberry, a census-designated place in unincorporated Marin County, California (Figure 2-1, "Regional Location"), next to the City of Mill Valley. The campus address is 201 Seminary Drive on the Strawberry Peninsula. The campus consists of ten Assessor's Parcels, two of which have boundaries that extend into Richardson Bay (the "Richardson Bay Parcels").

The campus encompasses approximately 127 acres, generally bounded by Richardson Drive, Seminary Drive, and East Strawberry Drive (Figure 2-2, "Project Site"). The properties composing the project site total approximately 101 acres and include Assessor's Parcel Numbers (APN) 043-261-25, 043-261-26, 043-401-05, 043-401-10, 043-401-16, 043-402-03, 043-402-05, and 043-402-06. No development is proposed on the Richardson Bay Parcels (APN 043-262-03 and 043-262-06) and, thus, they are not included as part of the project. Furthermore, because the Richardson Bay Parcels consist of submerged lands and other undeveloped areas that are not publicly accessible, it is not anticipated that the project will result in increased use of the Richardson Bay Parcels.

Regional access to the project site is available from US Highway 101 (US 101) and State Route 131 (SR 131; Tiburon Boulevard). From US 101 off-ramps, ingress to the project site is available through the Redwood Highway Frontage Road to Seminary Drive and egress returning to the freeway on-ramps is available through Seminary Drive and the Highway Frontage Road to US 101 on-ramp. The project site is accessible from Seminary Drive, both at Hodges Drive and Gilbert Drive. Other access points to the project site include Mission Drive, East Strawberry Drive, Chapel Drive, and Reed Boulevard.

Source: Adapted by Ascent Environmental in 2022.

Figure 2-1 Regional Location



Source: Adapted by Ascent Environmental in 2022.

Figure 2-2 Project Site

2.3 PROJECT BACKGROUND

2.3.1 Site History and Previous Uses

The Golden Gate Baptist Theological Seminary originally developed the project site pursuant to a 1953 Conditional Use Permit (1953 CUP or CUP), which governs the development and operation of the seminary. The 1953 CUP allows for a campus operation with up to 1,000 students supported by faculty and staff. By 1982, 132 student apartments, 19 faculty/staff apartments and 60 dormitory rooms were constructed, as well as the administration building, library, cafeteria, and academic classrooms. In 1984, the Board of Supervisors approved a Master Plan for the campus; however, additional buildings and residential units approved under the 1984 Master Plan were never developed. Use of the site as the Golden Gate Baptist Theological Seminary peaked with enrollment of 910 students in 1987, with most students, faculty, and staff living nearby in the surrounding communities. In 2014, after the Seminary relocated to Southern California, the applicant acquired the project site. The 1984 Master Plan expired on January 1, 2018.

The applicant is currently requesting approvals from the County to redevelop the campus, removing some residences, retaining and improving several existing structures, and constructing new housing as well as accessory childcare and fitness facilities. North Coast first submitted an application in 2015 and provided a revised application in early 2020 with plan modifications in response to community input. The Strawberry Design Review Board reviewed the 2020 application and recommended denial. In late 2020, a decision by the County Environmental Planning Manager to proceed with an EIR was appealed to the Board of Supervisors by the community group, Seminary Neighborhood Association. The Board accepted the Environmental Planning Manager's decision and denied the appeal, allowing the EIR to proceed (Marin County 2020). The preparation of an EIR was initiated by the County.

2.4 PROJECT SETTING

The topography of the project site consists primarily of hillsides and knolls on the Strawberry Peninsula with a range of elevations from approximately 10 to 250 feet. The Richardson Bay shoreline is adjacent to Seminary Drive, which runs along portions of the project site boundary to the east and south. While the larger campus property includes Richardson Bay shoreline and submerged land south of Seminary Drive, no development is proposed in this area and therefore is not included as part of the project site (see Figure 2-2, "Project Site"). Existing landscaping within the project site includes a number of vegetation communities, including Monterey pine woodland on the southern knoll/Forested Knoll and seminary point, California sagebrush scrub on seminary point, and various planted landscape areas throughout the campus. Sensitive vegetation communities include purple needlegrass grassland and coast live oak woodland.

The eastern portion of the project site includes the academic campus and associated facilities. The Seminary Playing Field is located west of the academic campus, at the topographically lowest point of the project site and encompasses approximately two acres. Residential uses occur throughout the project site. Existing uses are further described in Section 2.4.2, "Existing Project Site Land Uses," below.

The project site is situated in a primarily residential area within Marin County. Residential uses, including condominiums and single- and multi-family homes, surround the project. The Club at Harbor Point, located east of the project site, offers membership access to a clubhouse and club restaurant, fitness center, pool, and tennis courts. Southern Marin Fire Protection District, Station 9, is located directly north of the project site.

2.4.1 Existing Plan Designations and Zoning

The project site is zoned RMP-2.47:AH, Residential, Multiple Planned district, and allows a density of 2.47 residential units per acre. The Bayfront Conservation combining district occurs on those portions of the site located along the San Francisco Bay within a narrow band of land around Seminary Point, and an Affordable Housing combining district exists over a geographically unspecified 2-acre portion of project site parcels APNs 043-261-25 and -26, which total approximately 73 acres. The Affordable Housing combining district allows this portion of the site to be developed at a density of up to 20 units per acre with affordable housing units, for a total of 40 affordable units. The current academic use is allowed in the RMP-2.47 district with the 1953 Conditional Use Permit. The Marin Countywide Plan designates the project area as MF2 (indicating Low Density Residential) and allows a density of two to four residential units per acre. The project site is also within the Strawberry Community Plan and Plan Amendment area, which designates the project site for educational and residential development to support campus uses (Marin County 1973).

2.4.2 Existing Project Site Land Uses

The project site's existing land uses are described below. They are organized by the proposed planning areas for ease of comparison with proposed project land uses (see Figure 2-3, "Project Site Planning Areas," for the outlines of planning areas).

ACADEMIC CAMPUS PLANNING AREA

The Academic Campus Planning Area is located along the eastern portion of the project site. Existing land uses include an academic campus totaling approximately 120,600 square feet (sf) of buildings. Uses consist of:

- a 51,200-sf academic building that includes two stories of classrooms, gathering spaces, a bookstore, daycare facility, and faculty offices;
- a 25,200-sf administration building that consists of a single story at the eastern entrance and then two stories on the west, containing administrative and faculty offices, classrooms, and a recently renovated business office;
- a 10,000-sf cafeteria that consists of two stories with a full kitchen, prep kitchen, administrative offices, and seating for approximately 200 people; and
- a 32,000-sf library that comprises two stories of stacks, open study space, administrative offices, classrooms, and meeting rooms, and a 2,200-sf maintenance building.

The academic campus is currently tenant-occupied by Olivet University, a private Christian university. As of September 2020, at the time of the Notice of Preparation (NOP), enrollment consisted of approximately 100 students on campus. The student population has been significantly higher in the past; as of 2015, the population was approximately 600 students. Most of the students and their families live off-site and commute to the campus. The academic campus is staffed with approximately 24 employees. Additionally, the university occasionally hosts conferences and other gatherings within the academic campus buildings.

Because the student population was approximately 100 at the time of the issuance of the NOP of this EIR, and to ensure that the EIR accurately assesses the full scope of potential environmental impacts, the EIR assumes a baseline population of 100 students.

Daycare

The existing 3,000-sf daycare facility occupies the southern portion of the Academic Campus Planning Area and is located in the academic building. The daycare serves the families of the academic campus, residents connected with the campus, and other southern Marin County community residents. Current enrollment is approximately 60 children, with approximately 16 total staff. Eight to 12 staff work onsite on any given day, depending on the age of the children enrolled that particular day.

Source: Adapted by Ascent Environmental in 2022.

Figure 2-3 Project Site Planning Areas

RESIDENTIAL PLANNING AREAS

Existing housing is dispersed throughout the project site within the following planning areas:

- **Seminary Point Planning Area**: This planning area is in the southwestern portion of the project site. Existing housing consists of 24 one-bedroom residential units in three two-story apartment buildings (14,451 sf), and one single-family residence (the President's residence). The housing is situated along Chapel Drive and east of Seminary Drive.
- **Hodges/Shuck Planning Area**: This planning area is in the northern portion of the project site, just south of the Shuck Drive Knoll Planning Area. Existing housing includes one- and two-story buildings consisting of 16 studios, 30 one-bedroom apartments, and 47 two-bedroom apartments. Housing is located along Shuck Drive, Judson Lane, Oliver Lane, and Hodges Drive.
- **Reed/Storer/Shuck Planning Area**: This planning area is located in the northeastern portion of the project site and is bounded by Shuck Drive to the west, Storer Drive to the south, Reed Boulevard to the east, and open space to the north. This neighborhood includes seven single-story residential buildings consisting of seven two-bedroom apartments and eight three-bedroom apartments, and one single-family residence (superintendent's residence) located on the northerly corner of Reed Boulevard and Storer Drive.
- **Dormitory Hill Planning Area**: This planning area is located centrally, along the eastern boundary of the project site and is bound by Storer Drive to the north and east, Shuck Drive to the west, and Gilbert and Herring Drive to the south. It contains a two-building, two-story dormitory facility with 66 dorm rooms and seven shared kitchens.
- **Mission Drive Planning Area**: This planning area is located on the eastern side of the project site, along Mission Drive and Chapel Drive, and across from the academic campus. This area is surrounded by existing single-family homes and consists of two vacant abutting undeveloped parcels. The existing Missionary House and Platt Village apartments (comprising one single-family residence and 10, three-bedroom units) are located in the vicinity of the intersection of Mission and Chapel Drives.

In total, there are 145 existing residential units within the project site. This includes 16 market-rate studios, 54 one-bedroom housing units, 54 two-bedroom housing units, 18 three-bedroom housing units, and three single-family residences. There are also 66 dormitory rooms with seven shared kitchens[1]. The existing housing is occupied by approximately 320 residents[2], including general public occupants as well as students, faculty, staff, and families affiliated with the academic campus.

RECREATION AND OPEN SPACE PLANNING AREAS AND RESOURCES

Open space within the academic campus property, while privately owned, is and has been accessible to the public for passive outdoor recreation uses, such as walking, picnicking, sightseeing, and outdoor relaxing, and for outdoor sport use on the playing field. Project site roads, campus sidewalks, and paths/trails are also available for active recreation, such as walking, jogging, and bicycling. Existing outdoor recreation and open space planning areas include the following:

- **Shuck Drive Knoll Planning Area:** This planning area is in the northern portion of the project site, just south of the Woodland Buffer. The planning area is currently undeveloped and consists of an open grassy hillside surrounded by forested areas.
- **Chapel Hill Planning Area**: This planning area is in the southern portion of the project site and is bounded by Willis Drive to the west, Gilbert Drive to the north, Chapel Drive to the south, and the academic campus to the east. The planning area is between the academic campus and Chapel Drive. It is currently undeveloped and consists of a leveled hilltop partially surrounded by a stand of Monterey pines. A walking path traverses this planning area.

[1] The 66 dormitory rooms are counted as a total of seven residential units

[2] Based on occupancy estimates provided by applicant and an occupancy rate of 2.1 persons per household consistent with the Traffic Study (Appendix Q)

Other outdoor recreation and open space resources within the project site include the following.

- **Seminary Playing Field:** This 2-acre recreational playing field is in the western portion of the project site, bound by Seminary Drive to the west, Hodges Drive to the north, Shuck Drive to the east, and Gilbert Drive to the south. The field is open daily for use by the public, including local adult and youth sports leagues.
- **Forested Knoll:** The Forested Knoll is a prominent hilltop open space within the Seminary Point Planning Area. It is densely forested with Monterey pines.
- **Woodland Buffer:** An existing woodland buffer is located in the northern portion of the project site along Ricardo Road and Richardson Drive. The woodland buffer includes dense brush and trees and older trees that require removal.

TRANSPORTATION AND CIRCULATION

As previously described, vehicular access to the project area is provided from US 101 and SR 131/Tiburon Boulevard. From US 101 off-ramps, ingress to the project site is available through the Redwood Highway Frontage Road and Seminary Drive, while egress returning to the freeway on-ramps is available through Seminary Drive and the Highway Frontage Road to US 101 on-ramp. The project site is accessible from Seminary Drive, both at Hodges Drive and at Gilbert Drive. Other access points to the project site include Mission Drive, East Strawberry Drive, Chapel Drive, and Reed Boulevard. Public transit to the project area is available through Golden Gate Transit, which provides local and county bus services at the Seminary Drive Bus Pad located at the Redwood Highway Frontage Road and US 101 North off-ramp.

The existing circulation pattern within the site consists of private internal streets. There are no existing dedicated bicycle facilities on the internal streets. Existing bicycle facilities are present around the perimeter of the project site, including Class II bike lanes (i.e., dedicated on-street bike lanes) on Seminary Drive and Class III bike routes (i.e., signed, shared roadways) on Strawberry Drive.

In total, 608 existing parking spaces are located throughout the project site, including 311 residential parking spaces and 297 parking spaces for the academic campus. Residential parking is dispersed throughout the project site in various surface lots adjacent to the residential structures. Parking for the academic campus is clustered in a central three-tiered parking lot, bounded by Foreman Drive to the west and Gilbert Drive to the north, east, and south.

2.5 PROJECT OBJECTIVES

The purpose of the project is to redevelop the property under a new Master Plan focused on supporting an academic institution, providing amenities to the surrounding community, and developing a diversity of housing types. The basic objectives of the proposed project are to:

- Create an intergenerational community for residents to live, work, and learn;
- Support a thriving campus use that offers amenities to the surrounding community and academic value for region;
- Continue to provide undisturbed views and visual access to the Bay through retainment of undeveloped open space areas within the project site and preservation of existing viewsheds and local ridgelines;
- Support a housing balance in the Strawberry community while creating a unique space with the potential to improve and transform the social fabric of the site and local community;
- Support implementation of Countywide Plan Housing Element goals and policies (including Housing Goal 1 and supporting policies 1.1 through 1.3 as well as Housing Goal 2 and supporting policies 2.1, 2.4 and 2.5) to provide a mix of housing units, including affordable units, that contribute to meeting the housing goals outlined in the Countywide Plan Housing Element and consistent with the Association of Bay Area Governments' Regional Housing Needs Allocation for Marin County;
- Develop the project site sensitive to and compatible with the scale and form of the surrounding area; and

- Provide improvements to circulation systems serving the Strawberry community in the form of enhanced trails, bicycle facilities, and pedestrian enhancements on the project site.

2.6 PROJECT COMPONENTS

The project is proposed to include a new daycare and fitness center, new residential care facility, upgrades to existing housing and construction of new housing, renovation of academic buildings, new campus maintenance building, retention and improvements to existing open space and recreation areas, and creation of new bicycle and pedestrian paths within the project site. Figure 2-4, "Illustrative Site Plan (West)," and Figure 2-5, "Illustrative Site Plan (East)," illustrate the proposed development and landscape improvements in the proposed site plan, while Figure 2-6, "Project Site Plan," provides a mapped depiction of specific proposed site uses and planning areas. Table 2-1, "Summary of Existing and Proposed Uses," compares existing site uses against proposed project components.

Table 2-1 Summary of Existing and Proposed Uses

Land Use	Existing Uses	Proposed Uses
Academic Campus	▶ Academic building ▶ Administration building ▶ Cafeteria ▶ Library ▶ Maintenance building ▶ Permitted maximum student population of 1,000; baseline student population of 100 at time of NOP ▶ Occasional conferences and large gatherings	▶ Retain academic building, cafeteria, and library ▶ Renovate administration building, including adding floor area ▶ Demolish existing maintenance building and construct new maintenance building ▶ Per the 1953 CUP, no change to the permitted enrollment at the academic campus; maximum student population of 1,000
Daycare and Fitness Center	▶ Existing daycare on the academic campus; there is no existing fitness center ▶ Current enrollment of approximately 60 children and 16 staff	▶ Revert existing daycare space to academic uses. Construct facility for a daycare and fitness center ▶ Enrollment of approximately 60 children and 16 staff at daycare ▶ Limited enrollment in fitness center with three staff
Residential	▶ Seminary Point Planning Area: 24 one-bedroom units and one single-family residence (President's residence) ▶ Hodges/Shuck Planning Area: 16 studios, 30 one-bedroom units, and 47 two-bedroom units ▶ Reed/Storer/Shuck Planning Area: seven two-bedroom units and eight three-bedroom units, as well as one single-family home (the superintendent's residence) ▶ Mission Drive Planning Area: 10 three-bedroom units (Platt Village) and one single-family residence (Missionary house) ▶ Dormitory Hill Planning Area: two-building dormitory with 66 dorm rooms and seven shared kitchens	▶ Seminary Point Planning Area: Retain the existing single-family residence, demolish the 24 existing one-bedroom units, and construct eight two-bedroom units and six three-bedroom single-family residences, resulting in a reduction in the number of units in the planning area from 25 units to 15 units. ▶ Hodges/Shuck Planning Area: Demolish all existing units and construct 14 one-bedroom apartments, 44 two-bedroom units, and 56 three-bedroom units. In the northwest corner of Hodges Drive and Shuck Drive, three six-story residential buildings (including a total of 103 units) would be constructed, including eight one-bedroom apartment units, 32 two-bedroom apartment units, and 63 three-bedroom apartment units. The total number of units in the planning area would increase by 124 units. ▶ Reed/Storer/Shuck Planning Area: Retain existing single-family residence, demolish other existing units and construct 36 three-bedroom units in three buildings, increasing the number of units in the planning area by 21 units. ▶ Mission Drive Planning Area: Construct two four-bedroom single-family residences and retain 10 three-bedroom units (Platt Village) and one single-family residence (Missionary House), increasing the number of units in the planning area by 2 units.

Land Use	Existing Uses	Proposed Uses
		▶ Dormitory Hill Planning Area: Demolish existing dormitory buildings and construct a three-story senior housing building in residential care facility, described below (the Residential Care Facility). ▶ Chapel Hill Planning Area: Construct two one-bedroom units, 25 two-bedroom units, nine three-bedroom units, and four four-bedroom units, providing a total of 40 units in the planning area. ▶ Shuck Drive Knoll Planning Area: Construct 14 three-bedroom units, providing a total of 14 units in the planning area.
Residential Care Facility	▶ N/A	▶ A facility with a capacity of up to 170 residents in 100 independent living units and 50 assisted living/memory care residences
Recreation and Open Space	▶ Open space resources throughout the project site ▶ 2-acre Seminary Playing Field	▶ Maintain about 70 percent of the project site as undeveloped space ▶ Add to the network of trails ▶ Raise 2-acre Seminary Playing Field by approximately 25-30 feet to help balance onsite grading, resulting in a landscape berm along Seminary Drive. The elevated site would continue to be available as a playing field.
Parking and Circulation	▶ Private streets with no dedicated bicycle facilities ▶ Approximately 608 parking spaces in a three-tiered parking lot and in lots adjacent to residential structures	▶ Approximately 944 parking spaces in three-tiered parking lot and underground garages in proposed residential structures and concealed garages in proposed duplexes ▪ 51 existing residential spaces to remain ▪ 467 spaces for new proposed residential development ▪ 185 spaces for residential care facility ▪ 241 spaces for academic campus ▶ Secure bicycle parking, trails and walkways, complete street elements, and Class III bike routes on interior streets

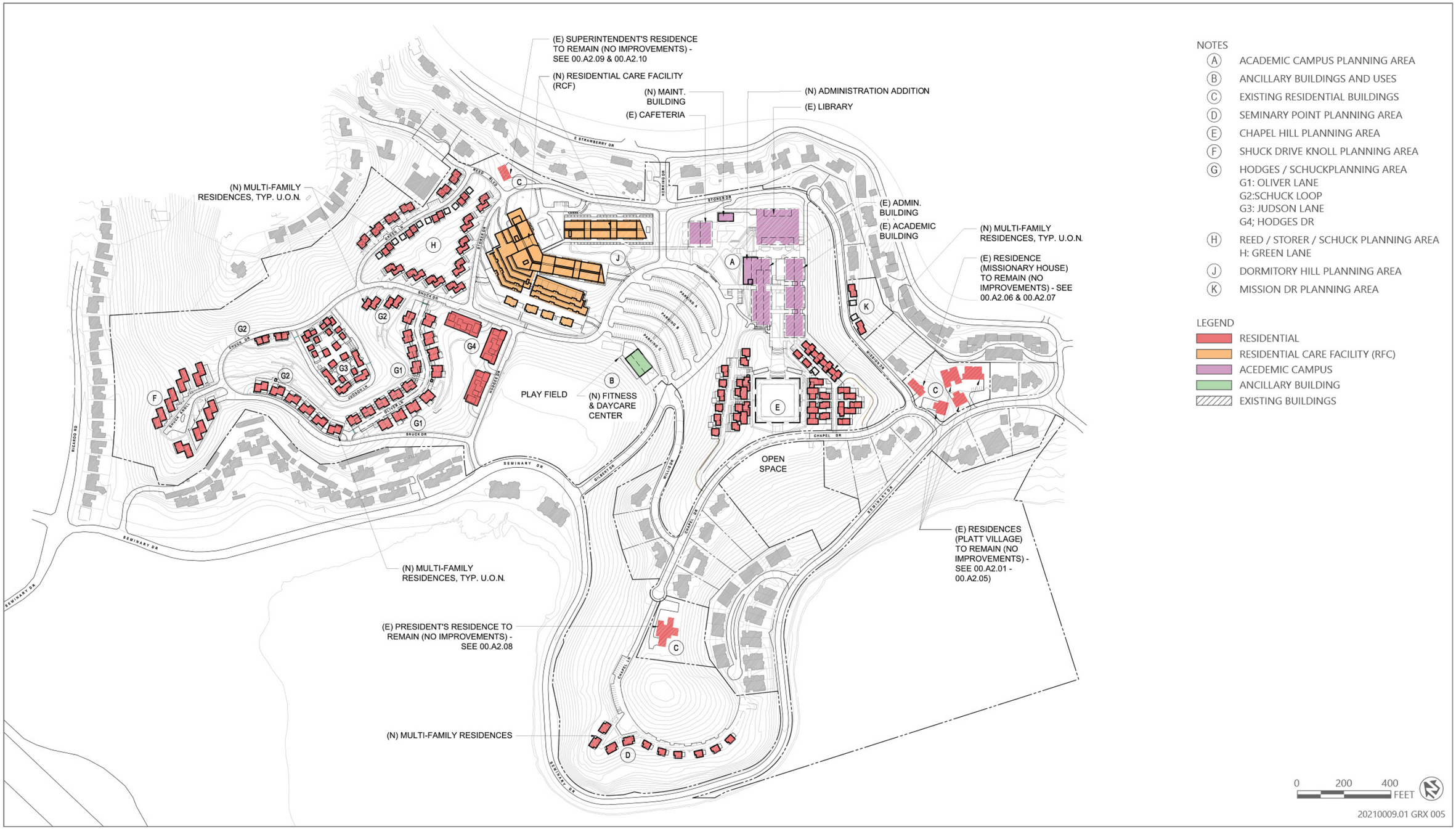
Source: North Coast Land Holdings 2020. Compiled by Ascent Environmental in 2022.

Source: Image produced and provided by Mark Cavagnero Associates Architects, adapted by Ascent Environmental in 2022.

Figure 2-4 Illustrative Site Plan (West)

Source: Image produced and provided by Mark Cavagnero Associates Architects, adapted by Ascent Environmental in 2022.

Figure 2-5 Illustrative Site Plan (East)



Source: Image produced and provided by Mark Cavagnero Associates Architects, adapted by Ascent Environmental in 2022.

Figure 2-6 Project Site Plan

2.6.1 Academic Campus

The proposed project includes reconfiguration of the existing academic campus to improve accessibility and facilitate construction of new residential uses in the Chapel Hill and Shuck Drive Knoll Planning Areas. The existing academic building, cafeteria, and library would be retained in their current locations. The administration building would be renovated and would include the addition of a 15,800-sf structure along the northern façade of the existing building. The maintenance building located north of the academic building would be demolished and a new 2,200-sf maintenance building would be constructed between the existing library and cafeteria. Operation of the academic campus under the project would be similar to existing operations at the campus. The academic campus would continue to be occupied by a university or college, with no change proposed to the scope of the existing 1953 CUP, including the maximum permitted enrollment of 1,000 higher education students. As noted above in Section 2.4.2, existing enrollment at the campus is approximately 100 students. Therefore, the EIR analyzes the potential change in student enrollment from a baseline of 100 students to the maximum permitted enrollment of 1,000 students as allowed by the 1953 CUP.

DAYCARE AND FITNESS CENTER

The proposed project includes construction of a new facility that would contain a 3,000-sf daycare and a 17,000-sf fitness center. The daycare and fitness center would be located in a shared facility that would be situated in the central portion of the project site, east of the Seminary Playing Field and west of the three-tiered parking lot. The proposed location for the facility is currently occupied by Foreman Drive and adjacent landscaping.

The existing daycare would continue to operate on-site but would be relocated from the academic building into the new space within the proposed daycare and fitness center. Enrollment at the daycare would be limited to approximately 60 children, with preference given to families in the community. Parking for the facility would be available at the three-tiered parking lot located centrally within the project site. The proposed hours of operation include weekdays, from 7:30 a.m. to 6:00 p.m., except for National holidays, Christmas week, and one week in the spring. The daycare would be staffed by approximately 16 employees, with eight to 12 working onsite on any given day. Deliveries would occur daily from 7:30 a.m. to 6:00 p.m.

The proposed fitness center would include a half-basketball court, cardiovascular and resistance training equipment, roof deck for fitness activities, outdoor workout area, reception area, locker rooms, offices, and restrooms. The fitness center would also include existing playground equipment that would be relocated from the foot of Dormitory Hill near the intersection of Shuck Drive and Storer Drive. Parking that is accessible to persons with disabilities and bicycle parking would be provided adjacent to the fitness center. Additional parking for the fitness center would be available at the three-tiered parking lot in the center of the project site. The proposed hours of operation for the fitness center are 5:30 a.m. to 8:00 p.m., daily. Membership would be limited to on-site residents, affiliates of the academic campus, and residents of the surrounding community that are within walking distance of the facility. The fitness center would be staffed by approximately two to three full-time employees. Deliveries would occur daily.

2.6.2 Residential Development

The project would include retaining some units, replacing existing housing, and increasing the total number of residences. The applicant proposes to retain 13 existing residential units within the project site and replace the remaining residential units with new housing. Proposed new housing would include replacement of 139 existing residential units and construction of 184 new units consisting of single-family and multi-family residences, as well as a residential care facility (counted as one residential unit but supporting up to 170 residents). While under the Countywide Plan and consistent with state Density Bonus Law, the project site could be developed with a maximum of up to four residential units per acre (416 units), the project proposes a density of 3.3 units per acre and a total of 337 residential units including 324 new/replacement residential units (including the residential care facility). Implementation of the proposed project would result in a total of up to approximately 850 residents (i.e., 680

residents of the 336 single family and multi-family units, and 170 new residents for the residential care facility described below). This would be an increase of approximately 530 residents compared to existing conditions (i.e., 320 existing residents). The applicant has stated that preference for housing would be given to on-site workers, students, faculty, and staff and remaining units would be available to the broader community. The mechanism proposed by the applicant to implement such a program would be through a Certificate of Preference program (North Coast Land Holdings 2020). For purposes of this EIR, a reasonable estimate is used in the environmental analysis that approximately 30 percent of the housing would be occupied by university-affiliated residents, i.e., students, staff, and faculty. The estimate is reasonable because data from the applicant indicates that 27 percent of existing housing units on the property are occupied by university-affiliated residents (Jones 2022). A summary of the residential development is provided in Table 2-2, "Proposed Residential Uses."

Table 2-2 Proposed Residential Uses

Housing Type	Unit Type	Proposed Units
Market Rate	One-bedroom	23
	Two-bedroom	82
	Three-bedroom	160
	Single-Family Dwelling	8
	Total	**273**
Affordable Housing (low-income)	One-bedroom	1
	Two-bedroom	19
	Three-bedroom	30
	Total	**50**
Existing on-site Units to Remain	Three-bedroom	10
	Single-Family Dwelling	3
	Total	**13**
Residential Care Facility*		1
Total		**337**

* Approximately 267,354 sf facility with 170 independent living apartments and assisted living residences.

Source: North Coast Land Holdings 2021.

The following 13 existing housing units would be retained:

- Superintendent's residence: one single-family three-bedroom house on Reed Boulevard,
- Missionary House: one single-family three-bedroom house on Storer Drive and Seminary Drive,
- Platt Village: four structures with 10 three-bedroom units on Storer Drive and Seminary Drive, and
- President's house: one single-family four-bedroom house on Chapel Drive.

The project would include upgrades to these 13 existing units to address the age of the structures (e.g., installation of new exterior siding). Landscaping would be installed between the buildings and the street frontage to shield them from view.

New residential development proposed for the project includes the following:

- **Seminary Point Planning Area:** Project implementation would result in the demolition of the three existing apartment buildings and construction of 10 new buildings (14 residential units) in this planning area. Of the proposed two-story buildings, eight would consist of two-bedroom apartments (10,072 sf) and six would consist of three-bedroom single-family residences (10,572 sf).

- **Hodges/Shuck Planning Area:** The project would include the demolition of existing buildings and development of new apartment buildings along Oliver Lane, Shuck Loop, and Judson Lane. Construction of new one- and two-story buildings in the Hodges/Shuck Planning Area would support 14 one-bedroom apartments (10,794 sf), 44 two-bedroom apartments (ranging from 16,302 sf to 19,918 sf), and 56 three-bedroom apartments (ranging from 6,696 sf to 32,520 sf). In the northwest corner of Hodges Drive and Shuck Drive three six-story residential buildings (including a total of 103 units) would be constructed, including eight one-bedroom apartment units (6,400 sf), 32 two-bedroom apartment units (54,400 sf), and 63 three-bedroom apartment units (119,700 sf).
- **Reed/Storer/Shuck Planning Area:** The project would result in the demolition of 15 existing two- and three-bedroom residential units and construction of three new residential buildings consisting of 36 three-bedroom apartment units (ranging from 12,352 sf to 33,568 sf in size and one to two stories) fronting Green Lane, Reed Boulevard, Storer Drive, and Shuck Drive.
- **Dormitory Hill Planning Area:** The project would include demolition of the two existing dormitory buildings and development of a two- to three-story senior housing building in the residential care facility, described below.
- **Mission Drive Planning Area:** Project implementation would include construction of two new single-story, four-bedroom single-family homes, similar in character to nearby residences.
- **Chapel Hill Planning Area:** The project would include development of two one-bedroom residential units (2,695 sf), 25 two-bedroom residential units (55,943 sf), nine three-bedroom residential units (25,100 sf), and four four-bedroom residential units (12,873 sf) on an undeveloped hillside. The multi-family residential buildings would be one to three stories in height and would be located around a central landscaped courtyard. Existing grassland surrounding the new multi-family buildings would be preserved and landscaping would be installed.
- **Shuck Drive Knoll Planning Area:** The project would include development of 14 three-bedroom (20,097 sf), one- to three-story residential units on an undeveloped hillside west of the Hodges/Shuck Planning Area.

Development in each of the above-listed planning areas would include preservation of existing grassland, as well as installation of landscaping and stormwater treatment facilities.

The overall design of residential development would involve clustered one- to three-story multi-family residential buildings and homes with small private yards and large shared open spaces. Building heights for proposed residences and structures are generally limited to 30 feet. Parking would be provided in underground shared parking garages, which would also be used for trash bins, mechanical equipment, and storage.

The three six-story residential buildings proposed at the northwest corner of Hodges Drive and Shuck Drive would be approximately 60 to 65 feet in height with parking provided in underground garages. Access to subterranean parking would be provided off Hodges Drive and Shuck Drive. The overall design of the buildings would be similar to that of other residential buildings proposed in the planning area, including similar architectural design, materials, color, open space and landscaping. Design of these three residential buildings is presented at a master plan level; a design review level plan has not yet been prepared. Once a design review level plan has been prepared, it will need to undergo review and approval by the County.

In conformance with Marin County Development Code Section 22.22.020 and California's Density Bonus Law (see Gov. Code, § 65915), 50 of the proposed 324 new residential units would be available to low-income households. The affordable units would be offered at rates in accordance with Section 22.22.080(c) of the Marin County Development Code. The affordable units will be inclusionary; dispersed throughout the project site; and comparable in location, size, and exterior design to the remaining units in the overall residential development in accordance with Section 22.22.080(E) of the Marin County Development Code. No other density bonus units are proposed for the project.

RESIDENTIAL CARE FACILITY

The project would include construction and operation of a new two- to three-story, 267,354-sf residential care facility. The facility would be located in the eastern portion of the project site, within the Dormitory Hill Planning Area, situated northwest of the academic campus and north of the central tiered parking lot. The proposed site for the residential care facility is currently occupied by two residential dormitory structures and a surface parking lot.

The residential care facility would be designed to serve adults 55 and older with capacity to house up to 170 residents. The housing would consist of up to 100 independent living apartments and 50 assisted living and memory care residences. In addition to the proposed housing, the residential care facility would include public dining, wellness, and lounge areas, as well as support and back-of-house facilities for Certified Medical Technical personnel and underground parking. Amenities would be provided for residents at the facility, including laundry services, shuttle services, recreational programming, and twice-daily meal services. In addition, the residents would have access to other facilities within the project site, including the proposed fitness center for wellness classes and academic campus for classes and events. Operation of the facility, including front of house services, assisted living/memory care facility services, and food service will require approximately 34 employees at varying shifts including two 24/7 staffed positions. Shift changes would occur at non-peak hour times.

2.6.3 Landscaping, Wildfire Resilience, and Site Improvements

The project would include landscape and hardscape improvements throughout the project site, including construction of new parking structures, play fields, walkways, and streets with pedestrian infrastructure.

The landscape plan would include removal of dead and declining trees and invasive species, as well as pruning dead wood and branches from existing trees. Specifically, the project would require the removal of 89 protected trees, including one bay laurel, 87 coast live oaks, and one coast redwood. Of these protected trees, 41 were determined to be in poor to marginal condition, while the remaining 48 trees were determined to be in fair or good condition. The removal of protected trees would require a Tree Removal Permit pursuant to County Municipal Code Section 22.62.020 and would be replaced in accordance with County Municipal Code Section 22.27.040. Additionally, several Monterey pine trees on the project site show symptoms of infection and pose potential safety risks related to limb and tree failure and wildfire risk.

The project site would be replanted with native species, including clusters of oaks, buckeyes, and compatible ornamental species. Trees replanted on site would be sited accordingly in conformance with the Southern Marin County Fire Protection District's fire protection standards related to vegetation management (e.g., defensible space). Portions of the project site would be restored to an open native oak and grassland landscape. On-site landscaping would be designed to reduce the use of potable water (i.e., use of water control systems to apply water based on planting hydro zones and soil moisture levels). All permanent irrigation for new landscape areas near walkways, building foundations, planters, and campus grounds would be drip irrigated. All shrub and groundcover areas would be mulched to retain soil moisture.

Hardscape improvements would result in a net increase of impervious surface area within the project site. To accommodate the increase in impervious surface area, the project would include new storm drain systems that would consist of vegetated and cobble swales, drainage inlets, storm drain pipes, and stormwater best management practices (e.g., treatment and detention facilities).

A defensible safe zone including 30-foot and 100-foot fuel management zones would also be established as part of the project. Landscape improvements within the 30-foot fuel management zone would consist primarily of non-irrigated native grasses, ground covers with shrub plantings, with limited areas of irrigated new plantings. Existing trees within the 30-foot zone would be pruned of all dead wood and branches within ten feet of the buildings. Subject to recommendations by the arborist, healthy Monterey pines would be retained, and dead, dying, or diseased trees would be removed.

The 100-foot fuel management zone would be similar to the 30-foot zone and would consist of annual grass understory with some areas of brush and a mix of hardwoods and conifers. Subject to recommendations by the arborist, healthy Monterey pines would be retained, and dead, dying, or diseased trees would be removed. In this zone grasses would be mowed or grazed and all dead wood and branches within ten feet of the ground or surrounding vegetation would be removed. All invasive species of brush would be removed, and remaining shrubs native shrubs would be pruned or removed to ensure no continuity with other shrub masses or trees. No fire-prone species would be planted in fuel management zones.

RECREATION AND OPEN SPACE

Approximately 70 percent of the project site is proposed to be maintained as open space, athletic fields, paths, and plazas, and a network of trails would be established on the site (Figure 2-7, "Pedestrian and Bus Access Diagram"). The project would implement a long-term landscaping plan to replace dead or dying trees, maintain the forested nature of the project site, and comply with Marin County fire codes. The project would be designed to preserve existing viewsheds and the Strawberry ridgeline; establish new parks, trails, and pedestrian pathways; and provide the community access to open space.

Improvements to recreation and open space areas include the following:

- **Seminary Playing Field and Landscaped Buffer:** The existing 2-acre seminary playing field would be retained in the central portion of the project site. The field would be raised approximately 25 feet to 30 feet to create a landscaped berm adjacent to Seminary Drive. The berm would provide shielding of the playing field from the adjacent residences west of Seminary Drive. A walking path approximately four feet wide would be constructed on the berm, which would connect the playing field to the proposed trail system throughout the project site. The existing wire mesh fence along Seminary Drive would be replaced with a low stone wall. An at-grade style stormwater bioretention area would be developed along the northern border of the field.

  The playing field would continue to be open to the community for daily use and sporting events. Lights and loudspeakers would not be permitted.

- **Campus Approach:** The campus approach refers to the area along Gilbert Drive that makes up the main entry to the academic campus. Trees would be planted along Gilbert Drive and existing open space would be maintained on each side of the roadway.

- **Forested Knoll:** The existing Forested Knoll within the Seminary Point Planning Area would be protected as open space. Dead or dying Monterey pines would be removed and new trees would be replanted. A pedestrian trail would be established with views of the San Francisco Bay, the City of San Francisco, and Mt. Tamalpais.

- **Chapel Hill Planning Area:** The existing hilltop would be preserved as a park and wildlife corridor. The park would include an arbor and landscaping and would offer views of the San Francisco Bay and City of San Francisco skyline. The park would be open to the public.

- **Campus Slopes:** The existing slopes adjacent to the academic campus, located between Storer Drive and Mission Drive, would be planted with native fire- and drought-resistant plants.

- **Woodland Buffer:** The project would include maintenance of the existing woodland buffer located in the northern portion of the project site along Ricardo Road and Richardson Drive. The woodland buffer includes dense brush and trees and some dying trees that would be removed for wildfire risk reduction.

The project would also include establishment of new trails and pathways and improvements to existing trails:

- **Seminary Point Trail:** The existing four-foot-wide trail which begins at the main entrance to the project site at Seminary Drive and wraps around Seminary Point would be improved and any dense brush along the trail would be cleared. This trail includes scenic vista points that overlook Richardson Bay and provide views of the City of San Francisco skyline.

- **Storer Pathway:** The portion of Storer Drive parallel to East Strawberry Road would be repaved and improved as a pedestrian pathway. Trees and landscaping would be planted adjacent to the path.

PARKING AND CIRCULATION

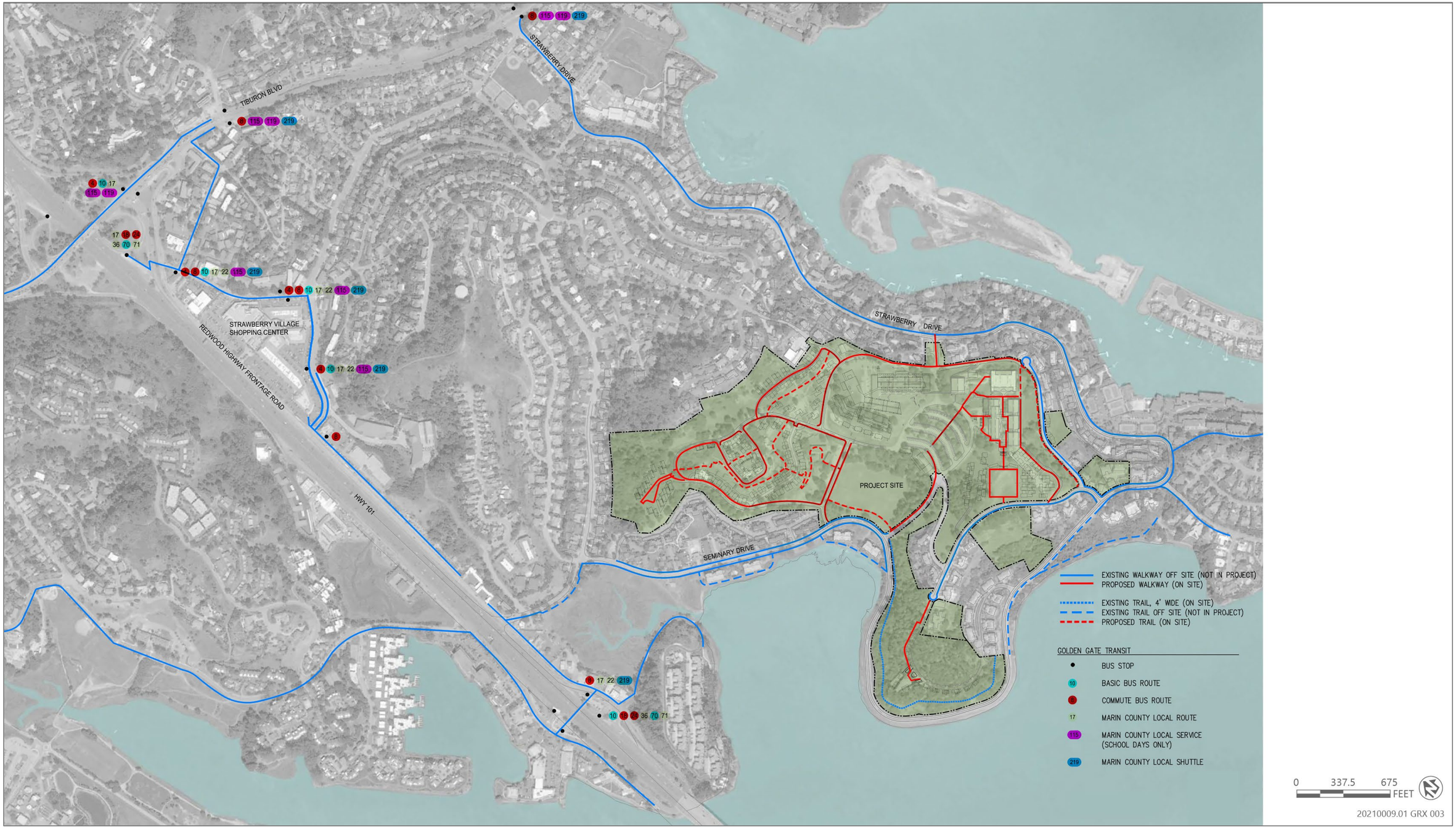
Buildout of the project would increase the total number of parking spaces from 608 existing spaces to 944 parking spaces. Of the existing residential parking spaces, 51 spaces would be retained, and an additional 652 residential parking spaces would be added for residential housing and the residential care facility, resulting in a total of 703 residential parking spaces on the project site. Residential parking would be provided in the form of subterranean garages within the residential structures and concealed garages in the residential duplex units. The depth of excavation for the proposed subterranean garages would range from approximately 7 feet to 19 feet below ground level. The existing tiered parking lot would remain as is and would serve the academic campus planning area and users of the playing field, fitness center, and daycare. The existing 297 parking spaces for the academic campus would be reduced to 241 parking spaces. The combined parking for the proposed residential development and academic campus would be 944 parking spaces.

The project would be designed to encourage pedestrian and bicycle transportation, including features such as complete streets elements, secure bicycle parking, trails and walkways, and Class III bike routes on interior streets. The existing circulation pattern would be maintained but would be enhanced with pedestrian and bicycle path connections, as shown in Figures 2-7, "Pedestrian and Bus Access Diagram," and 2-8, "Regional Bicycle Access Diagram".

Vehicular access to the project site from US 101 would not be altered for the project. The project does not include proposed off-site transportation infrastructure improvements between the project and the US 101 freeway.

LIGHTING

The project would include lighting improvements within internal roads and pedestrian pathways. New lighting would consist of low-wattage fixtures that would be shielded and directed downward to prevent spillover effects to residential neighbors. New residential housing areas would be set behind the native tree line and would include screening and window placement designed to minimize light exposure to the west. Many existing trees that surround the non-residential buildings would remain in place, and it is expected that these trees would reduce light exposure.



Source: Image produced and provided by Mark Cavagnero Associates Architects, adapted by Ascent Environmental in 2022.

Figure 2-7 Pedestrian and Bus Access Diagram

Source: Image produced and provided by Mark Cavagnero Associates Architects, adapted by Ascent Environmental in 2022.

Figure 2-8 Regional Bicycle Access Diagram

SUSTAINABILITY FEATURES

The following sustainability features are proposed to be implemented:

- New buildings would use Variable Refrigerant Flow systems to reduce the need for air conditioning by achieving varying climate control zones in both large and small structures.
- Lighting fixtures would consist of low-wattage lighting.
- Solar electricity-generating panels would be installed on the building roofs of new residential units and hidden behind parapets, as required by building codes.
- Landscape design would include features to reduce water consumption, including a plant palette of native and drought-tolerant species and mulched shrub and groundcover areas.
- The storm drain system would consist of vegetated and cobble swales and storm water treatment and detention Best Management Practices (BMPs).
- Individual yards in residential areas would be eliminated to reduce waste of potable water through efficient technologies, conservation efforts, design and management practices, and by better matching the source and quality of water to the user's needs.
- Measures would be implemented to reduce the heat island effect, including use of high albedo paving and roof surfaces, and planting of canopy trees throughout the site, as well as along streets and paved surfaces.
- Trails, bike paths, bike parking, and e-bike charging would be located throughout the project site to encourage individual mobility choices.
- Construction of new site uses would include high-quality, energy-efficient building materials that would be long-lasting and durable.

UTILITIES AND INFRASTRUCTURE

The project site includes existing utility infrastructure for potable water, sanitary sewer, gas, electricity, and stormwater. Buildout of the site would include retention of existing infrastructure as well as installation of new utility lines and infrastructure. All newly installed utility lines would be constructed within joint trenches, existing roadways, or within the footprint of existing utility infrastructure and would not require construction across undisturbed ground. Proposed infrastructure is described below for each of the planning areas. All of the following improvements will be installed within the boundaries of the project site.

- **Academic Campus Planning Area:** No utility improvements would be implemented in this planning area.
- **Chapel Hill Planning Area:** Installation of a new storm drain and stormwater treatment area, new water line, five new fire hydrants, and a new 6-inch sewer line.
- **Dormitory Hill Planning Area:** Installation of a new storm drain and stormwater treatment area, eight new fire hydrants, and replacement of existing 6-inch sewer line with new 8-inch sewer line along Storer Drive.
- **Hodges/Shuck Planning Area:** Installation of a new storm drain and stormwater treatment area, new water line on Shuck Lane, ten new fire hydrants, a new 8-inch sewer line on Shuck Drive, and replacement of an existing sewer line within Hodges Drive with a new 8-inch sewer line.
- **Mission Drive Planning Area:** Installation of a new storm drain, relocation of an existing storm drain along Mission Drive, and a new stormwater treatment area.
- **Reed/Storer/Shuck Planning Area:** Installation of a new water line and 6-inch sewer line on Green Lane, four new fire hydrants, and replacement of an existing 6-inch sewer line with a new 8-inch sewer line along Storer Drive (shared with Dormitory Hill Planning Area).

- **Seminary Point Planning Area:** Installation of a new storm drain and stormwater treatment area, new 6-inch sewer line, new water line on Chapel Drive, and two new fire hydrants.
- **Shuck Drive Knoll Planning Area:** Installation of a new storm drain and stormwater treatment area, a new water line on Shuck Knoll, one new fire hydrant, and a new 6-inch sewer line.

The project site would continue to be served by the following utility providers:

- Natural gas and electrical: PG&E,
- Sewer: Richardson Bay Sanitary District,
- Storm drain: Marin County Department of Public Works, and
- Water: Marin Municipal Water District.

2.6.4 Off-Site Improvements

All project activities would take place within the project site boundary except for the following improvements proposed in small areas of the public right-of-way adjacent to the project site. All necessary encroachment permits would be obtained from the County for work that would encroach within County right-of-way. These off-site improvements would total approximately 0.27 acres and would consist of:

- cut and fill at Hodges Drive and Seminary Drive,
- road and walkway extension at Gilbert Drive,
- walkway extension from Herring Drive to Strawberry Drive, and
- walkway improvements along Mission Drive.

2.7 CONSTRUCTION ACTIVITIES

2.7.1 Construction Phasing

Buildout of the project is proposed to occur within several phases categorized by the project components: residential development, academic uses, and landscaping and site improvements. The approximate phasing duration by project component is described further in Table 2-3, "Summary of Proposed Construction Phasing." Construction of the entire project would take approximately 4 years and would be reasonably expected to begin in 2024 and completed by 2028.

The construction labor force would fluctuate depending on the phase of work. As described in Table 2-3, the approximate number of on-site workers could range from 10 to 160 people depending on project component and phase.

All construction staging would occur within the project site. The project would require approximately 220,000 cubic yards of cut and fill, which would be balanced on-site. The project would require excavation to a maximum depth of approximately 19 feet below ground surface for grading, constructing underground parking structures, and utility improvements.

Table 2-3 Summary of Proposed Construction Phasing

Project Components/Phasing	Approximate Duration (weeks)	Approximate Number of Workers (day)
Residential Program (approximate 4-year duration) (Chapel Hill, Mission Drive, Dormitory Hill, Hodges/Shuck, Mission Drive, Seminary Point, Reed/Storer/Shuck Planning Areas)		
Demolition	8-16	15-20
Site Preparation (utilities, grading)	8	15-20
Building Construction	16-26	25-30
Architectural Coating	36-78	40-50
Interior Finishes	40-90	60-80
Academic Program (approximate 3-year duration) (Academic Campus Planning Area)		
Demolition	4-10	15-20
Site Preparation (utilities, grading)	4-6	15
Construction	8-16	20
Architectural Exterior Finishes	20-26	25-40
Interior Finishes	30-40	30-60
Landscaping, Wildfire Resilience, and General Site Improvements (approximate 3-year duration)		
Site Preparation (utilities, vegetation treatments)	16	15
Construction (hardscape, paving)	32	20
Architectural Coating	8	10
Irrigation/Planting	32	15

Source: Data Provided by North Coast 2021. Compiled by Ascent Environmental in 2022.

In conformance with Marin County Development Code Section 6.70.030, construction activities would occur between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and from 9:00 a.m. to 5:00 p.m. on Saturdays. The operation of loud noise-generating construction equipment (e.g., backhoes, generators, and jackhammers) would be limited to the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday. Construction activities would be prohibited on Sundays and holidays.

2.7.2 Construction Equipment

The following construction equipment would be used during project construction:

- excavator,
- paddle wheel scraper,
- backhoe loader,
- compactor,
- skid steer loader,
- dump truck,
- concrete truck,
- paving equipment,
- telehandler,
- forklift,
- boom lift,
- mobile crane,
- concrete pump truck, and
- mini-excavator.

2.8 POTENTIAL PERMITS AND APPROVALS REQUIRED

The permits and approvals required for the project are summarized in Table 2-4.

Table 2-4 List of Required Permits and Approvals

Agency	Permit or Approval	Description
County of Marin	Final EIR certification and project approval	The County of Marin is responsible for certifying the Final EIR and approving the project.
	Amendment to the Strawberry Community Plan	The proposed amendment would revise the residential unit count and would also remove the restriction that requires that residential and other site uses be dedicated exclusively to students, faculty, and staff of the academic campus.
	Approval of Master Plan for large scale development and Design Review for new construction in a planned zoning district	The following elements require Master Plan and/or Design Review approval pursuant to Marin County Development Code Section 22.44.020: daycare and fitness center, residential development, residential care facility, administration building renovation, maintenance building replacement, landscape and hardscape improvements, and open space.
	Approval of Vesting Tentative Map application	This approval would be required to allow future condominium conversion at the site pursuant to County Code Section 22.84.110. No changes to the existing lot line configuration are proposed.
	Issuance of a Master Use Permit	This permit would be required to allow multiple conditional uses on the site in addition to the existing educational use pursuant to County Code Section 22.49.010. The conditional uses include a fitness center open to the public as well as allowing the existing daycare on the site to accept children that are not affiliated with the existing academic campus.
	Issuance of Tree Removal Permit	This permit would be required for the removal of protected trees pursuant to County Code Section 22.62.020.
	Encroachment Permit	This permit would be required for roadway tie-in and other project-related work that may encroach within County right-of-way.
	Building Permit(s)	Building permit(s) would be required for construction of proposed project structures.
Regional Water Quality Control Board – Region 2	Issuance of Clean Water Act Section 401 Permit	This permit is required for activities that may result in discharges to waters of the United States.
	Issuance of National Pollutant Discharge Elimination System (NPDES) Construction General Permit	This permit is required for all construction projects disturbing one or more acres of soil and requires preparation of a storm water pollution prevention plan (SWPPP).
	Issuance of Porter-Cologne Act Discharge of Dredge or Fill Materials Permit	This permit could potentially be required for discharge of fill materials to waters of the state.
U.S. Army Corps of Engineers	Issuance of Clean Water Act Section 404 Permit	This permit may not be needed. Isolated wet areas on the project have not been formally delineated as Section 404 jurisdiction. If the discharge of dredge or fill material into waters of the United States is determined to be necessary, this permit would be required.
BCDC	None needed	No development in Bay or Shoreline Band jurisdictions is proposed.

3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

APPROACH TO THE ENVIRONMENTAL ANALYSIS

This Draft EIR evaluates and discloses the environmental impacts associated with the proposed project, in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulation, Title 14, Division 6, Chapter 3, Section 15000, et seq.). Sections 3.1 through 3.15 of this Draft EIR present a discussion of regulatory background, existing conditions, thresholds of significance, environmental impacts associated with construction and operation of the project, proposed mitigation measures to reduce the level of impact, and residual level of significance (i.e., after application of mitigation, including impacts that would remain significant and unavoidable even after application of all feasible mitigation measures). Issues evaluated in these sections consist of the environmental topics identified for review in the notice of preparation (NOP) prepared for the project (see Appendix A of this Draft EIR). Chapter 4 of this Draft EIR, "Cumulative Impacts," presents an analysis of the project's impacts considered together with those of other past, present, and probable future projects producing related impacts, as required by Section 15130 of the State CEQA Guidelines. Chapter 5, "Alternatives," presents a reasonable range of alternatives and evaluates the environmental effects of those alternatives relative to those of the proposed project, as required by Section 15126.6 of the State CEQA Guidelines. Chapter 6, "Other CEQA Sections," includes an analysis of the project's growth inducing impacts, as required by Section 21100(b)(5) of CEQA.

Sections 3.1 through 3.15 of this Draft EIR each include the following components.

Regulatory Setting: This subsection presents information on the laws, regulations, plans, and policies that relate to the issue area being discussed. Regulations originating from the federal, state, and local levels are each discussed as appropriate.

Environmental Setting: This subsection presents the existing environmental conditions on the project site and in the surrounding area as appropriate, in accordance with State CEQA Guidelines Section 15125. The discussions of the environmental setting focus on information relevant to the issue under evaluation. The extent of the environmental setting area evaluated (the project study area) differs among resources, depending on the locations where impacts would be expected to occur. For example, air quality impacts are assessment for the air basin (macroscale) as well as the site vicinity (microscale), whereas aesthetic impacts are assessment for the project site vicinity.

Environmental Impacts and Mitigation Measures: This subsection describes the analysis methodology, presents the thresholds of significance, and evaluates the significant and potentially significant effects of the proposed project on the existing environment, including the environment beyond the project boundaries, in accordance with State CEQA Guidelines Section 15126.2. The methodology for the impact analysis is described, including technical studies upon which the analyses rely. The thresholds of significance are defined and thresholds for which the project would have no impact are disclosed and dismissed from further evaluation.

In most instances, thresholds of significance are derived from resource-specific factual questions posed in Appendix G of the State CEQA Guidelines, which is a sample Initial Study checklist recommended for use by public agencies subject to CEQA. Appendix G includes factual inquiries on a broad range of environmental topics, which in many instances reflect legal and factual considerations relevant under related federal and state laws such as the Clean Air Act, the California Clean Air Act, the federal Endangered Species Act, the California Endangered Species Act, the Clean Water Act, the Porter-Cologne Water Quality Control Act, and California's climate and energy statutes, to name just a few. These inquiries also reflect input solicited by the State of California from key expert agencies, nonprofit organizations, and leading experts on CEQA.

Notably, lead agencies are under no obligation to use these inquiries from Appendix G in fashioning thresholds of significance on various subjects. (*Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068). Rather, with few exceptions, "CEQA grants agencies discretion to develop their own thresholds of significance" (*Id.*).

Even so, it is a common practice for lead agencies to take the language from the inquiries set forth in Appendix G and to use that well-considered language in fashioning significance thresholds. The County has frequently done so here. The County has also been cognizant of a limited number of "mandatory findings of significance" (significance thresholds) set forth in Section 15065[a] of the State CEQA Guidelines. Where particular thresholds for particular topics in this EIR depart from the precise language of Appendix G or flesh out some of the general wording from that language, such departures generally reflect the informed expert opinion or judgment of outside agencies such as the Bay Area Air Quality Management District and the Governor's Office of Planning and Research, as well as the opinion and judgment of County staff and the County's professional environmental consultants. Sometimes the County has looked to its own General Plan policies and ordinances in modifying the language of Appendix G inquiries or in fashioning specific significance thresholds. The County has also relied on statutes that identify significant impacts (PRC Sections 21084.1 [historical resources] and 21084.2 [tribal cultural resources]), as well as principles developed in CEQA case law.

Project impacts and mitigation measures are numbered sequentially in each subsection (Impact 3.2-1, Impact 3.2-2, Impact 3.2-3, etc.). A summary impact statement precedes a more detailed discussion of each environmental impact. The discussion includes the analysis, rationale, and substantial evidence on which conclusions are based. The determination of level of significance of the impact is presented in bold text. A "less-than-significant" impact is one that would not result in a substantial adverse change in the physical environment. A "potentially significant" impact or "significant" impact is one that would result in a substantial or potentially substantial adverse change in the physical environment; both are treated the same under CEQA in terms of procedural requirements and the need to identify potentially feasible mitigation. Mitigation measures are identified, as feasible, to avoid, minimize, rectify, reduce, or compensate for significant or potentially significant impacts, in accordance with the State CEQA Guidelines Section 15126.4. Unless otherwise noted, the mitigation measures presented are recommended in the EIR for consideration by the Marin County Board of Supervisors to adopt as conditions of approval. The Board of Supervisors has the ultimate say as to whether the proposed mitigation measures are feasible and should be adopted. Under CEQA, lead agency decisionmakers are required to try to reduce significant environmental effects to less than significant levels to the extent feasible. (See PRC Sections 21002, 21081[a][3]; State CEQA Guidelines Sections 15002[a][3]. 15021[a][2], 15081[a][3].)

Where an existing law, regulation, or permit specifies mandatory and prescriptive actions about how to fulfill the regulatory requirement as part of the project definition, leaving little or no discretion in its implementation, and would avoid an impact or maintain it at a less-than-significant level, the environmental protection afforded by the regulation is considered before determining impact significance. Where existing laws or regulations specify a mandatory permit process for future projects, performance standards without prescriptive actions to accomplish them, or other requirements that allow substantial discretion in how they are accomplished, or have a substantial compensatory component, the level of significance is determined before applying the influence of the regulatory requirements. In this circumstance, the impact would be potentially significant or significant, and the regulatory requirements would be reflected in proposed mitigation measures, often as the performance standards that must be satisfied. This approach is consistent with State CEQA Guidelines Section 15126.4[a][1][B], which provides that "[c]ompliance with a regulatory permit or other similar process may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards."

This subsection also describes whether mitigation measures would reduce project impacts to less- than-significant levels. Significant-and-unavoidable impacts are identified as appropriate in accordance with State CEQA Guidelines Section 15126.2(b). Significant-and-unavoidable impacts are also summarized in Chapter 6, "Other CEQA Sections."

References: The full references associated with the references cited in Sections 3.1 through 3.15 are presented in Chapter 8, "References," organized by chapter or section number.

3.1 AESTHETICS

This section provides a description of the existing aesthetic conditions of the visible landscape on and near the North Coast Land Holdings project site and an assessment of changes to those conditions that would occur from project implementation. The effects of the project on the visual environment are generally defined in terms of the project's physical characteristics and potential visibility, the extent to which the project's presence would change the perceived visual character and aesthetic quality of the environment, and the expected level of sensitivity that the viewing public may have where the project would alter existing views.

The information contained in this section is based on the technical analysis provided in the Visual Resources Analysis Technical Report prepared by 2M Associates (2022), which is provided as Appendix B of this Draft EIR. The "Analysis Methodology" discussion below provides further detail on the evaluation approach. Public comments regarding aesthetics received during the scoping process requested the EIR address visibility from surrounding vantage points; consistency with existing policies; local scenic vistas including local ridgelines, Seminary Point, Seminary Knoll, and Chapel Hill; visual compatibility with surrounding character; lighting; and raising the athletic field. See Appendix A for all NOP comments received.

3.1.1 Regulatory Setting

FEDERAL

No federal plans, policies, regulations, or laws related to aesthetics, light, and glare are applicable to the proposed project.

STATE

California Building Code

The California Building Code (California Code of Regulations, Title 24, Part 2) contains various building standards derived and adapted from the International Building Code, authorized by the California Legislature, that address California building issues, including several that are applicable to the visual condition of a site (especially at night). They include standards for outdoor lighting intended to improve energy efficiency, minimize light pollution and nighttime glare, and provide design solutions to shield and control outdoor lighting fixtures.

Related to glare, the *2022 California Green Building Standards Code, Title 24 Section A4.106.7 Reduction of Heat Island Effect on Nonroof Areas* includes voluntary measures for residential buildings. It states "Use high albedo materials with an initial solar reflectance value of at least 0.30 as determined in accordance with American Society for Testing and Materials (ASTM) Standards E1918 or C 1549." This is a minimum threshold. For roofs the minimum value threshold varies by Building Climate Zone and building type tier levels (low-rise and high-rise). The project site is in Building Climate Zone 3. There are no minimum thresholds values indicated in the code for low-rise residential roofs in Zone 3.

California Department of Transportation: Scenic Highway Program

The State Scenic Highway Program—a provision of Sections 260 through 263 of the Streets and Highways Code—was established by the Legislature in 1963 to preserve and enhance the natural beauty of California. The State Scenic Highway System includes highways that are either eligible for designation as scenic highways or have been designated as such. The status of a State Scenic Highway changes from "eligible" to "officially designated" when the local jurisdiction adopts a scenic corridor protection program, applies to Caltrans for scenic highway approval, and receives the designation from Caltrans.

LOCAL

Marin County Multi-Family Residential Design Guidelines

The Multi-family Residential Design Guidelines provide guidance for achieving high-quality residential design in unincorporated areas of Marin County. The Guidelines are intended to assist project applicants during the project design phase and County staff and decision makers in the review and approval process.

While conformance with the Marin County Code is required for any project approval, the County's Multi-Family Residential Design Guidelines offer additional direction about the County's expectations and provide clear evaluation criteria that can be used in decision-making. The guidelines aim to be prescriptive enough to create a framework for design and to carry out the vision in the Countywide Plan and applicable Community Plans, but flexible enough to allow for creativity and innovation in design. Development applications should achieve general consistency with the guidelines in order to be approved (Marin County 2013).

Marin County goals and policies set the foundation for the guidelines. The most relevant goals and policies are synthetized into the following "design principles."

- Sustainability. Encourage development patterns and building methods that make efficient use of land, energy and other resources. Build things that last and adapt to new needs over time, including changing environmental conditions such as sea level rise.
- Health and Livability. Promote public health by making walking and biking attractive options and by encouraging community and other outdoor living areas that are appropriate to the place and the people who will use them.
- Physical Character. In each community, respect and enhance essential design characteristics that make it attractive and livable. Protect Marin's scenic qualities, especially views of ridgelines, hillsides, water, and trees.
- Housing and Other Human Needs. Provide a mix of housing types to meet the needs of Marin's workforce and residents, particularly families, seniors, low-wage earners, and disabled people.
- Compact Development. Use Marin's land efficiently by having new construction take a compact form, whenever possible. Promote infill development within existing communities, consistent with County policy.
- Fair Housing. Reduce the potential cost of the County's development review process for projects that provide homes for people from a broad range of socioeconomic backgrounds by increasing the transparency of design criteria that support approval of such projects in a timely manner.

Marin Countywide Plan

The following goals and policies in the Marin Countywide Plan are relevant to the project. Multiple Implementation Programs support each of these policies and are described fully in the Countywide Plan (Marin County 2023).

Built Environment Element

GOAL DES-3: New Development in Built Areas. New construction should occur in a compact form in developed locations whenever feasible.

- Policy DES-3.1: Promote Infill. Encourage the development of vacant and underutilized parcels consistent with neighborhood character.
- Policy DES-3.2: Promote Green Spaces. Encourage the creation of high-quality community plazas, squares, greens, commons, community and neighborhood parks, and rooftop gardens.
- Implementing Program DES-3. b: Adopt Design Guidelines. Continue to incorporate the Marin County Single Family Residential Design Guidelines (see the Introduction, "Technical Background Reports and Other Supporting Documents") into the design review process for new and remodeled homes, and include standards for view protection, solar access, landscaping and trees, streetscapes and pedestrian amenities, and compatibility with surrounding built and natural features. Landscaping standards may include techniques such as irregular plant spacing to achieve a natural appearance on graded slopes, and requirements to minimize runoff and conserve water.

GOAL DES-4: Protection of Scenic Resources. Minimize visual impacts of development and preserve vistas of important natural features.

- Policy DES-4.1: Preserve Visual Quality. Protect scenic quality and views of the natural environment — including ridgelines and upland greenbelts, hillsides, water, and trees — from adverse impacts related to development.
- Implementing Program DES-4. a: Protect Key Public Views. Work with community groups to identify, map, and protect important view corridors. Establish design standards for development in these areas as part of the design review requirements and individual community plans (see DES-3. b).
- Implementing Program DES-4. b: Minimize Visual Impacts of Public Facilities. Amend applicable codes and procedures to require appropriate placement, design, setbacks, and native landscaping of public facilities (including sound walls, medians, retaining walls, power lines, and water tanks) to reduce visual impacts, and encourage local agencies to adopt similar standards.
- Implementing Program DES-4. c: Regulate Mass and Scale. Ensure that the mass and scale of new structures respect environmental site constraints and character of the surrounding neighborhood (see Program DES-3. b), are compatible with ridge protection policies (see Program DES-4e) and avoid tree-cutting (especially on wooded hillsides) and grading wherever possible. Community plans should consider regulations concerning home size.
- Implementing Program DES-4. d: Protect Views of Ridgelines. Implement Development Code standards that require development proposed on or near visually prominent ridgelines (including in the Ridge and Upland Greenbelt Areas shown on Map 3-4) to be clustered below the ridgeline on the least visually prominent portion of the site. Expand the implementation of these standards by including in the Ridge and Upland Greenbelt Area those unmapped ridgelines identified as having countywide significance and rezoning Ridge and Upland Greenbelt lands to Planned District categories and adjacent buffer area to a transitional district. (See DES-4. e)
- Implementing Program DES-4. e: Protect Views of Ridge and Upland Greenbelt Areas. Employ a variety of strategies to protect views of Ridge and Upland Greenbelt areas, including the following:
  - Identifying any unmapped ridgelines of countywide significance, both developed and undeveloped, and adjusting the Ridge and Upland Greenbelt Areas map as appropriate;
  - Amending the Development Code and County zoning maps to designate a suburban edge on all parcels contiguous to the City-Centered Corridor that abut the Ridge and Upland Greenbelt, and requiring that those parcels develop at rural densities with visually sensitive site design;
  - Rezoning Ridge and Upland Greenbelt lands to the Planned District category and adjacent buffer areas to a transitional district, thereby subjecting them to County Design Review Requirements that include hillside protection;
  - Requiring buildings in Ridge and Upland Greenbelt areas to be screened from view by wooded areas, rock outcrops, or topographical features (see DES-3. b); and
  - Calculating density for Ridge and Upland Greenbelt subdivisions at the lowest end of the Countywide Plan designation range.

Marin County Zoning and Development Code

Article II, Zoning Districts and Allowable Land Uses, of the Marin County Code establishes zoning districts that are applied to properties within the County, determines how the zoning districts are applied on the official zoning maps, and provides general permit requirements for development and new land uses. Under Article II, the unincorporated areas of Marin County are divided into zoning districts that consistently implement the Marin Countywide Plan, as well as applicable community and specific plans. Under the Marin County Code, the project site is zoned RMP-2.47:AH, Residential, Multiple Planned district.

The following policies and development standards related to aesthetics are applicable to the project (Marin County 2022).

22.10.040 - Residential District Development Standards

B. Development standards for planned districts. Table 2-5, Residential District Development Standards, outlines the RMP district height limit for primary structures as 30 ft and accessory structure as 16 feet. There are no applicable minimum setback requirements outlined in the table for the RMP zoning district.

22.16.030 - General Standards

D. Building location.

1. **Clustering requirement.** Structures shall be clustered in the most accessible, least visually prominent, and most geologically stable portions of the site, consistent with needs for privacy where multiple residential units are proposed. Clustering is especially important on open grassy hillsides; a greater scattering of buildings may be preferable on wooded hillsides to save trees.
2. **Development near ridgelines.** No construction shall occur on top of, or within 300 feet horizontally, or within 100 feet vertically of visually prominent ridgelines, whichever is more restrictive, unless no other suitable locations are available on the site or the lot is located substantially within the ridgeline area as defined herein. If structures must be placed within this restricted area because of site constraints or because siting the development outside of the ridgeline area will result in greater visual or environmental impacts, they shall be in locations that are the least visible from adjacent properties and view corridors.

F. Landscaping. Introduced landscaping should be designed to minimally disturb natural areas, and shall be compatible with the native plant setting. Landscaping plans should be prepared in compliance with Chapter 22.26 (Landscaping). Landscaping plans should consider fire protection, solar access, the use of native and drought tolerant plant species and minimal water use. Planting should not block scenic views from adjacent properties or disturb wildlife trails. See also Chapter 22.26 (Landscaping).

G. Lighting, exterior. Exterior lighting visible from off-site should be allowed for safety purposes only, shall consist of low-wattage fixtures, and should be directed downward and shielded to prevent adverse lighting impacts on nearby properties, subject to the approval of the Director.

I. Project Design.

1. **Height limits for structures.**
    a. 30 feet for primary structures, except that multi-family residential buildings may be increased in height to 40 feet when side yard setbacks of 15 feet or greater are provided.
    b. The floor level of the lowest floor shall not exceed 10 feet above natural grade at the lowest corner.
    c. Structures located within the ridgeline areas pursuant to Subsection F.2 above shall be limited to a maximum height of 18 feet.
2. **Materials and colors.** Building materials and colors shall be chosen to blend into the natural environment unobtrusively, to the greatest extent possible.

22.26.040 - Landscaping Objectives

A. Provide visual amenities. Landscaping should enhance the appearance of new development and surrounding areas by being designed, installed, and maintained to blend new structures into the context of an established community.

D. Screen incompatible land uses. Landscaping should be utilized to screen incompatible land uses by creating visual separation, where deemed necessary and appropriate, between land uses.

22.42.010 - Purpose of Chapter

D. The design of the built environment respects and preserves the natural beauty of the County and the environmental resources found within.

G. Conflicts between land uses are eliminated, environmental values of the site are preserved, and adverse physical or visual effects which might otherwise result from unplanned or inappropriate development, design, or placement are minimized or eliminated.

24.04.410 - Parking lot lighting

Lighting fixtures shall be shielded so as not to produce obtrusive glare on the public right of way or adjoining properties. All luminaries shall meet the most recently adopted criteria of the Illuminating Society of North American (IESNA) for "full cut off" luminaries.

22.130.030 – Definitions of Specialized Terms and Phrases Visually Prominent Ridgeline

A line connecting the topographic highpoints within the Countywide Plan's Ridge and Upland Greenbelt along a ridge that separates watersheds and is visible from public viewpoints from open space areas, parks, trailheads, highways, arterial roads, the bay and other water bodies.

Strawberry Community Plan (1973)

The following guidelines and policies of the Strawberry Community Plan related to aesthetics are applicable to the project (Marin County 1973).

General Design Guidelines

- Landscaping: Site plans shall be designed to incorporate landscaping to screen views of proposed structures. Landscaping shall be placed to provide privacy between proposed and existing structures.
- Ridgelines: Hilltops, forested areas and other prominent visual landmarks in the community should be recognized in development plan proposals and preserved in their natural state.
- View Corridors: Existing significant view corridors should be identified and designs for maintaining those corridors should be incorporated into development proposals. Structures in view of existing development should be designed to incorporate a variety of interesting structure planes and angles while adhering to a 30' 0" height limitation that maintains those existing views.

Specific Policy Framework

2.0: Preserve and Enhance the Scale and Character of the Area.

- 2.1: Preserve the natural appearance of hills, ridgelines, and other prominent or significant landforms.
- 2.12: Permit no development which would significantly interfere with views from ridges or hilltops to the Bay or lowlands.
- 2.13: Permit no development which would interrupt a continuous view of the visual crest of the surrounding hillsides from adjacent lowlands.

Strawberry Community Plan and Amendments (1982)

The following goals and guidelines of the Strawberry Community Plan related to aesthetics are applicable to the project (Marin County 1982).

II. Goals

A. Community Amenities

It is the desire of the Community to assure that future development provide for such amenities as visual backdrops, neighborhood separators, retention of ridgelines, and protection of environmentally important areas, through careful planning and clustering of structures. In addition, all means of open space acquisition should be pursued, including purchase and dedication.

III. Development Guidelines

C. Golden Gate Baptist Theological Seminary – Land Use

- (Area 5) Slope between Chapel and Seminary Drive - A band of open undeveloped land should extend from Chapel Drive to Seminary Drive.
- (Area 6) Any expansion of the campus or student housing should be developed in this area. Hilltop adjacent to Chapel Drive is a prominent visual landmark within the Community and should remain undeveloped, if possible. However, if development of this site is to occur, it should be limited to structures for Seminary activities. No

housing-should be placed on this site. structures should be designed and placed so that they are as unobtrusive as possible. This should be accomplished by placing structures in the northern quadrant of the site and by "benching" the slope to provide a lower building pad and profile. Landscaping should also be incorporated into the site plan to screen views of the structure from existing dwellings. The existing views from residences along Hillard Drive should not be blocked by development on this hilltop.

- (Area 8) Location of Development - The Forested Knoll above Seminary Drive should remain undeveloped because it is a prominent visual landmark in the Community.

E. General Design Guidelines

- Landscaping: Site plans shall be designed to incorporate landscaping to screen views of proposed structures. Landscaping shall be placed to provide privacy between proposed and existing structures.
- Ridgelines: Hilltops, forested areas and other prominent visual landmarks in the community should be recognized in development plan proposals and preserved in their natural state.
- View Corridors: Existing significant view corridors should be identified and designs for maintaining those corridors should be incorporated into development proposals. Structures in view of existing development should be designed to incorporate a variety of interesting structure planes and angles while adhering to a 30' 0" height limitation that maintains those existing views.

3.1.2 Environmental Setting

DEFINITIONS

Aesthetics

Aesthetics refers to the nature and appreciation of beauty in both form and appearance as perceived through the visual sense only. Aesthetic resources include the visual character and quality of an area, consisting of both the landscape features and the social environment from which it is viewed. Aesthetic resources include, but are not limited to:

- federal, state, and local designated scenic resources;
- places of cultural importance, such as traditional cultural properties;
- designated federal, state, and local historic properties;
- areas of high visual quality (e.g., scenic vistas, scenic hiking trails, and scenic highways);
- recreation and open space areas that attract users with sensitivity to visual quality;
- landscape features, including ridgelines and the vegetative mosaic visible on mountains; and
- dark night skies.

Visual Quality

Visual quality is defined as the overall visual impression or attractiveness of an area as determined by its particular landscape characteristics, including landforms, rock forms, water features, and vegetation patterns. The viewer attributes of natural harmony, orderliness, and coherence contribute to the overall visual quality of a setting.

Viewer Sensitivity

Viewer sensitivity is a composite measurement of the overall susceptibility of a viewer to adverse visual or aesthetic impacts, given the combined factors of the visual quality of the characteristic landscape, affected population, viewer exposure, and viewer awareness of the visual impact. Viewer sensitivity considers whether the general public, when seeing the project, is engaged in an active (e.g., soccer, driving) or passive (e.g., hiking, bird-watching) activity. Viewer sensitivity often is reflected according to high, moderate, and low visual sensitivity ranges.

Viewer Exposure

Viewer exposure addresses the variables that affect viewing conditions from potentially sensitive areas. Viewer exposure considers the following factors:

- **Landscape Visibility.** The ability to see the majority of the project site as a whole or see only selected features of the project site because they are screened by existing topography, vegetation, or structures.
- **Distance Zones.** The proximity of viewers to the project site. Distance zones are measured from one static point, such as the location of a key view. There are four defined distance zones:
  - Immediate Foreground: properties and streets that are immediately adjacent to the project site.
  - Foreground: 0.25-0.5 mile from the viewer.
  - Middle ground: 0.5 to 2 miles from the viewer
  - Background: beyond 2 miles from the viewer.

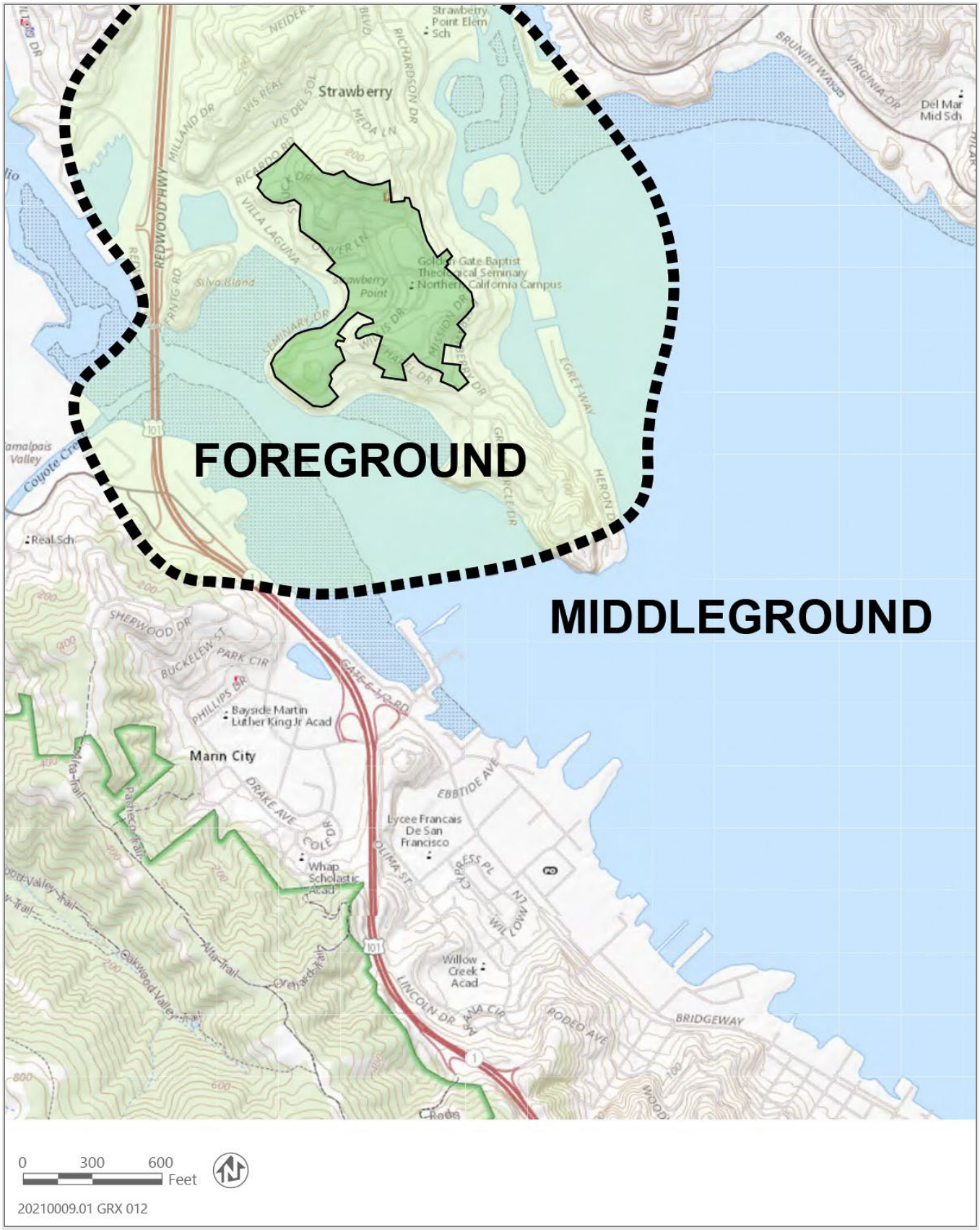
Figure 3.1-1, "Distance Zones" illustrates the distance zones relative to the project site.

- **Viewing Angle.** Considers whether the project site would be viewed from above (superior), below (inferior) or from a level (normal) line of sight. If along a street or path, consideration is given if the project site is in the direct line of sight or at an acute angle relative to the direction of travel. Viewing angle also affects whether project components include a backdrop or are silhouetted against the sky.
- **Extent of Visibility.** Considers the relative location of the project site to the viewer and whether visibility conditions are open, framed, or limited by intervening vegetation, structures, or terrain; additionally, whether the view is part of a larger panorama.
- **Duration of View.** Pertains to the amount of time the project site would typically be seen from a sensitive viewpoint. In general, duration of view, and hence, impact would be less in instances where the project would be seen for a short period while traveling (0 to 10 seconds), moderate or intermittent period when traveling (up to a minute) or would be seen as a constant from a stationary position condition such as from public gathering area, park, or trail.

VISUAL CHARACTER OF THE PROJECT SITE

As discussed in Chapter 2, "Project Description," the project site is located on the former Golden Gate Baptist Theological Seminary campus property in the community of Strawberry, in unincorporated Marin County, California (see Figure 2-1, "Regional Location," in Chapter 2, "Project Description"), next to the City of Mill Valley. The campus encompasses approximately 127 acres, generally bounded by Richardson Drive, Seminary Drive, and East Strawberry Drive (see Figure 2-2, "Project Site," in Section 2, "Project Description"). The properties composing the project site total approximately 101 acres.

Regional access to the project site is available from US Highway 101 (Highway 101) and State Route 131 (SR 131; Tiburon Boulevard). From US 101 off-ramps, ingress to the project site is available through the Redwood Highway Frontage Road to Seminary Drive and egress returning to the freeway on-ramps is available through Seminary Drive and the Highway Frontage Road to US 101 on-ramp. The project site is accessible from Seminary Drive, both at Hodges Drive and Gilbert Drive. Other access points to the project site include Mission Drive, East Strawberry Drive, Chapel Drive, and Reed Boulevard.



Source: Images produced and provided by 2M Associates in 2022.

Figure 3.1-1 Distance Zones

Topography and Local Ridgelines

As illustrated in Figure 3.1-2, "Local Ridgelines and Planning Units," there are a series of local ridgelines that play an important role in defining the project site, its planning areas, and how they are viewed. Although the local ridgelines play an important role in the landscape appearance of the project site, none are designated by the County as ridgelines subject to Countywide Plan policies or County development code provisions, which is why the EIR calls them out as "local" ridgelines. At an elevation of approximately 190 feet, the central point on the project site is Chapel Hill. From Chapel Hill major local ridgelines extend:

- South to Strawberry Point with a break through a saddle where Seminary Drive transitions into Strawberry Drive.
- West to the forested Seminary Point (approximate elevation 125 feet).
- North through the campus to a saddle composing Dormitory Hill (approximate elevation 115 feet) then up to near Richardson Drive residences (approximate elevation 250 feet) and then arching west down to Schuck Knoll (approximate elevation 110 feet).

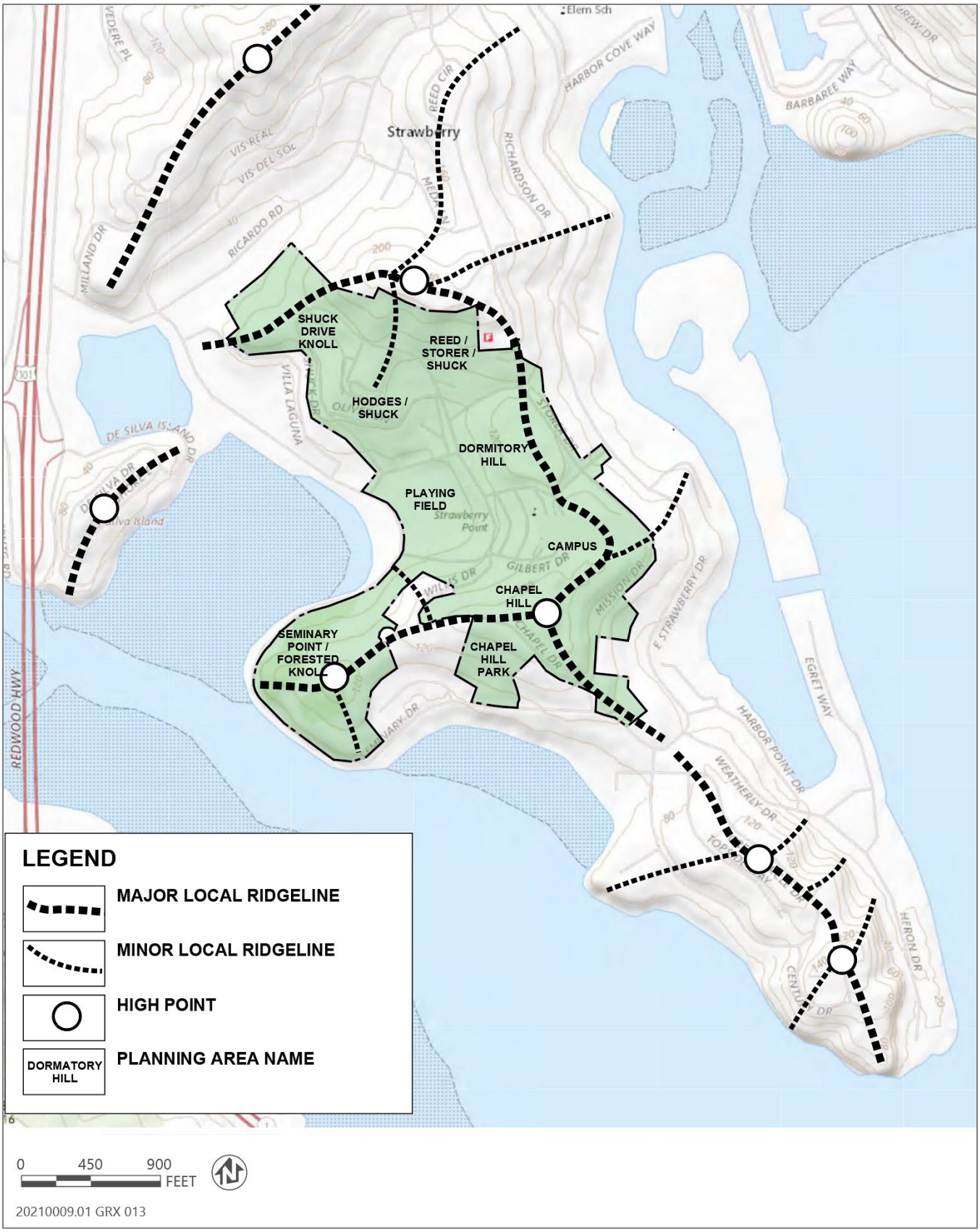
Visually, a series of minor local ridgelines further divide the project site. Because of its location surrounded on three sides by Richardson Bay, Seminary Point is the most prominent visual natural feature of the project site. The topography and local ridgelines tend to control views into the project site such that the entire project site is generally not visible from any one surrounding location. This is particularly true from the immediate foreground and foreground distances. Due to the topography, the major portion of the project site is only visible from the southwest and west.

Characteristic Landscape

The project site generally encompasses the middle portions of the Strawberry Peninsula. The topography of the project site consists primarily of hillsides and knolls on the Strawberry Peninsula with a range of elevations from approximately 10 to 250 feet. The Richardson Bay shoreline is adjacent to Seminary Drive, which runs along portions of the project site boundary to the east and south. While the larger campus property includes Richardson Bay shoreline and submerged land south of Seminary Drive, no development is proposed in this area and therefore is not included as part of the project site (see Figure 2-2, "Project Site," in Section 2, "Project Description").

The eastern portion of the project site includes the academic campus and associated facilities. The Seminary Playing Field is located west of the academic campus, at the topographically lowest point of the project site and encompasses approximately two acres. Residential uses occur throughout the project site.

Existing landscaping within the project site includes several vegetation communities, including Monterey pine woodland on the southern knoll/Forested Knoll and Seminary Point, California sagebrush scrub on Seminary Point, and various planted landscape areas throughout the campus. Sensitive vegetation communities include purple needlegrass grassland and coast live oak woodland.



Source: Images produced and provided by 2M Associates in 2022.

Figure 3.1-2 Local Ridgelines and Planning Units

As shown on Figure 3.1-3, "Characteristic Landscape Units," the project site can be visually characterized in five landscape units with similar qualities of harmony, cultural order, and coherence. A description of each landscape unit follows below:

1. Seminary Point/Forested Knoll: A significant natural feature of the project site and of the Strawberry peninsula. A singular forest dominates and provides a high degree of harmony and natural coherence extending down to the Richardson Bay shoreline. The existing housing development along the extended Chapel Drive within the project site is visually camouflaged due to relatively dark architectural colors and screening by the forest.
2. Chapel Hill Park: A southwest-facing slope, consisting of a band of sparse trees at the top of the area along Chapel Drive with denser forest and shrubland vegetation toward the bottom along Seminary Drive. An open grassland is located mid-slope. The park provides a harmonious foil of undeveloped lands that contrasts with the lack of order seen in the pattern, color, and textures of surrounding private residences. (No project improvements are proposed in this landscape unit).
3. Playing Field: A bowl-like setting with irrigated turf surrounded by forest vegetation. Views to and within the area are partially contained by topography and perimeter vegetation.
4. Academic Campus/Chapel Hill: A developed landscape with a moderate degree of cultural order and coherence created by disparate elements of streets, terraced parking, campus academic structures, and graded landforms of Chapel Hill.
5. Dormitory Hill to Schuck Knoll: A partially developed landscape visually consisting of the open grasslands and graded landforms visually punctuated by sparse low-profile structures, among clustered tree groupings and individual trees. The overall visual character of the area presents a moderate degree of cultural order, harmony, and coherence. Private residential structures at the top of the slopes to the north and the colors and bulk of the Southern Marin Fire Protection District, Station 9, contribute to the lack of overall harmony and coherence.

Scenic Resources

No designated State Scenic Highways or County roadways are located within Marin County (Caltrans 2022). The following routes are eligible as a State Scenic Highway but have not been adopted as such by Marin County:

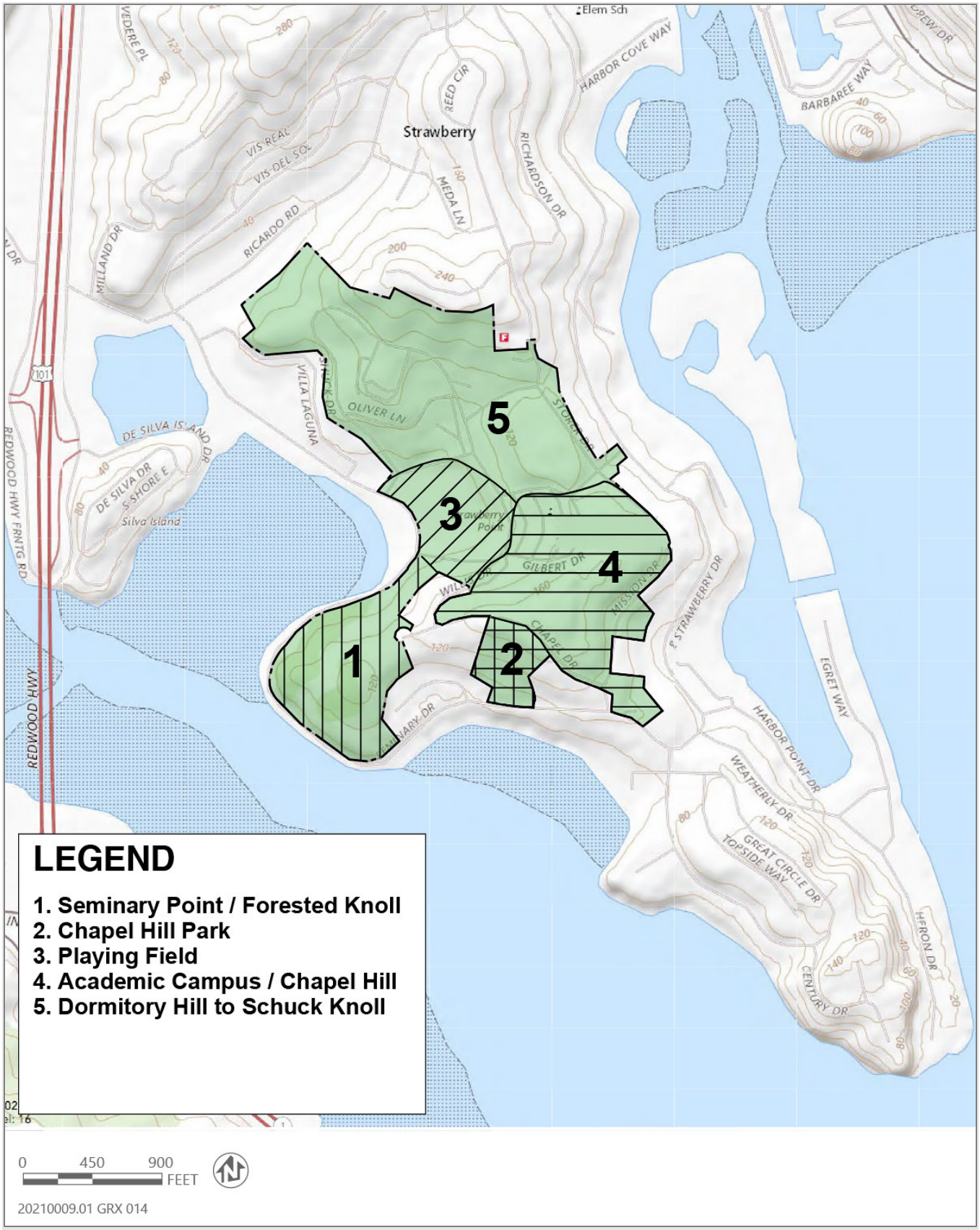
- US 101 north from the Golden Gate Bridge to SR 1 north (approximately 0.4 miles southwest of the project site). Figure 2-2 in Section 2, "Project Description," depicts the segment of US 101 which is nearest to the project site.
- SR 1 north (approximately 0.3 miles southwest of the project site).
- SR 37 east to the Sonoma County line (approximately 13 miles north of the project site).

VISUAL CHARACTER OF THE SURROUNDING AREA

Visually, the area surrounding the project site presents a predominantly developed residential landscape. The lands surrounding the project site are fully developed by single family homes, duplex homes, apartments, and condominiums. Development spans from the Peninsula's local ridgelines to the edges of Richardson Bay. The overall visual character of these areas presents a moderate degree of cultural order, harmony, and coherence.

High density apartment complexes are located along Seminary Drive, including Strawberry Shores and Harbor Point Apartments. The large bulk appearance of these structures visually contrasts with the finer visual texture presented by surrounding individual residences. This contrast tends to reduce the harmony and coherence of the area as a whole. Relatively large duplex houses occur within Strawberry Cove at the base of Seminary Point and Chapel Hill with a similar, yet not as contrasting, effect. The remaining residential development consists of moderate to relatively large, single-family homes.

The Southern Marin Fire Protection District, Station 9, is located directly north of the project site (above Dormitory Hill). The predominantly concrete Station 9 and its communications tower is visible in the immediate surrounding foreground area and presents bulk and form not typical of the surrounding residences.



Source: Images produced and provided by 2M Associates in 2022.

Figure 3.1-3 Characteristic Landscape Units

Architectural styles and colors of the development surrounding the project site vary widely. Generally, light-valued colors on structures stand out and dark-valued colors on structures visually recede. Such is the case with many of the existing structures within the Hughes-Shuck Planning Area or those on Seminary Point that tend to not be readily noticeable. Local ridgeline development within and around the project site generally parallels the natural ridgeline contours. Most rooflines, with a few exceptions, do not visually extend above the natural ridgeline. Most of those that do extend above the local ridgelines are surrounded by landscaping that projects above the structures and provides a more natural edge as seen against the open sky backdrop.

VIEWS OF THE PROJECT SITE AND SURROUNDING AREA

Visibility into the project site is generally greatest from the west and southwest from adjacent streets, Richardson Bay, and looking over Richardson Bay from Sausalito and Marin City. Views of the project site from Tiburon are limited to the immediate crest of the local ridgeline between Chapel Hill and Dormitory Hill.

Visual conditions, viewer experience, and viewer response to visual change are studied in this Draft EIR through the identification and selection of the most critical and representative public viewpoints of the project, referred to as Key Observation Points (KOPs).

KOPs serve as the basis for the subsequent assessment of visual impacts after determining the visual quality of the project site. Key views are representative of the range of views that would be affected by the project. These representative views are selected to catalog an image of critical baseline conditions that were used to assess the visual impacts of the project.

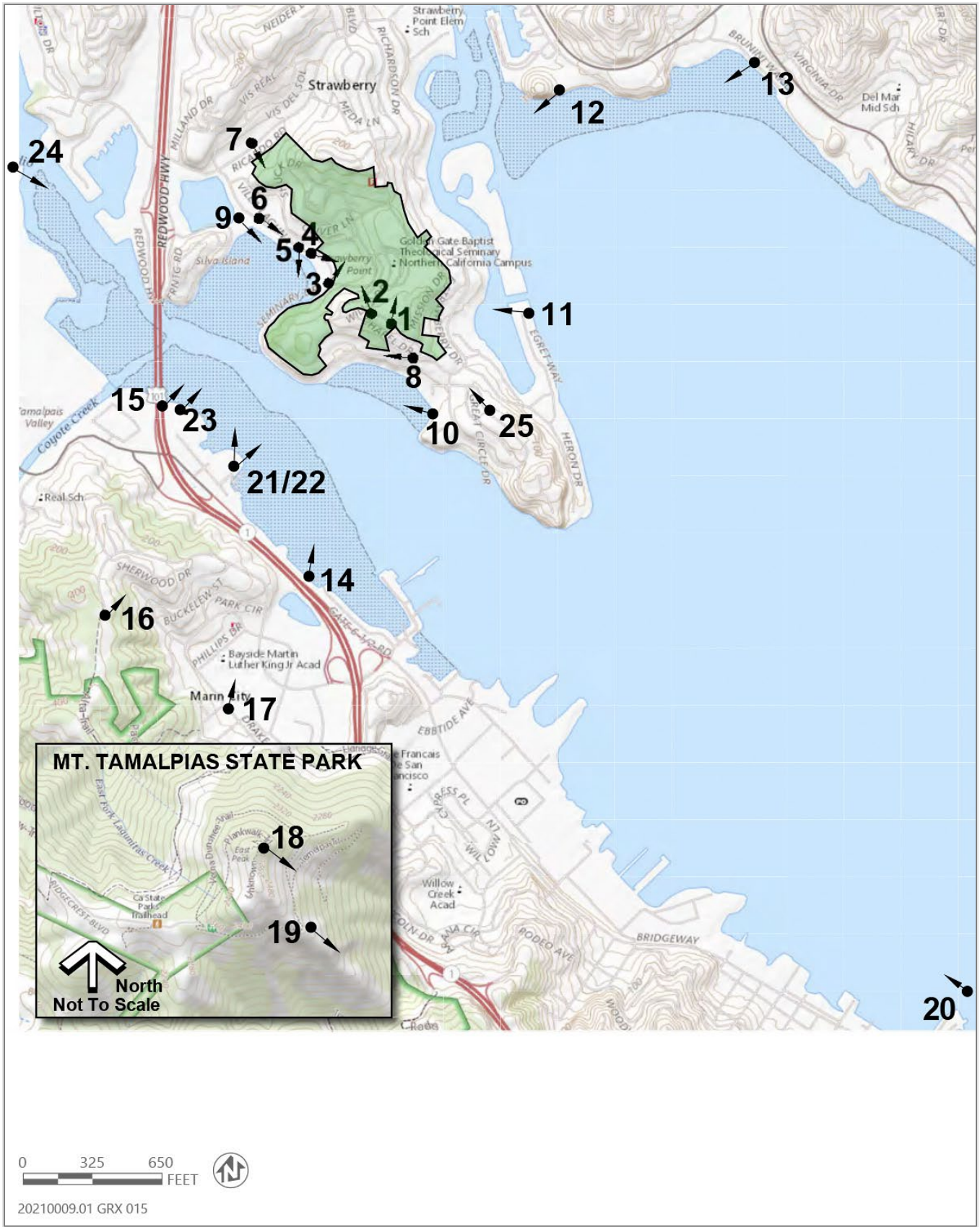
Twenty-five KOPs were used to evaluate the existing visual quality of the project site and visual impacts of the project. Figure 3.1-4, "Key Observation Points," illustrates the locations of each KOP.

The table depicted on Figures 3.1-5a and 3.1-5b serves as a key to Figure 3.1-4, "Key Observation Points," and lists each KOP, describing its general characteristics in terms of the following viewer exposure considerations:

- proximity / distance zone,
- landscape visibility,
- viewing angle,
- extent of visibility,
- duration of view, and
- viewer sensitivity.

Each of the KOPs are shown on Figures 3.1-6 through 3.1-18. Of the twenty-five KOPs identified, the following eight KOPs were selected for preparing visual simulations to illustrate the project-related visual change that would occur.

- KOP #2 – Chapel Road (looking north),
- KOP #3 – Seminary Drive at Gilbert Drive (looking northeast),
- KOP #8 – Seminary Drive west of Chapel Drive (looking west),
- KOP #10 – Brickyard Park (looking northwest),
- KOP #14 – San Francisco Bay Trail / Mill Valley – Sausalito Path (looking north),
- KOP #17 – Drake Avenue, Marin City (looking north),
- KOP #19 – Verna Dunshee Trail Overlook, Mount Tamalpais State Park (looking southeast), and
- KOP #23 – Richardson Bay adjacent to Shoreline Office Center (looking northeast).



Source: Images produced and provided by 2M Associates in 2022.

Figure 3.1-4 Key Observation Points

KOP ID #	Proximity / Distance Zone	Landscape Visibility	Viewing Angle	Extent of Visibility	Duration of View	Viewer Sensitivity (General Public)
1	**Chapel Drive: On the sidewalk in front of the residence at 125 Chapel Drive. View Direction: North toward Chapel Hill.**					
	Immediate Foreground	Moderate	Inferior / 45° Angle	Open	Short to Moderate	Moderate
2*	**Chapel Drive: On the sidewalk across from the residence at 141 Chapel Drive. View Direction: North over the playing field toward the center of the Project site and Shuck Knoll.**					
	Immediate Foreground	High	Superior / 90° Angle	Filtered to Open	Short to Moderate	Moderate
3*	**Seminary Drive: On the sidewalk opposite to the Gilbert Drive intersection. View Direction: Northeast toward the playing field.**					
	Immediate Foreground	High	Normal / 45° Angle	High	Short to Moderate	Moderate to High
4	**Seminary Drive: On the sidewalk at the driveway entrance to 150 Seminary Drive. View Direction: Northeast toward the playing field.**					
	Immediate Foreground	High	Normal / Direct	Open	Moderate	Moderate to High
5	**Seminary Drive: On the sidewalk near the pedestrian path along the bay shore behind 150 Seminary Drive. View Direction: South to Seminary Point**					
	Immediate Foreground	Moderate to High	Normal / Direct	Open / Panorama	Moderate	Moderate
6	**Seminary Drive: On the street adjacent to 110 Seminary Drive and Strawberry Shores Apartments. View Direction: Southeast funneled view to Chapel Hill above the playing field but screened by existing trees.**					
	Foreground	Low to Moderate	Normal / Direct	Framed	Moderate	Moderate
7	**Ricardo Drive: On the sidewalk opposite the residence located at 301 Ricardo Drive. View Direction: Southeast to forested side of Shuck Knoll.**					
	Foreground	Moderate	Normal / 60° Angle	Limited	Short	Moderate
8*	**Seminary Drive: Approximately 150 feet west from intersection with Chapel Drive. View Direction: West with view focused on the forested hill.**					
	Foreground	Moderate	Normal / Direct	Framed	Short	Low to Moderate
9	**Strawberry Cove Park: From edge of developed playground / picnic area. View similar to KOP #5. View Direction: Southeast toward forested knoll.**					
	Foreground	Moderate	Normal / Direct	Open / Panorama	Stationary	High
10*	**Brickyard Park: From edge of developed playground / picnic area. View Direction: West directly toward forested Seminary Point**					
	Foreground	Low to Moderate	Normal / Direct	Open / Panorama	Stationary	High
11	**Shoreline Access Path: At end of Egret Way. View Direction: West over houses to existing Chapel Hill development. General orientation is to the east and Richardson Bay.**					
	Foreground	Low	Inferior / Direct	Limited	Stationary	High
12	**Interpretive Overlook; Richardson Bay Audubon Center & Sanctuary. View Direction: Southwest to east side of existing Chapel Hill development.**					
	Middleground	Low	Inferior / Direct	Open / Panorama	Stationary	High
13	**San Francisco Bay Trail / Tiburon Old Rail Trail: On path across from restrooms. View Direction: West to east side of existing Chapel Hill development. Similar to KOP #12.**					
	Foreground	Moderate to High	Inferior / 90° Angle	Open / Panorama	Stationary	High
14*	**San Francisco Bay Trail / Mill Valley – Sausalito Path: On path approximately 750 feet northwest of pubic parking area. View Direction: Northeast to Seminary Point and Chapel Hill. Seminary Point screens the Shuck Knoll area.**					
	Middleground	High	Normal / 90° Angle	Open / Panorama	Moderate to Constant	High
15	**Highway 101: Traveling north on bridge just past the Shoreline Office Center structures. View Direction: East at an acute angle to the direction of travel.**					
	Foreground	High	Normal / 30° to 90° Angle	Open	Moderate	Low to Moderate
16	**Golden Gate National Recreation Area, Alta Trail: Approximately 350 feet from the trail entrance at the Donahue Street staging area. View Direction: Northeast.**					
	Middleground	Low	Superior / 45° Angle	Limited	Short to Moderate	High
17*	**Drake Avenue: On sidewalk at crest of street. View Direction: North.**					
	Middleground	Moderate to High	Normal / 90° Angle	Open / Panorama	Short to Moderate	Moderate to High

20210009.01 GRX 016

Source: Images produced and provided by 2M Associates in 2022.

Figure 3.1-5a Table V-1: Key Observation Points

KOP ID #	Proximity / Distance Zone	Landscape Visibility	Viewing Angle	Extent of Visibility	Duration of View	Viewer Sensitivity (General Public)
18	**Mount Tamalpais State Park: At the base of fire tower lookout on the east side. View Direction: Southeast.**					
	Background	Moderate	Superior / Direct	Open / Panorama	Stationary	High
19*	**Mount Tamalpais State Park: At the Verna Dunshee Trail Overlook. View Direction: Southeast.**					
	Background	High	Superior / Direct	Open / Panorama	Stationary	High
20	**Richardson Bay Shoreline: Public access pier adjacent to The Spinnaker. View Direction: Northwest towards forested knoll. Remainder of site not in view. Similar view from dining areas inside restaurant.**					
	Background	Low	Inferior / Direct	Limited	Stationary	High
21	**Richardson Bay Shoreline: At parking area off Salinas Street and Seaplane Adventures. View Direction: North towards Shuck Knoll area with Watertank Hill in background.**					
	Foreground	High	Inferior / Direct	Open / Panorama	Stationary	Low
22	**Richardson Bay Shoreline: Behind parking area off Salinas Street and Seaplane Adventures. View Direction: Northeast towards forested knoll and Chapel Hill.**					
	Foreground	High	Inferior / Direct	Open / Panorama	Stationary	Low
23*	**Richardson Bay Shoreline: Shoreline public access point adjacent to Shoreline Office Center. View Direction: Northeast to forested knoll and Shuck Knoll area. Similar view to KOP #15 and what kayaks / boats would see from the water.**					
	Foreground / Middleground	High	Inferior / Direct	Open / Panorama	Stationary	High
24	**San Francisco Bay Trail / Mill Valley – Sausalito Path: At Bothen Marsh Preserve across from Almonte Boulevard parking area. View Direction: Southeast toward forested knoll. Highway 101 bridge partially blocks view.**					
	Middleground	Low	Inferior / 45° Angle	Limited	Moderate to Stationary	High
25*	**Great Circle Drive. View Direction: Northwest toward Chapel Hill.**					
	Foreground	High	Superior	Focused	Short	Moderate
20210009.01 GRX 017						

Source: Images produced and provided by 2M Associates in 2022.

Figure 3.1-5b Table V-1: Key Observation Points Cont'd

Source: Images produced and provided by 2M Associates in 2022.

KOP #1: Chapel Road looking north (Photo date: June 15, 2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #2: Chapel Road looking north (Photo date: June 16, 2021).

Figure 3.1-6 KOP #1 and #2 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #3: Seminary Drive looking northeast (Photo date: June 21,2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #4: Seminary Drive looking southeast (Photo date: June 21,2021).

Figure 3.1-7 KOP #3 and #4 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #5: Seminary Drive looking south (Photo date: June 21, 2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #6: Seminary Drive looking southeast (Photo date: June 16, 2021).

Figure 3.1-8 KOP #5 and #6 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #7: Ricardo Road looking southeast (Photo date: June 21, 2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #8: Seminary Drive looking west (Photo date: June 15, 2021).

Figure 3.1-9 KOP #7 and #8 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #9: Strawberry Cove Park looking southeast (Photo date: June 15, 2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #10: Brickyard Park looking northwest (Photo date: June 21, 2021).

Figure 3.1-10 KOP #9 and #10 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #11: Shoreline Access Path looking west (Photo date: June 15, 2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #12: Richardson Bay Audubon Center & Sanctuary looking southwest (Photo date: June 15, 2021).

Figure 3.1-11 KOP #11 and #12 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #13: San Francisco Bay Trail / Tiburon Old Rail Trail looking west (Photo date: June 15, 2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #14: San Francisco Bay Trail / Mill Valley – Sausalito Path looking northeast (Photo date: June 15, 2021).

Figure 3.1-12 KOP #13 and #14 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #15: Highway 101 looking northeast (Photo date: June 16,2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #16: Golden Gate National Recreation Area, Alta Trail looking northeast (Photo date: June 15, 2021).

Figure 3.1-13 KOP #15 and #16 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #17: Drake Avenue, Marin City looking northeast (Photo date: June 15, 2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #18: Mount Tamalpais State Park at base of fire tower looking southeast (Photo date: June 16, 2021).

Figure 3.1-14 KOP #17 and #18 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #19 Verna Dunshee Trail Overlook, Mount Tamalpais State Park looking southeast (Photo date: June 16, 2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #20: Public access pier adjacent to The Spinnaker restaurant looking northwest (Photo date: September 9, 2021).

Figure 3.1-15 KOP #19 and #20 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #21: Shoreline off Bolinas Street and Seaplane Adventures looking north (Photo date: September 9, 2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #22: Shoreline off Bolinas Street and Seaplane Adventures looking northeast (Photo date: September 9, 2021).

Figure 3.1-16 KOP #21 and #22 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #23: Richardson Bay looking northeast (Photo date: September 9, 2021).

Source: Images produced and provided by 2M Associates in 2022.

KOP #24: Mill Valley – Sausalito Path, Bothen Marsh Preserve looking southeast (Photo date: September 9, 2021).

Figure 3.1-17 KOP #23 and #24 Photographic Record

Source: Images produced and provided by 2M Associates in 2022.

KOP #25: Great Circle Drive looking northwest (Photo date: September 9, 2021).

Figure 3.1-18 KOP #25 Photographic Record

Principal Views

The following descriptions present the principal views to the project site available to the general public from the surrounding street network, parks, trails, and Richardson Bay.

Immediate Foreground Views

Other than those within the site boundaries, the project site is not seen by the general public from most of the surrounding neighborhood streets due to topography, existing development, and vegetation.

Along Chapel Drive (KOP #1, Figure 3.1-6) there is a direct view to the existing open contoured grasslands of Chapel Hill. West of the crest of Chapel Drive (KOP #2, Figure 3.1-6) is an expansive view north toward Shuck Knoll overlooking the playing field. Visually dominant structures are the residences in the backdrop along Richardson Drive projecting above the local ridgeline and the Southern Marin Fire District station. The primary view orientation of most of the single-family residences along Chapel Drive is south toward Richardson Bay away from the project site.

Views from Seminary Drive immediately adjacent to the project site (KOP #3 and KOP #4, Figure 3.1-7) when traveling in either direction focus on the park-like setting of the playing field and redwood grove. Existing mature trees surrounding the open playing field on the east side screen the majority of structures on Dormitory Hill and the parking lots and structures of the main campus.

Foreground Views

Views to the project site are available from the following streets: Seminary Drive, Chapel Drive, Willis Drive, Ricardo Drive, and a short segment of Great Circle Drive. Portions of the project site area are seen from Strawberry Cove Park, Brickyard Park, and the Shoreline Access Path near Egret Way.

Approaching the project site on Seminary Drive from Ricardo Road, the first open view to the project site (KOP #9, Figure 3.1-10) is over Strawberry Cove Park to the forests of Seminary Point. While the sky-lined roofs of residences

along Campus Drive and the horizontal roofline of the existing multi-family housing on the point are visible, their presence is subservient to the forest and the visually dominant bay edge and marshlands at the base of the hill.

As Seminary Road bends toward the project site (KOP #6, Figure 3.1-8), a funneled view to the project site's forest above the playing field is created by three-story condominium buildings on either side of the road. A break in the corridor view is provided (KOP #5, Figure 3.1-8) by views to the south over bay marshlands to the Forested Knoll. The forest generally screens housing located on Chapel Drive and on the slopes of the knoll.

From Ricardo Street (KOP #7, Figure 3.1-9), the project site sits above continuous single family houses backdropped by the woodland buffer area of the project site. The houses dominate the view from the street with Pacific Gas and Electric (PG&E) utility lines visible parallel to the back property line of the houses. The forest and topography limit views into the project site and existing dormitory development in the Hodges Shuck/Planning Area. From Seminary Drive (KOP #8, Figure 3.1-9) traveling north there is a direct view focusing on the forested Seminary Point. A similar view exists from Brickyard Park (KOP #10, Figure 3.1-10). Dominant visual features are the rounded Forested Knoll, duplex houses along Seminary Cove, and the shoreline edge.

Only a small portion of the project site along the Dormitory Hill and Academic Campus ridgeline is seen from the south and east. In the foreground from the shoreline park at the end of Egret Way (KOP #11, Figure 3.1-11) only the rooflines of the existing campus administration and classroom buildings are visible. Though seen, they are in the backdrop and essentially extend the roofline view of the houses along Egret Way. Also, the entire orientation of the houses along Egret Way, the park, and the trail is to the east toward the Bay and the Tiburon Peninsula, looking away from the project site.

A brief view to Chapel Hill and the Administrative buildings exists when traveling north on Great Circle Drive (KOP #25, Figure 3.1-18). The horizontal character of the graded open space and building rooflines contrasts with the backdrop of the Mount Tamalpais East Peak ridgeline.

Principal visibility to the expanse of the project site is afforded with a continuous view from the south and southeast from Richardson Bay itself or looking over Richardson Bay from Highway 101 traveling north (KOP #15, Figure 3.1-13), and from the Francisco Bay Trail/Mill Valley – Sausalito Path (KOP #21 and KOP #22, Figure 3.1-16) and shoreline (KOP #23, Figure 3.1-17). Views for kayakers and other boaters in Richardson Bay would be similar to KOP#23 (Figure 3.1-17, KOP #23 and #24 Photographic Record). Looking toward the project site, the most prominent natural features are Richardson Bay itself, the opposite Richardson Bay shoreline, the Forested Knoll, grasslands of Shuck Knoll, the woodland buffer and the grasslands of Water Tank Hill or the Ring Mountain Preserve in the background. The bulk of condominiums and duplex housing along Seminary Drive visually contrast with the forest surrounding them.

Middle Ground Views from the East

Views to the project site from Tiburon Boulevard (State Route 131), the San Francisco Bay Trail/Tiburon Linear Park, and other public spaces (KOP #12, Figure 3.1-11 and KOP #13, Figure 3.1-12) are limited to the Chapel Hill and Dormitory Hill ridgelines. The campus library, cafeteria, and dormitory residences are visible. The rooflines of the structures are generally horizontal and parallel the local ridgeline. However, the scale of the structures is relatively large as compared to the texture of the surrounding residences.

Middle Ground Views from the West and South

Views to the project site from Bridgeway and downtown Sausalito are predominantly blocked by development along Bridgeway or, as in the case of Dunphy Park, strongly screened by boats and masts. The forested Seminary Point can be seen as a component of the development in Strawberry and Tiburon from the public pier adjacent to The Spinnaker (KOP #20, Figure 3.1-15). However, the features that dominate the view are Richardson Bay and the East Peak of Mount Tamalpais State Park.

From the crest of Drake Avenue in Marin City (KOP #17, Figure 3.1-14) a view includes the Forested Knoll, Chapel Hill Park, the Chapel Hill Planning Area, and the Reed Storer/Shuck Planning Area of the project, with Ring Mountain Preserve in the backdrop. Numerous rooftops in the foreground on the streets below and residences along Seminary Avenue, Campus Drive, and Richardson Drive punctuate the view. A similar view, but one filtered by trailside

vegetation, exists from Alta Trail in the Golden Gate National Recreation Area (KOP #16, Figure 3.1-13). The higher in elevation on the trail system, the more of the project site is visible.

Views to the project site as seen from Richardson Bay and its margins to the west of Highway 101 (KOP #24, Figure 3.1-17) are limited to Seminary Point and are filtered and dominated by the highway bridge and north shoreline commercial development. Views to the remainder of the project site are blocked by the topography of De Silva Island.

Views from the North

Views into the project site from the ridge along Richardson Drive and Milland Drive are generally blocked by residences. Some of the forest buffer on the north side of Shuck Knoll is seen from Richardson Drive.

Background Views from Mount Tamalpais State Park

A 270 degree panoramic view extending from the Pacific Ocean to San Pablo Bay is available from East Peak of Mount Tamalpais State Park. The project site can be seen to the southeast from both the top of the mountain around the fire lookout (KOP #18, Figure 3.1-14) and the Verna Dunshee Trail Overlook (KOP #19, Figure 3.1-15).

LIGHT AND GLARE CONDITIONS

Existing sources of light and glare are uniformly present in the project vicinity. Existing sources of light include streetlights along project roadways; lights in parking lots, along walkways, and on the exteriors of buildings; and interior lights in buildings.

Natural and artificial light reflect off various surfaces and can create localized occurrences of daytime and nighttime glare. Buildings and structures made with glass, metal, and polished exterior roofing materials exist throughout the surrounding area; however, there are no reported occurrences of excessive daytime or nighttime glare in the project vicinity.

SHADE/SHADOWS

The evaluation of shading and shadows in this Draft EIR is limited to daytime shadows cast by objects blocking sunlight. The angle of the sun, and hence the character of shadows, varies depending on the time of year and the time of day; however, in the Northern Hemisphere, the sun always arcs across the southern portion of the sky. During the winter, the sun is lower in the southern sky, casting longer shadows compared to other times of year. During the summer months, the sun is higher in the southern sky, resulting in shorter shadows. During the summer, the sun can be almost directly overhead at midday, resulting in almost no shadow being cast. During all seasons, as the sun rises in the east in the morning, shadows are cast to the west; at mid-day, the sun is at its highest point and shadows are their shortest and cast to the north; and as the sun sets in the west in the afternoon/evening, shadows are cast to the east. Because of the climate in the Bay Area, midday and afternoon shade in summer can be beneficial. In the winter access to sunlight at any time of day can also be beneficial.

3.1.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

The evaluation of potential aesthetic and visual resource impacts are based on review of site photos representing key observation points and documents pertaining to the project site, including the Countywide Plan (Marin County 2023), the Strawberry Community Plan (Marin County 1973), the Strawberry Community Plan and Amendments (Marin County 1982), the County Development Code, and the Visual Resources Analysis Technical Report prepared for the proposed project (Appendix B). Field reconnaissance of the project site was conducted on June 15, 2021, June 16, 2021, and September 9, 2021, by 2M Associates. The impact assessment in the Visual Resources Analysis Technical Report

employed a line-of-sight analysis to consider the net visual effects that would result from implementation of the project as seen from publicly accessible locations within the Strawberry peninsula and from the surrounding areas.

In determining the level of significance, this analysis assumes that the project would comply with relevant state and local ordinances and regulations, as well as the Countywide Plan and Strawberry Community Plan policies presented in Section 3.1.1, "Regulatory Setting," above.

Visual Simulations

Visual simulations of the project are depicted from eight selected KOPs (KOP #2; KOP #3; KOP #8; KOP #10; KOP #14; KOP #17; KOP #19; and KOP #23) and are depicted on Figures 3.1-19 through 3.1-26. They are also found in Attachment B to the Visual Resources Analysis Technical Report (Appendix B). The simulations are based on architectural, engineering, and landscape architectural drawings and materials selection provided by North Coast Land Holdings, LLC. They do not present a final design. There are potential details of the project, such as the installation of solar electricity-generating panels on the building roofs that would be hidden behind parapets, as required by building codes. These and other details, such as lighting standards, are not shown in the simulations. The simulations are intended to illustrate the overall pattern, form, scale, color, and texture of the proposed development related to the characteristic landscape.

The simulations assumed the following about vegetative conditions:

- An approximate 5-year growth period for planted vegetation after completion of construction.
- The project proponent would implement a long-term landscape plan to replace dead or dying trees, maintain the forested nature of the project site, and comply with Marin County fire codes. It is assumed that vegetative clearing and tree removal will be initially caused by grading, removal of existing structures, creating a defensible space around all new structures per code, or by removal of existing dead or highly diseased trees that are currently standing. In addition, removal selected downed wood on the ground plane in forested areas and limbing up trees to avoid fuel ladder conditions would take place.

Many, but not all, of the KOPs identified above and in Figure 3.1-4, "Key Observation Points," provide relatively expansive views to the project site. Attachment A to the Visual Resources Analysis Technical Report (Appendix B) includes, when applicable, panoramic images depicting existing visual conditions at the selected KOPs listed above used for simulations. Visual simulations of the project as seen from the selected KOPs are shown on Figures 3.1-19 through 3.1-26 and consist of images designated "a" and "b," with the existing views identified with an "a" and visual simulations 5 years after construction identified with a "b."

Source: Images produced and provided by 2M Associates in 2022.

KOP #2a – Existing View from Chapel Road (looking north).

Source: Images produced and provided by 2M Associates in 2022.

KOP #2b – Simulation of Project 5 years after construction as seen from Chapel Road.

Figure 3.1-19 KOP #2 Visual Simulation

Source: Images produced and provided by 2M Associates in 2022.

KOP #3a – Existing view from Seminary Drive at Gilbert Drive (looking northeast).

Source: Images produced and provided by 2M Associates in 2022.

KOP #3b – Simulation of Project 5 years after construction as seen from Seminary Drive at Gilbert Drive.

Figure 3.1-20 KOP #3 Visual Simulation

Source: Images produced and provided by 2M Associates in 2022.

KOP #8a – Existing view from Seminary Drive west of Chapel Drive (looking west).

Source: Images produced and provided by 2M Associates in 2022.

KOP #8b – Simulation of Project 5 years after construction as seen Seminary Drive west of Chapel Drive.

Figure 3.1-21 KOP #8 Visual Simulation

Source: Images produced and provided by 2M Associates in 2022.

KOP #10a– Existing view from Brickyard Park (looking northwest).

Source: Images produced and provided by 2M Associates in 2022.

KOP #10b – Simulation of Project 5 years after construction as seen from Brickyard Park.

Figure 3.1-22 KOP #10 Visual Simulation

Source: Images produced and provided by 2M Associates in 2022.

KOP #14a – Existing view from San Francisco Bay Trail /Mill Valley – Sausalito Path (looking northeast).

Source: Images produced and provided by 2M Associates in 2022.

KOP #14b – Simulation of Project 5 years after construction as seen from San Francisco Bay Trail /Mill Valley – Sausalito Path.

Figure 3.1-23 KOP #14 Visual Simulation

Source: Images produced and provided by 2M Associates in 2022.

KOP #17a – Existing view from Drake Avenue, Marin City (looking northeast).

Source: Images produced and provided by 2M Associates in 2022.

KOP #17b – Simulation of Project 5 years after construction as seen from Drake Avenue, Marin City (looking north).

Figure 3.1-24 KOP #17 Visual Simulation

Source: Images produced and provided by 2M Associates in 2022.

KOP #19a – Existing view from Verna Dunshee Trail Overlook, Mount Tamalpais State Park (looking southeast).

Source: Images produced and provided by 2M Associates in 2022.

KOP #19b – Simulation of Project 5 years after construction as seen from Verna Dunshee Trail Overlook, Mount Tamalpais State Park.

Figure 3.1-25 KOP #19 Visual Simulation

Source: Images produced and provided by 2M Associates in 2022.

KOP #23a – Existing view from Richardson Bay adjacent to Shoreline Office Center (looking northeast).

Source: Images produced and provided by 2M Associates in 2022.

KOP #23b – Simulation of Project 5 years after construction as seen from Richardson Bay adjacent to Shoreline Office Center.

Figure 3.1-26 KOP #23 Visual Simulation

THRESHOLDS OF SIGNIFICANCE

Based on criteria derived from the sample Initial Study checklist in Appendix G to the CEQA Guidelines, an impact on aesthetics, light, and glare is considered significant if implementation of a proposed project would do any of the following:

- have a substantial adverse effect on a scenic vista;
- substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- (for a project in a nonurbanized area) substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage points);
- (for a project in an urbanized area) conflict with applicable zoning and other regulations governing scenic quality; or
- create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

ISSUES NOT DISCUSSED FURTHER

Substantial Adverse Effect on a Scenic Vista

A scenic vista is defined as (1) a public view from an existing park, plaza, major roadway, or other public area, or (2) a gateway or panoramic view from areas generally available to the general public. Views from private residences and non-public access areas are not considered scenic views because they are not available to the general public (Appendix B).

There are numerous panoramic and scenic views throughout the area's roadways, trails, public parks, and the Bay. The Fire Lookout and the Verna Dunshee Trail Overlook in Mount Tamalpais State Park could be considered formal designated vista points (Figure 3.1-15, KOP #19 and #20 Photographic Record).

The project would not block public views from any local or designated scenic vista points (Figure 3.1-25, KOP #19 Visual Simulation). Nor would the project block views to any regional landmarks including Richardson Bay, San Francisco Bay, Mount Tamalpais, or from other bayside communities including San Francisco as seen from areas surrounding the project site. Therefore, no substantial adverse effect on a scenic vista would occur as a result of the proposed project, and this topic is not addressed further in this Draft EIR.

Substantially Damage Scenic Resources within a State Scenic Highway

No State scenic highways designated by the California Department of Transportation are located near the project site (Caltrans 2022). Therefore, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway, and no impact would occur. This topic is not addressed further in this Draft EIR.

Substantially Degrade the Existing Visual Character or Quality of Public Views of the Site and its Surroundings

The project site is in an urbanized area, which State CEQA Guidelines section 15387 defines, in pertinent part, as "a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile." The project site is within an urbanized area in the Marin Countywide Plan, specifically within the City-Centered Corridor in eastern Marin County where urban land uses and development primarily occur and are planned to be concentrated in the future (Marin County 2023).

Under Appendix G to the CEQA Guidelines, the question of whether a proposed project would substantially degrade the existing visual character or quality of public views of the site and its surroundings only applies to project sites located in "*non*urbanized areas." In such areas, compared with more developed "urbanized areas," landscapes are more likely to be relatively untouched and subject to degradation by the introduction of new structures. The differences in approach between these two types of areas – nonurbanized and urbanized – was added to Appendix G in revisions made by the California Natural Resources Agency (CNRA) in 2018.

The approach to analysis for projects in urbanized areas reflected two considerations. First, aesthetic assessments in urban contexts are inherently somewhat subjective in character, particularly where projects are proposed in settings that are already highly developed. And second, if building mass and height, by themselves, were treated as adverse "environmental" effects, the prospect that EIRs and negative declarations would call for mitigation in the form of downsizing proposed development carried the risk of disincentivizing higher densities in urbanized areas. Within such areas, comparatively taller, denser development is often appropriate from a planning standpoint in order to make efficient use of both land and infrastructure. Thus, for urbanized areas, the key aesthetic issue under CEQA is whether a proposed development project complies with applicable local rules governing building design, such as setbacks, materials, or height (CNRA 2018).

For these reasons, the County need not address whether the proposed project would substantially degrade the existing visual character or quality of public views of the project site and its surroundings. This topic is not addressed further in this Draft EIR. The proper focus will be on whether the proposed project would conflict with applicable zoning and other regulations governing scenic quality.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: Conflict with Applicable Zoning and other Regulations Governing Scenic Quality

Key elements of the project's development that would affect its ability to conform to County policies are development color palette, bulk, and relationship to the project site's local ridgelines as seen from lower elevations. This impact would be **potentially significant**.

Short-Term Construction Impacts

During project construction, the following may be seen throughout the immediate project area as well as from all KOPs in the foreground, and to a lesser extent, the middle ground:

- Removal of existing vegetation;
- Demolition of existing structures and off-hauling of materials;
- Cut and fill grading necessary to develop project area access roads and building sites;
- Fill placement at the existing playing field;
- Large pieces of equipment used for: moving earth; trenching ditches; transporting, lifting, placing materials; hauling cement; water trucks spraying water to control dust; and assorted construction vehicles; and
- Construction activities for individual of project facilities.

These activities would be dominant features in the landscape setting and would attract attention to the project. It would usually not be feasible to fully screen or avoid the visibility of all project construction activities; however, buildout of the project is proposed to occur within several phases over approximately four years categorized by the project components: residential development, academic uses, and landscaping and site improvements. Because project construction is anticipated to occur in phases and in different areas of the project site, visual impacts from construction would be temporary and considered **less than significant**.

Long-Term Operational Impacts

The project is in an urbanized area within the jurisdiction of Marin County. As such, and as explained earlier, the significance of visual impacts is defined by the consistency of the project with the adopted goals, policies, and guidelines relating to visual character and quality. These are contained in the Marin Countywide Plan, Marin County Development Code, and Strawberry Community Plan and Amendments. The project proposes a series of new amendments to the Strawberry Community Plan that relate to overall development within the project site.

Long-term impacts to the visual character of the Strawberry area as seen by the general public would principally be related to changes in views created by the presence of new development. Key elements of the project's development

that would affect compatibility with County policies are color palette, bulk, and relationship to the project site's local ridgelines as seen from lower elevations. The main color palette for most buildings would consist of relatively light-valued materials including light beige cement plaster.

Table 3.1-1 below provides an overview of the project's impact on the existing visual character as seen from all KOPs. KOP ID numbers with an asterisk identify those used for preparing photo simulations.

Table 3.1-1 Impact on Visual Character from Key Observation Points

KOP ID#	Location	Impact Description
1	Chapel Drive: On the sidewalk in front of the residence at 125 Chapel Drive.	Immediate foreground view to the open grassland hilltop would be modified to a developed landscape with clustered apartments on the side slopes of the hill. The majority of the structures are attached which visually increases their overall bulk. However, the resulting development would be coherent and unified. The hilltop would remain open space but converted to a formal, rectilinear viewing plaza with perimeter canopy/arbor structure. As Chapel Hill and its slopes would be redeveloped in their entirety, the resulting fit between new structures and open space would also be harmonious. Light-valued surfaces of architectural components would present a striking contrast and draw attention to the buildings. The visibility of the apartments from Chapel Drive would depend on the landscaping along Chapel Drive.
2 *	Chapel Drive: On the sidewalk across from the residence at 141 Chapel Drive.	See simulation (Figure 3.1-19, KOP #2 Visual Simulation). The view north over the existing playing field includes the Shuck Drive Knoll, Hodges/Shuck, Reed/Storer/Shuck, and a portion of Dormitory Hill Planning Areas. The view would be significantly altered with the removal of random sparse structures and development of tightly spaced distinct housing located along the existing road system. Light-valued surfaces of architectural components would contrast with the grassland and forest backdrop and draw attention to the buildings. Landscape and undeveloped open space between the structures would remain visible in some areas and visually break up the various development clusters. Only the upper floors of the taller six-story structures at the corner of Hodge and Shuck Drives would be visible. The apartment buildings being located at the lower elevations of the project site would be visually backdropped by hillside topography and smaller apartments of a similar architectural style.
3 *	Seminary Drive: On the sidewalk opposite the Gilbert Drive intersection	See simulation (Figure 3.1-20, KOP #3 Visual Simulation). Views to the playing field would be eliminated from Seminary Drive with the creation of a 1:1 (horizontal to vertical) gradient fill slope. The slope would be landscaped with native trees that would filter existing views up the toward Dormitory Hill. Views beyond the elevated playing field would include the upper stories of the residential care facility and the six-story apartment buildings in the Hodges/Shuck Planning Area. As seen from Seminary Drive, views to the structures would be further filtered by street trees and landscape in and between the structures.
4	Seminary Drive: On the sidewalk at the driveway entrance to 150 Seminary Drive.	Similar to KOP #3 (Figure 3.1-7, KOP #3 and #4 Photographic Record), views to the playing field and hillside backdrop would be eliminated with a 1:1 gradient slope in the immediate foreground. The redwood grove would remain. The slope would be landscaped with trees.
5	Seminary Drive: On the sidewalk near the pedestrian path along the bay shore behind 150 Seminary Drive.	Views to the forested Seminary Point would be altered by with the inclusion of light-valued surfaces on two- to three-story structures that would contrast with the darker forest vegetation and change what is not seen as essentially undeveloped hillside. Since the structures are sited relatively low on the hillside, the local ridgeline backdrop would remain.
6	Seminary Drive: On the street adjacent to 110 Seminary Drive and Strawberry Shores Apartments.	The view is funneled along the street by adjacent apartment and condominium buildings focusing on the exiting hillside vegetation above the existing playing field. The Monterey pine trees would initially remain with locally native tree species replacing them over time. Raising the playing field would not be seen because the existing condominium structure at 150 Seminary Drive blocks the view. The rest of the project site would not be visible.
7	Ricardo Drive: On the sidewalk opposite the residence located at 301 Ricardo Drive.	Because of topography, views to most of the proposed project development would not be seen. The existing forest buffer on the north and west sides of Shuck Knoll (noting that some of the forest is not within the project boundaries) would generally screen development on the upper portions of Shuck Knoll.

KOP ID#	Location	Impact Description
8 *	Seminary Drive: Approximately 150 feet west from intersection with Chapel Drive.	See simulation (Figure 3.1-21, KOP #8 Visual Simulation). Three units of the proposed apartments would be seen along the lower portions of Seminary Point. When seen individually, their scale and bulk would be smaller than the duplex units in the foreground. The forest immediately around the structures would be thinned/cleared for fire protection making the structures more visible. Light-valued surfaces of architectural components would present a striking contrast with the forest setting and draw attention to the buildings. The ridgeline would not be altered.
9	Strawberry Cove Park: From edge of developed playground / picnic area.	The units that replace the existing apartments would be seen due to forest thinning and would draw attention due to the light-valued surfaces of architectural components that would contrast with the forest setting. The ridgeline would not be altered.
10 *	Brickyard Park: From edge of developed playground / picnic area.	See simulation (Figure 3.1-22, KOP #10 Visual Simulation). Similar to KOP #8 (Figure 3.1-9, KOP #7 and #8 Photographic Record), portions of three or four apartment units would be seen along the lower portions of Seminary Point. The ridgeline would not be altered.
11	Shoreline Access Path: At end of Egret Way.	The foreground view to the existing rooflines of the academic buildings in the Academic Campus Planning Area would remain. The view would not change.
12	Interpretive Overlook, Richardson Bay Audubon Center & Sanctuary.	The campus library and cafe can be seen as one component of the fully developed east-facing hillside of the Strawberry Peninsula. As no changes are proposed in this portion of the project site, the view would not be altered.
13	San Francisco Bay Trail / Tiburon Old Rail Trail.	The middle ground view to the east side of Dormitory Hill ridgeline would change only slightly. The existing campus library and cafe would be seen with the horizontal roofline of the highest level of the residential care facility that will replace the visible upper levels of the existing dormitories along the ridgeline. The residential care facility would be unified with the existing topography. Overall, the lines of the structure would parallel the ridgeline and generally blend with the texture of the fully developed east-facing hillside of the Strawberry Peninsula.
14 *	San Francisco Bay Trail / Mill Valley – Sausalito Path.	See simulation (Figure 3.1-23, KOP #14 Visual Simulation). The forms of Chapel Hill and Seminary Point are openly visible. These topographic features screen the rest of the project area from view. The vegetation at the top of Chapel Hill Park would screen the development on the east side of Chapel Drive. Most of the apartments proposed at Seminary Point would be visible. When seen individually, or in mass, their scale and bulk would be similar to the duplex units along Seminary Drive. The forest immediately around the structures would be thinned/cleared for fire protection making the structures more visible. Light-valued surfaces of architectural components will present a striking contrast with the forest setting and draw attention to the buildings. The ridgeline would not be altered.
15	Highway 101: Traveling north.	Views to the project site are available when traveling north on Highway 101 from the Sausalito-Marin City Exit to the end of the Highway 101 bridge over Richardson Bay. In some sections, views from the highway are generally blocked by development along Bridgeway until approaching the bridge spanning Richardson Bay. On the bridge, views are blocked by commercial buildings on the south and De Silva Island on the north. For all vehicles traveling north, views from the Sausalito-Marin City Exit to the project site could last from approximately 75 seconds when traveling 65 miles per hour (mph) with approximately 17 seconds of that being open views while on the bridge. On the bridge, views begin at a 30-degree angle at the southern end of the bridge and increase to a 90-degree angle nearing De Silva Island. The visibility of project site would be similar to that of KOP #23 (Figure 3.1-17, KOP #23 and #24 Photographic Record) except with a more superior perspective.
16	Golden Gate National Recreation Area, Alta Trail	At the lower elevations of the Golden Gate National Recreation Area trail system, middle ground views are often blocked by trailside vegetation. Where views are available, they are similar to that of KOP #18 (Figure 3.1-14, KOP #17 and #18 Photographic Record) but with a more superior perspective.

KOP ID#	Location	Impact Description
17 *	Drake Avenue.	See simulation (Figure 3.1-24, KOP #17 Visual Simulation). Middle ground views from Marin City to the Forested Knoll of Seminary Point and Chapel Hill Park exist. The Ring Mountain Preserve on the Tiburon Peninsula provides a backdrop to the entire project site. As with KOP #14 (Figure 3.1-12, KOP #13 and #14 Photographic Record), topography and vegetation of Seminary Point would screen most the project area from view. The vegetation at the top of Chapel Hill Park would only partially screen the apartment development on Chapel Hill. The apartments on the south side of Chapel hill would be visible. The bulk and scale of the apartment units would be similar to the houses along the west side of Chapel Drive. The light-valued color of the architectural surfaces would be noticeable. However, the overall visibility of the development over time would depend on the landscaping along Chapel Drive. Most of the apartments proposed at Seminary Point would be visible. When seen individually, or in mass, their scale and bulk would be similar to the duplex units along Seminary Drive. The forest immediately around the structures would be thinned/cleared for fire protection making the structures more visible. Light-valued surfaces of architectural components would present a contrast with the forest setting and draw attention to the buildings. The ridgeline would not be altered.
18	Mount Tamalpais State Park: At the base of fire tower lookout on the east side.	Background panoramic views are available from East Peak of Mount Tamalpais State Park. From this superior position, virtually the entire Strawberry Peninsula can be seen. Visually, only the structure groupings (due to their light-valued architectural surfaces) would be evident as three distinct development areas: Strawberry Point; Chapel Hill; and the Dormitory Hill to Shuck Knoll area. The spaces that are distributed in between these clusters would be revegetated and at a background distance would not be noticeably altered.
19 *	Mount Tamalpais State Park: At the Verna Dunshee Trail Overlook.	See simulation (Figure 3.1-25, KOP #19 Visual Simulation). The view is essentially the same as KOP #18 (Figure 3.1-14, KOP #17 and #18 Photographic Record) but taken from a developed scenic overlook point.
20	Public access pier adjacent to The Spinnaker.	The only portion of the project site that is distinctly visible is Strawberry Point. The roofline of the eastern-most academic building is also visible. While the apartments on Strawberry Point may be seen due to their light-valued architectural surfaces, their scale would be minimal and not affect the overall panorama of Richardson Bay seen from the pier.
21 / 22	Richardson Bay Shoreline at parking area at the end of Bolinas Street behind Seaplane Adventures.	This viewing point is not officially identified as a public shoreline and therefore is little used by the general public. The east-facing panorama over Richardson Bay allows virtually the entire project site to be seen. The visual impacts would be similar to that of KOP #23 (Figure 3.1-17, KOP #23 and #24 Photographic Record) which depicts a publicly accessible shoreline park area.
23 *	Richardson Bay Shoreline public access point adjacent to Shoreline Office Center.	See simulation (Figure 3.1-26, KOP #23 Visual Simulation). Virtually the entire project would be seen from the east-facing panorama over Richardson Bay. This is a similar perspective to what would be seen by kayakers and other boaters on Richardson Bay. The perspective of this KOP to the project site is inferior so that development would be seen behind but above the apartment and condominiums that line the Richardson Bay shoreline along Seminary Drive. The light-valued surfaces and uniform architectural components of the project would present a contrast to surrounding landscape and development. The bulk and scale of the residential care facility is somewhat visually minimized by the stepped nature of the architecture and, though attached, the segmentation of the building into distinct units. The rooflines of the apartments in the top of the Reed/Storer/Shuck Planning Area and the upper-most residential care facility structure would be sky-lined. If on the water, this effect would be more noticeable as one approaches to the western shoreline of Richardson Bay.
24	San Francisco Bay Trail / Mill Valley –Sausalito Path: At Bothen Marsh Preserve.	A middle ground view to Seminary Point is partially blocked by the Highway 101 bridge over Richardson Bay. The bridge is visually located roughly at the same position as the proposed apartments. The remainder of the project site is not visible.
25	Great Circle Drive.	An open view to Chapel Hill is available north of the crest of Great Circle Drive. When driving at 25 mph the view lasts for approximately 5 seconds. The apartment cluster on the south side of Chapel Hill and the redeveloped Chapel Hill Plaza would be noticeably visible. The degree of visibility to the apartments over time will be dependent on the downhill landscaping of the project and street trees planted along the east side of Chapel Drive.

Note: *KOP selected for visual simulation

Open Space

The principal open space feature of the project site is Seminary Point with its Forested Knoll. The overall open space prominence of Seminary Point as seen from any direction would remain; however, the new apartments along Chapel Drive would be seen as a linear feature replacing a portion of the existing woodland landscape along the lower slopes of Seminary Point linking with the existing duplex housing of Seminary Cove.

The project elements located within the Dormitory Hill, Reed/Shuck/Storer, Hughs/Shuck, and Shuck Knoll Drive planning areas would convert a portion of the existing undeveloped private open space areas into housing, the residential care facility, and other community facilities. The visual effect, particularly as seen from inferior viewer positions on Richardson Bay and its western shoreline area, would be seen as the development of these open spaces (KOP #23b, Figure 3.1-26). This change in the visual landscape would be considerably less when seen at higher elevations where open space areas would be observed between development clusters (KOP #18, Figure 3.1-14 and KOP #19, Figure 3.1-15). The side slopes of Chapel Hill would also be developed with the westernmost point of Chapel Hill being reconfigured and developed as a formal vista point but remaining as open space. Chapel Hill Park, also a visual open space as seen from the south and west, would remain untouched.

Scale

The project's proposed apartments and dormitory structures would be generally compatible in scale with the surrounding single-family homes, condominiums, and large apartment buildings that exist along the Richardson Bay shoreline. The mass and scale of the residential care facility, while larger than surrounding buildings, would be minimized by its angled footprint forming two wings that mimic the topography and consist of five floors that step down the slope. The mass and scale of the residential care facility would also be minimized by street trees that would help screen the building and by planting trees between the wings of the buildings, which would further visually separate them. In addition, the horizontal nature of the building would include fenestration of the facade that further visually breaks the building into smaller components.

The mass and scale of the six-story apartment structures proposed at the corner of Hodges Drive and Shuck Drive would be visually distinct when viewed in the immediate foreground from within the project site. Viewed from surrounding areas outside the project site, the lower floors would generally not be visible as the structures would be located in the lower elevations of the project site. While the upper floors of the six-story apartment structures may be seen, they would be similar in color and fenestration to the smaller apartment structures that backdrop them and would thus be visually unified with them.

Color

The exteriors of the proposed buildings are proposed to be light-valued off-white cement plaster. Streets and pedestrian pavements would use high albedo surfaces that are also light valued in color. While off-white and other light-valued colors do appear in the residential structures in the surrounding community, they are intermittent in the overall landscape. With a common architecture throughout the entire proposed development, the overall effect of the buildings taken in their entirety would display a color contrast between the light-color buildings and the surrounding natural landscape that draws the attention of the viewer. This is particularly true for views from the southwest in the afternoon looking at the project over Richardson Bay (Figure 3.1-26, KOP #23 Visual Simulation, shows the off-white, light-valued exterior of the proposed buildings seen from Richardson Bay). While the project appearance internally would be harmonious and coherent, from public viewpoints around the project site, it would draw the viewer's attention contrasting with the established harmony of the surrounding landscape and community.

Views

Views from the North

The project site is blocked from view from the majority of the public street system to the north by continuous residential development, the ridgeline extending from the Reed/Storer/Shuck and Shuck Knoll Drive planning areas, and the existing woodland buffer located along Ricardo Road and Richardson Drive. A portion of the woodland buffer is within the project site. To the extent that the on-site woodland buffer is thinned, the apartments on the west and north sides of the Shuck

Knoll would be seen, though filtered, from the western end Ricardo Road (KOP #7) near Seminary Drive. The scale of the apartments would be in harmony with the scale of residences along Ricardo Road and the Vista Del Sol neighborhood.

Views from the Northeast and East

Views from the Tiburon Peninsula (KOP #12, Figure 3.1-11) and (KOP #13, Figure 3.1-12) into the project site are generally blocked by the ridgeline connecting the Campus, Dormitory Hill, and Reed/Storer/Shuck planning areas and by existing mature vegetation along the residential area of East Strawberry Drive. Project facilities would not be seen with the exception of portions of the uppermost level of the residential care facility. The flat roofline would parallel the topography and would be backdropped by the ridgelines of the Golden Gate National Recreation Area. Views from Egret Way (KOP #11, Figure 3.1-11) to the existing campus buildings would not change.

Views from the South

Views of the Chapel Hill Planning Area apartments would be directly visible from Chapel Drive (KOP#1, Figure 3.1-6) in the immediate foreground and from Great Circle Drive (KOP #25, Figure 3.1-18). The degree of visibility would be dependent on street trees and landscaping associated with the final project design. When driving, views into the project site would be relatively short.

Open views into the project site in the immediate foreground to the majority of apartments and dormitory development in the Reed/Storer/Shuck, Hodges/Shuck, and Shuck Knoll planning areas would be afforded from Chapel Drive (Figure 3.1-19, KOP #2 Visual Simulation). The central portions of the project site would change from one of scattered structures to more intense but clustered development as represented in the simulations for KOP #2 (Figure 3.1-19, KOP #2 Visual Simulation) and KOP #23 (Figure 3.1-26, KOP #23 Visual Simulation).

For the remainder of views from the south, most of the project is blocked by the ridgeline from the Academic Campus Planning Area to Seminary Point. Views focus on the Forested Knoll of Seminary Point. Apartment development on Seminary Point would be seen from Seminary Drive (KOP #8, Figure 3.1-21) and from Brickyard Park (KOP #10, Figure 3.1-22). Only a portion of the apartment development would be seen from the south and would be smaller in scale than that of the existing duplex housing. A cleared area would be created from grading associated with the project cutting into the hillside to meet fire code around structures, and from thinning of the forest to remove downed undergrowth and dead and/or diseased trees.

Views from the Southwest and West

The greatest visual impact of the project is for views from the southwest and west where a significant portion of the project site is viewed. The project would require approximately 220,000 cubic yards of cut and fill, which would be balanced on-site by raising the Seminary Playing Field approximately 25 to 30 feet as seen from Seminary Drive. The result is that an existing view to the playing field in the immediate foreground from Seminary Drive (KOP #3, Figure 3.1-20, KOP #3 Visual Simulation) that takes the eye into the project site would become a view to a vegetated slope with a 1:1 gradient (horizontal to vertical). The view from Seminary Drive traveling east (KOP #4, Figure 3.1-7) would be altered similarly to that of KOP #3 (Figure 3.1-20, KOP #3 Visual Simulation), but with the steep slope behind the existing redwood grove. Because of vegetation removal required by the project to place the fill and construct the residential care facility, the upper levels of the residential care facility would be seen against a skyline backdrop. The degree of screening of the residential care facility will be dependent on the density and coverage of native shade tree planting indicated for the hillside.

The central portions of the project site consisting of student housing and dormitories would change from one of scattered structures to more intense but clustered development as seen in the middle ground from the Sausalito shoreline (KOP #13, Figure 3.1-12; KOP #21, Figure 3.1-16; KOP #23, Figure 3.1-17), Highway 101 (KOP #15, Figure 3.1-13), and to varying degrees, from the trail system of the Golden Gate National Recreation Area. The project would visually reflect the single- and multiple-family residential development that cover the Strawberry Peninsula and that, except for Watertank Hill, surrounds it. However, while there is visually dense clustered development, many areas within the project site would remain undeveloped land that visually continues to provide an open space foil for the remainder of the Strawberry Peninsula. Notably, these are the Forested Knoll, Chapel Hill Park, and the upper slopes of Dormitory Hill.

The proposed apartments mid-slope along Seminary Point, the most visually prominent feature of the project site, would be seen in the foreground from Seminary Drive (KOP #6, Figure 3.1-8), Strawberry Cove Park (KOP #9, Figure 3.1-10), and in the middle ground from the Sausalito shoreline and the San Francisco Bay Trail (KOP #14, Figure 3.1-23), Highway 101 Richardson Bay (KOP #23b, Figure 3.1-26), Marin City (KOP #17b, Figure 3.1-24), and, again to varying degrees, from the trail system of the Golden Gate National Recreation Area (KOP #16, Figure 3.1-13).

Regulatory Framework Consistency Analysis

Table 3.1-2 below provides a consistency analysis of the project with the goals, policies, and guidelines listed in Section 3.1.1. The County's policies generally direct that the natural appearance of hills, visually prominent ridgelines, and other prominent or significant landforms be preserved; views to the Bay and lowlands be maintained; the visual crest of the hillsides are not interrupted; and that materials and colors should unobtrusively blend with the natural environment.

Table 3.1-2 Policy Consistency Analysis

Policy	Consistency Analysis
Marin Countywide Plan: Built Environment Element	
Goal DES-3: New Development in Built Areas	Consistent: Proposed development would be visually clustered with open space surrounding and between building clusters.
DES-3.1 Promote Infill	Consistent: The visual character of surrounding neighborhoods on the Strawberry Peninsula is continuous development with little to no visual open space between structures. The project would visually expand that development but with open spaces.
DES-3.2 Promote Green Spaces	Consistent: Visual open space and park areas would be either preserved or redeveloped as approximately 70 percent of the project site is proposed to be maintained as undeveloped space. The project would be designed to preserve existing viewsheds and the Strawberry ridgeline; establish new parks, trails, and pedestrian pathways; and provide the community access to open space.
Goal DES-4: Protection of Scenic Resources	Consistent: No existing vistas to important natural features would be blocked. The form of Seminary Point, the major visible natural feature of the project site, would not be changed and would continue to be a locally dominant natural promontory.
DES-4.1: Preserve Visual Quality	Consistent: Though more expansive, the project would create a harmonious, ordered, and coherent development within the project site as compared to existing improvements.
Marin Countywide Plan: Implementing Programs	
DES-4.a Protect Key Public Views	Consistent: Key view corridors identified in the Strawberry Community Plan (see below) and through public scoping comments are from Chapel Hill and to Seminary Point. These key view corridors would not be blocked.
DES-4.b Minimize Visual Impacts of Public Facilities	Consistent: Most of the parking related to new structures would be interior or in underground garages. All utilities would be underground. Predominantly native tree and shrub species would be used to reduce visual impacts.
DES-4.c Regulate Mass and Scale	Potentially Inconsistent Unless Mitigated: Most project structures conform with the bulk and scale of existing development on the Strawberry Peninsula. Visibility to the residential care facility is limited to public views from the southwest. The residential care facility would be stepped to follow the existing topography and broken into distinct building components. Implementation of Mitigation Measures 3.1-1b and 3.1-1c, combined with site landscaping, over time, would reduce visibility and further disguise the bulk of the structure visually. Due to their location along the lower elevations of the project site, the three six-story apartment buildings at the corner of Hodges Drive and Shuck Drive would have limited exposure to surrounding areas. The upper floors may be seen from selected locations but would be backdropped by topography and other development similar in color and texture to the apartment structures such that the bulk of the buildings would be visually blended with the overall development.

Policy	Consistency Analysis
DES-4.d: Protect Views of Ridgelines	Potentially Inconsistent Unless Mitigated: Map 3-4 of the Marin Countywide Plan does not show the project site within a Ridge or Upland Greenbelt area to be protected. Most of the development visible to the general public would be clustered below local ridgelines. The uppermost component of the residential care facility is a horizontal structure with a roofline that would parallel existing topography. Public visibility to the project site is limited to a middle ground view from Tiburon (KOP #13, Figure 3.1-12), views from the west including Seminary Drive (KOP #2, Figure 3.1-19), and middle ground views from the edge of Richardson Bay (KOP #23b, Figure 3.1-26). This effect would be eliminated with the implementation of Mitigation Measures 3.1-1b and 3.1-1c, which, combined with site landscaping, over time, would reduce visibility and further protect views of local ridgelines.
DES-4.e: Protect Views of Ridge and Upland Greenbelt Areas	Consistent: Map 3-4 of the Marin Countywide Plan does not show the project site within a Ridge or Upland Greenbelt area to be protected.
Marin County Development Code – Section 22.10.040 – Residential District Development Standards	
B. Development standards for planned districts	Potentially Inconsistent Unless Mitigated: The uppermost component of the residential care facility is a horizontal structure of which the roofline would parallel existing topography. Public visibility to the project site would be limited to a middle-ground view from Tiburon (KOP #13, Figure 3.1-12), views from the west including Seminary Drive (Figure 3.1-19, KOP #2 Visual Simulation), and middle-ground views from the edge of Richardson Bay (Figure 3.1-26, KOP #23 Visual Simulation). This effect would be eliminated with the implementation of Mitigation Measures 3.1-1b and 3.1-1c.
Marin County Development Code – Section 22.16.030 – General Standards	
D.1 Building location- Clustering requirement	Consistent: Structures would be visually clustered, particularly in open grassland areas between Dormitory Hill and Shuck Knoll. Existing and new plantings would assist in screening most facilities.
D.2 Building Location Development Near Ridgelines	Potentially Inconsistent Unless Mitigated: Development would not occur on an identified regionally prominent ridgeline. However, development would occur within 300 feet of visually prominent local ridgelines. Effects on local ridgelines would be eliminated with the implementation of Mitigation Measure 3.1-1c, which requires planting fast-growing trees so that, with time, a natural-appearing backdrop is created reducing visibility and further protecting views of the local ridgeline.
F. Landscaping	Consistent: Landscaping would be designed to be compatible with the native plant setting. Planting would not block scenic views to Richardson Bay or Mount Tamalpais from adjacent properties.
G. Lighting, exterior	Consistent: Low-wattage fixtures would be directed downward and shielded to prevent adverse lighting impacts on nearby properties.
I.1. Project design: Height Limits	Potentially Inconsistent Unless Mitigated: The local Dormitory Hill ridgeline includes a wide plateau in the saddle between the Academic Campus and the Reed/Storer/Shuck planning areas. The uppermost component of the residential care facility extends approximately 39.75 feet above the plateau at its highest point and would be seen above the ridgeline from various locations. This effect would be eliminated with the implementation of Mitigation Measure 3.1-1c, which requires planting fast-growing trees so that, with time, a natural-appearing backdrop is created reducing visibility and further protecting views of the local ridgeline.
I.2 Project design: Materials and colors	Potentially Inconsistent Unless Mitigated: The light-valued colors of the structures and albedo pavements would contrast with colors of the natural environment. Implementation of Mitigation Measure 3.1-1d would visually blend new structures with the natural environment and mimic the variety and pattern of colors in the surrounding residential areas.

Policy	Consistency Analysis
Marin County Development Code – 22.26.040 Landscaping Objectives	
A. Provide visual amenities	Consistent: Proposed landscaping would enhance the appearance of new development and surrounding areas by being designed, installed, and maintained to blend new structures into the context of the established community.
D. Screen incompatible land uses	Potentially Inconsistent Unless Mitigated: Landscaping as part of the development combined with Mitigation Measures 3.1-1a and 3.1-1b would screen the project and would create visual separation from adjacent residential areas.
Marin County Development Code – 22.42 Design Review. 22.42.010 – Purpose of Chapter	
D. Natural Beauty	Consistent: Visually the project would result in a highly ordered and coherent development preserving Seminary Point, vistas from Chapel Hill, and respecting the local ridgelines between Chapel Hill and Shuck Knoll.
G. Conflicts	Potentially Inconsistent Unless Mitigated: With vegetative screening as recommended in Mitigation Measures 3.1-1a and 3.1-1b, visual conflicts with surrounding areas are minimized.
Strawberry Community Plan (1973)	
General Design Guidelines: Landscaping	Potentially Inconsistent Unless Mitigated: Landscaping as part of the development combined with Mitigation Measure 3.1-1a will be used to screen views and provide privacy.
General Design Guidelines: Ridgelines	Consistent: Hilltops, forested areas, and other prominent visual landmarks are recognized in the project design. The form of Seminary Point, the major visible natural feature of the project site, would be preserved in its natural state. Chapel Hill consisting of a leveled hilltop, would be retained as a developed overlook to Richardson Bay with proposed apartments located on the slopes below it.
General Design Guidelines: View corridors	Consistent: No existing public view corridors to Richardson Bay, San Francisco Bay, Mount Tamalpais, or other regional landmarks including San Francisco would be blocked.
Specific Policy Framework 2.0 Preserve and Enhance the Scale and Character of the Area	Consistent: The project would preserve the natural appearance and ridgeline of Strawberry Point. Chapel Hill, partially graded in the past, would be reconfigured and developed as a formal vista point. The project would not interfere with views from ridges or hilltops to the Bay or lowlands. No structures would interrupt a continuous view of the visual crest of the surrounding hillsides from adjacent lowlands.
Strawberry Community Plan and Amendments (1982) Note: The project is a proposed amendment to the Strawberry Community Plan.	
II. Goals	
A. Community Amenities	Consistent: Proposed development would retain visual backdrops and provide visual neighborhood separators by retaining existing vegetation through landscaping and revegetation. Local ridgelines would be visually retained or in the case of the residential care facility, mimicked in the lines of the architecture. New structures would be generally clustered.
III. Development Guidelines	
C. Golden Gate Baptist Theological Seminary – Land Use (Area 5)	Consistent: A band of open undeveloped land extending from Chapel Drive to Seminary Drive would be retained in the Chapel Hill Park.
C. Golden Gate Baptist Theological Seminary – Land Use (Area 6)	Potentially Inconsistent Unless Mitigated: Housing is proposed on the sides of Chapel Hill. However, the housing is sited to be lower than the promontory of the hill and would not block views from the hill. Landscaping proposed as part of the project combined with Mitigation Measure 3.1-1a would screen views of the structures from existing dwellings.

Policy	Consistency Analysis
C. Golden Gate Baptist Theological Seminary – Land Use (Area 8)	Consistent: Existing mid-to lower slope development on Seminary Point would be replaced and expanded. However, Seminary Point would remain a visually prominent visual landmark in the Community.
E. General Design Guidelines: Landscaping	Consistent: Landscaping would be used to screen views and provide privacy.
E. General Design Guidelines: Ridgelines	Consistent: Hilltops, forested areas, and other prominent visual landmarks are recognized in the project design. The form of Seminary Point, the major visible natural feature of the project site, would be preserved in its natural state. Chapel Hill, while being more formally developed, would be retained as an overlook to Richardson Bay with proposed apartments located on the slopes below it.
E. General Design Guidelines: View corridors	Consistent: No existing public view corridors to Richardson Bay, San Francisco Bay, Mount Tamalpais or other regional landmarks including San Francisco would be blocked.
Specific Policy Framework	
2.0 Preserve and Enhance the Scale and Character of the Area.	Consistent: The project would preserve the natural appearance and ridgeline of Strawberry Point. Chapel Hill, partially graded in the past, would be reconfigured and developed as a formal vista point. The project would not interfere with views from ridges or hilltops to the Bay or lowlands. No structures would interrupt a continuous view of the visual crest of the surrounding hillsides from adjacent lowlands.

Potentially significant visual impacts would be related to applicable policies addressing scenic quality where environmental impacts are indicated as "potentially inconsistent unless mitigated." The environmental impacts include changes to views into the project site from surrounding streets and trails, the contrasting color of structures, and the bulk and sky lining effects of the residential care facility. The following mitigation measures would reduce potentially significant impacts through detailed planting and architectural color designs implemented during the Design Review process.

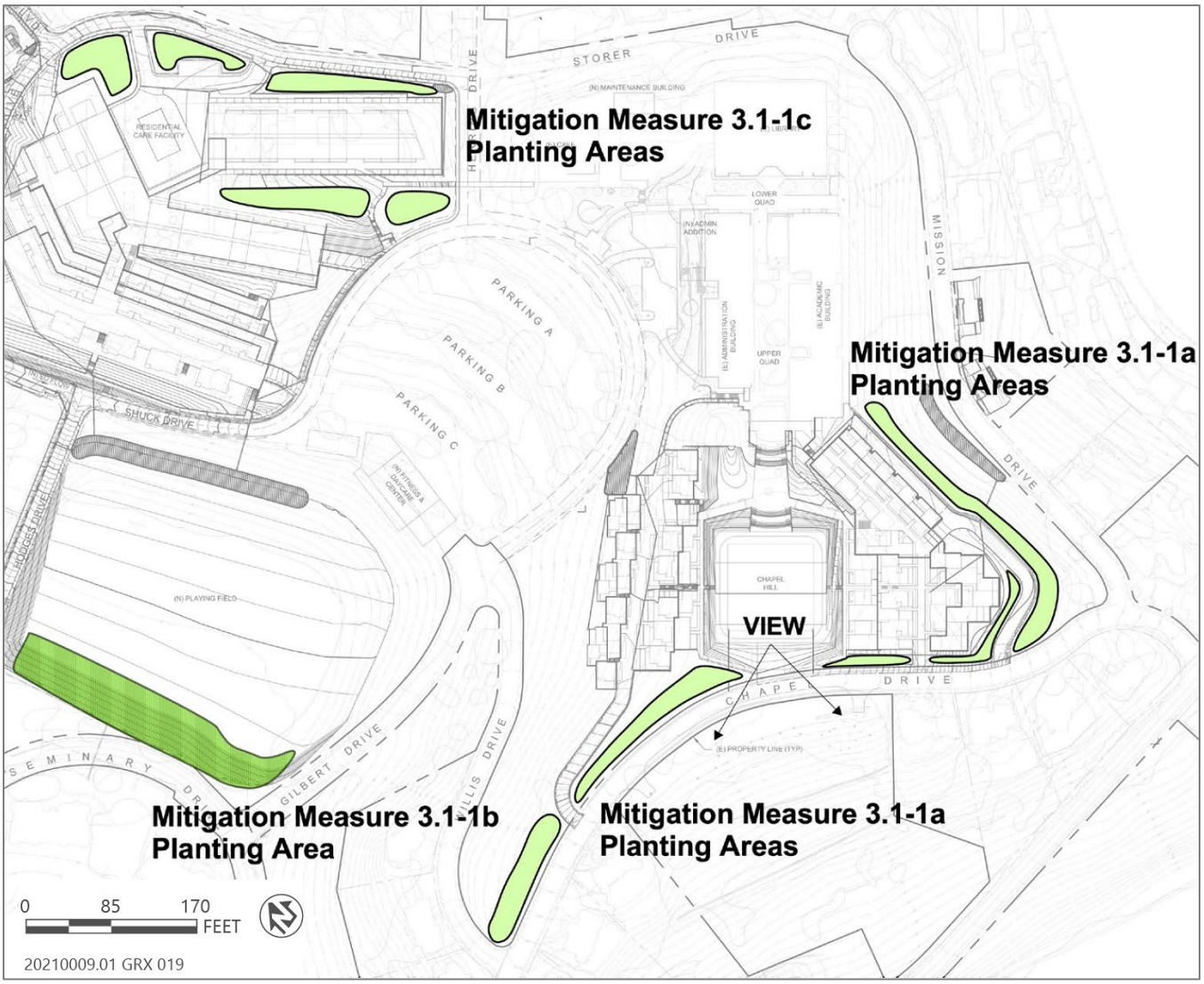
Mitigation Measures

Mitigation Measure 3.1-1a: Buffer Views

To visually buffer views into the project from adjacent streets, project plans, in compliance with County defensible space and landscape plan requirements, shall specify evergreen shrubs and trees along the north side of Chapel Drive, including the south slopes of Chapel Hill extending from Mission Drive to Willis Drive, that:

- Screen and/or block views of the project housing on the sides of Chapel Hill when driving along Chapel Drive.
- Screen and/or block views into the central area of the project on the south side of Chapel Drive west of Chapel Hill.
- Maintain a view corridor to Richardson and San Francisco Bays from Chapel Hill.

Figure 3.1-27, "Mitigation Planning Areas," identifies planting areas where this measure shall be implemented.



Source: Images produced and provided by 2M Associates in 2024

Figure 3.1-27 Mitigation Planning Areas

Mitigation Measure 3.1-1b: Screen Views

To screen views of the residential care facility as seen from Seminary Drive (KOP #3), project plans, in compliance with County defensible space and landscape plan requirements, shall specify native shade trees on the hillside created by fill placement immediately adjacent to Seminary Drive to extend over the top of the fill and onto the playing field level. Project plans shall also specify a naturalistic hedgerow of screening shrubs along the top edge of the slope to further block views uphill. Figure 3.1-27, Mitigation Planning Areas, identifies planting areas where this measure shall be implemented.

Mitigation Measure 3.1-1c: Specify Fast-Growing Trees

To mitigate the sky-lining effects of the residential care facility as seen from the west and southwest, project plans, in compliance with County defensible space and landscape plan requirements, shall specify a variety of fast-growing trees planted on the north and east sides of the facility so that, with time, a natural-appearing backdrop is created.

Mitigation Measure 3.1-1d: Reduce Color Contrast

To reduce the color contrast with the surrounding natural landscape and community setting created by the use of only light-valued cement plaster building material, project building materials shall use a variety of light and slightly darker-valued earth-toned materials that are flat and non-reflective (either integral to the material or painted).

Significance after Mitigation

Views into the project site from surrounding streets and trails, the color of the structures, and the bulk and sky-lining effect of the residential care facility associated with the proposed project would conflict with applicable zoning and other regulations governing scenic quality. Implementation of Mitigation Measures 3.1-1a through 3.1-1d would ensure that the project would not conflict with applicable zoning and other regulations governing scenic quality. This impact would be **less than significant with mitigation**.

Impact 3.1-2: Create a New Source of Substantial Light or Glare that would Adversely Affect Day or Nighttime Views in the Area

Although project implementation would result in an incremental increase in the amount of light on the project site, the project would adhere to the County's outdoor lighting standards, which require that lighting sources be designed and constructed in a manner that is consistent with Marin County's Design Review Standards and Development Code to avoid light spillage on adjacent properties and in private spaces. However, the project would include the use of high albedo surfaces, which could create solar reflectivity and glare that could affect daytime and nighttime views. Within the project site, use of high albedo coefficient materials may also potentially compromise outdoor thermal comfort, indoor thermal environments, and potentially affect nearby plant growth characteristics. This impact would be **potentially significant**.

Short-term Construction Impacts

Glare would be introduced to the project area during construction from windshields of vehicles and construction equipment. These would be small sources of glare, would be at ground level, and would not adversely affect daytime views of the area. Additionally, in conformance with Marin County Development Code Section 6.70.030, construction activities would occur during daytime hours, between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and from 9:00 a.m. to 5:00 p.m. on Saturdays. Security lighting may be used on site at night and could represent a new source of lighting. Upon completion of construction, on-site construction vehicle activities would cease, and the impact associated from glare and lighting would be temporary. Given the temporary nature of construction and the surrounding development, project construction would have a **less-than-significant** impact related to light or glare.

Long-term Operational Impacts

The project would include lighting improvements within internal roads and pedestrian pathways. New lighting would consist of low-wattage fixtures that would be shielded and directed downward to prevent spillover effects to residential neighbors. New residential housing areas would be set behind the native tree line and would include screening and window placement designed to minimize light exposure to the west. Many existing trees that surround the non-residential buildings would remain in place, and it is expected that these trees would reduce light exposure.

The project will meet Marin County's outdoor lighting standards since the project would implement low-wattage fixtures that would be directed downward and shielded to prevent adverse lighting impacts on nearby properties. Furthermore, as discussed above in Section 3.1.1, "Regulatory Setting," all luminaries shall meet the most recently adopted criteria of the Illuminating Society of North American (IESNA) for "full cut off" luminaries. Therefore, the project would not create a new source of substantial light that would adversely affect day or nighttime views in the area.

In relation to glare, albedo, sometimes referred to as 'reflection coefficient', is a measure of how reflective a surface is. Albedo is commonly defined by a coefficient value between 0 and 1. The higher the value, the more energy is reflected back to the source. Complete reflection is 1 or 100 percent, and complete absorption is 0. There are no standards in the Marin County building code addressing albedo. The *2022 California Green Building Standards Code, Title 24 Section A4.106.7 Reduction of Heat Island Effect on Nonroof Areas* states as follows: "Use high albedo materials with an initial solar reflectance value of at least 0.30 as determined in accordance with American Society for Testing and Materials

(ASTM) Standards E1918 or C 1549." This is a minimum threshold. For roofs the minimum value threshold varies by Building Climate Zone and building type tier levels (low-rise and high-rise). The project site is in Building Climate Zone 3. There are no minimum thresholds values indicated in the code for low-rise residential roofs in Zone 3.

Depending on the reflective coefficient value to be employed, albedo surfacing materials used on the horizontal surfaces of the project (streets, pedestrian walks and plazas, and roofs) may create solar reflectivity and glare that could affect daytime and nighttime views. During the daytime, glare would be uncomfortable to the eye. At night, the main concern would be that of visibility of surface markings and traffic signs. In either case, there is common concern during wet conditions when surface markings may become difficult to notice. Within the project site, use of high albedo coefficient materials may also potentially compromise outdoor thermal comfort, indoor thermal environments, and potentially affect nearby plant growth characteristics.

Viewers most affected would be the residents and visitors within the project area. Foreground views from neighboring areas located above the project site looking downward into the project site could also be affected such as along Campus Drive (KOP #2). The remaining foreground and middleground views into the project site from surrounding areas are generally from inferior viewing positions such that there would be no significant glare impacts caused by use of albedo materials.

Since the project could create a new source of substantial glare that would adversely affect daytime and nighttime views in and around the project area, this would result in a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.1-2: Reflectance Coefficients for Albedo Surfaces

The reflectance coefficients for albedo surfaces (streets, pedestrian walks and plazas, and roofs) used for the project shall not exceed a maximum coefficient of 0.6 as higher values would entail glare issues. Compliance with this maximum coefficient shall be verified by the Architect of Record as part of the design review process.

Significance after Mitigation

The implementation of Mitigation Measure 3.1-2 would ensure that the reflectance coefficients for albedo materials would not exceed a maximum of 0.6. Implementation of Mitigation Measure 3.1-2 would reduce new sources of substantial glare that would otherwise adversely affect day or nighttime views in the area and would therefore reduce this impact to **less than significant with mitigation**.

3.2 AIR QUALITY

This section includes a discussion of existing air quality conditions, a summary of applicable air quality regulations, and an analysis of potential short-term and long-term air quality impacts that could result from implementation of the project. Mitigation is developed as necessary to reduce significant air quality impacts to the extent feasible.

Scoping comments received regarding air quality in response to the notice of preparation (NOP) requested that the EIR address air quality emissions and health effects from increased traffic during construction as well as exhaust from cars idling at intersections; operational traffic particulate emissions; and dust monitoring during construction. See Appendix A for all NOP comments received.

3.2.1 Regulatory Setting

Air quality in the project area is regulated through the efforts of various federal, State, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality in the San Francisco Bay Area Air Basin (SFBAAB) are discussed below.

FEDERAL

In *Massachusetts et al. v. Environmental Protection Agency et al.,* 549 U.S. 497 (2007), the Supreme Court of the United States ruled that carbon dioxide (CO_2) is an air pollutant as defined under the federal Clean Air Act (CAA) and that the U.S. Environmental Protection Agency (EPA) has the authority to regulate GHG emissions. In 2010, the EPA started to address GHG emissions from stationary sources through its New Source Review permitting program, including operating permits for "major sources" issued under Title V of the CAA.

The National Highway Traffic Safety Administration (NHTSA) also regulates vehicle emissions through the Corporate Average Fuel Economy (CAFE) Standards.

The CAFE Standards, which were first enacted by Congress in 1975, set fleet-wide averages that must be achieved by each automaker for its car and truck fleet. The purpose of the CAFE Standards is to reduce energy consumption by increasing the fuel economy of cars and light trucks. On April 1, 2022, Transportation Secretary Pete Buttigieg unveiled new CAFE standards for 2024–2026 model year passenger cars and light-duty trucks, requiring new vehicles sold in the US to average at least 40 miles per gallon.

EPA has also adopted emission standards for different types of non-road engines, equipment and vehicles. For nonroad diesel engines, EPA has adopted multiple tiers of emission standards.

EPA signed a final rule on May 11, 2004, introducing the Tier 4 emission standards, to be phased in between 2008 and 2015 (69 Code of Federal Regulations (CFR) 38957–39273, June 29, 2004). The Tier 4 standards require that emissions of PM and NO_X be reduced by about 90 percent. Such emission reductions can be achieved through the use of control technologies, including advanced exhaust gas after-treatment. To enable sulfur-sensitive control technologies in Tier 4 engines, EPA also mandated reductions in sulfur content in nonroad diesel fuels. In most cases, federal nonroad regulations also apply in California, which has limited authority to set emission standards for new nonroad engines. The CAA preempts California's authority to control emissions from new farm and construction equipment less than 175 horsepower (hp) (CAA Section 209[e][1][A]) and requires California to receive authorization from the EPA for controls over other off-road sources (CAA Section 209[e][2][A]). New engines built in and after 2015 across all horsepower sizes must meet Tier 4 final emission standards. In other words, new manufactured engines cannot exceed the emissions established for Tier 4 final emissions standards.

See Section 3.7, Greenhouse Gas Emissions and Climate Change Vulnerability, for a detailed analysis of GHG emissions and climate change.

Criteria Air Pollutants

The CAA required EPA to establish the National Ambient Air Quality Standards (NAAQS) (42 United States Code Section 7409). As shown in Table 3.2-1, EPA has established primary and secondary NAAQS for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide, respirable particulate matter with an aerodynamic diameter of 10 micrometers or less (PM_{10}), fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$), and lead. The primary standards protect the public health, and the secondary standards protect public welfare. The CAA also requires each state to prepare a state implementation plan (SIP) for attaining and maintaining the NAAQS. The federal CAA amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. Individual SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and whether implementation will achieve air quality goals. If EPA determines a SIP to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary air pollution sources in the air basin.

Table 3.2-1 National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California (CAAQS)[a,b]	National (NAAQS)[c] Primary[b,d]	National (NAAQS)[c] Secondary[b,e]
Ozone	1-hour	0.09 ppm (180 µg/m^3)	–[e]	Same as primary standard
	8-hour	0.070 ppm (137 µg/m^3)	0.070 ppm (147 µg/m^3)	
Carbon monoxide (CO)	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	Same as primary standard
	8-hour	9 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	
Nitrogen dioxide (NO_2)	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	53 ppb (100 µg/m^3)	Same as primary standard
	1-hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	—
Sulfur dioxide (SO_2)	24-hour	0.04 ppm (105 µg/m^3)	—	—
	3-hour	—	—	0.5 ppm (1300 µg/m^3)
	1-hour	0.25 ppm (655 µg/m^3)	75 ppb (196 µg/m^3)	—
Respirable particulate matter (PM_{10})	Annual arithmetic mean	20 µg/m^3	—	Same as primary standard
	24-hour	50 µg/m^3	150 µg/m^3	
Fine particulate matter ($PM_{2.5}$)	Annual arithmetic mean	12 µg/m^3	9.0 µg/m^3	15.0 µg/m^3
	24-hour	—	35 µg/m^3	Same as primary standard
Lead [f]	Calendar quarter	—	1.5 µg/m^3	Same as primary standard
	30-Day average	1.5 µg/m^3	—	—
	Rolling 3-Month Average	–	0.15 µg/m^3	Same as primary standard
Hydrogen sulfide	1-hour	0.03 ppm (42 µg/m^3)	No National standards	
Sulfates	24-hour	25 µg/m^3		
Vinyl chloride [f]	24-hour	0.01 ppm (26 µg/m^3)		
Visibility-reducing particulate matter	8-hour	Extinction of 0.23 per km		

Notes: µg/m^3 = micrograms per cubic meter; km = kilometers; ppb = parts per billion; ppm = parts per million.

A California standards for ozone, carbon monoxide, SO_2 (1- and 24-hour), NO_2, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

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

C National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over three years, is equal to or less than the standard. The PM_{10} 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. The $PM_{2.5}$ 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. Environmental Protection Agency for further clarification and current federal policies.

D National primary standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

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

F The California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source : CARB 2016, EPA 2024.

Hazardous Air Pollutants and Toxic Air Contaminants

Toxic air contaminants (TAC), or, in federal parlance, hazardous air pollutants (HAPs), are a defined set of airborne pollutants that may pose a present or potential hazard to human health. A TAC is defined under California law as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. A substance that is listed as a HAP pursuant to subsection (b) of Section 112 of the CAA (42 United States Code Section 7412[b]) is considered a TAC. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

A wide range of sources, from industrial plants to motor vehicles, emit TACs. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects, such as cancer, birth defects, neurological damage, asthma, bronchitis, and genetic damage, or short-term acute effects, such as eye watering, respiratory irritation (a cough), runny nose, throat pain, and headaches.

For evaluation purposes, TACs are separated into carcinogens and noncarcinogens based on the nature of the physiological effects associated with exposure to the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. This contrasts with criteria air pollutants, for which acceptable levels of exposure can be determined and for which ambient standards have been established (Table 3.2-1). Cancer risk from TACs is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure.

EPA and, in California, the California Air Resources Board (CARB) regulate HAPs and TACs, respectively, through statutes (i.e., 42 United States Code Section 7412[b]) and regulations that generally require the use of the maximum achievable control technology or best available control technology for toxics to limit emissions.

STATE

CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA) (California Health and Safety Code Section 40910). The CCAA, which was adopted in 1988, required CARB to establish California Ambient Air Quality Standards (CAAQS) (Table 3.2-1).

Criteria Air Pollutants

CARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. In most cases, the CAAQS are more stringent than the NAAQS. Differences in the standards are generally explained by the health effects studies considered during the standard-setting process and the interpretation of the studies. In addition, the CAAQS incorporate a margin of safety to protect sensitive individuals.

The CCAA requires that all local air districts in the State endeavor to attain and maintain the CAAQS by the earliest date practical. It specifies that local air districts should focus particular attention on reducing the emissions from transportation and areawide emission sources, and it provides air districts with the authority to regulate indirect emission sources.

CARB regulates emission of criteria air pollutants through several programs, regulations, and plans. The 2022 State SIP Strategy (2022 SIP) serves as compilation document of all actions taken by CARB and local air districts to further the attainment of the NAAQS. Pertinent regulations to the project included in the 2022 SIP include, but are not limited to, the Advanced Clean Cars II Program, Advanced Clean Fleets, and Zero-Emissions Trucks Measure, which all serve to electrify the transportation sector through sales requirements for benchmark years (CARB 2022).

Toxic Air Contaminants

TACs in California are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807, Chapter 1047, Statutes of 1983) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588, Chapter 1252, Statutes of 1987). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. Research, public participation, and scientific peer review are required before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted EPA's list of HAPs as TACs. Most recently, particulate matter (PM) exhaust from diesel engines (diesel PM) was added to CARB's list of TACs.

After a TAC is identified, CARB then adopts an airborne toxics control measure for sources that emit that particular TAC. If a safe threshold exists for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If no safe threshold exists, the measure must incorporate best available control technology for toxics to minimize emissions.

The Hot Spots Act requires that existing facilities that emit toxic substances above a specified level prepare an inventory of toxic emissions, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

AB 617 of 2017 (California Health and Safety Code Section 39607.1) aims to help protect air quality and public health in communities around stationary sources of pollution including facilities subject to the State's cap-and-trade program for GHG emissions. AB 617 imposes a new State-mandated local program to address non-vehicular sources (e.g., refineries, manufacturing facilities) of criteria air pollutants and TACs. AB 617 requires CARB to identify high-pollutant areas and directs air districts to focus air quality improvement efforts through adoption of community emission reduction programs within these identified areas. Currently, air districts review individual sources and impose emissions limits on emitters based on best available control technology, pollutant type, and proximity to nearby existing land uses. AB 617 addresses the cumulative and additive nature of air pollutant health effects by requiring community-wide air quality assessment and emission reduction planning.

CARB has adopted diesel exhaust control measures and more stringent emissions standards for various transportation-related mobile sources of emissions, including transit buses, and off-road diesel equipment (e.g., tractors, generators). Over time, the replacement of older vehicles will result in a vehicle fleet that produces substantially lower levels of TACs than under current conditions. Mobile-source emissions of TACs (e.g., benzene, 1-3-butadiene, diesel PM) have been reduced significantly over the last decade and will be reduced further in California through a progression of regulatory measures (e.g., Low Emission Vehicle/Clean Fuels and Phase II reformulated gasoline regulations) and control technologies. With implementation of CARB's Risk Reduction Plan and other regulatory programs, it is estimated that emissions of diesel PM will be less than half of those in 2010 by 2035 (CARB 2023). Adopted regulations are also expected to continue to reduce formaldehyde emissions emitted by cars and light-duty trucks. As emissions are reduced, it is expected that risks associated with exposure to the emissions will also be reduced.

LOCAL

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) maintains and manages air quality conditions in the SFBAAB, including Alameda County, through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of BAAQMD includes the preparation of plans and programs for the attainment of the NAAQS and CAAQS, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. BAAQMD also inspects

stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the CAA and CCAA.

Projects located in the SFBAAB are subject to BAAQMD's rules and regulations. The following rules and regulations are applicable to the project:

- **Regulation 2, Rule 1, General Permit Requirements.** This rule includes criteria for issuance or denial of permits, exemptions, and appeals against decisions of the Air Pollution Control Officer and BAAQMD actions on applications.
- **Regulation 6, Rule 1, General Requirements.** This rule limits the quantity of particulate matter in the atmosphere by controlling emission rates, concentration, visible emissions, and opacity.
- **Regulation 7, Odorous Substances.** Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. A person or facility must meet all limitations of this regulation, but meeting such limitations shall not exempt such person or facility from any other requirements of BAAQMD, state, or national law. The limitations of this regulation are not applicable until BAAQMD receives odor complaints from 10 or more complainants within a 90-day period, alleging that a person or facility has caused odors perceived at or beyond the property line of such person or facility and deemed to be objectionable by the complainants in the normal course of their work, travel, or residence. When the limitations of this regulation become effective, as a result of citizen complaints described above, the limits remain effective until such time as no citizen complaints have been received by BAAQMD for 1 year. The limits of this regulation become applicable again if BAAQMD receives odor complaints from five or more complainants within a 90-day period. BAAQMD staff investigate and track all odor complaints it receives, make attempts to visit the site and identify the source of the objectionable odor, and assist the owner or facility in finding a way to reduce the odor.

The CCAA requires that all local air districts in the state endeavor to achieve and maintain the CAAQS in their region by the earliest practical date. It specifies that local air districts should focus attention on reducing the emissions from transportation and areawide emission sources and provides districts with the authority to regulate indirect sources. To achieve the CAAQS, BAAQMD prepares and updates air quality plans on a regular basis. The air quality plans published by BAAQMD and other local air districts in the state are incorporated into California's SIP strategy and meet CAA requirements.

For state air quality planning purposes, the SFBAAB is classified as a serious nonattainment area with respect to the 1-hour ozone standard. The "serious" classification triggers various plan submittal requirements and transportation performance standards. One such requirement is that BAAQMD update its Clean Air Plan every 3 years to reflect progress in meeting the NAAQS and CAAQS and to incorporate new information regarding the feasibility of control measures and new emission inventory data. BAAQMD's record of progress in implementing previous measures must also be reviewed. BAAQMD prepared these plans in cooperation with the Metropolitan Transportation Commission and the Association of Bay Area Governments. On April 19, 2017, BAAQMD adopted the most recent revision to the Clean Air Plan, titled the *2017 Clean Air Plan: Spare the Air, Cool the Climate* (BAAQMD 2017). This plan serves to:

- define a vision for transitioning the region to a postcarbon economy needed to achieve 2030 and 2050 greenhouse gas reduction targets;
- decrease emissions of air pollutants most harmful to Bay Area residents, such as particulate matter, ozone, and TACs;
- reduce emissions of methane and other potent climate pollutants; and
- decrease emissions of carbon dioxide by reducing fossil fuel combustion.

Although offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable stress among the public and often generating citizen complaints to local governments and BAAQMD. BAAQMD's Regulation 7 ("Odorous Substances"), discussed above, regulates odors.

Marin Countywide Plan

The Atmosphere and Climate element of the *Marin Countywide Plan* (Marin County 2023) addresses air quality:

GOAL AIR-I. Improved Regional Air Quality. Promote planning and programs that result in the reduction of airborne pollutants measured within the county and the Bay Area

- Policy AIR-1.1 Coordinate Planning and Evaluation Efforts. Coordinate air quality planning efforts with local, regional, and State agencies, and evaluate the air quality impacts of proposed plans and developments projects.
- Policy AIR-1.2. Meet Air Quality Standards. Seek to attain or exceed the more stringent of federal or State Ambient Air Quality Standards for each measured pollutant.
- Policy AIR-1.3. Require Mitigation of Air Quality Impacts. Require projects that generate potentially significant levels of air pollutants, such as quarry, landfill operations, or large construction projects, to incorporate best available air quality mitigation in the project design.

GOAL AIR-2. Protection from Emissions. Minimize the potential impacts from land uses that may emit pollution and/or odors on residential and other land uses sensitive to such emissions.

- Policy AIR-2.1. Buffer Emission Sources and Sensitive Land Uses. Consider potential air pollution and odor impacts from land uses that may emit pollution and/or odors when location (a) air pollution sources, and (b) residential and other pollution-sensitive land uses in the vicinity of air pollution sources (which may include freeways, manufacturing, extraction, hazardous materials storage, landfill, food processing, wastewater treatment, and other similar uses).

Marin County Code

Title 22 of the Marin County Code includes the county's development code. Section 22.20.040 contains requirements for outdoor construction activities and requires the following fugitive dust control measures to be implemented for projects involving ground disturbance that are subject to environmental review:

- All unpaved exposed surfaces (e.g., parking areas, staging areas, soil piles, and graded areas, and unpaved access roads) shall be watered two times a day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to a maximum of 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified emissions evaluator.

The fugitive dust control measures in County Code Section 22.20.040(C) are the same as those recommended by the BAAQMD for addressing project-level fugitive dust impacts during construction.

3.2.2 Environmental Setting

The project site is in the SFBAAB. The SFBAAB includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties. The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by the sources of air pollutants and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such

natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources, as discussed separately below.

CLIMATE, METEOROLOGY, AND TOPOGRAPHY

The Mediterranean climate type of the SFBAAB is characterized by hot, dry summers and cool, rainy winters. During the summer, daily temperatures range from 49.9 degrees Fahrenheit (°F) to more than 81.8°F. The inland location and surrounding mountains shelter the area from much of the ocean breezes that keep the coastal regions moderate in temperature. Most precipitation in the area results from air masses that move in from the Pacific Ocean, usually from the west or northwest, during the winter months. More than half the total annual precipitation falls during the winter rainy season (November through February); the average winter temperature is a moderate 50°F. Also characteristic of SFBAAB winters are periods of dense and persistent low-level fog, which are most prevalent between storms. The prevailing winds are moderate in speed and vary from moisture-laden breezes from the south to dry land flows from the north.

The mountains surrounding the SFBAAB create a barrier to airflow, which leads to the entrapment of air pollutants when meteorological conditions are unfavorable for transport and dilution. The highest frequency of poor air movement occurs in the fall and winter when high-pressure cells are often present over the SFBAAB. The lack of surface wind during these periods, combined with the reduced vertical flow caused by a decline in surface heating, reduces the influx of air and leads to the concentration of air pollutants under stable meteorological conditions. Surface concentrations of air pollutant emissions are highest when these conditions occur in combination with agricultural burning activities or with temperature inversions, which hamper dispersion by creating a ceiling over the area and trapping air pollutants near the ground.

May through October is ozone season in the SFBAAB. This period is characterized by warmer months with high ozone concentrations. In addition, longer daylight hours provide a plentiful amount of sunlight to fuel photochemical reactions between reactive organic gases (ROG) and oxides of nitrogen (NO_X), which result in ozone formation.

The local meteorology of the project site and surrounding area is represented by measurements recorded at the Western Regional Climate Center Kentfield, California station. The normal annual precipitation is approximately 47.4 inches. January temperatures range from a normal minimum of 38.6°F to a normal maximum of 55.6°F. July temperatures range from a normal minimum of 50.2°F to a normal maximum of 83.4°F (WRCC 2016). The prevailing wind direction is from the north (WRCC 2002).

CRITERIA AIR POLLUTANTS

Concentrations of criteria air pollutants are used to indicate the quality of the ambient air. A brief description of key criteria air pollutants in the SFBAAB is provided below. Emission source types and health effects are summarized in Table 3.2-2. Marin County's attainment status for the CAAQS and the NAAQS are shown in Table 3.2-3. Monitoring data applicable to the project site is provided in Table 3.2-4 (found in subsection "Environmental Impacts and Mitigation Measures").

Table 3.2-2 Sources and Health Effects of Criteria Air Pollutants

Pollutant	Sources	Acute[1] Health Effects	Chronic[2] Health Effects
Ozone	Secondary pollutant resulting from reaction of ROG and NO_X in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO_X results from the combustion of fuels	increased respiration and pulmonary resistance; cough, pain, shortness of breath, lung inflammation	permeability of respiratory epithelia, possibility of permanent lung impairment
Carbon monoxide (CO)	Incomplete combustion of fuels; motor vehicle exhaust	headache, dizziness, fatigue, nausea, vomiting, death	permanent heart and brain damage
Nitrogen dioxide (NO_2)	combustion devices (e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines)	coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis or pulmonary edema; breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, death	chronic bronchitis, decreased lung function
Sulfur dioxide (SO_2)	coal and oil combustion, steel mills, refineries, and pulp and paper mills	Irritation of upper respiratory tract, increased asthma symptoms	Insufficient evidence linking SO_2 exposure to chronic health impacts
Respirable particulate matter (PM_{10}), Fine particulate matter ($PM_{2.5}$)	fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the atmosphere by condensation and/or transformation of SO_2 and ROG	breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, premature death	alterations to the immune system, carcinogenesis
Lead	metal processing	reproductive/ developmental effects (fetuses and children)	numerous effects including neurological, endocrine, and cardiovascular effects

Notes: NO_X = oxides of nitrogen; ROG = reactive organic gases.

[1] "Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.

[2] "Chronic" refers to effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations.

Sources: EPA 2023a.

Ozone

Ground-level ozone is not emitted directly into the air but is created by chemical reactions between ROG and NO_X. This happens when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight. Ozone at ground level is a harmful air pollutant because of its effects on people and the environment and is the main ingredient in smog (EPA 2023a).

Acute health effects of ozone exposure include increased respiratory and pulmonary resistance, cough, pain, shortness of breath, and lung inflammation. Chronic health effects include permeability of respiratory epithelia and possibility of permanent lung impairment (EPA 2023a). Emissions of the ozone precursors ROG and NO_X have decreased over the past two decades because of more stringent motor vehicle standards and cleaner burning fuels (CARB 2013).

Nitrogen Dioxide

NO_2 is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2. The combined emissions of NO and NO_2 are referred to as NO_X and are reported as equivalent NO_2. Because NO_2 is formed and depleted by reactions associated with photochemical smog (ozone), the NO_2 concentration in a particular geographical area may not be representative of the local sources of NO_X emissions (EPA 2023a).

Acute health effects of exposure to NO_X includes coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis, or pulmonary edema, breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, and death. Chronic health effects include chronic bronchitis and decreased lung function (EPA 2023a).

Table 3.2-3 Attainment Status Designations for the San Francisco Bay Area Air Basin

Pollutant	National Ambient Air Quality Standard	California Ambient Air Quality Standard
Ozone	Attainment (1-hour)[1]	(No State Standard for 1-hour)
	Nonattainment (8-hour)[3] Classification=Severe	Nonattainment (8-hour) Classification=Marginal
	Nonattainment (8-hour)[4] Classification=Severe	
Respirable particulate matter (PM_{10})	Attainment (24-hour)	Nonattainment (24-hour)
		Nonattainment (Annual)
Fine particulate matter ($PM_{2.5}$)	Nonattainment (24-hour)	(No State Standard for 24-Hour)
	Attainment (Annual)	Attainment (Annual)
Carbon monoxide (CO)	Attainment (1-hour)	Attainment (1-hour)
	Attainment (8-hour)	Attainment (8-hour)
Nitrogen dioxide (NO_2)	Unclassified/Attainment (1-hour)	Attainment (1-hour)
	Unclassified/Attainment (Annual)	Attainment (Annual)
Sulfur dioxide (SO_2)[5]	(Attainment Pending) (1-Hour)	Attainment (1-hour)
		Attainment (24-hour)
Lead (Particulate)	Attainment (3-month rolling avg.)	Attainment (30 day average)
Hydrogen Sulfide	No Federal Standard	Unclassified (1-hour)
Sulfates		Attainment (24-hour)
Visibly Reducing Particles		Unclassified (8-hour)
Vinyl Chloride		Unclassified (24-hour)

Notes:

[1] Air Quality meets federal 1-hour Ozone standard (77 FR 64036). EPA revoked this standard, but some associated requirements still apply. BAAQMD attained the standard in 2009. BAAQMD has requested EPA recognize attainment to fulfill the requirements.

[2] Per Health and Safety Code (HSC) § 40921.5(c), the classification is based on 1989 – 1991 data, and therefore does not change.

[3] 1997 Standard.

[4] 2008 Standard.

[5] 2010 Standard.

Source: EPA 2023b.

Particulate Matter

PM_{10} is emitted directly into the air, and includes fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires and natural windblown dust, and particulate matter formed in the atmosphere by reaction of gaseous precursors (CARB 2013). $PM_{2.5}$ includes a subgroup of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less. PM_{10} emissions in the SVAB are dominated by emissions from area sources, primarily fugitive dust from vehicle travel on unpaved and paved roads, farming operations, construction and demolition, and particles from residential fuel combustion. Direct emissions of PM_{10} are projected to remain relatively constant through 2035. Direct emissions of $PM_{2.5}$ have steadily declined in the SVAB between 2000 and 2010 and are projected to increase slightly through 2035. Emissions of $PM_{2.5}$ in the SVAB are dominated by the same sources as emissions of PM_{10} (CARB 2013).

Acute health effects of exposure to PM_{10} include breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases including asthma and chronic obstructive pulmonary disease, and premature death. Chronic health effects include alternations to the immune system and carcinogenesis (EPA 2023a). For $PM_{2.5}$, short-term exposures (up to 24-hours duration) have been associated with premature mortality, increased hospital

admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. Long-term (months to years) exposure to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children.

TOXIC AIR CONTAMINANTS

According to the *California Almanac of Emissions and Air Quality* (CARB 2013), the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being diesel PM. Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a PM exposure method. This method uses the CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Diesel PM poses the greatest health risk among these 10 TACs mentioned. Based on receptor modeling techniques, CARB estimated the average cancer risk associated with diesel PM concentrations in the SFBAAB to be 360 excess cancer cases per million people in the year 2000. Overall, levels of most TACs, except para-dichlorobenzene and formaldehyde, have decreased since 1990 (CARB 2013).

ODORS

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 overall is quite subjective. Some individuals can smell very minute quantities of specific substances; 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 may be perfectly acceptable to another (e.g., a cooking-related odor from a fast food restaurant). It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity. Odor sources of concern include wastewater treatment plants, sanitary landfills, composting facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting operations, rendering plants, and food packaging plants (BAAQMD 2022). There are no sources of odors within the vicinity of the project site.

SENSITIVE RECEPTORS

Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and/or the potential for increased and prolonged exposure of individuals to pollutants. Sensitive receptors near the project site include residences north, south, east, and west on Seminary Drive, Great Circle Drive, Topside Way, Weatherly Drive, East Strawberry Drive, Richardson Drive, Reed Boulevard, Median Lane, Ricardo Road, and Vista del Sol.

3.2.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Criteria Air Pollutants

The analysis in this section is consistent with the recommendations of BAAQMD's CEQA Guidelines (BAAQMD 2022). The analysis primarily focuses on the extent to which the project would conflict with air quality planning efforts.

BAAQMD has established thresholds for determining environmental significance of air pollutant emissions. These thresholds distinguish between a project's short-term emissions from its long-term emissions. The short-term emissions are related to the construction phase of a project, which are recognized to be short in duration. The long-term emissions are related to the activities that will occur on an ongoing basis as a result of project operations.

Impacts are evaluated both on the basis of CEQA Guidelines Appendix G questions and BAAQMD significance criteria. The impacts evaluated are those involving construction, operational emissions of criteria pollutants (i.e., ROG and NO_X, CO, SO_2, $PM_{10,}$ and $PM_{2.5}$), and cumulative air quality impacts. Because the portion of the SFBAAB including Marin County is nonattainment for ozone, PM_{10}, and $PM_{2.5}$, a major criterion for review is whether the project would result in a net increase of pollutants impacting ozone precursor pollutants, PM_{10}, and $PM_{2.5}$.

Modeling was based on project-specific information (e.g., size, area to be graded, area to be paved) where available; reasonable assumptions based on typical construction activities; and default values in the California Emissions Estimator Model (CalEEMod) Version 2020.4.0 that are based on the project's location and land use types. Based on scheduling information provided by the project applicant and noted in Chapter 2, "Project Description," construction of the project would commence in 2024 and end in 2028. For the purposes of this analysis, construction was assumed to start

in 2023 and end in 2026. This assumption provides a more conservative estimate of emissions to avoid the risk of understating an impact, because the on- and off-road mobile source sectors continue to become more fuel efficient as various statewide regulations continue to be deployed, such as the Advanced Clean Cars II program and the Advanced Clean Fleet regulation. Construction equipment mix assumptions were based on project-specific data. The modeling prepared for the project also assumes that all construction equipment over 50 horsepower would be held to EPA's Tier 3 engine standards.

Both short-term construction emissions and long-term area and energy operational emissions were calculated using the CalEEMod, version 2020.4.0, computer program. Mobile source emissions were estimated using the updated CalEEMod 2022.1.1.22 version using the vehicle miles traveled (VMT) estimates from the 2024 traffic study (Fehr & Peers 2024). Use of the 2022.1.1.22 version includes updated vehicle emissions factors from CARB's EMFAC 2017. This model was developed in coordination with the South Coast Air Quality Management District and is the most current emissions model approved for use in California by various air districts, including BAAQMD. Energy- and area-sourced emissions were estimated using CalEEMod default values.

Toxic Air Contaminants

A health risk assessment (HRA) was prepared to quantify and evaluate TAC impacts from construction and operational activities. Construction-related emissions of diesel PM were determined by conducting detailed construction emissions modeling for the project using the BAAQMD-approved CalEEMod, project-specific details (e.g., construction phasing, equipment lists, excavation estimates), and model defaults where project-specific information was not available. Generally, emissions were quantified for all phases of project construction that are anticipated to occur across the eight planning areas of the project site for the entire duration of project buildout (i.e., four years). Mass emissions were averaged over the anticipated construction duration, in accordance with BAAQMD's guidance and consistent with their adopted average daily mass emissions thresholds. Outputs from the mass emissions calculations conducted with CalEEMod were used to conduct the HRA. Additional details regarding methodology, assumptions, and outputs can be found in Appendix C.

THRESHOLDS OF SIGNIFICANCE

Appendix G of the State CEQA Guidelines includes the following criteria for assessing an air quality impact:

- Would the project conflict with or obstruct implementation of the applicable air quality plan?
- Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- Would the project expose sensitive receptors to substantial pollutant concentrations?
- Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The BAAQMD's air quality thresholds of significance are tied to achieving or maintaining attainment designations with the NAAQS and CAAQS, which are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective of human health. Implementing the project would have a significant impact related to air quality such that human health would be adversely affected if it would (BAAQMD 2022):

- cause construction-generated criteria air pollutant or precursor emissions to exceed 54 pounds per day (lb/day) of ROG and NO_X, 82 lb/day for PM_{10} exhaust, and 54 lb/day for $PM_{2.5}$ exhaust, or substantially contribute to emissions concentrations (e.g., PM_{10}, $PM_{2.5}$) that exceed the applicable NAAQS or CAAQS;
- result in a net increase in long-term operational criteria air pollutant or precursor emissions that exceed 54 lb/day or 10 tons per year (tons/year) of ROG and NO_X, 82 lb/day or 15 tons/year for PM_{10} exhaust, and 54 lb/day or 10 tons/year for $PM_{2.5}$ exhaust, or substantially contribute to emissions concentrations (e.g., PM_{10}, $PM_{2.5}$) that exceed the applicable NAAQS or CAAQS;
- not implement the BAAQMD's Basic Construction Mitigation Measures for dust emissions (e.g., PM_{10} and $PM_{2.5}$);
- result in long-term operational local mobile-source CO emissions that would violate or contribute substantially to concentrations that exceed the 1-hour CAAQS of 20 parts per million (ppm) or the 8-hour CAAQS of 9 ppm;
- result in an incremental increase in cancer risk (i.e., the risk of contracting cancer) greater than 10 in one million at any off-site receptor and/or a noncarcinogenic hazard index of 1.0 or greater; or
- result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

ISSUES NOT DISCUSSED FURTHER

BAAQMD recommends a screening approach to assess a project's potential to generate a CO hotspot. Projects that meet these criteria would not result in a CO hotspot:

- Project-generated traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- Project-generated traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Based on the traffic study conducted for this analysis (Appendix Q), the project would introduce more than 230 new trips per hour to any one intersection within the project area. This level of trip generation would be considerably lower than BAAQMD's comments screening threshold of 24,000 to 44,000 vehicles per hour to any one intersection. BAAQMD's quantitative screening thresholds were developed in consideration of vehicle idling resulting in the exceedance of the one-hour concentration based CAAQS for CO (20 ppm [23 mg/m^3]). Projects introducing a level of vehicle trips exceeding the aforementioned screening criteria have the potential to lead to a local exceedance of this standard; therefore, projects resulting in fewer vehicle trips per hour at any one intersection would not lead to a local exceedance of CO or expose receptors to substantial pollutant concentration. Moreover, CO emissions have declined substantially over the past two decades throughout California, including Marin County, from advances in vehicular

technology including the advent of catalytic converters and improved fuel economy. Therefore, the additional 230 localized trips would not result in adverse health outcomes from CO exposure. CO hotspots have been dismissed from this analysis and no further discussion is required.

The project does not introduce new sources of odors to the project site. BAAQMD considers wastewater treatment plants, sanitary landfills, composting facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting operations, rendering plants, and food packaging plants as potential sources of adverse odors. The project's proposed land use types would be primarily educational, commercial, and residential, which are not considered sources of adverse odors. As such, long-term odor impacts are dismissed from further consideration and no further discussion is required.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: Generate Short-Term Construction-Related Emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$

Considering BAAQMD's guidance, average daily construction-generated emissions were quantified for the project. The project would not generate construction emissions of ROG, PM_{10} exhaust, and $PM_{2.5}$ exhaust exceeding BAAQMD's average daily mass emissions thresholds of significance. However, the project would emit NO_X emissions exceeding BAAQMD's mass emissions thresholds. These thresholds are inherently tied to long-term regional air quality planning (i.e., BAAQMD's 2017 Spare the Air AQMP), which demonstrates that the project could conflict with the applicable air quality plans for ozone generation. The project would incorporate BAAQMD's Basic Best Management Practices (BMPs) for Construction-Related Fugitive Dust Emissions as required by Section 22.20.040 of Title 22 of the Marin County Code. Nevertheless, the project's NO_X emissions would exceed BAAQMD's average daily mass emissions thresholds. Therefore, this impact would be **potentially significant**.

Although the impacts from construction related air pollutant emissions are temporary in duration, such emissions can become a significant air quality impact. Construction activities such as grading, excavation, building construction, and paving can generate substantial amounts of air pollution. Emissions from construction equipment engines also contribute to elevated concentrations of ROG, NO_X, PM_{10}, $PM_{2.5}$, CO, and oxides of sulfur (SO_X).

Several pieces of diesel-powered heavy equipment would operate during the construction of the proposed project. Site preparation activity emissions have been estimated based on the maximum fleet recommended by BAAQMD. Exhaust and fugitive dust emissions would be generated by excavation and grading, construction vehicle traffic, wind blowing over exposed earth, construction workers traveling to and from the construction sites, heavy-duty construction equipment operation, and application of architectural coatings.

Dust from construction activities can cause impacts both locally and regionally. The dry climate of the area during the summer months, combined with regional fine, silty soils, create a high potential for dust generation. Increased dustfall and locally elevated PM_{10} levels near the construction activity are expected. Depending on the weather, soil conditions, the amount of activity taking place at any one time, and the nature of dust control efforts, these impacts could affect existing land uses near the project site. See the discussion in the "Methodology" section and Appendix C for additional modeling information.

Construction emissions estimates for the proposed project were calculated using CalEEMod (refer to Appendix C). Based on the outputs of CalEEMod, the project would produce the emissions shown in Table 3.2-4, estimated as average daily values and compared to applicable BAAQMD's thresholds of significance.

The project would be required to implement BAAQMD's construction BMPs as a part of the project and consistent with Section 22.20.040 of Title 22 of the Marin County Code. Nevertheless, as shown in Table 3.2-4, the project would generate emissions of NO_X exceeding BAAQMD's significance threshold. Because BAAQMD's thresholds of significance are tied to long-term regional planning, construction of the project could interfere with BAAQMD's future attainment of the CAAQS and NAAQS for ozone. Therefore, the project's unmitigated construction emissions

could individually result in an adverse health outcome from exposure to air pollution. Therefore, the project's construction emissions would be **potentially significant**.

Table 3.2-4 Maximum Emissions of Criteria Pollutants and Precursors Associated with Construction of the Project

Year	ROG (lb/day)	NO_X (lb/day)	CO (lb/day)	SO_X (lb/day)	PM_{10} (Exhaust) (lb/day)	$PM_{2.5}$ (Exhaust) (lb/day)
Average Daily Emissions						
2023	4	33	35	<1	1	1
2024	15	68	82	<1	3	2
2025	15	38	58	<1	1	1
2026	2	7	9	<1	1	<1
BAAQMD Thresholds of Significance	54	54	N/A	N/A	82	54
Exceeds Thresholds of Significance?	No	Yes	N/A	N/A	No	No

Notes: lb/day = pounds per day, ROG = reactive organic gases, NO_X = oxides of nitrogen, CO = carbon monoxide, SO_X = sulfur oxides, PM_{10} = respirable particulate matter, $PM_{2.5}$ = fine particulate matter, BAAQMD = Bay Area Air Quality Management District

Source: Modeling performed by Ascent in 2022 (Appendix C).

Mitigation Measures

Mitigation 3.2-1: Apply Tier-4 Emission Standards to all Diesel-Powered Off-Road Equipment

The project applicant shall require the construction contractor to only use off-road construction equipment that meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and to comply with the appropriate test procedures and provisions as contained in 40 CFR Parts 1065 and 1068. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Implementation of this measure shall be required in the contract the project applicant establishes with its construction contractors. The applicant shall demonstrate its plan to fulfill the requirements of this measure in a report or in project improvement plan details submitted to the County prior to the use of any off-road, diesel-powered construction equipment on the site.

Significance after Mitigation

Implementation of Mitigation Measure 3.2-1 would reduce the project's emissions of NO_X exhaust by requiring the use of Tier 4 engines for construction equipment exceeding 50 hp. Table 3.2-5 summarizes the project's emissions following implementation of Mitigation Measure 3.2-1.

Table 3.2-5 Maximum Mitigated Emissions of Criteria Pollutants and Precursors Associated with Construction of the Project

Year	ROG (lb/day)	NO_X (lb/day)	CO (lb/day)	SO_X (lb/day)	PM_{10} (Exhaust) (lb/day)	$PM_{2.5}$ (Exhaust) (lb/day)
Average Daily Emissions						
2023	2	11	35	<1	<1	<1
2024	10	22	82	<1	<1	<1
2025	12	14	58	<1	<1	<1
2026	5	3	9	<1	<1	<1
BAAQMD Thresholds of Significance	54	54	N/A	N/A	82	54
Exceeds Thresholds of Significance?	No	No	N/A	N/A	No	No

Notes: lb/day = pounds per day, ROG = reactive organic gases, NO_X = oxides of nitrogen, CO = carbon monoxide, SO_X = sulfur oxides, PM_{10} = respirable particulate matter, $PM_{2.5}$ = fine particulate matter, BAAQMD = Bay Area Air Quality Management District

Source: Modeling performed by Ascent in 2022.

As shown in Table 3.2-5, implementation of Mitigation Measure 3.2-1 would be sufficient to reduce NO_X exhaust emissions to a less-than-significant level. Because BAAQMD's thresholds of significance are tied to long-term regional planning, the construction of the project, as mitigated, would not interfere with BAAQMD's future attainment of the CAAQS and NAAQS for ozone, PM_{10}, or $PM_{2.5}$. Therefore, the project's mitigated construction emissions would not individually result in an adverse health outcome from exposure to air pollution. This impact would be **less than significant** with mitigation.

Impact 3.2-2: Generate Long-Term Operational Emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$

Considering BAAQMD's guidance, average daily operation-generated emissions were quantified for the project. The project would not generate operational emissions of criteria air pollutants and ozone precursors exceeding BAAQMD's average daily mass emissions thresholds of significance. Because operational emissions of criteria air pollutants and ozone precursors would be less than BAAQMD's daily mass emissions threshold, impacts would be **less than significant.**

Implementation of the project would result in additional development and urbanization in Marin County, which would in turn increase criteria air pollutants and ozone precursors in an area that is currently designated as a nonattainment area with respect to the NAAQS.

Operational emissions estimates for the proposed project were calculated using CalEEMod (Appendix C). Table 3.2-6 summarizes the total modeled operational emissions associated with the project for the assumed first full year of operation (i.e., 2026). Emissions are presented for the entire project.

Table 3.2-6 Maximum Annual Emissions of Criteria Pollutants and Precursors Associated with Operation of the Project

Sector	ROG (lb/day)	NO_X (lb/day)	CO (lb/day)	SO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)
Average Daily Emissions						
Area	11	3	<1	<1	<1	<1
Energy	<1	1	<1	<1	<1	<1
Mobile	9	7	62	<1	15	4
Total	20	11	62	<1	15	4
BAAQMD Thresholds of Significance	54	54	N/A	N/A	82	54
Exceeds Thresholds?	No	No	N/A	N/A	No	No

Notes: lb/day = pounds per day, ROG = reactive organic gases, NO_X = oxides of nitrogen, CO = carbon monoxide, SO_X = sulfur oxides, PM_{10} = respirable particulate matter, $PM_{2.5}$ = fine particulate matter, BAAQMD = Bay Area Air Quality Management District

Source: Modeling performed by Ascent in 2022 (Appendix C).

As shown in Table 3.2-6, the project's operational emissions would not exceed BAAQMD's average daily thresholds of significance for any pollutant. Because BAAQMD's thresholds of significance are tied to long-term regional planning, the operation of the project would not interfere with BAAQMD's future attainment of the CAAQS and NAAQS for ozone, PM_{10}, or $PM_{2.5}$. Therefore, the project's operational emissions would not individually result in an adverse health outcome from exposure to air pollution. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.2-3: Expose Receptors to TAC Concentrations Adversely Affecting a Substantial Number of People

Based on the HRA prepared for the project, construction of the project would produce significant diesel PM or other TACs such that BAAQMD's thresholds for TAC cancer risk exposure of 10 in 1 million or an acute or chronic Hazard Index of 1 for the maximally exposed individual (MEI) for non-carcinogens would be exceeded. Using these numerical thresholds established by BAAQMD, the project would generate substantial emissions of TACs causing an adverse health impact from TAC expose. This impact would be **potentially significant**.

The project does not propose land use types that are typical land uses that generate long-term operational emissions of TACs and does not propose any BAAQMD-permitted development. Therefore, the potential exposure of diesel PM from project construction comprises the focus of this analysis.

BAAQMD has developed quantitative thresholds of significance for carcinogenic risk exposure (i.e., 10 in 1 million) and non-carcinogenic risk exposure (i.e., acute or chronic Hazard Index of 1 for the MEI) in consideration of dosage, risk exposure, background risk levels, and guidance established by AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act.

Also, AB 2588 directs each air district to establish a prioritization score threshold for stationary sources of TACs. In order to assist the districts with this requirement, the California Air Pollution Control Officers Association (CAPCOA) Toxics Committee, in cooperation with the Office of Environmental Health Hazard Assessment (OEHHA) and CARB, developed the Air Toxics "Hot Spots" Program, Facility Prioritization Guidelines (July 1990). The purpose of the guideline is to provide districts with suggested procedures for prioritizing facilities. However, districts may develop and use prioritization methods which differ from the CAPCOA guidelines. In 2015, CAPCOA updated these guidelines to incorporate the changes made to the OEHHA risk assessment methodology.

Construction-related activities would result in temporary, short-term project-generated emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., demolition, clearing, grading); paving; application of architectural coatings; and other miscellaneous activities. Particulate exhaust emissions from diesel PM was identified as a TAC by CARB in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. According to guidance from the California Office of Environmental Health and Assessment *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, a 30-year exposure duration is used for estimating cancer risk at residential land uses (OEHHA 2015). Construction activity is anticipated to take place over a 4-year timeframe for the project and could result in intensive construction activities for an extended period of time during project construction.

The TAC that is the focus of this analysis is diesel PM because it is known that diesel PM would be emitted during project construction. Construction-related activities that would result in temporary, intermittent emissions of diesel PM would be from the exhaust of off-road equipment used during site preparation and construction and on-road heavy-duty trucks. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they do not operate at any one location for extended periods of time such that they would expose a single receptor to excessive diesel PM emissions.

Construction-related activities would result in temporary, short-term project-generated emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., demolition, clearing, grading); paving; application of architectural coatings; and other miscellaneous activities. Construction activity is anticipated to take place over a 4-year timeframe for the project and could result in intensive construction activities for an extended period of time during project construction. Exposure risk was calculated for construction of the project in consideration of nearby sensitive receptors to the project site. A construction HRA was prepared to evaluate potential TAC exposure from project construction and is summarized in Table 3.2-7.

Table 3.2-7 Maximum Cancer Risk Under an Unmitigated Project Scenario

Receptor[1]	Unmitigated Scenario Cancer Risk (Chances in a million)
Point of maximum impact	134
Maximally exposed individual resident (On-Site)	48
BAAQMD Significance Threshold	10.0
Threshold Exceeded?	Yes

1. Receptors selected based on occurrence under Proposed Scenario.

Source: Modeling performed by Ascent in 2022 (Appendix C).

Based on the findings of the HRA, the lifetime cancer risk for the MEI (identified as a residential receptor type approximately 900 feet from the project site) was estimated to be 48 in one million, which is above BAAQMD's significance threshold of 10 in one million. Because construction-emissions of diesel PM would be above BAAQMD's thresholds of significance for TAC impacts, construction related TAC emissions would be **potentially significant**.

Mitigation Measures

Implement Mitigation Measure 3.2-1 described above.

Significance after Mitigation

Implementation of Mitigation Measure 3.2-1 would reduce the project's emissions of diesel PM by requiring the use of Tier 4 engines for construction equipment exceeding 50 hp. Table 3.2-8 summarizes the project's emissions following implementation of Mitigation Measure 3.2-1.

Table 3.2-8 Maximum Cancer Risk under a Mitigated Project Scenario

Receptor[1]	Mitigated Scenario Cancer Risk (Chances in a million)[1]
point of maximum impact	11.25
maximally exposed individual resident (On-Site)	5.69
BAAQMD Significance Threshold	10.0
Threshold Exceeded?	No

1. Mitigation applied in the mitigated scenario is described in detail in the Air Quality Chapter of the EIR; however, to briefly summarize here, measures included BAAQMD's dust suppression measures and inclusion of USA EPA Tier 4 engines.

Source: Modeling performed by Ascent in 2022 (Appendix C).

As shown in Table 3.2-8, implementation of Mitigation Measure 3.2-1 would reduce the project's incremental cancer risk to 5.69 in one million, which is below BAAQMD's recommended threshold of 10 in one million. This would reduce the impact to a less-than-significant level. This impact would be **less than significant with mitigation**.

Impact 3.2-4: Result in Other Emissions (such as Those Leading to Odors) Adversely Affecting a Substantial Number of People

The project would introduce construction-related sources of odors; however, these sources would be intermittent and would disperse rapidly from the source. Construction-related odors would be subject to BAAQMD Regulation 7, which would reduce the potential for receptors to be exposed to odors. Given the temporary and intermittent nature of odor-generating construction activities and coverage by BAAQMD's Regulation 7, construction of the land uses developed under the project would not expose a substantial number of people to objectionable odors for an extended period. Impacts would be **less than significant**.

Odorous emissions generated by heavy-duty diesel equipment and the laying of fresh asphalt during project-related construction activities would be intermittent and temporary, and would dissipate rapidly from the source with an increase in distance. While construction of the project would be implemented over approximately 4 years, these types

of odor-generating activities would not occur in a single location, or within proximity to off-site receptors, for an extended period. The type and level of construction activity would be typical of new development on a large site, and associated odor sources would not remain in any one part of the project area throughout all construction phases.

Additionally, construction-generated odors would also be subject to BAAQMD's Regulation 7, which places general limitations on odorous substances and specific emissions limitations on certain odorous compounds. The limitations of Regulation 7 are only applicable to sources of odors resulting in 10 or more confirmed complaints within a 90-day period. If, during construction, the project receives complaints exceeding this standard, the limitations of Regulation 7 would become effective to reduce odor impacts. Given the temporary and intermittent nature of odor-generating construction activities and coverage by BAAQMD's Regulation 7, construction of the land uses developed under the project would not expose a substantial number of people to objectionable odors for an extended period. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

3.3 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

This section evaluates the potential impacts of the project on known and unknown cultural resources, in both the "built" environment and in archaeological sites. Cultural resources include districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include pre-historic resources, historic-era resources, and "tribal cultural resources" (the latter as defined by AB 52, Statutes of 2014, in PRC Section 21074).

Archaeological resources are locations where human activity has measurably altered the earth or left deposits of pre-contact or historic-era physical remains (e.g., stone tools, bottles, former roads, house foundations). Built environment historical resources include standing buildings (e.g., houses, barns, outbuildings, cabins) and intact structures (e.g., dams, bridges, roads, districts) or landscapes. A cultural landscape is defined as a geographic area (including both cultural and natural resources and the wildlife therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

CEQA identifies three broad categories of cultural resources that enjoy some level of legal protection. In 1982, the Legislature enacted PRC Section 21083.2, which created the concepts of "unique archaeological resources" and "nonunique archaeological resources." The former received some limited legal protections while the latter did not, as explained in Section 3.3.1 below. In 1992, the Legislature enacted PRC Section 21084.1, which created a much broader category of "historical resources," which includes not only certain archaeological resources but also some cultural resources in the built environment. The California Natural Resources Agency (CNRA) subsequently promulgated State CEQA Guidelines section 15064.5 to flesh out the attributes of these historical resources. CNRA also added language to State CEQA Guidelines section 15126[b][3], which refers to "historical resource[s] of an archaeological nature" and sets forth specific mitigation strategies for them. In general, "historical resources" enjoy more protection than "unique archaeological resources." Finally, in 2014, effective January 1, 2015, the Legislature enacted AB 52, adding tribal cultural resources as a new category of cultural resources subject to review under CEQA, though there is much overlap with unique archaeological resources and historical resources. The category tribal cultural resources includes site features, places, cultural landscapes, sacred places or objects, which are of cultural value to a tribe. AB 52 created PRC sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21084.2, and 21084.3.

One comment letter regarding cultural resources was received in response to the Notice of Preparation (see Appendix A). The Native American Heritage Commission (NAHC) requested AB 52 and SB 18 compliance information; while SB 18 does apply to the project because there is a General Plan amendment associated with the project (which is the trigger for SB 18 compliance), SB 18 is not a CEQA requirement and therefore is not discussed in this section. AB 52 compliance is described below.

3.3.1 Regulatory Setting

FEDERAL

National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. It is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, and cultural districts that are considered significant at the national, state, or local level.

The formal criteria (36 CFR 60.4) for determining NRHP eligibility are as follows:

1. The property is at least 50 years old (however, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP).

2. It retains integrity of location, design, setting, materials, workmanship, feeling, and associations.
3. It possesses at least one of the following characteristics:

   Criterion A Association with events that have made a significant contribution to the broad patterns of history (events).

   Criterion B Association with the lives of persons significant in the past (persons).

   Criterion C Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction (architecture).

   Criterion D Has yielded, or may be likely to yield, information important to prehistory or history (information potential).

For a property to retain and convey historic integrity, it must possess most of the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Location is the place where the historic property was constructed or the place where a historic event occurred. Integrity of location refers to whether the property has been moved since its construction. Design is the combination of elements that create the form, plan, space, structure, and style of a property. Setting is the physical environment of a historic property that illustrates the character of the place. Materials are the physical elements that were combined or deposited during a particular period and in a particular pattern or configuration to form a historic property. Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. Feeling is a property's expression of the aesthetic or historic sense of a particular period. This is an intangible quality evoked by physical features that reflect a sense of a past time and place. Association is the direct link between the important historic event or person and a historic property. Continuation of historic use and occupation help maintain integrity of association.

Listing in the NRHP does not entail specific protection or assistance for a property but it does guarantee recognition in planning for federal or federally assisted projects, eligibility for federal tax benefits, and qualification for federal historic preservation assistance. Additionally, project effects on properties listed in the NRHP must be evaluated under CEQA.

The *National Register Bulletin* series was developed to assist evaluators in the application of NRHP criteria. For example, *National Register Bulletin* #36 provides guidance in the evaluation of archaeological site significance. If a property cannot be placed within a particular theme or time period, and thereby lacks "focus," it will be unlikely to possess characteristics that would make it eligible for listing in the NRHP. Evaluation standards for linear features (such as roads, trails, fence lines, railroads, ditches, and flumes) are considered in terms of four related criteria that account for specific elements that define engineering and construction methods of linear features: (1) size and length, (2) presence of distinctive engineering features and associated properties, (3) structural integrity, and (4) setting. The highest probability for NRHP eligibility exists in the intact, longer segments, where multiple criteria coincide.

STATE

California Register of Historical Resources

All properties in California that are listed in or formally determined eligible for listing in the NRHP are also listed in the California Register of Historical Resources (CRHR). The CRHR is a listing of State of California resources that are significant in the context of California's history. It is a statewide program with a scope and with criteria for inclusion similar to those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR.

A historical resource must be significant at the local, state, or national level under one or more of the criteria defined in CCR Title 14, Division 3, Chapter 11.5, Section 4850 to be included in the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the criteria listed below is considered an historical resource under CEQA. As noted above, all resources listed in or formally determined eligible for listing in the NRHP are automatically listed in the CRHR.

The CRHR uses four evaluation criteria, considering whether a resource:

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

Similar to the NRHP, a resource must meet one of the above criteria and retain integrity. The CRHR uses the same seven aspects of integrity as the NRHP.

California Environmental Quality Act

CEQA requires public agencies to consider the effects of their actions on "unique archaeological resources," "historical resources," and "tribal cultural resources." Section 21083.2 requires agencies to determine whether projects would have effects on unique archaeological resources. Pursuant to PRC Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." PRC Section 21084.2 establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment."

Unique Archaeological Resources

CEQA also requires lead agencies to consider whether projects would affect unique archaeological resources. PRC Section 21083.2(g) states that "unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

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

Mitigation of Unique Archaeological Resources Under Public Resources Code Section 21083.2

Treatment options under PRC Section 21083.2(b) to mitigate impacts to unique archaeological resources include activities that preserve such resources in place in an undisturbed state. PRC Section 21083.2 states:

(a) As part of the determination made pursuant to Section 21080.1, the lead agency shall determine whether the project may have a significant effect on archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the environmental impact report shall address the issue of those resources. An environmental impact report, if otherwise necessary, shall not address the issue of nonunique archaeological resources. A negative declaration shall be issued with respect to a project if, but for the issue of nonunique archaeological resources, the negative declaration would be otherwise issued.

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

(1) Planning construction to avoid archaeological sites.

(2) Deeding archaeological sites into permanent conservation easements.

(3) Capping or covering archaeological sites with a layer of soil before building on the sites.

(4) Planning parks, greenspace, or other open space to incorporate archaeological sites.

(c) To the extent that unique archaeological resources are not preserved in place or not left in an undisturbed state, mitigation measures shall be required as provided in this subdivision.

(d) Excavation as mitigation shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project.

(e) In no event shall the amount paid by a project applicant for mitigation measures required pursuant to subdivision (c) exceed the following amounts:

(1) An amount equal to one-half of 1 percent of the projected cost of the project for mitigation measures undertaken within the site boundaries of a commercial or industrial project.

(2) An amount equal to three-fourths of 1 percent of the projected cost of the project for mitigation measures undertaken within the site boundaries of a housing project consisting of a single unit.

(3) If a housing project consists of more than a single unit, an amount equal to three-fourths of 1 percent of the projected cost of the project for mitigation measures undertaken within the site boundaries of the project for the first unit plus the sum of the following:

(A) Two hundred dollars ($200) per unit for any of the next 99 units.

(B) One hundred fifty dollars ($150) per unit for any of the next 400 units.

(C) One hundred dollars ($100) per unit in excess of 500 units.

(f) Unless special or unusual circumstances warrant an exception, the field excavation phase of an approved mitigation plan shall be completed within 90 days after final approval necessary to implement the physical development of the project or, if a phased project, in connection with the phased portion to which the specific mitigation measures are applicable. However, the project applicant may extend that period if he or she so elects. Nothing in this section shall nullify protections for Indian cemeteries under any other provision of law.

Historical Resources

"Historical resource" is a term with a defined statutory meaning (PRC Section 21084.1; State CEQA Guidelines Sections 15064.5[a] and [b]). Under State CEQA Guidelines Section 15064.5(a), historical resources include the following:

1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR is considered a historical resource (PRC Section 5024.1).

2) A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g), will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3) Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1).

4) The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1[k]), or not identified in a historical resources survey (meeting the criteria in PRC Section 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

Tribal Cultural Resources

CEQA also requires lead agencies to consider whether projects would affect tribal cultural resources. PRC Section 21074 states:

a) "Tribal cultural resources" are 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.

b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Public Resources Code Section 21080.3

AB 52, signed by the California Governor in September of 2014, established a new class of resources under CEQA: "tribal cultural resources," defined in PRC Section 21074. Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American Tribe, begin consultation before the release of an EIR, negative declaration, or mitigated negative declaration. CEQA Sections 21080.3.1 and 21080.3.2 state that within 14 days of determining that a project application is complete, or to undertake a project, the lead agency must provide formal notification, in writing, to the tribes that have requested notification of proposed projects in the lead agency's jurisdiction. If it wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. The lead agency must begin the consultation process with the tribes that have requested consultation within 30 days of receiving the request for consultation. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, provisions under PRC Section 21084.3 (b) describe mitigation measures that may avoid or minimize the significant adverse impacts. Examples include:

(1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

(2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

(A) Protecting the cultural character and integrity of the resource

(B) Protecting the traditional use of the resource

(C) Protecting the confidentiality of the resource.

(3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

(4) Protecting the resource.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act (PRC Section 5097.9) applies to both State and private lands. The act requires, upon discovery of human remains, that construction or excavation activity cease and that the county coroner be notified. If the remains are those of a Native American, the coroner must notify the NAHC, which notifies and has the authority to designate the most likely descendant (MLD) of the deceased. The act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

Health and Safety Code, Sections 7050.5

Section 7050.5 of the Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If they are determined to be those of a Native American, the coroner must contact NAHC.

Public Resources Code, Section 5097

PRC Section 5097 specifies the procedures to be followed if human remains are unexpectedly discovered on nonfederal land. The disposition of Native American burials falls within the jurisdiction of NAHC. Section 5097.5 of the code states:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

LOCAL

Marin County Code

Title 22. Development Code. The purpose of Title 22 Development Code is to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the County. The Development Code carries out the policies of the Marin Countywide Plan by classifying and regulating the uses of land and structures within the unincorporated areas of Marin County. The Marin Countywide Plan includes policies to preserve and enhance the natural environment of the County, and to strive for a high quality built environment.

Chapter 22.20.040 Outdoor Construction Activities. Outdoor construction activities that require Building Permits shall meet the standards enumerated below in addition to any other requirements imposed by Federal, State, or local agencies.

E. Archaeological, Historical, and Paleontological Resources. In the event that archaeological, historic, or paleontological resources are discovered during any construction, construction activities shall cease, and the Agency shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may occur in compliance with State and Federal law. The disturbance of an Indian midden may require the issuance of an Excavation Permit by the Department of Public Works, in compliance with Chapter 5.32 (Excavating Indian Middens) of the County Code.

Marin Countywide Plan

Chapter 4, Socioeconomic Element, of the Marin Countywide Plan, contains the following goals and policies replated to historical resources (Marin County 2023).

GOAL HAR-1: Historical Resource Protection. Identify and protect archaeological and historical resources as major contributors to quality of life and community vitality in Marin.

- **Policy HAR-1.1: Preserve Historical and Archaeological Resources.** Identify archaeological and historical resource sites.

- Policy HAR-1.2: Document Historical Information. Provide documents, photographs, and other historical information whenever possible to be catalogued in the Anne T. Kent California Room in the Marin County Free Library.
- Policy HAR-1.3: Avoid Impacts to Historical and Archaeological Resources. Ensure that human activity avoids damaging cultural resources, where feasible.

3.3.2 Environmental Setting

REGIONAL PREHISTORY

Human occupation in northwest California is generally subdivided into distinct time periods, each of which is marked by various adaptive patterns and geographical distributions. Regional northwest California archaeology is divided among three patterns: Borax Lake Pattern (10,000 – 6,000 calibrated years before present [cal BP]), Archaic (6,000 cal BP – 500 cal AD), and Emergent (AD 500 – 1,800).

Paleo Indian (10,000-6,000 cal BP)

The Paleo-Indian Period is the first to be sufficiently defined and is marked by the earliest material evidence available of human occupation in California, short-term settlement patterns, and the absence of either developed milling technologies or elaborate mechanisms of exchange.

Archaic (2,500 cal BP -cal AD 500)

This period is divided into the Lower, Middle, and Upper Archaic. The Lower being earliest in time (6,000 – 3,000 BP) and witnessing the introduction of milling technology, continued geographic mobility and only limited sedentism, as well as an exchange economy similar to that of the preceding period. The Middle Archaic (3,000 – 550 BP) sees a further development of milling technology with the introduction of the mortar and pestle, greater sedentism, a more diversified economy, and the possible entry of a distinct tribal group. The Upper Archaic (1,000 BP – AD 500) is distinguished by significant cultural complexity, both in terms of its social economy and religious traditions. Status distinctions are evident, shell beads come into prominence, and more elaborate forms of social exchange become the norm. Small village sites are established and sophisticated adaptations to a sedentary culture is now in evidence.

Emergent (cal AD 500 - 1,800)

The Emergent Period is divided in two, Lower (AD 500 – 1,500) and Upper (AD 1,500 – 1,800), the former seeing the bow and arrow introduced as the primary hunting weapon and the establishment of local tribal territories and large village sites administered by tribal leaders; and the latter seeing the introduction of clam disk currency and the specialized production of goods, as well as the expansion of trade ranges.

ETHNOGRAPHY

The Coast Miwok tribe is indigenous to lands extending from Marin County to southern Sonoma County, and eastward from the coast to the Napa-Sonoma Marshes Wildlife Area. The Coast Miwok include the linguistically distinct Olamentko tribe in Bodega Bay and the Hookooeko and Lekahtewutko tribes of southern Marin, making them the second-largest Miwok tribe. However, dialectic distinctions between Hookooeko and Lekahtewutko have been criticized as being too nuanced to be significant. Villages tended to be established at the threshold of differing ecosystems, allowing expedient access to the widest variety of resources. Between the indigenous Bay Area tribes, a total of seven different languages were spoken: Bay Miwok, Coast Miwok, Karkin Costanoan, Patwin, Southern Pomo, San Francisco Bay Costanoan, and Wappo. Local tribes were made up of 200 to 400 individuals on average and grouped members into several neighboring villages over a territory of some 10 to 12 miles. Ancestors of the Coast Miwok would have traveled south as far as the Monterey Peninsula by 500 BP, populating San Francisco in the north and lands along the South Coast Ranges in between. Social ties within tribes were maintained through the observance of communal feasts, dances, and other activities such as group hunting and foraging, and religious

ceremony. At the time of European contact, the Miwok and Ohlone, along with Patwins and Wappo from the north, were known to have intermarried. In 2000, the Federated Indians of Graton Rancheria, formerly known as the Federated Coast Miwok, regained full rights and privileges afforded federally recognized tribes. The federation includes both Coast Miwok and Southern Pomo tribes; currently there are almost 500 members registered with the tribe (Natural Investigations Company [NIC] 2023 (Appendix D)).

Acorns represent the primary vegetal food resource of the pre-contact Coast Miwok, as it did for the Ohlone. Ground into flour with mortar and pestle, the nut was made into bread and other dishes. Tanoak (*Notholithocarpus densiflorus*), Black oak (*Quercus kelloggii*), Blue oak (*Quercus douglasii*) and Valley oak (*Quercus lobata*) were favored species and available in large quantities. Hard seeds, roots, and herbs were also regularly consumed. Terrestrial mammals such as tule elk, deer, bear, and rabbits constituted a portion of the Coast Miwok diet while marine foods including fish, eels, waterfowl, and shellfish were very important; oysters and mussels were prioritized and eventually overexploited. By AD 160, clam harvesting replaced the reliance on oysters and mussels. Controlled burning of local land was carried out in the fall to ensure a healthy supply of plant foods each year (NIC 2023 (Appendix D)).

Significant technological distinctions are evident in the material culture of the Coast Miwok in Marin County, many of which connected them to the other tribal groups in the Bay Area. Production and manufacture included the creation of clothing, ornamentation, woodwork, stonework, basketry, weapons, and shell currency. While everyday body clothing was scant, the Coast Miwok are noted to have worn deerskin loin cloths and shirts, while women wore aprons of grass, tule and sometimes skirts and capes made from deerskin. Ornamentation of feather wristlets, belts, headdresses, plumes, and shells were meticulously crafted and generally reserved for special occasions; however, shell necklaces may have been worn more frequently to communicate the death of a spouse for both men and women. Woodworking included hallowed log foot drums, double-bladed balsa paddles, and mush stirrers while stonework produced mortars, charm stones, and obsidian blades and points. Canoes or balsas made of tule were constructed and used for navigation through marshland channels, promoting trade and productive hunting and fishing; while coiled and twined basketry occasionally ornamented with feathers and beads facilitated Coast Miwok life in the form of food storage containers, cradles, cooking implements, and myriad other crafts. Production and labor tasks were divided along gender lines with women being responsible for the harvesting of vegetal resources and basket weaving, and men for the bulk of the hunting, fishing, and the construction and placement of traps for wild game. Trade of resources between tribes was a major mechanism driving the indigenous economy. Shell beads, basketry, vegetal and animal foods and medicines, as well as tools and the raw materials with which to make them were all exchanged on a semi-regular basis primarily with the Pomo, Wappo, and Southern Pomo. Currency in the form of disk beads made of clam shells were used, and the Coast Miwok had an abundant supply of these shells in Bodega Bay. Reciprocity of resources is noted between the Coast Miwok and Southern Pomo as the Southern Pomo routinely entered Coast Miwok territory to dig for clams (NIC 2023 (Appendix D)).

HISTORIC SETTING

Marin County History

There is limited documentation regarding the early explorations of modern-day Marin County. Among the first Europeans to have explored the area was Sir Francis Drake on his ship the *Golden Hind* along with the 164 men in his company. Drake is believed to have docked his ship at or near Point Reyes in 1579 and spent 36 days camped in the area. Encounters with the indigenous Coast Miwok were documented by Francis Fletcher, a chaplain in Drake's company in what is commonly referred to as the Drake Chronicles. These writings detail the reception of the English sea voyagers by the native community, which was celebrated with ceremony and even an honorary 'crowning' of Drake (NIC 2023 (Appendix D)).

Although Drake explored Marin County in the late 16th century, the County was not settled until 1817 when the Spanish established Mission San Rafael Arcángel. Twenty-one missions were established by the Spanish and the Franciscan Order along the coast between San Diego and San Francisco between 1769 and 1823. The missions established along the travel corridor known as El Camino Real, or King's Highway, that are closest to the current Project are Mission San Francisco de Asís (Mission Dolores) founded in 1776, approximately 14 miles to the south, and

Mission San Rafael Arcángel founded in 1817, approximately 8 miles to the north. The original El Camino Real route traveled north from Mission San Diego de Alcala in San Diego along the coast roughly along the alignment of US Highway 101, then along SR 82 to San Francisco (NIC 2023 (Appendix D)).

After the end of the Mexican Revolution (1810–1821) against the Spanish crown, the Mexican Period is marked by an extensive era of land grants, most of which were in the interior of the state, as well as by exploration by American fur trappers west of the Sierra Nevada Mountains. Twenty-one ranchos were awarded in Marin County by 1846. Rancho Corte Madera del Presidio was the first land grant to be awarded in Marin County in 1834 by Governor Figueroa to John Reed, who owned a ferry transporting service on Richardson Bay. Once he received the land grant, Reed built the first sawmill in the county where he provided lumber for the San Francisco Presidio. In 1836, Reed married Hilaria Sanchez and had four children, but died soon after in 1843 at age 38. Upon his death, his widow inherited the house and livestock while the land was partitioned among the four children. Eventually, the Reed claim was confirmed by the Land Commission in 1856. The Project Area resides solely within the historical borders of Rancho Corte Madera del Presidio (NIC 2023 (Appendix D)).

Marin County is one of the original 27 California counties created in 1850, earning its namesake from the famed Chief Marin, otherwise known as Huicmuse, who was an 18th-century leader of the Licatiut Coast Miwok tribe. San Rafael was chosen as the county seat, and it remains so to this day. By 1860 the county boundaries were fixed and in 1862 it was portioned into eight townships: San Rafael, Novato, San Antonio, Tomales, Nicasio, Point Reyes, Bolinas, and Sausalito (NIC 2023 (Appendix D)).

Development of Golden Gate Baptist Theological Seminary

In 1934, Isam B. Hodges arrived in the Bay Area and within two years he was pastor of Oakland's Golden Gate Baptist Church. The Golden Gate Baptist Church had been organized in 1892 with the Northern Baptist Convention; Hodges, believing that the Northern Baptists were not doing enough to grow their ministries, sought for affiliation with the Southern Baptist Convention for his church in November 1943. Hodges had established sufficient reputation among Sothern Baptists and was the president of the General Convention from 1944 to 1945, providing strong leadership and support for Southern Baptist expansion in California (Appendix E).

In the spring of 1944, the congregation of Golden Gate Baptist Church authorized its deacons to establish a theological seminary, with the expressed purpose of training men and women for the ministry. The combined committee met on March 31, 1944, to formally organize Golden Gate Baptist Theological Seminary (GGBTS). By summer of 1944, a state charter had been issued and classes began at the Golden Gate Baptist Church in Oakland. In November 1945, the Southern Baptist General Convention of California gained ownership of the school and Dr. Benjamin O. Herring succeeded Hodges as president in 1946. Although primarily an educator, Herring was active in growing the GGBTS. He wrote letters thanking the Golden Gate Baptist Church for use of their facilities while also suggesting the GGBTS should acquire housing facilities. He repeatedly presented the case that the SBC open a Baptist College in California and petitioned Baptist churches for financial support. In early 1947, Herring was successful in moving the GGBTS to larger, more spacious quarters in nearby Berkeley. This property also included dormitories for women. In 1949 the GGBTS was accredited by the State of California. All of Herring's work contributed to the SBC accepting ownership of the school in May 1950 (Appendix E).

Herring resigned his presidency in 1951 and was succeeded by Dr. Harold K. Graves from Oklahoma. Graves continued to expand the faculty and push for academic excellence. During this time, he also continued Herring's search for a new location. In 1953 he led the acquisition of 148 acres of prime Marin County real estate, at the site of a dairy farm previously considered as a permanent location for the United Nations. Moving the GGBTS was a bold venture that would require the development and construction of all new facilities (Appendix E).

The GGBTS campus was opened in September 1959. The campus buildings were designed by noted San Francisco architect John Carl Warnecke and the campus landscape was planned and designed by influential landscape architect Lawrence Halprin. Graves continued to lead the GGBTS until he retired and became president emeritus in 1977. Completed, the campus had nine buildings containing nearly 120,000 square feet of floor space, with 211 student housing units and spectacular views of San Francisco's skyline over the bay. Enrollment peaked in the 1970s at 750 students, most doing graduate work (Appendix E).

Dr. William M. Pinson Jr., pastor of the First Baptist Church of Wichita Falls, Texas, became president of GGBTS after Graves in 1977. His five-year tenure saw the GGBTS continue to expand its visibility. Pinson led in the establishment of the GGBTS's regional campus in the Pacific Northwest. Dr. Franklin D. Pollard, pastor of the First Baptist Church of San Antonio, Texas, was inaugurated as the fifth president of GGBTS in 1983. During his three-year administration, the GGBTS experienced the largest enrollment gain in its history, a 20 percent increase in the fall of 1984 over the previous fall. Pollard also led in a redevelopment of the GGBTS master plan so more students could study at GGBTS (Appendix E).

In April 2014, the board of trustees voted to move the GGBTS's main campus from Mill Valley 400 miles south to Ontario, California and rename the school Gateway Seminary of the Southern Baptist Convention. The Marin campus was sold to North Coast Land Holdings for $84 million. In 2016, North Coast Land Holdings signed a three-year lease with Olivet University, a private evangelical Christian school. The Marin site is now called the Seminary at Strawberry and, besides having the university tenant, is a setting for weddings, seminars, and special events (Appendix E).

The Design Team

John Carl Warnecke was an award-winning architect based in the San Francisco Bay Area. Warnecke pioneered the idea of contextual architecture, that modern buildings could be designed in sympathy with the natural and built context. Contextual architecture reflects the setting, forms, and details of a building's surrounding landscape, not building something that contrasts and feels out of place. In the late 1950s, the architectural profession did not generally acknowledge the neighboring built environment. Among significant works of this period by Warnecke's office were the John F. Kennedy Gravesite in Arlington National Cemetery (1966); the Hawaii State Capitol (1969) in Honolulu; Lafayette Square in Washington DC (1962-72), the Soviet Embassy in Washington DC (1975); and the Hart Senate Office Building in Washington DC (1982). His designs reflected his passion for structures that harmonize with the environment and the heritage of the places in which they were built (Appendix E).

Lawrence Halprin was one of the most influential landscape architects of the latter 20th century. With a career spanning more than five decades, he designed significant projects overseas and across the United States including the landscapes for the Hebrew University in Jerusalem, Israel (1960), the United Nations Plaza in San Francisco (1975), Sea Ranch on the Sonoma Coast (1965), and Park Central Square in Springfield, Missouri (1974; listed in the NRHP in 2010). His designs sought to impart positive social impact and user experience, as well as convey artistic expression by bringing nature into urban spaces in unprecedented ways. Stylistically, Halprin was part of the modernist design movement. Expanding upon the principles of landscape architecture pioneered by Frederick Law Olmsted, Halprin created new types of landscapes that were dynamic, environmentally sensitive, commemorative, and eco-friendly. One of his specialties was creating grand open space networks that were carved into declining infrastructure. Halprin, like Olmsted, wanted to take the viewer on a scenic journey so he scaled his designs with the human viewpoint in mind. However, unlike Olmsted, Halprin's landscapes were inspired by, but not imitative of, nature; his signature elements included scenic vegetation, striking water features, sculptures, terraced backdrops, native stones, and concrete (Appendix E).

RECORDS SEARCHES, SURVEYS, AND CONSULTATION

On November 17, 2021, a records search of the project site and a 0.25-mile buffer was conducted at the Northwest Information Center (NWIC), at Sonoma State University. The following information was reviewed as part of the records search:

- NRHP and CRHR,
- Historic Property Data File for Marin County,
- Archaeological Determinations of Eligibility,
- California Inventory of Historic Resources,
- California State Historic Landmarks,
- California Points of Historical Interest, and
- Historical GLO land plat maps.

The results of the records search review revealed that five previous studies of cultural resources have been conducted within the project site and that an additional 13 cultural resources studies have been completed for lands within a 0.25-mile radius. All studies were completed between 1978 and 2013. The records search at the NWIC revealed that three archaeological sites have been previously recorded within the project site, all of which are precontact sites. In addition, a total of five previously recorded historic-era sites were identified within the 0.25-mile radius. No built-environment resources have been previously identified within the project site.

An archaeological pedestrian survey of the project site was conducted in two phases by NIC, on February 14 and 15, 2022. The survey was constrained by existing hardscape and buildings. All non-paved portions of the project site were surveyed intensively using transects spaced at intervals no greater than 15 meters apart. During the pedestrian survey, all visible ground surface in the project site was carefully examined for cultural material (e.g., flaked stone tools, tool-making debris, stone milling tools, or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Ground disturbances (e.g., animal burrows, embankments, graveled or dirt roads) were visually inspected. One historic-era archaeological site was identified as a result of the survey effort (NIC-2022-Marin-01). In addition, the three precontact archaeological sites identified through the NWIC records search as being within the project site were relocated and their site records were updated. No new precontact archaeological sites were observed during the survey.

Subsurface testing for the project was conducted between February 20 and 22, 2023, by NIC. The subsurface testing consisted of manual excavation of auger probes (APs) using a soil auger. APs were excavated using a 10-centimeter (cm)-diameter auger in 20-cm levels to a maximum depth of 100 cm or until two consecutive sterile levels were encountered. APs surrounding known archaeological resources were dug to a depth of three consecutive sterile levels or a maximum depth of 100 cm below surface. APs not in close proximity to known archaeological resources were dug to a depth of two consecutive sterile levels or a max depth of 100 cm below surface. A total of 25 APs were placed across the project area. Ten APs were placed along the accessible boundaries of the three precontact archaeological sites and 15 APs were placed in locations where soil type and levels of previous disturbances indicate the highest probability for the presence of buried deposits of intact cultural resources. NIC did not identify any tribal cultural resources, archaeological resources, or cultural soils (e.g., midden) in any of the APs. Based on the results of the AP excavations, NIC determined that the existing mapped boundaries for sites the three precontact archaeological sites are accurate and the potential for the presence of intact tribal or archaeological resources beyond existing site boundaries in open or other areas in project boundaries is low (NIC 2023 (Appendix D)).

The built-environment survey was conducted on November 22, 2021, by architectural historian Alta Cunningham, who meets the Secretary of the Interior Professional Qualification Standards for Architectural History and History. Field work consisted of an intensive pedestrian survey of the built environment features within the project site 45 years or older. Areas that are part of the 130-acre campus property but not part of the current project and do not contain built-environment features were not surveyed. GGBTS was recorded and evaluated as a potential historic district. Fifty-two historic-era buildings and structures were recorded (see Appendix E).

NRHP and CRHR criteria were used to evaluate the significance of the historic features and archaeological sites. The NRHP criteria for eligibility are codified in 36 CFR Part 60 and explained in guidelines published by the Keeper of the NRHP. The NRHP and CRHR are discussed in more detail above in Section 3.3.1, "Regulatory Setting." Eligibility for listing on the NRHP and the CRHR rests on twin factors of significance and integrity. A resource must have both significance and integrity to be considered eligible. Loss of integrity, if sufficiently great, will become more important than the historical significance a resource may possess and render it ineligible. Likewise, a resource can have complete integrity, but if it lacks significance, it must also be considered ineligible.

Archaeological Sites

Three precontact archaeological sites were identified within the project site in addition to one mixed-age secondary historic dump (NIC-2022-Marin-01), discussed in additional detail below. One of the precontact archaeological sites identified within the project site is considered to be potentially significant as it may yield information important to the prehistory of the area (CRHR Criterion 4). For the two other precontact archaeological sites, one lacks integrity and

does not appear to have the potential to yield further information or answer scientific questions under Criterion 4 and the other does not meet any of the CRHR criteria. Therefore, neither are considered eligible for listing in the CRHR and are not considered unique archaeological resources as defined under PRC Section 21083.2(g) (see Appendix D).

NIC-2022-Marin-01

NIC-2022-Marin-01 consists of mixed-age secondary historic dump consisting of mortared, stacked rock wall foundations with rebar, a plastic tote lid, metal garbage can lid, plywood, cinder blocks, asphalt chunks, plastic bucket. These wall segments appear to have been removed from their original location and were redeposited here at a later time based on the various shape and size of the rock wall segments and the bent conditions of the protruding rebar. The field assessment of NIC-2022-Marin-01 finds that the site lacks the variety of artifacts and structural remains, as well as integrity of constituents, needed to comprise a CRHR-eligible resource or as a unique archaeological resource. Therefore, the site does not appear to qualify as an historical resource as defined under CEQA Section 15064.5 or a unique archaeological resource as defined under PRC Section 21083.2(g).

Historic Features

GGBTS

The majority of the 127-acre site is made up of 211 residential units, consisting of 16 studios, 54 one-bedroom housing units, 54 two-bedroom housing units, 18 three-bedroom housing units, three single-family homes, and 66 dormitory units. Historical research revealed no specific contributions to the Southern Baptist Convention's growth once the campus moved to Marin. Because the historic record does not show the property to be associated with events that have made a significant contribution to history, it does not appear to meet NRHP/CRHR Criterion A/1. The establishment of a Baptist seminary in California is credited to Isam B. Hodges, and the expansion of GGBTS in Berkeley is credited to Dr. Benjamin O. Herring and Dr. Harold K. Graves. Although Graves was responsible for the founding of the Marin campus of GGBTS, this does not rise to the level of significance necessary for NRHP or CRHR consideration. Also, while the Marin campus of GGBTS was designed by John Carl Warnecke and Lawrence Halprin, this property does not appear to be the most representative example of their work, discussed further under Criterion C/3. Therefore, the Marin campus of GGBTS does not appear to meet NRHP/CRHR Criterion B/2. The GGBTS campus buildings are not examples of modernist work and there is minimal landscaping. While the GGBTS property has a park-like setting and the hillside is mirrored in the terracing of buildings and the main parking lot, the campus is not representative of Warnecke's or Halprin's work. As a whole, the GGBTS campus lacks the architectural and design values of both masters, and therefore does not appear to possess sufficient design or construction value to warrant inclusion in the NRHP/CRHR under Criterion C/3. Criterion D/4 generally applies to archaeological resources, or other resources that through study of construction details can provide information that cannot be obtained in other ways. Construction details about GGBTS have been documented and are stored at the Gateway Seminary library in Ontario, California. The property does not appear to be significant under this criterion because it is not likely to yield any additional important information about our history.

Tribal Cultural Resources

Sacred Lands File Search

NAHC was contacted to request a search of its Sacred Lands file, and negative results were returned on January 27, 2022.

Native American Consultation

As previously stated in Section 3.3.1, "Regulatory Setting," AB 52 applies to those projects for which a lead agency issues a notice of preparation of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration on or after July 1, 2015. Consultation under AB 52 was offered by the County to those tribal entities that had requested notification of proposed projects in the lead agency's jurisdiction. On December 15, 2020, the County mailed a letter to Buffy McQuillen from the Federated Indians of Graton Rancheria (FIGR). The tribe responded on December 17, 2020, requesting consultation. A summary of events related to communication between FIGR and Marin County is provided below:

- December 15, 2020, The County sent all AB 52 notification letters to the interested Tribes regarding the project.
- December 20, 2020, FIGR requested consultation on the project.
- January 2022, NIC extended invitation to FIGR to join archaeological survey; FIGR declined.
- March 7, 2022, virtual meeting with County, FIGR, NIC, Ascent.
- May 20, 2022, archaeological report was sent to FIGR. No comments were received.
- August 29, 2022, virtual meeting to discuss the results of the report; subsurface testing recommended, monitoring during project implementation requested.
- March 21, 2023, subsurface testing report was sent to FIGR. No further comments from FIGR were forthcoming.

On June 16, 2021, the County also sent a letter to the Coast Miwok Tribal Council of Marin (CMTCM) and followed up with an email on July 29, 2021. On August 03, 2021, CMTCM responded stating that they would like to consult. A meeting was held between CMTCM and the County on February 28, 2022 and no new tribal cultural resources information about the project site were shared. Following the meeting, a subsequent email was sent by the County to CMTCM requesting any additional information and inviting the CMTCM members for a site visit if desired. No further correspondence or response was received by the County from the CMTCM. Therefore, the consultation was closed.

3.3.3 Impacts and Mitigation Measures

METHODOLOGY

The impact analyses for archaeological and historical resources are based on the findings and recommendations of the *Cultural Resources Assessment for the North Coast Land Holdings Project, Mill Valley, Marin County, California (*NIC 2023 (Appendix D)) and the *Historical Resource Evaluation Report for the North Coast Land Holding Project* (Appendix E). These analyses are also informed by the provisions and requirements of federal, state, and local laws and regulations that apply to cultural resources.

PRC Section 21083.2(g) defines a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following CRHR-related criteria: (1) that it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) that it as a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) that it is directly associated with a scientifically recognized important prehistoric or historic event or person. An impact on a resource that is not unique is not a significant environmental impact under CEQA (State CEQA Guidelines Section 15064.5[c][4]). If an archaeological resource qualifies as a resource under CRHR criteria, then the resource is treated as a unique archaeological resource for the purposes of CEQA.

PRC Section 21074 defines "tribal cultural resources" as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" that are listed or determined eligible for listing in the CRHR, listed in a local register of historical resources, or otherwise determined by the lead agency to be a tribal cultural resource.

For the purposes of the impact discussion, "historical resource" is used to describe built-environment historic-era resources. Archaeological resources (both prehistoric and historic-era,) which may qualify as "historical resources" pursuant to CEQA, are analyzed separately from built-environment historical resources.

THRESHOLDS OF SIGNIFICANCE

Based on PRC Sections 21084.1 and 21084.2, as well as Appendix G of the State CEQA Guidelines, the project would result in a significant impact on cultural resources if it would:

- cause a substantial adverse change in the significance of a built environment historical resource pursuant to Section 15064.5 of the State CEQA Guidelines;
- cause a substantial adverse change in the significance of a unique archaeological resource or an historical resource of an archaeological nature pursuant to Section 15064.5 of the State CEQA Guidelines;
- disturb any human remains, including those interred outside of dedicated cemeteries; or
- cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC Section 5020.1(k), or
  - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

ISSUES NOT DISCUSSED FURTHER

All potential archaeological, historical, and tribal cultural resources issues identified in the significance criteria are evaluated below.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: Cause a Substantial Adverse Change in the Significance of Built-Environment Historical Resources

No new built-environment historical resources were identified as a result of surveys conducted on the project site. The GGBTS is recommended not eligible for listing in the NRHP or CRHR. Because the property is not a historical resource pursuant to Section 15064.5, there would be **no impact**.

No previously recorded built-environment historical resources were identified by the NWIC records search. The pedestrian survey recorded and evaluated the GGBTS and its buildings at a district level; the property is recommended not eligible for inclusion in the NRHP or CRHR. As described previously under Records Searches, Surveys, and Consultation – Historic Features, the GGBTS in Marin County is recommended not eligible for listing and does not appear to meet any of the significance criteria necessary for listing; the property is not associated with important events or people in history (NRHP/CRHR Criterion A/1), is not representative of the typical work of John Carl Warnecke and Lawrence Halprin (Criteria B/2 and C/3) and is not likely to yield any additional important information about our history (Criterion D/4) (Appendix E).

Therefore, because the property is not a historical resource pursuant to Section 15064.5, the project would have **no impact** on built-environment historical resources.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.3-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Historical Resources of an Archaeological Nature

Based on the records search, pedestrian survey, and subsurface testing, one unique precontact archaeological site is located in the project site. Although project activities would avoid this site, it is possible that ground-disturbing activities could result in discovery or damage of yet undiscovered archaeological resources as defined in State CEQA Guidelines Section 15064.5. This would be a **potentially significant** impact.

The NWIC records search, pedestrian survey, and subsurface testing revealed four archaeological sites within the project area, three precontact sites and one historic-era site (NIC-2022-Marin-01). Out of the three precontact archaeological sites, two are not considered eligible for CRHR and do not meet the criteria of a unique archaeological resource under PRC Section 21083.2(g). The assessment of NIC-2022-Marin-01 determined that the site lacks the variety of artifacts and structural remains, as well as integrity of constituents, needed to comprise a CRHR-eligible resource or a unique archaeological resource. Because these sites are not considered eligible for the CRHR or as unique archaeological resources as defined under CEQA Section 21083.2(g), they do not require further protection and do not need to be avoided by project design or implementation.

One precontact archaeological resource is located in the project site and is considered to be potentially significant as it may yield information important to the prehistory of the area (CRHR Criterion 4). These questions could include: do recovered deposits and/or soils contain temporally diagnostic elements that can be used to establish the age of the site, and/or different periods of occupation; how does the age indicated by these recovered deposits and/or elements compare to previous discoveries; or how do the ancestral artifacts compare with those found at other sites throughout the Marin area?

Impacts on this precontact archaeological site would be less than significant, as project activities would avoid this site. Even so, project construction could encounter other previously undiscovered or unrecorded archaeological sites and materials during preconstruction- or construction-related ground-disturbing activities. Although Marin County Code Chapter 22.20.040 Section E calls for halting construction and notifying a qualified archaeologist, these activities could damage or destroy previously undiscovered unique archaeological resources or historical resources of an archaeological nature. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.3-2: For All Ground-Disturbing Construction Activities, Halt Ground Disturbance Upon Discovery of Subsurface Archaeological Features

Consistent with Marin County Code Chapter 22.20.040 Section E, if any precontact or historic-era subsurface archaeological features or deposits (e.g., ceramic shard, trash scatters), including locally darkened soil ("midden"), which may conceal cultural deposits, are discovered during construction, all ground-disturbing activity within 100 feet of the resources shall be halted, and a qualified professional archaeologist (one who meets the Secretary of the Interior's Professional Qualification Standards for archaeology) shall be retained to assess the significance of the find (i.e., whether the find may contain unique archaeological resources, historical resources of an archaeological nature, or tribal cultural resources). If the qualified archaeologist determines the archaeological material to be Native American in nature, the archaeologist under contract to North Coast Land Holdings shall contact the Federated Indians of Graton Rancheria. A tribal representative from Federated Indians of Graton Rancheria may make recommendations for further evaluation and treatment as necessary and provide input on the preferred treatment of the find. If the find is determined to be significant by the archaeologist or the tribal representative (i.e., because it is determined to constitute a unique archaeological resource, an historical resource of an archaeological nature, or a tribal cultural resource, as appropriate), the archaeologist and tribal representative, as appropriate, shall develop, for consideration and approval (possibly with modifications) by the Director of Marin County Community Development Agency (Director) or his or her designee, appropriate mitigation procedures to protect the integrity of the resource and ensure that no additional resources are affected.

(a) Where the find is determined to be a tribal cultural resource, the Director or designee shall obtain the approval of the representative from Federated Indians of Graton Rancheria, or provide a reasonable opportunity to solicit and obtain such approval, before approving the proposed mitigation procedures and requiring North Coast Land Holdings or another appropriate party to implement them.

(b) Where the find is a unique archaeological resource but not an historical resource of an archaeological character, mitigation procedures shall be developed and implemented in accordance with PRC Section 21083.2, subdivisions (b) through (f), except as provided below.

(c) Where the find is an historical resource of an archaeological character, mitigation procedures shall be developed and implemented consistent with Section 15126.4(b) of the State CEQA Guidelines, with a preference for preservation in place. Avoidance or preservation of unique archaeological resources or historical resources of an archaeological nature shall not be required where such avoidance or preservation in place would preclude the construction of important structures or infrastructure or require exorbitant expenditures, as determined by the Director or designee. Where avoidance or preservation are not appropriate for these reasons, the professional archaeologist, in consultation with the Director or designee, shall prepare a detailed recommended a treatment plan for consideration and approval by the Director or designee, which may include data recovery. Work may not resume within the no-work radius until the Director or designee, in consultation with the professional archaeologist, determines that the site either: 1) does not contain unique archaeological resources or historical resources of an archaeological nature; or 2) that the preservation and/or treatment measures have been completed to the satisfaction of the Director or designee.

Significance after Mitigation

Implementation of Mitigation Measure 3.3-2 would reduce impacts associated with archaeological resources to a **less-than-significant** level because it would require the performance of professionally accepted and legally compliant procedures for the discovery and protection of previously undocumented significant archaeological resources (i.e., tribal cultural resources, unique archaeological resources, and historical resources of an archaeological nature).

Impact 3.3-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource

Tribal consultation under AB 52 has not resulted in the identification of tribal cultural resources on the project site; however, precontact archaeological resources are located on the project site. Additionally, excavation activities associated with project construction may disturb or destroy previously undiscovered significant subsurface tribal cultural resources. This impact would be **potentially significant**.

The search of the NAHC Sacred Land Files did not identify any documented sacred lands. As detailed above, the County sent AB 52 notification letters to tribal representatives. Consultation with the Federated Indians of Graton Rancheria has not resulted in the identification of any tribal cultural resources as defined by PRC Section 21074; however, the Federated Indians of Graton Rancheria have requested archaeological and tribal monitoring during ground-disturbance activities in the highly sensitive areas of the project site. These Culturally Sensitive Areas have been defined as a 100-foot buffer surrounding the precontact archaeological sites within the project site.

Ground-disturbing activities during project construction could uncover and damage or destroy previously unknown tribal cultural resources. This impact would be **potentially significant**.

Mitigation Measures

Implement Mitigation Measure 3.3-2 described above.

Mitigation Measure 3.3-3: Retain Archaeological and Tribal Monitors for Culturally Sensitive Areas

A minimum of three weeks prior to ground disturbance within 100 feet of the precontact archaeological sites identified within the project site (the Culturally Sensitive Areas), North Coast Land Holdings shall retain and compensate for the services of an archaeological monitor. This archaeological monitor shall contract directly with the Federated Indians of Graton Rancheria for tribal monitoring services. The archaeological monitor shall contact the

Tribal representatives a minimum of 14 days prior to beginning earthwork or other ground disturbing activities within the Culturally Sensitive Areas; construction activities shall proceed if no response is received from the Federated Indians of Graton Rancheria 48 hours prior to ground disturbing activities. The monitors shall only be present onsite during the construction phases that involve ground disturbing activities within the Culturally Sensitive Areas. The monitors shall complete daily monitoring logs that describe each day's activities, including construction activities, locations, soil, and any cultural materials identified.

Significance after Mitigation

Implementation of Mitigation Measures 3.3-2 and 3.3-3 would reduce impacts associated with tribal cultural resources to a **less-than-significant** level because it would require monitoring of known sensitive areas and the performance of professionally accepted and legally compliant procedures for the discovery and protection of previously undocumented significant resources.

Impact 3.3-4: Disturb Human Remains

Based on documentary research, no evidence suggests that any precontact or historic-era marked or un-marked human interments are present within or in the immediate vicinity of the project site. However, ground-disturbing construction activities could uncover previously unknown human remains. Compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097 would make this impact **less than significant**.

Based on documentary research, no evidence suggests that any precontact or historic-era marked or un-marked human interments are present within or in the immediate vicinity of the project site. However, the location of grave sites and Native American remains can occur outside of identified cemeteries or burial sites. Therefore, there is a possibility that unmarked, previously unknown Native American or other graves could be present within the project site and could be uncovered by project-related construction activities.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.

These statutes require that, if human remains are discovered, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the County coroner shall be notified immediately. If the remains are determined by the coroner to be Native American, NAHC shall be notified within 24 hours and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner's findings, the NAHC-designated Most Likely Descendant, if one is timely identified and steps forward, and the landowner shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments, if present, are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

Compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

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3.4 BIOLOGICAL RESOURCES

This section addresses common and sensitive biological resources that could be affected by implementation of the proposed project. This evaluation is based on data collected during reconnaissance-level surveys of the wildlife and plant habitat on the project site conducted on October 5, 2021 and September 1, 2022; a review of aerial photographs of the project site; and a search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (2022a), and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (2022).

Scoping comments received regarding biological resources in response to the NOP requested that the EIR address historic biological conditions on the project site; use of the site for butterfly overwintering; impacts to wildlife habitat and impacts from tree removal; consideration of special-status species and mitigation measures listed in the CDFW scoping comment; re-forestation following construction; missing data in County records for biological resources and consultation with local organizations and agencies; wildlife corridors; and a potential vernal pool in the Shuck Knoll area. See Appendix A for all NOP comments received.

3.4.1 Regulatory Setting

FEDERAL

Federal Endangered Species Act

Pursuant to the federal Endangered Species Act (ESA) (16 U.S.C. Section 1531 et seq.), the U.S. Fish and Wildlife Service (USFWS) regulates the taking of species listed in the ESA as threatened or endangered. In general, persons subject to the ESA (including private parties) are prohibited from "taking" endangered or threatened fish and wildlife species on private property, and from "taking" endangered or threatened plants in areas under federal jurisdiction or in violation of state law. Under Section 9 of the ESA, the definition of "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS has also interpreted the definition of "harm" to include significant habitat modification that could result in take.

Section 10 of the ESA applies if a non-federal agency is the lead agency for an action that results in take and no other federal agencies are involved in permitting the action. Section 7 of the ESA applies if a federal discretionary action is required (e.g., a federal agency must issue a permit), in which case the involved federal agency consults with USFWS.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it will be unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. Under the MBTA, "take" is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities." A take does not include habitat destruction or alteration, as long as there is not a direct taking of birds, nests, eggs, or parts thereof. The current list of species protected by the MBTA can be found in Title 50 of the CFR, Section 10.13. The list includes nearly all bird species native to the United States.

Clean Water Act – Sections 404 and 401

Section 404 of the Clean Water Act (CWA) (33 U.S.C. Section 1344) requires project proponents to obtain a permit from the U.S. Army Corps of Engineers (USACE) before performing any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Many surface waters and wetlands in California meet the criteria for waters of the United States. In accordance with Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must obtain water quality certification from the appropriate regional water quality control board (RWQCB) indicating that the action would uphold State water quality standards.

On May 26, 2023, the United States Supreme Court issued it decision in *Sackett v. Environmental Protection Agency*, 598 U.S. 651, 143 S.Ct. 1322 (2023), which interpreted the scope of the term "waters of the United States" (WOTUS) as used for purposes of wetland permitting under Section 404 of the CWA. The Court's decision has been generally understood to contract the legal jurisdiction previously asserted by the USACE. In its opinion, the Court held that the "waters" protected under the CWA are limited to "geographic[al] features that are described in ordinary parlance as 'streams, oceans, rivers, and lakes'" and to adjacent wetlands that are "indistinguishable" from those bodies of water due to a continuous surface connection, though "temporary interruptions in surface connection may sometimes occur because of phenomena like low tides or dry spells."

On August 29, 2023, in response to the *Sackett* decision, USACE and the U.S. Environmental Protection Agency (EPA) issued a final rulemaking that revises the definition of "Waters of the United States" (WOTUS) within USACE and EPA regulations. The adopted document is known as the WOTUS Rule. It defines "waters of the United States" to include the following:

- traditional navigable waters, the territorial seas, and interstate waters (Jurisdictional Waters);
- impoundments of Jurisdictional Waters (Jurisdictional Impoundments);
- relatively permanent, standing or continuously flowing tributaries to either Jurisdictional Waters or Jurisdictional Impoundments (Jurisdictional Tributaries);
- wetlands having a continuous surface connection to either Jurisdictional Waters, Jurisdictional Impoundments, or Jurisdictional Tributaries (Jurisdictional Wetlands); and
- relatively permanent, standing or continuously flowing intrastate lakes and ponds with a continuous surface connection to (but are not themselves) a Jurisdictional Water, Jurisdictional Impoundment, Jurisdictional Tributary, or Jurisdictional Wetland.

STATE

California Endangered Species Act

Pursuant to Fish and Game Code Section 2080, no person or public agency shall "take" any species determined by the California Fish and Game Commission to be endangered or threatened, except as otherwise provided in the California Endangered Species Act (CESA), the Native Plant Protection Act, or the California Desert Native Plants Act. Such "take," however, can occur via a permit issued by CDFW under Fish and Game Code Section 2081. That statute empowers CDFW to issue a permit for lawful projects that otherwise be disallowed under the take prohibition found in Section 2080. Under the definition of "take" found in Fish and Game Code section 86, which applies to Sections 2080 and 2081, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Under this definition, the concept of "take" extends to an activity that would directly or indirectly kill an individual of an endangered or threatened species, but does not include "harm" or "harass," as does the federal definition. As a result, the threshold for take is higher under CESA than under the federal ESA. Authorization for take of state-listed species can be obtained through a California Fish and Game Code Section 2081 incidental take permit.

California Fish and Game Code Sections 3503 and 3503.5—Protection of Bird Nests and Raptors

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the California Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders *Falconiformes* and *Strigiformes*), including their nests or eggs. Typical violations include destruction of active nests as a result of tree removal or disturbance caused by project construction or other activities that cause the adults to abandon the nest, resulting in loss of eggs and/or young.

Fully Protected Species under the California Fish and Game Code

Protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species and do not provide for

authorization of incidental take, except pursuant to natural community conservation plans (see Fish & Game Code Section 2835) or for specific project types (renewable energy, transportation, and water infrastructure) that are not a part of this proposed project (SB 147, Statutes of 2023).

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, waters of the state fall under the jurisdiction of the appropriate RWQCB. The RWQCB must prepare and periodically update water quality control plans (basin plans). Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control point and nonpoint sources of pollution to achieve and maintain these standards. The RWQCB's jurisdiction includes federally protected waters as well as areas that meet the definition of "waters of the state." Waters of the state is defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB has the discretion to take jurisdiction over areas not federally protected under Section 401 provided they meet the definition of waters of the state. Actions that affect waters of the state, including wetlands, must meet the RWQCB's waste discharge requirements.

Procedures for wetland regulation under Porter-Cologne are set forth in the State Water Resources Control Board's State Wetland Definition and Procedures for Discharges of Dredge of Fill Material to Waters of the State adopted on April 2, 2019 (the Procedures) and the related Implementation Guidance for the Procedures (Guidance), dated April 2020. These documents define a wetland as follows: (1) the area, under normal circumstances, has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. The Procedures, along with the Implementation Guidance, state that the permitting authority (e.g., a RWQCB) shall rely on any wetland area delineation from a final aquatic resource report verified by the USACE. If the USACE does not require an aquatic resource delineation report, an applicant must submit a delineation of all waters, but these delineations will be verified by the RWQCB staff during application review. Similarly, if the USACE does not require a delineation, but similar information is prepared for CDFW, the applicant submit that information to the RWQCB, which will determine if it is sufficient for the RWQCB's purposes.

The Procedures, along with the Interim Guidance, also include procedures for the submission, review, and approval of applications for activities that could result in the discharge of dredged or fill material to any Waters of the State and include elements of the Clean Water Act Section 404(b)(1) Alternatives Analysis Guidelines, thereby bringing uniformity to State Water Resources Control Board's regulation of discharges of dredged or fill material to all waters of the state. Typically, the USACE requires a Clean Water Act 404(b)(1) Alternatives Analysis for wetland impacts greater than 0.50 acres. The Procedures require an alternatives analysis to be completed in accordance with a three-tier system. The level of effort required for an alternatives analysis within each of the three tiers shall be commensurate with the significance of the impacts resulting from the discharge.

California Public Resources Code Section 21083.4 (Oak Woodlands)

Section 21083.4 of the California Public Resources Code requires counties to determine if a project within their jurisdiction may result in conversion of oak woodlands that would have a significant adverse effect on the environment. If the lead agency determines that a project would result in a significant adverse effect on oak woodlands, mitigation measures to reduce the significant adverse effect of converting oak woodlands to other land uses are required.

Section 21083.4(b) provides the following four mitigation options where a county finds that a project may have a significant effect on oak woodlands: (1) conserve oak woodlands, through the use of conservation easements; (2) plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees; (3) contribute funds to the Oak Woodlands Conservation Fund; and (4) "[o]ther mitigation measures developed by the county." The second option – tree planting – is subject to the following limitations and opportunities: (a) "[t]he requirement to maintain trees … terminates seven years after the trees are planted"; (b) this mitigation strategy "shall not fulfill more than one-half of the mitigation requirement for the project"; and (c) replanting "may be used to restore former oak woodlands."

LOCAL

Marin County Code of Ordinances

The Marin County Code includes the following ordinances relevant to the project.

22.20.040-Outdoor Construction Activities.

Outdoor construction activities that require Building Permits shall meet the standards enumerated below in addition to any other requirements imposed by Federal, State, or local agencies.

C. Dust Control. The following dust control measures shall apply to projects involving ground disturbance that are subject to environmental review:

1. All unpaved exposed surfaces (e.g., parking areas, staging areas, soil piles, and graded areas, and unpaved access roads) shall be watered two times a day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to a maximum of 15 miles per hour.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California of Regulations). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified emissions evaluator.

F. Roosting Bat Protection Measures. For the purposes of protecting roosting bats, outdoor construction activity that involves tree removal in an area where a biological assessment has identified a high probability of roosting bats on site are subject to the requirements enumerated below before and during site preparation and construction activities, unless separate project mitigation measures have been adopted that override these requirements. These standards apply only to tree removal that takes place during the nesting seasons of March 1 and April 15 or between September 1 and October 15.

1. Trees identified as containing suitable roost habitat shall be removed using a two-step process if they are removed during the nesting season. Trees removed during the nesting season shall be felled the first day and left overnight before the felled trees are removed the following day or later.
2. A qualified biologist shall be responsible for overseeing the removal of trees that provide suitable bat habitat and will submit written confirmation to the County verifying that these measures have been undertaken.

G. Nesting Bird Protection Measures. For the purposes of protecting nesting birds, outdoor construction activity that involves tree removal, grading, or other site disturbances in an area where a biological assessment has identified a high probability of the presence of nesting birds are subject to the requirements enumerated below before and during site preparation and construction activities, unless separate project mitigation measures have been adopted that override these requirements.

1. Construction activities that may disturb birds shall be conducted outside the nesting season, which generally occurs between February 1 and August 15.
2. If commencing construction activities between August 16 and January 31 is infeasible and ground disturbance or tree removal needs to occur within the nesting season, a pre-construction nesting bird survey of the property shall be conducted by a qualified biologist. If no nesting birds are observed by the biologist, no further action is required, and construction activities shall occur within one week of the survey.

3. If active bird nests are observed during the pre-construction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged, as determined by a qualified biologist.
4. To delineate the buffer zone around a nesting tree, orange construction fencing shall be placed at the specified radius from the base of the tree within which no machinery or workers shall intrude. After the fencing is in place, there will be no restrictions on grading or construction activities outside the prescribed buffer zones, but County staff during routine site inspections may verify that fencing remains in place.
5. Pre-construction surveys will be documented and provided to the County by the qualified biologist. If construction fencing is required, photographs of the fencing, directly after installation, will be submitted to the County.

Chapter 22.27.030 - Prohibition on Removal of Protected Trees. Protected Trees shall not be removed except in compliance with Section 22.62.040 (Exemptions), and as provided for in Chapter 22.62 (Tree Removal Permits).

Chapter 22.27.040 - Replacement Requirements for a Permit Validly Obtained. In order to mitigate for any trees removed under the provisions of this Chapter, the Director may require one or more of the following:

A. Establishment and maintenance of replacement trees in conformance with Countywide Plan policies, the Landscaping Objectives identified in section 22.26.040 of this Development Code, the Single-Family Residential Design Guidelines, and/or the vegetation management requirements of the Marin County Fire Department or local Fire Protection District, as applicable.

B. For large properties, a management plan which designates areas of the property for preservation of stands of trees or saplings and replacement plantings as required.

C. Removal of invasive exotic species.

D. Posting of a bond to cover the cost of an inspection to ensure success of measures described above.

In the event that tree planting on the site is not feasible or appropriate, the Director may require in lieu of planting on the specific property, the payment of money in the amount of $500.00 per replacement tree to be deposited into the Tree Preservation Fund managed by the Marin County Parks and Open Space Department for planting, maintenance, and management of trees and other vegetation.

Chapter 22.62.020 - Applicability. This Chapter applies only to "protected and heritage trees" as defined in Article VIII (Definitions) on improved and unimproved lots as defined in Article VIII in the non-agricultural unincorporated areas of Marin County. Protected and heritage trees may be removed in specific circumstances as stated in Section 22.62.040 (Exemptions) without triggering a requirement for a permit. Woodlands shall be managed and trees shall be preserved or replaced in compliance with Chapter 22.27 (Native Tree Protection and Preservation). Protected trees and heritage trees in Article VIII are defined based on the diameter at breast height for each species of tree. For example, a coast live oak (*Quercus agrifolia*) is a protected tree at 6 inches diameter breast height (DBH) and a heritage tree at 18 inches DBH, where as a California bay (*Umbellularia californica*) is a protected tree at 10 inches DBH and a heritage tree at 30-inch DBH. Some tree species are not included in the definition of protected or heritage trees (i.e., Monterey pine). The number of projected trees proposed for removal is discussed in Impact 3.4-10 below.

Chapter 22.62.040 - Exemptions. The removal of any protected or heritage tree on a lot is exempt from the requirements of this Chapter if it meets at least one of the following criteria for removal:

A. The general health of the tree is so poor due to disease, damage, or age that efforts to ensure its long-term health and survival are unlikely to be successful;

B. The tree is infected by a pathogen or attacked by insects that threaten surrounding trees as determined by an arborist report or other qualified professional;

C. The tree is a potential public health and safety hazard due to the risk of its falling and its structural instability cannot be remedied;

D. The tree is a public nuisance by causing damage to improvements, such as building foundations, retaining walls, roadways/driveways, patios, sidewalks and decks, or interfering with the operation, repair, or maintenance of public utilities;

E. The tree has been identified by a Fire Inspector as a fire hazard;

F. The tree was planted for a commercial tree enterprise, such as Christmas tree farms or orchards;

G. Prohibiting the removal of the tree will conflict with CC&R's which existed at the time this Chapter was adopted;

H. The tree is located on land which is zoned for agriculture (A, ARP, APZ, C-ARP or C-APZ) and that is being used for commercial agricultural purposes.(This criterion is provided to recognize the agricultural property owner's need to manage these large properties and continue their efforts to be good stewards of the land.);

I. The tree removal is by a public agency to provide for the routine management and maintenance of public land or to construct a fuel break;

J. The tree removal is on a developed lot and: 1) does not exceed two protected trees within a one-year timeframe; 2) does not entail the removal of any heritage trees; and 3) does not entail the removal of any protected or heritage trees within a Stream Conservation Area or a Wetland Conservation Area.

Marin Countywide Plan

The Marin Countywide Plan (Marin County 2023) contains goals and policies relevant to the biological resources on the project site.

GOAL BIO-1: Enhanced Native Habitat and Biodiversity. Effectively manages and enhance native habitat, maintain viable native plant and animal populations and provide for improved biodiversity throughout the County.

- Policy BIO-1.1: Protect Wetlands, Habitat for Special-Status Species, Sensitive Natural Communities, and Important Wildlife Nursery Areas and Movement Corridors. Protect sensitive biological resources, wetlands, migratory species of the Pacific flyway, and wildlife movement corridors through careful environmental review of proposed development applications, including consideration of cumulative impacts, participation in comprehensive habitat management programs with other local and resource agencies, and continued acquisition and management of open space lands that provide for permanent protection of important natural habitats.
- Policy BIO-1.3: Protect Woodlands, Forests, and Tree Resources. Protect large native trees, trees with historical importance; oak woodlands; healthy and safe eucalyptus groves that support colonies of monarch butterflies, colonial nesting birds, or known raptor sites; and forest habitats. Prevent the untimely removal of trees through implementation of standards in the Development Code and the Native Tree Preservation and Protection Ordinance. Encourage other local agencies to adopt tree preservations ordinances to protect native trees and woodlands, regardless of whether they are located in urban or undeveloped areas.
- Policy BIO-1.4: Support Vegetation and Wildlife Disease Management Programs. Support agency programs and proven methods to limit the impacts of Sudden Oak Death syndrome and any other diseases harmful to native vegetation and wildlife in Marin County, while addressing any potential adverse effects on sensitive resources.
- Policy BIO-1.5: Promote Use of Native Plant Species. Encourage use of a variety of native or compatible non-native, non-invasive plant species indigenous to the site vicinity as part of project landscaping to improve wildlife habitat values.
- Policy BIO-1.6: Control Spread of Invasive Exotic Plants. Prohibit use of invasive species in required landscaping as part of the discretionary review of proposed development. Work with landowners, landscapers, the Marin County Open Space District, nurseries, and the multi-agency Weed Management Area to remove and prevent the spread of highly invasive and noxious weeds. Invasive plants are those listed in the State's Noxious Weed List, the California Invasive Plant Council's list of "Exotic Pest Plants of the Greatest Ecological Concern in California," and other priority species identified by the agricultural commissioner and California Department of Agriculture. Species of particular concern include the following: barbed goatgrass (*Aegilops triuncialis*), giant reed (*Arundo donax*), Italian thistle (*Carduus calcitrapa*), distaff thistle (*Carthamus lanatus*), purple starthistle (*Centaurea*

calcitrapa), yellow starthistle (*Centaurea solstitialis*), pampas grass (*Cortaderia selloana*), Scotch broom (*Cytisus scoparius*), Cape ivy (*Delairea odorata*), oblong spurge (*Euphorbia oblongata*), fennel (*Foeniculum vulgare*), French broom (*Genista monspessulana*), salt-water cord grass (*Spartina alternifolia*), Spanish broom (*Spartium junceum*), medusahead (*Taeniatherum caput-medusae*), gorse (*Ulex europaeus*), and periwinkle (*Vinca major*), among others.

- **Policy BIO-1.7:** Remove Invasive Exotic Plants. Require the removal of invasive exotic species, to the extent feasible, whine considering applicable measures in discretionary permit approvals for development projects unrelated to agriculture, and include monitoring to prevent the re-establishment in managed areas.
- **Policy BIO-1.8:** Restrict the Use of Herbicides, Insecticides, and Similar Materials. Encourage the use of integrated pest management and organic practices to manage pests the least possible hazard to the environment. Restrict the use of insecticides, herbicides, or any toxic chemical substance in sensitive habitats, except when an emergency has been declared; the habitat itself is threatened; a substantial risk to public health and safety exists, including maintenance for flood control; or such use is authorized pursuant to a permit issued by the agricultural commissioner. Encourage nontoxic strategies for pest control, such as habitat management using physical and biological controls, as an alternative to chemical treatment, and allow use of toxic chemical substances only after other approaches have been tried and determined unsuccessful. Continue to implement the Integrated Pest Management ordinance for county-related operations.

GOAL BIO-2: Protection of Sensitive Biological Resources. Require identification of sensitive biological resources and commitment to adequate protection and mitigation, and monitor development trends and resources preservation efforts.

- **Policy BIO-2.1:** Include Resource Preservation in Environmental Review. Require environmental review pursuant to CEQA of development applications to assess the impact of proposed development on native species and habitat diversity, particularly special-status species, sensitive natural communities, wetlands, and important wildlife nursery areas and movement corridors. Require adequate mitigation measures for ensuring the protection of any sensitive resources and achieving "no net loss" of sensitive habitat acreage, values, and function.
- **Policy BIO-2.2:** Limit Development Impacts. Restrict or modify proposed development in areas that contain essential habitat for special-status species, sensitive natural communities, wetlands, baylands and coastal habitat, and riparian habitats, as necessary to ensure the continued health and survival of these species and sensitive areas. Development projects should preferably be modified to avoid impacts on sensitive resources, or to adequately mitigate impacts by providing on-site or (as a lowest priority) off-site replacement at a higher ratio.
- **Policy BIO-2.3:** Preserve Ecotones. Condition of modify development permits to ensure that ecotones, or natural transitions between habitat types, are preserved and enhanced because of their importance to wildlife. Ecotones of particular concern include those along the margins of riparian corridors, baylands and marshlands, vernal pools, and woodlands and forests where they transition to grasslands and other habitat types.
- **Policy BIO-2.4:** Protect Wildlife Nursery Areas and Movement Corridors. Ensure that important corridors for wildlife movement and dispersal are protected as a condition of discretionary permits, including consideration of cumulative impacts. Features of particular importance to wildlife movement may include riparian corridors, shorelines of the coast and bay, and ridgelines. Linkages and corridors shall be provided that connect sensitive habitat areas such as woodlands, forests, wetlands, and essential habitat for special-status species, including and assessment of cumulative impacts.
- **Policy BIO-2.5:** Restrict Disturbance in Sensitive Habitat During Nesting Season. Limit construction and other sources of potential disturbance in sensitive riparian corridors, wetlands, and Baylands to protect bird nesting activities. Disturbance should generally be set back from sensitive habitat during the nesting season from March 1 through August 1 to protect bird nesting, rearing, and fledging activities. Preconstruction surveys should be conducted by a qualified professional where development is proposed in sensitive habitat areas during the nesting season, and appropriate restrictions should be defined to protect nests in active use and ensure that any young have fledges before construction proceeds.

GOAL BIO-3: Wetland Conservation. Require all feasible measures to avoid and minimize potential adverse impacts on existing wetlands and to encourage programs for restoration and enhancement of degraded wetlands.

- Policy BIO-3.1: Protect Wetlands. Require development to avoid wetland areas so that the existing wetlands and upland buffers are preserved and opportunities for enhancement are retained (areas within setbacks may contain significant resource values similar to those within wetlands and also provide a transitional projection zone). Establish a Wetland Conservation Area (WCA) for jurisdictional wetlands to be retained, which includes the protected wetlands and associated buffer area. Development shall be set back a minimum distance to protect the wetland and provide an upland buffer. Larger setback standards nay apply to wetlands supporting special-status species or associated with riparian systems and baylands under tidal influence, given the importance of protecting the larger ecosystems for these habitat types as called for under Stream Conservation and Baylands Conservation policies defined in Policy BIO-4.1 and BIO-5.1, respectively. Regardless of parcel size, and a site assessment is required either where incursion into a WCA is proposed or where full compliance with all WCA would not be met. Employ the following criteria when evaluating development projects that may impact wetland areas (Figure 2-1, in Marin County 2015).

  City-Centered Corridor:

  - For parcels more than 2 acres in size, a minimum 100-foot development setback from wetlands is required.
  - Regardless of parcel size, an additional buffer may be required based on the results of a site assessment, if such an assessment is determined to be necessary.

- Policy BIO-3.2: Require Thorough Mitigation. Where avoidance of wetlands is not possible, require provision of replacement habitat on-site through restoration and/or habitat creation at a minimum ratio of 2 acres of each acre lost (2:1 replacement ratio) for on-site mitigation and minimum of 3:1 replacement ration for off-site mitigation. Mitigation wetlands should be the same type as those lost and provide habitat for the species that use the existing wetland. Mitigation should also be required for incursion within he minimum WCA setback/transition zone.

GOAL BIO-4: Riparian Conservation. Protect and, where possible, restore the natural structure and function of riparian systems.

- Policy BIO-4.18: Promote the Use of Permeable Surfaces When Hardscapes Are Unavoidable in the SCA and WCA. Permeable surfaces rather than impermeable surfaces shall be required whenever feasible in the Stream Conservation Area and WCA.
- Policy BIO-4.20: Minimize Runoff. In order to decrease stormwater runoff, the feasibility of developing a peak stormwater management program shall be evaluated to provide mitigation opportunities such as removal of impervious surface or increase stormwater detention in the watershed.

3.4.2 Environmental Setting

SOILS

The soils underlying the project site were determined using a previously prepared soils map of the area (WRA 2010), overlayed with the current project site boundary and verified using the current soils map for the entire project site (USDA 2021). There are three types of soils present on the project site and described below.

Los Osos-Urban Land-Bonnydoon Complex, 15-30 Percent Slopes

The Los Osos-Urban Land-Bonnydoon Complex, 15-30 percent slopes, soil type consists of approximately 40 percent Los Osos and similar soils, 35 percent urban land, 15 percent Bonnydoon and similar soils, and 10 percent other minor components (WRA 2010). The Los Osos soil type is well drained and is formed from weathered sandstone or shale. The Bonnydoon soil type is a somewhat excessively drained soil that is also formed from weathered sandstone or shale. Urban land is not a native soil, but is made up of asphalt, concrete, and other materials.

Los Osos-Urban Land-Bonnydoon Complex, 30 -50 Percent Slopes

The Los Osos-Urban Land-Bonnydoon Complex, 30-50 percent slopes, soil type consists of approximately 40 percent Los Osos and similar soils, 30 percent urban land, 20 percent Bonnydoon and similar soils, and 8 percent other minor components (WRA 2010). The description of the components of this complex are the same as given in Section 3.1.1.

Xerorthents, Fill

A small portion of the project site in the vicinity of the existing sports field is made up of xerothents fill (WRA 2010). This fill may be composed of various soil types that have been rearranged and modified from their original characteristics.

LAND COVER AND LANDSCAPE FEATURES

The land cover and landscape feature types present on the project site were determined using the Marin County Fine Scale Vegetation Map, a Biological Resources Assessment covering a portion of the project site (WRA 2010), the Manual of California Vegetation Online (CNPS 2022), and reconnaissance surveys of the project site by Ascent biologists.

Table 3.4-1 Land Cover and Landscape Feature Types on the Project site

Land Cover/ Feature Type	Acres
Acacia Woodland	4.46
Annual Grassland	0.56
Coast Live Oak Woodland	17.11
Coastal Scrub	1.31
Closed-Cone Pine-Cypress Forest	14.75
Eucalyptus Woodland	3.09
French Broom Scrub	1.11
Freshwater Emergent Wetland	0.04
Montane Hardwood	0.14
Ornamental Forest	1.16
Perennial Grassland	18.61
Roadside Ditch and Cement/Rock Lined Ditch	0.33
Developed/Disturbed	34.55
Total	**97.22**

Notes: Mapped by Marin Fine Scale Vegetation Map adjusted by Ascent based on field survey.

Source: Data downloaded from Golden Gate National Parks Conservancy in 2022 and WRA 2010; Adapted by Ascent Environmental in 2022.

Acacia Woodland

Acacia woodland consists of nonnative trees covering approximately 4.46 acres in the Seminary Point Planning Area and between Chapel Drive and Seminary Drive (Figure 3.4-1, "Land Cover on the Project Site"), and adjacent to existing houses outside of the project area; this land cover type is distributed as discrete stands within coast live oak woodland (described separately, below). While this nonnative land cover type is not included in the Manual of California Vegetation, the project's identification and focus on potentially removing Acacia woodland warrants its evaluation in this analysis.

Annual Grassland

Annual grassland is identified on the Marin Fine Scale Vegetation Map as occurring in more open parts of the project site (Figure 3.4-1, "Land Cover on the Project Site"), and described in the previous Biological Resources Assessment as

Non-Native Annual Grassland (WRA 2010). This land cover type covers 0.56 acre of the project site in small patches within the Academic Campus Planning Area and along Seminary Drive and is dominated by nonnative grasses and forbs including bromes (*Bromus* spp.), oats (*Avena* spp.), barleys (*Hordeum* spp.), and geraniums (*Geranium* spp.). Native forbs may also be present including California poppy (*Eschscholzia californica*), blue dicks (*Dichelostemma capitatus*), and lupines (*Lupinus* spp.). Few trees and shrubs are present within this land cover type (WRA 2010). Due to the location of these habitat patches near Seminary Drive and other areas of frequent current disturbance, they do not provide habitat for native wildlife species that are found within less disturbed grasslands.

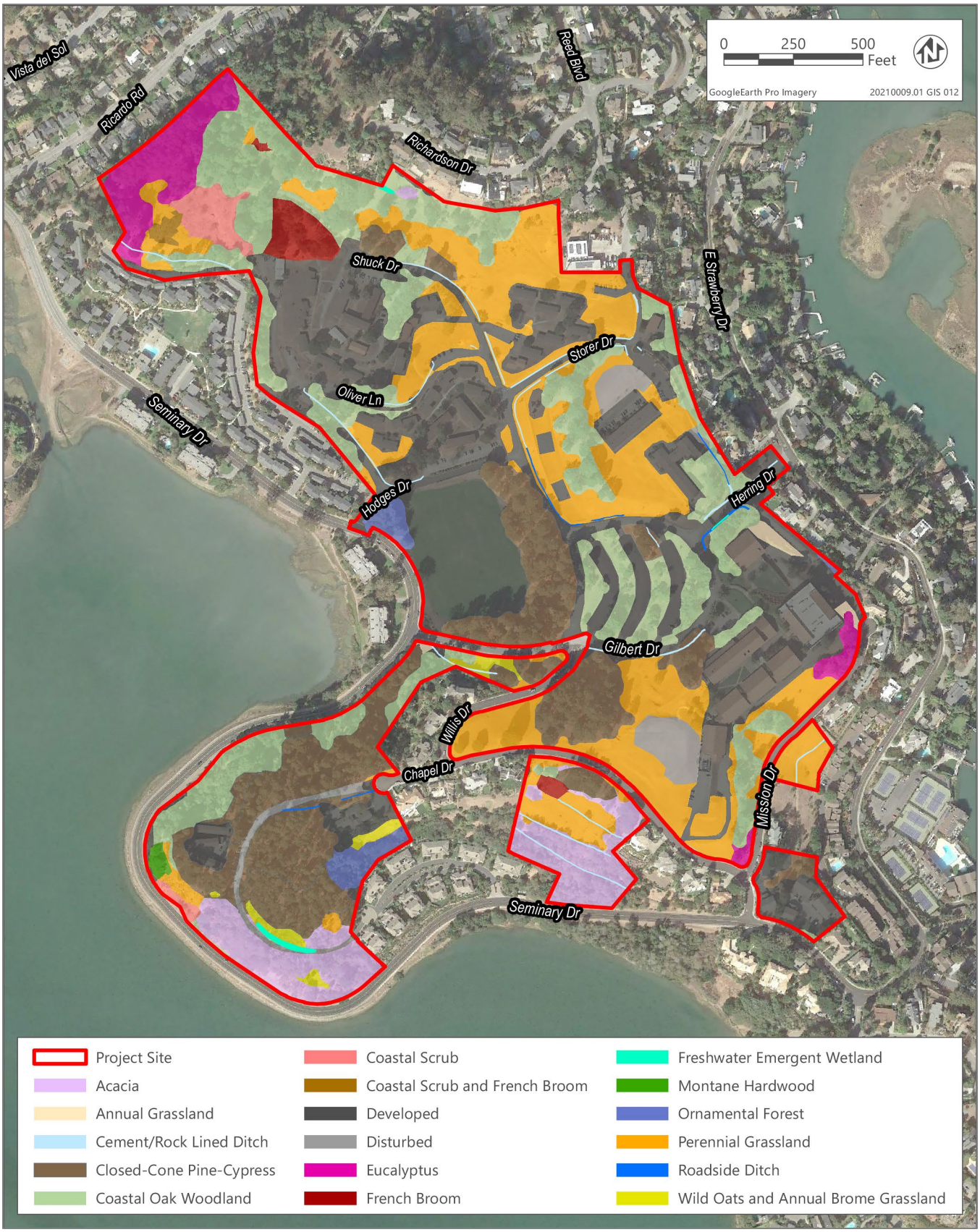
Coast Live Oak Woodland

Coast live oak woodland comprises 17.11 acres distributed throughout the project site in all planning areas and the woodland buffer (Figure 3.4-1, "Land Cover on the Project Site"). Small areas of oak woodland are located between parking lots along Gilbert Drive, along Mission Drive, and adjacent to existing buildings. These oak woodlands are fragmented and subject to existing disturbance, which limit their suitability as wildlife habitat to species tolerant of human disturbance (e.g., common song birds, small mammals). Larger areas of oak woodlands are present in the woodland buffer north of Shuck Drive and along Seminary Drive outside of the Seminary Point Planning Area. These areas, while subject to existing disturbance from traffic and adjacent uses, may provide habitat for species less tolerant of disturbance (e.g., white tailed kite). Coast live oak woodland on the project site contains a mix of native species, including coast live oak and California bay in the overstory and California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), creeping snowberry (*Symphoricarpos mollis*), and French broom (*Genista monspessulana*) seedlings in the shrub layer, with an understory of nonnative annual grasses, including slender oat (*Avena barbata*) and bristly dogtail grass (*Cynosurus echinatus*).

Oak woodlands are recognized as sensitive habitats pursuant to the Oak Woodlands Conservation Act and Public Resources Code Section 21083.4, regardless of whether the oak woodland vegetation alliance is a designated sensitive natural community. Coast live oak woodland is not designated a sensitive natural community; however, it is considered a sensitive habitat type for the purposes of the analysis in this document.

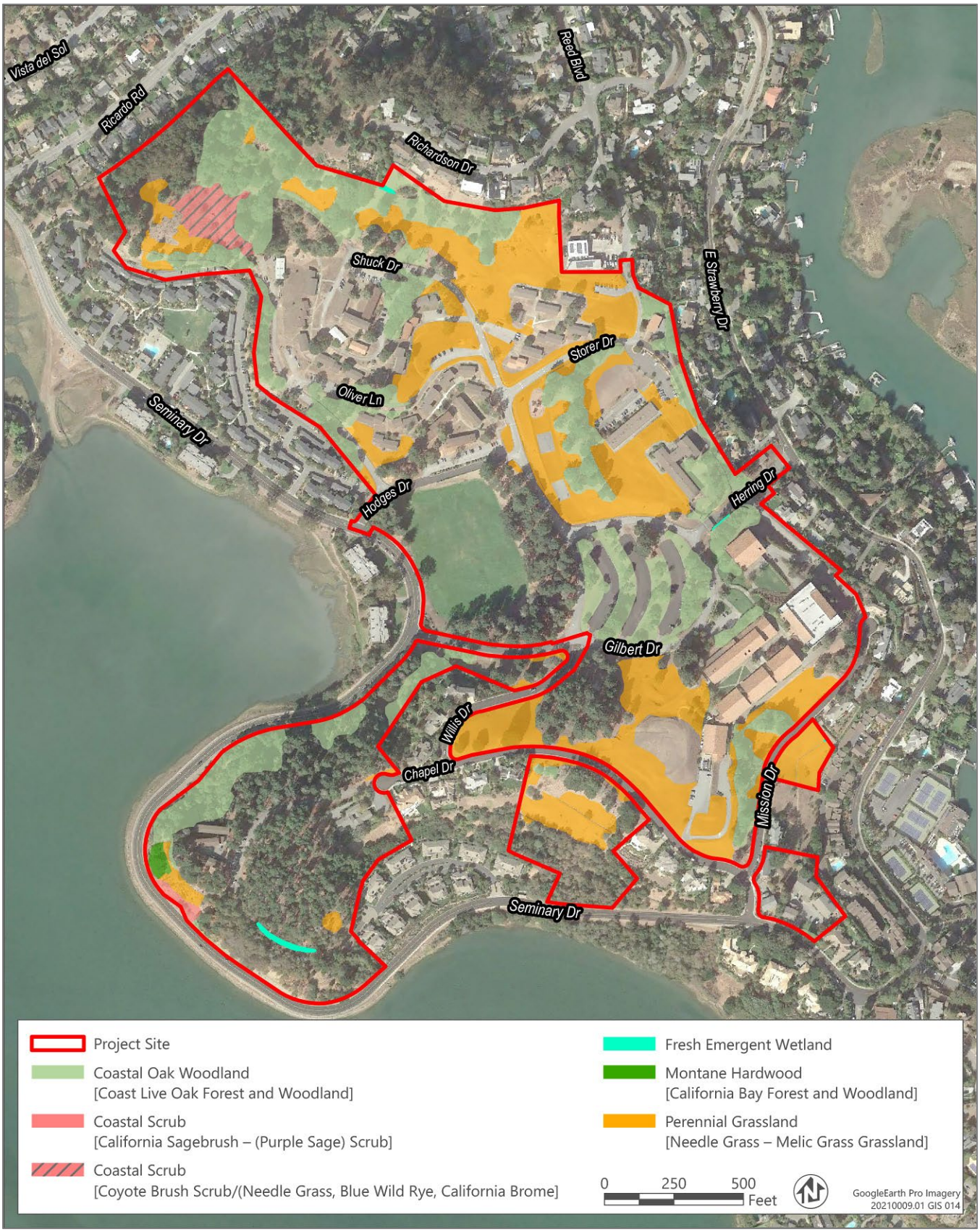
Coastal Scrub - Coyote Brush Scrub/ (Needle Grass, Blue Wild Rye, California Brome)

Coastal scrub comprises 1.31 acre on the project site. Of the total coastal scrub on the project site, 0.2 acre directly adjacent to Shuck Drive is mixed with French broom (*Genista monspessulana*). Further from Shuck Drive in the northwestern corner of the project site (Figure 3.4-1, "Land Cover on the Project Site"; Figure 3.4-2, "Sensitive Natural Communities and Sensitive Habitats on the Project Site") 0.94 acre of Coastal Scrub is comprised of coyote brush scrub with needle grass-melic grass grassland in the understory (greater than 5 percent). Therefore, this 0.94 acre natural community most closely resembles the sensitive natural community, coyote brush scrub / (needle grass, blue wild rye, California brome), which has a Rarity Ranking of S3 (vulnerable). However, the cover of coyote brush (*Baccharis pilularis*) appears to be increasing from what was mapped in 2010 by WRA. While coyote brush is increasing, the understory appears to be transitioning to annual grassland with a high cover of slender oat (greater than 35 percent) and there appears to be an increase in the presence of French broom compared to land cover that was mapped in 2010 by WRA. Other species observed in this community include California melic grass (*Melica californica*), blue wild-rye (*Elymus glaucus*), Harding grass (*Phalaris aquatica*), and ripgut brome (*Bromus diandrus*) in the understory, and poison oak and California bay saplings in the overstory. When visited in October of 2021, this area had several user-created paths that indicate disturbance from visitors to the site.



Sources: Data downloaded from Golden Gate National Parks Conservancy in 2022; adapted by Ascent in 2022.

Figure 3.4-1 Land Cover on the Project Site



Sources: Data downloaded from Golden Gate National Parks Conservancy in 2022; adapted by Ascent in 2022.

Figure 3.4-2 Sensitive Natural Communities and Sensitive Habitats on the Project Site

Coastal Scrub - California Sagebrush (Purple Sage) Scrub

Of the total of 1.31 acre of coastal scrub on the project site, California sagebrush – (purple sage) scrub comprises approximately 0.17 acres and is located along the southwestern boundary of the project site directly above Seminary Drive and outside of the Seminary Point Planning Area. California sagebrush (*Artemisia californica*) is the dominant species in this community. Other species observed include coyote brush and fennel.

Closed-Cone Pine-Cypress

Closed-cone pine-cypress land cover is located on the hillside above the existing playing field, the hillside above Willis Drive, and throughout the Seminary Point Planning Area form the top of the hill to where it transitions to oak woodland and acacia above Seminary Drive. This land cover comprises 14.75 acres on the project site (Figure 3.4.-1, "Land Cover on the Project Site"). and consists of relatively open stands of Monterey pine (*Pinus radiata*) with an understory of grasses and forbs. Monterey pine stands that border coast live oak stands on the project site as is the case on the northwestern facing slope above Seminary Drive, contain an understory of small coast live oaks, California bay, and poison oak. The Monterey pines on the site, while native to California, were planted in previously open grasslands as early as the 1950s (WRA 2010) and are not native to the project site. Monterey pine forest on the project site is not one of the three native stands of Monterey pine in California (Stephens et al. 2004), and therefore not a sensitive natural community (CDFW 2021). The areas of this landcover type above the playing field, dear Seminary Drive, and adjacent to existing residences likely do not provide habitat for species sensitive to human disturbance, but they may provide habitat for more common species (e.g., common birds and raptors).

Eucalyptus Woodland

Eucalyptus woodland, a nonnative plant community, covers 3.09 acres along the northern portion of the project site boarding the residences along Ricardo Road (Figure 3.4-1, "Land Cover on the Project Site"). This land cover type is composed of Tasmanian blue gum (*Eucalyptus globulus*) and red iron bark (*E. sideroxylon*). The understory of this eucalyptus woodland on the project site is dominated by French broom with few grasses and forbs (WRA 2010). This portion of the project site is relatively less disturbed away from the nearby residences.

French Broom Scrub

French broom scrub is dominated by the nonnative invasive broom species and covers approximately 1.11 acre of the project site. The areas of this land cover type are typically devoid of understory and may contain some overstory trees that are not dominant (WRA 2010). French broom scrub is located on the downhill side of Shuck Drive in the northwestern portion of the project site (Figure 3.4-1, "Land Cover on the Project Site").

Freshwater Emergent Wetland

A total 0.04 acre of freshwater emergent wetland occurs in two wet areas within roadside ditches and a third wet area along a drainage feature that appears based on the project site survey conducted for this analysis to be the result of irrigation runoff from an adjacent residential property. These wet areas are small, ephemeral, and isolated and do not provide substantial water quality benefits or important habitat for wildlife. The freshwater emergent wetland on the project site is dominated by rabbitsfoot grass (*Polypogon monspeliensis*) and tall flatsedge (*Cyperus eragrostis*), which are common opportunistic, weedy hydrophytic species.

Montane Hardwood - California Bay Forest and Woodland

California Bay Forest and Woodland, located along the southwestern boundary of the project site directly above Seminary Drive, has a State Rarity Ranking of S3 (vulnerable) and comprises approximately 0.14 acre of the project site (Figure 3.4-1, "Land Cover on the Project Site"; Figure 3.4-2, "Sensitive Natural Communities and Sensitive Habitats on the Project Site"). California bay is the dominant species in the overstory with annual grasses in the understory.

Ornamental Forest

A small stand of ornamental forest covering 1.16 acre and composed of native coast redwood (*Sequoia sempervirens*) is located at the corner of Seminary Drive and Hodges Drive (Figure 3.4-1, "Land Cover on the Project Site"). This small

stand was likely planted; the understory is highly disturbed and does not function as habitat for species closely associated with redwood forest. Because this stand was likely planted and due to the lack of understory vegetation from disturbance, this land cover type on the project site is not considered a sensitive natural community (CDFW 2021).

Perennial Grassland - Needle Grass – Melic Grass Grassland

The needle grass – melic grass grassland vegetation alliance was formerly known as purple needlegrass grassland. This vegetation type was documented in the WRA report (WRA 2010) to occur in the Seminary Point, Seminary Vista West, Student Village, and Seminary Knoll portions of the project site, and is dominated by native and nonnative grasses and forbs (WRA 2010). A portion of the area previously mapped by WRA as this land cover type has been converted to coyote brush scrub / (needle grass, blue wild rye, California brome) (discussed above) through the encroachment of coyote brush into this area. The entirety of the project site was surveyed in September of 2022 (Appendix G) and the presence of these land cover types was verified to occur within the perennial grassland land cover type (Figure 3.4-1, "Land Cover on the Project Site") on multiple locations on the project site. Needle grass – melic grass grassland comprises 16.4 acres of the 18.61 acres of perennial grassland on the project site (Figure 3.4-2, "Sensitive Natural Communities and Sensitive Habitats on the Project Site"). This landcover type on the project site meets the definition of a sensitive natural community (CDFW 2021).; however, the portions of the project site that contain needle grass – melic grass grassland are fragmented, scattered between buildings and paved roads, regularly mowed, and surrounded by development, which has led to a reduction in the quality of the habitat.

Roadside Ditch and Cement/Rock Lined Ditch

The project site contains approximately 0.33 acres of ditches along roads for stormwater conveyance; some of these roadside ditches are lined with cement or rock substrate. In addition, the project site contains other cement and rock lined ditches along the hillsides below Chapel Drive and Mission Drive that are located away from roadways; these ditches also convey stormwater.

Developed and Disturbed

A large portion of the project site (34.55 acres) is composed of existing development and highly disturbed vegetation (Figure 3.4-1, "Land Cover on the Project Site"). While planted trees, shrubs and nonnative grasses may be present as landscaping, sports fields, and street trees, this part of the project site is dominated by the built environment.

COMMON WILDLIFE SPECIES

The project site contains habitat for common wildlife species that are habituated to human disturbance. Common birds that may be present on the project site include mourning dove (*Zenaida macroura*), California scrub-jay (*Aphelocoma californica*), white-crowned sparrow (*Zonotrichia leucophry*), dark-eyed junco (*Junco hyemalis*), great blue heron (Ardea herodias), and red-shouldered hawk (*Buteo lineatus*). Common reptiles that may be found on the project site include pacific gophersnake (*Pituophis catenifer catenifer*) and western fence lizard (*Sceloporus occidentalis*). Mammals that may occur on the project site include mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), racoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*).

SENSITIVE BIOLOGICAL RESOURCES

Special-Status Species

Special status species are defined as species that are legally protected or that are otherwise considered sensitive by federal, state, or local resource agencies. Special-status species are species, subspecies, or varieties that fall into one or more of the following categories, regardless of their legal or protection status:

- officially listed by California or the federal government as endangered, threatened, or rare;
- a candidate for state or federal listing as endangered, threatened, or rare;

- taxa (i.e., taxonomic category or group) that meet the criteria for listing, even if not currently included on any list, as described in the definition of endangered, rare, or threatened species in the California Environmental Quality Act (CEQA) Guidelines, California Code of Regulations (CCR) Section 15380;
- species identified by CDFW as Species of Special Concern;
- species listed as Fully Protected under the California Fish and Game Code;
- species afforded protection under local planning documents; and
- plant taxa considered by the CDFW to be "rare, threatened, or endangered in California" and assigned a California Rare Plant Rank (CRPR). The CDFW system includes five rarity and endangerment ranks for categorizing plant species of concern, summarized as follows:
  - CRPR 1A - Plants presumed to be extinct in California;
  - CRPR 1B - Plants that are rare, threatened, or endangered in California and elsewhere; and
  - CRPR 2 - Plants that are rare, threatened, or endangered in California but more common elsewhere.

The term "California species of special concern" is applied by CDFW to animals not listed under ESA or CESA, but that are considered to be declining at a rate that could result in listing, or that historically occurred in low numbers and known threats to their persistence currently exist. The Legislature's enactment of Fish and Game Code sections 3511, 4700, 5050, and 5515, which identify fully protected birds, mammals, reptiles, amphibians, and fish, was California's first attempt to identify and protect animals that were rare or facing extinction. Most species identified in statute as fully protected were eventually listed as threatened or endangered under CESA; however, some species remain identified as fully protected but do not have simultaneous listing under CESA. Fully protected species may not be taken or possessed at any time and no take permits can be issued for these species except for scientific research purposes, for relocation to protect livestock, through an approved natural community conservation plan, or for infrastructure projects specified in SB 147, Statutes of 2023, none of which apply to the proposed project.

Appendix F provides a list of special-status species potentially occurring in the project vicinity. The list was developed through a review of comments received from CDFW during scoping, biological studies previously conducted in the area and observations made during the reconnaissance-level surveys conducted on October 5, 2021 and September 1, 2022. The CNPS Inventory of Rare and Endangered Plants (CNPS 2022) and CDFW's CNDDB (CNDDB 2022a) were reviewed for specific information on documented observations of special-status species previously recorded on the project site and vicinity. A search of the CNDDB and CNPS was conducted for the following U.S. Geological Survey 7.5' quadrangles containing and surrounding the project site: Bolinas, San Geronimo, Novato, Petaluma Point, San Quentin, San Francisco North, Point Bonita, and San Rafael. The CNDDB is based on recorded occurrences provided voluntarily and does not constitute an inventory of special-status species at a location.

The species list in Appendix F includes special-status wildlife species with both scientific and common names, regulatory status, summary of habitat associations, and the potential for the species to occur on the project site. Most of the special-status species identified in Appendix F do not occur in the project site or have a low potential for occurrence because the habitat elements they require are not present, or are not likely to use the site due to the existing disturbance and human activity. Special-status plant and animal species that could occur on or adjacent to the project site are evaluated in this DEIR and are discussed in further detail below.

Special-Status Plant Species

The search of the CNPS Inventory (CNPS 2022) and the CNDDB (CNDDB 2022a) identified 74 special-status botanical species documented within the 8-quad search area (Appendix F, Table A-1). Of these 74 special-status plants, 28 may occur on the project site based on their ranges and the presence of suitable land cover types and soils (Section 3.4.2). These species are shown along with their normal blooming period in Table 3.4.2.

Table 3.4-2 Special-Status Botanical Species That May Occur on the Project Site

Species	Federal Status [1]	State Status [1]	CRPR Status [1]	Habitat and Blooming Period	Potential for Occurrence [2]
Napa false indigo *Amorpha californica* var. *napensis*			1B.2	Species found in openings in forest or woodland or in chaparral. 100–2,410 feet in elevation. Blooms April–July.	**May occur:** The project site contains forested habitat suitable for the species. The project site is within the current distribution of the species and portions of the project site are within the species' elevational range.
Bent-flowered fiddleneck *Amsinckia lunaris*			1B.2	Species found within cismontane woodland, valley and foothill grassland, and coastal bluff scrub. 10–2,610 feet in elevation. Blooms March–June.	**May occur:** The project site contains forested habitat suitable for the species. The project site is within the elevational range of this species.
Marin manzanita *Arctostaphylos virgata*			1B.2	Species found within broadleafed upland forest, closed-cone coniferous forest, chaparral, and north coast coniferous forest on sandstone or granitic soils. 10–2,620 feet in elevation. Blooms January–March.	**May occur:** The project site contains forested habitat suitable for the species. The project site is within the elevational range of this species.
San Francisco Bay spineflower *Chorizanthe cuspidata* var. *cuspidata*			1B.2	Species found on sandy soil on terraces and slopes within coastal bluff scrub, coastal dunes, coastal prairie, and coastal scrub. 10–710 feet in elevation. Normally blooms April–July and sometimes as late as August.	**May occur:** The project site contains suitable coastal scrub and grassland habitat. The project site is within the elevational range of this species.
Franciscan thistle *Cirsium andrewsii*			1B.2	Species found in coastal bluff scrub, broadleaved upland forest, coastal scrub, and coastal prairie. Sometimes found in serpentine seeps. 0–490 feet in elevation. Blooms March–July.	**May occur:** The project site contains forested habitat suitable for the species. The project site is within the elevational range of this species.
San Francisco collinsia *Collinsia multicolor*			1B.2	Species found within closed-cone coniferous forest and coastal scrub on decomposed shale (mudstone) mixed with humus, or sometimes on serpentine. 100–820 feet in elevation. Blooms as early as February in some conditions. Typical blooming in March–May.	**May occur:** The project site contains forested habitat suitable for the species and is within the elevational range of this species.
Western leatherwood *Dirca occidentalis*			1B.2	Species found on brushy slopes and mesic sites including riparian areas in mixed evergreen and foothill woodland communities. 80–1,390 feet in elevation. Blooms most often January–March, and as late as April in some conditions.	**May occur:** The project site contains brushy areas that could be suitable for this species.
Marin checker lily *Fritillaria lanceolata* var. *tristulis*			1B.1	Species found in canyons, riparian areas, and rock outcrops within coastal bluff scrub, coastal scrub, and coastal prairie. Often found on serpentine soils. 50–490 feet in elevation. Blooms February–May.	**May occur:** The project site contains coastal scrub and grassland habitat suitable for the species. The project site is within the elevational range of this species.
Fragrant fritillary *Fritillaria liliacea*			1B.2	Species often found on serpentine soils; however, various soils reported though usually on clay. Found in coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland. 10–1,310 feet in elevation. Blooms February–April.	**May occur:** The project site contains grassland habitat suitable for the species. The project site is within the elevational range of this species.

Species	Federal Status [1]	State Status [1]	CRPR Status [1]	Habitat and Blooming Period	Potential for Occurrence [2]
Diablo helianthella *Helianthella castanea*			1B.2	Species usually found in the chaparral/oak woodland interface in rocky, azonal soils; however, also found in coastal scrub, riparian woodland, and grasslands. Often found growing in partial shade. 150–3,500 feet in elevation. Blooms March–June.	**May occur:** The project site contains oak and grassland habitat suitable for the species. The portions of the project site are within the elevational range of this species.
Congested-headed hayfield tarplant *Hemizonia congesta* ssp. *congesta*			1B.2	Species grows in grassy valleys and on hills in grasslands, also found in fallow fields and along roadsides. 70–2,130 feet in elevation. Blooms April–November.	**May occur:** The project site contains grassland habitat suitable for the species. The portions of the project site are within the elevational range of this species.
Santa Cruz tarplant *Holocarpha macradenia*	T	E	1B.1	Species often found with nonnatives on light, sandy soil or sandy clay within coastal prairie, coastal scrub, and grassland communities. 30–720 feet in elevation. Blooms June–October.	**May occur:** The project site contains grassland and scrub habitat suitable for the species. Portions of the project site are within the elevational range of this species.
Point Reyes horkelia *Horkelia marinensis*			1B.2	Species found on sandy flats and dunes near the coast in grassland or scrub plant communities. 10–2,540 feet in elevation. Blooms May–September.	**May occur:** The project site contains grassland and scrub habitat suitable for the species. Portions of the project site are within the elevational range of this species.
Thin-lobed horkelia *Horkelia tenuiloba*			1B.2	Species found on sandy soils and mesic openings within broadleaved upland forest, chaparral, and grassland. 160–1,640 feet in elevation. Blooms normally from May–July. Will bloom as late as August under certain conditions.	**May occur:** The project site contains grassland, forest, and scrub habitat suitable for the species. Portions of the project site are within the elevational range of this species.
Small groundcone *Kopsiopsis hookeri*			2B.3	Species found in open woods, shrubby places within north coast coniferous forest. Generally, grows on *Gaultheria shallon*. 390–4,710 feet in elevation. Blooms April–August.	**May occur:** The project site contains grassland, woodland, and forest habitat suitable for the species. Portions of the project site are near the elevational range of this species.
Marsh microseris *Microseris paludosa*			1B.2	Species found in closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland. 20–980 feet in elevation. Blooms normally in April–June; however, may bloom in July under some conditions.	**May occur:** The project site contains woodland, forest, scrub, and grassland habitat suitable for the species. The project site is within the elevational range of this species.
Marin County navarretia *Navarretia rosulata*			1B.2	Species found in dry, open rocky places within closed-cone coniferous forest and chaparral. Species can occur on serpentine. 660–2,080 feet in elevation. Blooms May–July.	**May occur:** The project site contains forested and scrub habitat suitable for the species. The project site is within the elevational range of this species.
Choris' popcornflower *Plagiobothrys chorisianus* var. *chorisianus*			1B.2	Species found on mesic sites within chaparral, coastal scrub, and coastal prairie. 50–530 feet in elevation. Blooms March–June.	**May occur:** The project site contains scrub and grassland habitat suitable for this species.
San Francisco popcornflower *Plagiobothrys diffusus*		E	1B.1	Species historically found on grassy slopes with marine influence in valley and foothill grassland and coastal prairie. 150–1,180 feet in elevation. Blooms March–June.	**May occur:** The project site contains grassland habitat suitable for the species. The project site is just below the elevational range of this species; however still may occur.

Species	Federal Status [1]	State Status [1]	CRPR Status [1]	Habitat and Blooming Period	Potential for Occurrence [2]
North Coast semaphore grass *Pleuropogon hooverianus*		T	1B.1	Species found in wet grassy, usually shady areas in broadleafed upland forest, north coast coniferous forest, meadows, and seeps. Sometimes found in freshwater marsh associated with forest environments. 150–3,810 feet in elevation. Blooms April–June.	**May occur:** The project site contains forested habitat suitable for the species. Portions of the project site are within the elevational range of this species.
Oregon polemonium *Polemonium carneum*			2B.2	Species found in coastal prairie, coastal scrub, and lower montane coniferous forest. 0–6,000 feet in elevation. Blooms April–September.	**May occur:** The project site contains grassland, scrub, and forested habitat suitable for the species.
Adobe sanicle *Sanicula maritima*		R	1B.1	Species found in meadows, seeps, valley and foothill grassland, chaparral, and coastal prairie on moist clay or ultramafic soils. 100–790 feet in elevation. Blooms February–May.	**May occur:** The project site contains grassland habitat suitable for the species. The project site is within the elevational range of this species.
Scouler's catchfly *Silene scouleri* ssp. *scouleri*			2B.2	Species found in coastal bluff scrub, coastal prairie, and valley and foothill grassland. 0–1,970 feet in elevation. Blooms during the period March–May, or June–August, and as late as September depending on conditions.	**May occur:** The project site contains grassland and scrub habitat suitable for the species. The project site is within the elevational range of this species.
San Francisco campion *Silene verecunda* ssp. *verecunda*			1B.2	Species found in coastal scrub, valley and foothill grassland, coastal bluff scrub, chaparral, and coastal prairie. Often grows on mudstone or shale, with one recorded site on serpentine. 10–2,120 feet in elevation. Most frequently in March–June, but may bloom as early as February and as late as August depending on conditions.	**May occur:** The project site contains grassland and scrub habitat suitable for the species. The project site is within the elevational range of this species.
Santa Cruz microseris *Stebbinsoseris decipiens*			1B.2	Species grows in open areas in loose or disturbed soil, usually derived from sandstone, shale or serpentine, on seaward slopes within broadleafed upland forest, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland, and chaparral. 30–1,640 feet in elevation. Blooms April–May.	**May occur:** The project site contains areas of closed-cone forest, grassland and scrub habitat suitable for this species. The project site is within the elevational range of this species.
Two-fork clover *Trifolium amoenum*	E		1B.1	Species found in valley and foothill grassland and coastal bluff scrub. Sometimes found on serpentine soil, open sunny sites, or swales. Most recently cited on roadside and eroding cliff face. 20–1,020 feet in elevation. Blooms April–June.	**May occur:** The project site contains grassland and scrub habitat suitable for this species. The project site is within the elevational range of this species.
San Francisco owl's-clover *Triphysaria floribunda*			1B.2	On serpentine and non-serpentine substrate (such as at Pt. Reyes) within coastal prairie, coastal scrub, and valley and foothill grassland. 0–490 feet in elevation. Blooms April–June.	**May occur:** The project site contains grassland and scrub habitat suitable for this species. The project site is within the elevational range of this species.
Coastal triquetrella *Triquetrella californica*			1B.2	Species grows on gravel or thin soil over outcrops within 100ft from the coast in coastal scrub, grasslands. Often found in open gravels on roadsides, hillsides, rocky slopes, and fields. 30–330 feet in elevation.	**May occur:** The project site contains grassland and scrub habitat suitable for this species. The project site is within the elevational range of this species.

Notes: CESA = California Endangered Species Act; CEQA = California Environmental Quality Act; CRPR = California Rare Plant Rank; ESA = Federal Endangered Species Act; NPPA = Native Plant Protection Act

[1] Legal Status Definitions

Federal :
E Endangered (legally protected by ESA)
T Threatened (legally protected by ESA)
State:
E Endangered (legally protected by CESA)
T Threatened (legally protected by CESA)
R Rare (legally protected by NPPA)

California Rare Plant Ranks:
1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
2 Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

Threat Ranks
0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

[2] Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present on the project site due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May to occur: Suitable habitat is available at the project site and project site is within the current known distribution of the species; however, there are little to no other indicators that the species might be present.

Sources: CNDDB 2022a; CNPS 2022.

Monarch Butterfly

The western population of monarch butterfly (*Danaus plexippus*) overwinters in wind-protected eucalyptus, Monterey pine, and cypress groves along the coast. These overwintering roosts are typically located within 1.5 miles from the ocean or bays. Adult monarch butterflies require a diversity of nectar resources for feeding during migration and breeding and milkweed host plants (*Asclepias* spp.) to complete their lifecycle (USFWS 2020a). During the spring and summer, adult females lay eggs on milkweed host plants, which are the only food source for larvae. Monarchs may forage in various habitats on the project site, and milkweed host plants may occur in the grasslands and oak woodlands on site. Due to documented decreases in overwintering populations, the USFWS determined that the listing of monarch butterfly as threatened or endangered was warranted, but precluded by higher priority actions (USFWS 2020b). Stands of mature trees in the northern portion of the project site within the Woodland Buffer and within the Seminary Point Planning Area on the project site may be suitable for use as overwintering roosts (WRA 2010); however, no overwintering roosts have been documented on the project site (CNDDB 2022a; Western Monarch Milkweed Mapper 2023). In addition, individual monarch butterflies, larvae, and host plants have been recorded in the vicinity of the Bothin Marsh Preserve and on the Strawberry peninsula, as well as other locations within eastern Marin County (Western Monarch Milkweed Mapper 2023).

Special-Status Fish

The project site (Figure 2-2, "Project Site") does not contain habitat for special-status fishes; however, Richardson Bay, which is a part of the San Francisco Bay estuary, is adjacent to the project site across Seminary Drive. The waters of Richardson Bay are suitable habitat for coho salmon – central California coast evolutionary significant unit (*Oncorhynchus kisutch*), which is listed as endangered under the ESA and CESA; and the southern distinct population segment of green sturgeon (*Acipenser medirostris*) and steelhead – central California coast distinct population segment (*Oncorhynchus mykiss irideus*) (Marin Watershed Program 2022), which are listed as threatened under the ESA. Longfin Smelt (*Spirinchus thaleichthys*), which is a CDFW Species of Special Concern, may also be present in Richardson Bay.

White-Tailed Kite, American Peregrine Falcon, and Bald Eagle

As noted as part of the scoping comments received for the project, American peregrine falcon (*Falco peregrinus anatum*) and bald eagle (*Haliaeetus leucocephalus*) have been reported to occur in the project site (Appendix A);

however, these species are not likely to nest within the project site. The project site lacks the tall buildings or cliffs that would be suitable nesting habitat for American peregrine falcon, and the existing disturbance within the site makes nesting by bald eagles unlikely. White-tailed kite (*Elanus leucurus*) is a CDFW fully protected species that may occur on the project site year-round, and is less sensitive to disturbance than bald eagle. White-tailed kites forage within grasslands, emergent wetlands, and meadows, preying on small mammals, birds, insects, reptiles, and amphibians. Individuals nest in oaks, willows, or other tree stands with dense canopies for cover near foraging habitat (CWHR 2005). The grasslands on the project site and the nearby wetlands provide foraging habitat for white-tailed kite, and trees in the less disturbed northern portions of the project site, and along Seminary Drive may provide suitable nesting habitat for the species. White-tailed kites nest from February to October.

Special-Status Bats

Pallid bat (*Antrozous pallidus*) is a CDFW Species of Special Concern. This bat species is found in chaparral, coastal scrub, woodland, and grassland habitat. Pallid bats roost alone, in small groups, or in large groups within crevices, caves, abandoned buildings, and the trunk cavities of large oaks and other tree species. Maternity roosts contain pups from late April through August and disperse in August through October (WBWG 2005a). Townsend's big eared bat (*Corynorhinus townsendii*) is a CDFW Species of Special Concern. This bat species is found throughout California in a variety of habitats. Townsend's big eared bat roosts primarily in caves and abandoned mines; however, the species has also been reported to use buildings, bridges, rock crevices and hollows in trees. Maternity colonies form between March and June and pups are born in June (WBWG 2005b). Western red bats (*Lasiurus blossevilli*) roost individually in dense clumps of foliage in riparian trees, orchards, and ornamental trees. Western red bats give birth to pups in June and the pups typically fly by August (Shump and Shump 1982). The buildings and other structures on the project site that are currently in use are not likely to be occupied by pallid bat or Townsends' big-eared bat roosts, due to the sensitivity of these species to human disturbance. If a building were to become unused for an extended period of time (several months) prior to project construction, it could be used as a pallid or Townsend's big-eared bat roosting site. Mature broad-leaved trees on the project site may provide suitable roosting locations for western red bat. There are no documented occurrences of sensitive bat species on the project site (CNDDB 2022a).

Sensitive Natural Communities

CDFW maintains a list of plant communities that are native to California (CDFW 2021). Sensitive natural communities are ranked by CDFW from S1 to S3, where S1 is critically imperiled, S2 is imperiled, and S3 is vulnerable. CDFW's natural-community rarity rankings follow the 2009 NatureServe Conservation Status Assessments, in which all alliances are listed with a global (G) and state (S) rank, where G1 is critically imperiled, G2 is imperiled, G3 is vulnerable, G4 is apparently secure, and G5 is secure. These communities may contain special-status species or their habitat. Sensitive natural communities on the project site are listed in Table 3.4-3, and described in "Land Cover and Landscape Features," above. As described above, Coyote Brush Scrub / (Needle Grass, Blue Wild Rye, California Brome) on the project site is degraded by non-native annual grasses, and the Needle Grass – Melic Grass Grassland on the project site is subject to regular mowing and other factors which have degraded the quality of this plant community.

Table 3.4-3 CDFW-Defined Sensitive Natural Communities on the Project Site

California Manual of Vegetation Type	Land Cover Type	CDFW Rarity Ranking	Acres
Needle Grass – Melic Grass Grassland	Perennial Grassland	S3	16.94
Coyote Brush Scrub / (Needle Grass, Blue Wild Rye, California Brome)	Coastal Scrub	S3	0.94
California Bay Forest and Woodland	Montane Hardwood	S3	0.14

Notes: CDFW = California Department of Fish and Wildlife.

3.4.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

This impact evaluation is based on data collected during a reconnaissance-level field survey conducted on October 5, 2021 and September 1, 2022, review of aerial photographs, the CNDDB and CNPS Inventory, information from previously completed documents, and other relevant resources that address biological resources in the project vicinity.

THRESHOLDS OF SIGNIFICANCE

Based on criteria derived from Appendix G to the CEQA Guidelines and the mandatory findings of significance found in Section 15065(a)(1) of the State CEQA Guidelines, a biological resources impact would be significant if implementation of the project would do any of the following:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
- have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan;
- substantially reduce the habitat of a fish or wildlife species; or cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, or threatened species.

ISSUES NOT DISCUSSED FURTHER

Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan

The project site is not located within or adjacent to the plan area of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other approved conservation plan. Therefore, the project would not conflict with any established conservation plan and this issue is not discussed further in this EIR.

Have a Substantial Adverse Effect on any Riparian Habitat

The project site does not contain any riparian habitat (Figure 3.4-1, "Land Cover on the Project Site"), nor is there riparian habitat directly adjacent to the project site. Therefore, the project would not have a substantial adverse effect on any riparian habitat and this issue is not discussed further in this EIR.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.4-1: Potential Disturbance or Loss of Special-Status Plants

Project construction activities would result in ground disturbance in habitat potentially suitable for special-status plants, which could result in the crushing or removal of individual plants or damage to special-status plants due to construction dust, if these species are present. Additionally, ground disturbance for project components could cause the introduction and spread of invasive plants that could outcompete special-status plants for resources. Furthermore, construction of project components and associated landscaping would result in a loss of habitat suitable for special-status plants. The crushing, removal, and damage of special-status plants, introduction and spread of invasive plants, and loss of habitat due to implementation of the project would have the potential to substantially reduce the number of individuals and range of these species, which would be a potentially substantial adverse effect on the local and regional populations, and therefore this impact would be **potentially significant**.

Construction and grading for new buildings, roads, trails, and other project components in woodland, forest, scrub, and grassland habitats would result in ground disturbance of habitat potentially suitable for special-status plants on the project site. Although the perennial grasslands that are scattered throughout the project site are fragmented, regularly mowed, and surrounded by development, special-status plants (e.g., Adobe sanicle, Scouler's catchfly, San Francisco campion) may be present in these areas. Annual grassland represents a very small portion of the project site and may host similar grassland species. Coastal scrub habitat, which occurs in the Shuck Drive Knoll Planning area and the Seminary Point Planning Area, has been degraded by nonnative annual grasses and French broom; however, these habitats may provide habitat for special-status plants such as Marin checker lily, Point Reyes horkelia, and Fragrant fritillary. The forested and woodland habitats within the project site may also contain special-status plants, some of which may also be found in scrub and grassland habitats (e.g., San Francisco collinsia, Franciscan thistle) (Table 3.4-2). The developed and disturbed portions of the project site (Figure 3.4-1, "Land Cover on the Project Site") are composed of existing development and highly disturbed vegetation and do not provide habitat for special-status species.

Construction activities that occur within habitats suitable for special-status plants could result in the crushing or removal of individual plants that occur within the construction area, as well as damage to special-status plants outside of the construction area due to construction dust; however, the effects of dust on special-status plants would be minimized due to the dust control requirements in the Marin County Code Section 22.20.040. Additionally, project-related ground disturbance could result in the introduction of new invasive plants to the project site and spread of existing invasive plants on site that could outcompete special-status plants, resulting in the death of individual special-status plants and degradation of special-status plant habitat. Furthermore, construction of new buildings, roads, trails, and other project components would increase impervious surface cover, which would remove habitat potentially suitable for special-status plants. Landscaping, implementation of defensible space, and fuels management actions would also occur in habitat potentially suitable for special-status plants and could result in the crushing or removal of individual special-status plants, and introduction and spread of invasive plants. While landscaping would not increase impervious surface cover, the planting of landscaping (although use of native species is proposed) could remove or degrade habitat for special-status plants through the introduction of competing species. The potential crushing, removal, and damage of special-status plants, introduction and spread of invasive plants, and loss of habitat due to implementation of the project would have the potential to substantially reduce the number of individuals and range of these species, which, if occurring, would be a substantial adverse effect on the local and regional populations, and therefore this impact would be **potentially significant**.

Mitigation Measures

Mitigation 3.4-1a: Avoid and Minimize Impacts to Special-Status Plants

To avoid and minimize potential impacts to special-status botanical species, prior to construction, the applicant shall implement the following measures.

- Prior to site preparation, vegetation removal, or construction, a qualified botanist shall conduct surveys following the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (current version dated March 20, 2018) (CDFW 2018) during the blooming period for the species shown in Table 3.4-1 in areas where potentially suitable habitat for these species would be disturbed by project activities (e.g., perennial and annual grasslands, coastal scrub, coastal oak woodland, closed-cone pine-cypress) (Figure 3.4-1, "Land Cover on the Project Site"). Surveys are not required in habitat that does not have the potential to support special-status plants (i.e., developed, disturbed, and landscaped areas).
- If special-status botanical species are found on the project site but are located outside of work areas or can be avoided, the applicant shall establish and maintain a 15-foot buffer around special-status plants to be retained, to prevent direct and indirect disturbance to the plants. The size of the buffer may be modified by a qualified botanist considering the species present, the work to be performed adjacent to the plants, and other appropriate variables.
- If special-status plants are found during rare plant surveys and cannot be avoided, the applicant's qualified botanist shall make a formal recommendation in writing to the County of Marin for review, regarding the appropriate compensation to offset the loss of occupied habitat or individuals. Mitigation measures may include, but are not limited to, measures such as preserving and enhancing existing populations in portions of the project site outside of the development footprint (the Woodland Buffer [Figure 2-3, "Project Site Planning Areas"]), creating off-site populations on mitigation sites through seed collection or transplantation at a 1:1 ratio, and restoring or creating suitable habitat in sufficient quantities to achieve a minimum of a no net loss 1:1 replacement of occupied habitat and individuals. Potential mitigation sites could include suitable locations within or outside of the project site. The implementing party shall develop and implement a site-specific mitigation strategy describing how unavoidable losses of special-status plants shall be compensated. Success criteria for preserved and compensatory populations shall include:

  The extent of occupied area and plant density (number of plants per unit area) in compensatory populations shall be equal to or greater than the affected occupied habitat for a no net loss of occupied habitat.

  Compensatory and preserved populations shall be self-producing. Populations shall be considered self-producing when:

  - plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
  - reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the Project vicinity.

  If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures shall be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations.

  The applicant shall provide the County of Marin with the results of surveys conducted. If special-status plants are found during surveys and measures are taken to avoid or compensate for removal of these plants, the applicant shall send a report detailing the measures taken to the County of Marin.

Mitigation 3.4-1b: Avoid and Minimize Introduction and Spread of Invasive Plants

To avoid and minimize potential impacts from the introduction and spread of invasive plants on special-status plants, the applicant shall implement the following measures.

- Prior to project implementation, a qualified biologist will conduct training with construction and forestry crews on the methods to be implemented to avoid the introduction and spread of invasive plants.
- Construction crews shall inspect all heavy equipment, vehicles, and tools for sand, mud, or other signs that invasive plant seeds or propagules could be present prior to use on the project site. If equipment is clean, then it may be used off road on the project site.
- Pressure wash or otherwise decontaminate all heavy equipment, vehicles and tools at a designated weed-cleaning station prior to use on the project site unless the equipment has been inspected and determined to be clean and fee of sand, mud or other signs that invasive plant seeds or propagules could be present.
- Prior to project implementation, a qualified biologist shall identify and map significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by the California Department of Food and Agriculture). A report detailing the locations of any significant infestations of invasive plant species shall be provided to the County of Marin prior to project implementation.
- Stage equipment in areas free of invasive plant infestations identified and mapped by the qualified biologist unless there are no uninfested areas present on the project site.

Significance after Mitigation

The implementation of Mitigation Measures 3.4-1a and 3.4-1b would avoid and minimize adverse effects on special-status plants from the implementation of the proposed project. Mitigation Measure 3.4-1a requires protocol surveys prior to construction; avoidance of special-status plants when present on the project site; or if removal of special-status plants is unavoidable, the implementation of other measures to compensate for loss individual plants in a manner that avoids any net loss of sensitive habitat. Mitigation Measure 3.4-1b requires implementing measures to prevent the introduction and spread of invasive plants on the project site. Therefore, with the implementation of Mitigation Measures 3.4-1a and 3.4-1b, the impact to special-status plants would be reduced to **less than significant with mitigation incorporated**.

Impact 3.4-2: Potential Disturbance or Loss of Monarch Butterfly

Construction of the project and related activities may result in the injury, mortality, or disruption of reproduction of monarch butterfly. In addition, the modification of habitat used for overwintering by monarch butterfly may result in loss of this habitat suitability. This could substantially reduce the habitat for this species, cause the local populations of monarch butterfly to be reduced below locally self-sustaining levels, and substantially reduce the numbers of monarch butterfly. Therefore, the impact on monarch butterfly would be **potentially significant**.

Stands of mature trees in the northern portion of the project site within the Woodland Buffer and within the Seminary Point Planning Area may be suitable for use as overwintering roosts (WRA 2010), and milkweed host plants may be present within the project site. Therefore, monarch butterflies may use the site for overwintering and reproduction; however, use of the site by the species has not been documented (CNDDB 2022a; Western Monarch Milkweed Mapper 2023). Landscaping and other maintenance activities currently occur within the project site and are not anticipated to increase substantially as a result of the project; therefore, these activities associated with the project would not have a substantial adverse effect on monarch. However, development of wooded portions of the project site, fuels management, and vegetation reduction for defensible space purposes that remove mature trees could disturb overwintering monarch butterflies, if the species is present, which could cause the loss of large numbers of butterflies. A recent and large decrease in overwintering populations within California has been documented (USFWS 2020b), and modifications to mature tree stands where overwintering occurs may result in loss or degradation of habitat suitability, which due to already declining populations of the species and limited suitable overwintering habitat within the region, could be a substantial adverse effect on the local and regional populations of the species. In

addition, construction of new buildings, roads, and trails; landscaping; fuels management; and other project components could result in the crushing or removal of milkweed plants that may occur in the vegetated land covers and disturbed portions of the project site (Figure 3.4-1, "Land Cover on the Project Site"). Loss of milkweed host plants within the range of monarch butterflies is a driver of the population decline of the species (USFWS 2020a), and while loss of milkweed plants could occur, the loss of plants would not be a substantial adverse effect on the local or regional population of monarch butterfly due the relatively small impact footprint of the project when compared to the amount of suitable milkweed habitat in Marin County. The potential to disturb overwintering monarch butterflies and alter overwintering habitat, could substantially reduce the habitat for this species, cause the local populations of monarch butterfly to be reduced below self-sustaining levels, and substantially reduce the numbers of monarch butterfly. Therefore, the impact to monarch butterfly would be **potentially significant**.

Mitigation Measures

Mitigation 3.4-2a: Avoid Disturbance of Overwintering Monarch Butterflies

To avoid or minimize impacts to monarch butterflies, the applicant shall implement the following measures.

- Prior to site preparation and vegetation removal, the applicant shall retain a qualified biologist to conduct monitoring within the stands of mature trees along the Woodland Buffer and within the Seminary Point Planning Area for monarch butterflies during the overwintering period (October through March) (Xerces Society 2017) to determine use of the site by the species. The results of monitoring shall be documented and submitted to the County prior to any vegetation removal.
- If monarch butterflies are found to be using stands on the project site, the applicant shall avoid vegetation removal within occupied stands during the overwintering period (October through March).

Mitigation 3.4-2b: Minimize Loss of Monarch Butterfly Overwintering Stands

To minimize impacts to monarch butterfly overwintering habitat, the applicant shall implement the following measures.

- If monarch butterflies are detected during monitoring pursuant to Mitigation 3.4-2a, prior to any site preparation or vegetation removal within suitable monarch overwintering stands, the applicant shall, in coordination with the County and USFWS (upon formal listing of the monarch butterfly under the Endangered Species Act), follow the guidelines in *Protecting California's Butterfly Groves, Management Guidelines for Monarch Butterfly Overwintering Habitat* (Xerces 2017) to maintain or improve the suitability of stands within undeveloped portions of the project site for overwintering monarchs.
    - These actions shall include requirements and specifications for maintaining or improving key habitat variables, removal or trimming of trees to facilitate solar radiation within the stand and to remove hazards, and the planting of trees where appropriate, and shall maintain or improve habitat structure for overwintering monarchs within undeveloped portions of the Woodland Buffer and within the Seminary Point Planning Area on the project site.

Significance after Mitigation

The implementation of Mitigation Measure 3.4-2a and Mitigation Measure 3.4-2b would avoid and minimize adverse effects on monarch butterfly from the implementation of the proposed project by conducting monitoring for monarchs prior to construction, avoiding disturbance of overwintering monarch habitat during the overwintering period, and maintaining or improving the suitability of stands outside of the development footprint on the project site for overwintering monarchs. Therefore, with the implementation of Mitigation Measure 3.4-2a and Mitigation Measure 3.4-2b, the impact to monarch butterfly would be reduced to **less than significant with mitigation incorporated**.

Impact 3.4-3: Potential Disturbance or Loss of Special-Status Fish Species

While the project would include grading and other ground disturbing activities, sediment control through the application of a required storm water pollution prevention plan and new storm drain systems would avoid discharge of contaminants to special-status fish habitat. Therefore, due to the lack of bay habitat within the project site, and the implementation of construction water quality best management practices as well as use of swales and other stormwater treatment techniques, the project would not substantially reduce the habitat for fish species, cause the population to drop below self-sustaining levels, threaten to eliminate a fishery, or substantially reduce the number of restrict the range of special-status fish. Therefore, the potential impact on special-status fishes would be **less than significant**.

The project would include grading and other ground disturbing activities, which could lead to sediment in strormwater during rain events; however, the potential for runoff from the project site containing sediment reaching Richardson Bay would be avoided through the application of standard construction best management practices for water quality that would be contained in a required storm water pollution prevention plan. See Section 3.9, "Hydrology," for construction requirements and best management practices that would protect local and regional water quality. The project would also result in an increase in impervious surface area on the project site, which could result in increased stormwater flow containing contaminants; however, the project would include new storm drain systems to prevent untreated discharge to the bay. It would consist of vegetated and cobble swales, drainage inlets, storm drainpipes, and stormwater best management practices (e.g., treatment and detention facilities), which would contain contaminated runoff from the project site once the project is completed. Due to the lack of bay habitat within the project site, and the implementation of construction water quality best management practices as well as use of swales and other stormwater treatment techniques the project would not substantially reduce the habitat for special-status fish species, cause the population to drop below self-sustaining levels, threaten to eliminate a fishery, or substantially reduce the number of restrict the range of special-status fish. Therefore, the potential impact to special-status fishes would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.4-4: Potential Disturbance or Loss of White-Tailed Kite and Other Common Nesting Birds

The adverse effects of project construction on common nesting birds would be avoided by the requirements of Marin County Code Section 22.20.040, which includes nesting season surveys, and non-disturbance buffers around nests. However, construction of the project and related activities may result in the injury, mortality, or disruption of reproduction of white-tailed kite. The nesting season for White-tailed kite extends beyond the nesting season requirements of Section 22.20.040, and the disturbance of white-tailed kite nests may still occur with the implementation of the avoidance measures in the section. The loss of eggs and young would be a potentially substantial adverse effect on white-tailed kite. Therefore, the impact of the project on white-tailed kite would be **potentially significant**.

White-tailed kite is a fully protected bird species under California Fish and Game Code Section 3511, and common nesting birds are protected under the Migratory Bird Treaty Act and the California Fish and Game Code Sections 3503 and 3503.5. Landscaping and other maintenance activities currently occur within the project site and are not anticipated to increase substantially as a result of the project; therefore, these activities associated with the project are not anticipated to have a substantial adverse effect on white-tailed kite and common raptors and other common nesting birds. Common raptors and other native bird species may nest throughout the project area in trees, shrubs, and on buildings. Construction, demolition, grading, or vegetation clearing including the construction of new buildings, roads, and trails; and fuels management activities could result in disturbance and loss of the nests of common native raptors and other common nesting birds if these activities occur during the nesting season for these species (February 1 to August 15); however, Marin County Code Section 22.20.040 requires preconstruction nesting bird surveys during the nesting season (February 1 and August 15) and establishment of buffers around active nests

until the young have fledged as determined by a qualified biologist. The application of Code Section 22.20.040 would avoid impacts to common nesting birds from project activities.

Trees in the less disturbed northern portions of the project site, such as within the Woodland Buffer, and along Seminary Drive provide nesting habitat for white-tailed kite. Vegetation clearing for fuels management, and construction activities within and adjacent to these areas may result in the disturbance of active white-tailed kite nests if these activities occur during the white-tailed kite nesting season (February 1 to October 31). The nesting season for White-tailed kite extends beyond the nesting season requirements of Section 22.20.040, and the disturbance of white-tailed kite nests may still occur with the implementation of the avoidance measures in the section.

While vegetation would be removed for fuels management and during construction of the project, oaks would be replanted on the project site, which would provide habitat for white-tailed kite, along with other landscaping that provides habitat for common nesting birds (Section 2.6.3, "Landscaping, Wildfire Resilience and Site Improvements"). Therefore, the project would not result in a substantial reduction of nesting habitat. In addition, the project site is currently subject to human disturbance and maintenance activities, and additional ongoing use of the site is not anticipated to further reduce the suitability of the habitat for nesting by common nesting birds or white-tailed kite.

The project would not substantially reduce the habitat for white-tailed kite or common nesting birds, or cause the population of common bird species to self-sustaining levels. However, disturbance of active nests of white-tailed kite could result in abandonment of the nest and loss of eggs and young, which could result in substantial reduction of the numbers of white-tailed kites and cause the local population white-tailed kite to be reduced below self-sustaining levels, Therefore, the impact of the project on the species would be **potentially significant.**

Mitigation Measures

Mitigation 3.4-4: Avoid Disturbance of White-tailed Kite

To avoid or minimize impacts to nests of white-tailed kite, the applicant shall implement the following measures.

- The applicant may choose to schedule site preparation, construction, demolition, grading, or vegetation clearing after October 31 or before February 1 to avoid the nesting period for white-tailed kite within or adjacent to suitable nesting habitat for the species (e.g., the Woodland Buffer and along Seminary Drive).
- If work is required during the white-tailed kite nesting season (February 1 to October 31), a qualified biologist, retained by the applicant, shall conduct a pre-construction survey prior to site preparation, demolition, grading, or vegetation clearing to identify white-tailed kite nests within 500 feet of work area as access allows. The survey shall be conducted no more than 7 calendar days before the beginning of construction demolition, grading, or vegetation clearing. If project activity ceases for 7 days or longer, resurvey shall be conducted prior to restarting activities.
- If white-tailed kite nests are located, no construction shall occur within 500 feet of the nest during the nesting season or until the young have fledged, as determined by a qualified biologist.
- A report describing the methods and results of any nest pre-construction surveys conducted, and any nest buffers implemented shall be submitted to the County.

Significance after Mitigation

The implementation of Mitigation Measure 3.4-4 would avoid and minimize adverse effects on white-tailed kite, from project implementation by avoiding the nesting season or conducting nest surveys and establishing non-disturbance buffers around active nests. Therefore, with the implementation of Mitigation Measure 3.4-4, the potential impact to white-tailed kite would be reduced to **less than significant with mitigation incorporated**.

Impact 3.4-5: Potential Disturbance or Loss of Special-Status and Common Bat Maternity and Hibernation Roosts

Construction of the project and related activities may result in the injury, mortality, or disruption of reproduction of special-status and common bat species through disturbance or loss of maternity and hibernation roosts. The loss of adult bats and pups may cause local bat populations to drop below self-sustaining levels, and may result in a substantial reduction in the local populations of special-status bat species. Therefore, the impact of the project on special-status and common bats would be **potentially significant**.

There are no documented occurrences of sensitive bat species on the project site (CNDDB 2022a); however, the buildings and other structures on the project site may provide maternity and hibernation roosting habitat for common bat species. The current use of the buildings and other structures on the project site makes them unlikely to be suitable for pallid bat or Townsends' big-eared bat roosting, due to the sensitivity of these species to human disturbance. Mature broad-leaved trees throughout the project site may provide suitable roosting locations for western red bat, and common bat species. Landscaping and other maintenance activities currently occur within the project site and are not anticipated to increase substantially as a result of the project and would therefore not have a substantial adverse effect on special-status or common bat species.

While trees would be removed for fuels management and during construction of the project, oaks would be replanted on the project site, which would provide future roosting habitat for special-status and common bat species (Section 2.6.3, "Landscaping, Wildfire Resilience and Site Improvements"). In addition, new structures would also provide future roosting habitat for common bat species. Therefore, the project would not result in a substantial reduction of roosting habitat for special-status or common bat species.

However, demolition of buildings and other structures on the project site and removal of mature broad-leaved trees during defensible space and fuel management could result in disturbance or destruction of special-status and common bat maternity and hibernation roosts, if these activities occur during the maternity roosting season (April 1 through August 31), or consistent with scoping comments provided by CDFW, the hibernation season (September 1 through October 15), and roosts are present. While Marin County Code Section 22.20.040(F) would avoid disturbance or destruction of some bat roosts, disturbance or destruction of maternity or hibernation roosts of special-status and common bats may still occur, which would result in the loss of adult bats and pups.

The project would not result in a substantial reduction of bat roosting habitat. However, loss of adult bats and pups may cause local bat populations to drop below self-sustaining levels, and may result in a substantial reduction in the local populations of special-status bat species. Therefore, the impact of the project on special-status and common bats would be **potentially significant**.

Mitigation Measures

Mitigation 3.4-5: Avoid Disturbance of Special-Status and Common Bat Maternity and Hibernation Roosts

To avoid and minimize impacts to special-status and common bats the applicant shall implement the following measures which meet and exceed the protections in Marin County Code Section 22.20.040(F).

- Within 14 days prior to initiating site preparation, demolition, grading, or vegetation clearing, a qualified bat biologist shall inspect the area of disturbance and areas adjacent (within 50 feet) for bat roosts (most likely buildings and mature trees with crevices, cavities and dense vegetation of broad leaves). Surveys shall consist of a daytime pedestrian survey by a qualified bat biologist looking for evidence of bat use (e.g., guano) and/or an evening emergence survey to note the presence or absence of bats. If no bat roosts are found, then no further study is required. If evidence of bat use is observed, the approximate number and species of bats using the roost would be determined. Acoustic bat detectors may be used to supplement survey efforts but are not required.
- If roosts of bats are determined to be present within buildings and other structures, direct disturbance to the roost, such as demolition or renovation of buildings, shall be avoided during the maternity season (April 15 through August 31) and hibernation season (September 1 through October 15). Eviction and exclusion of bats

may be implemented using daytime installation of one-way exits and blocking material during the period of March 1 through April 15, or September 1 through October 15 outside of the of the maternity season and hibernation season.

- If roosts of bats are determined to be present within trees on the project site, any project-related removal or pruning of trees occupied by bats shall occur during the period of March 1 through April 15, or September 1 through October 15 outside of the of the maternity season and hibernation season, and consistent with scoping comments provided by CDFW. To remove whole trees, pruning of branches and limbs that do not provide habitat shall occur the day prior to removal of the bole of the tree; this initial planned disturbance may prompt and allow bats to leave the tree during the night between limb and bole removal. The bole of the tree may be removed the following day.
- A report describing the methods and results of any bat surveys conducted, and any nest buffers implemented shall be submitted to the County.

Significance after Mitigation

Implementation of Mitigation Measure 3.4-5 would avoid and minimize potential project-related disturbance to special-status and common bats by avoiding the maternity roosting and hibernation roosting seasons or conducting roost surveys and avoiding disturbance around active roosts (e.g., removal or pruning of trees, demolition of structures). Therefore, with implementation of Mitigation Measure 3.4-5, consistent with the scoping comments provided by CDFW the potential impact to special-status bats would be reduced to **less than significant with mitigation incorporated**.

Impact 3.4-6: Potential Degradation or Loss of Sensitive Natural Communities Identified by CDFW or USFWS

Fuels management, grading, construction of new buildings, roads, trails, and other project components are not likely to adversely affect Monterey pine forest, California bay forest, needle grass – melic grass grassland or coyote brush scrub / (needle grass, blue wild rye, California brome). Therefore, the project would not threaten to eliminate a plant community, and the impact from the project on these sensitive natural communities would be **less than significant**.

Sensitive natural communities designated by CDFW as sensitive natural communities are present on the project site. California bay forest is present within 0.14 acre of the project site directly upslope of Seminary Drive at the edge of the disturbance footprint (Figure 3.4-2, "Sensitive Natural Communities and Sensitive Habitats on the Project Site"). While needle grass – melic grass grassland and coyote brush scrub / (needle grass, blue wild rye, California brome) are located on the project site (Appendix G), much of these vegetation communities on the project site are fragmented, between buildings and paved roads, regularly mowed, and surrounded by development.

Fuels management, grading, construction of new buildings, roads, trails, and other project components would result in the removal of dead, dying, or diseased Monterey pines on the project site (Section 2.6.3, "Landscaping, Wildfire Resilience and Site Improvements"); however, many of these trees were determined to be in poor to marginal condition, and removal of these trees would not result in conversion California bay forest or Monterey pine forest to other land cover types. Furthermore, due to removal being limited to dead, dying, or diseased Monterey pines the project would not substantially impair the habitat function of Monterey pine stands.

Grading, construction of new buildings, roads, trails, and other project components would result in ground disturbance within needle grass-melic grass grassland and coyote brush scrub / (needle grass, blue wild rye, California brome) communities. Ground disturbance within these sensitive natural communities would result in conversion within the footprint of new buildings, roads, trails and other impervious surfaces, as well as newly landscaped areas. In addition, areas that are temporarily disturbed by grading, but not covered by impervious surfaces or landscaping may also be converted from these sensitive natural communities, due to competition with annual and invasive plant species following ground disturbance. The existing regular disturbance, small patch size, and fragmentation of the onsite needle grass – melic grass grassland and coyote brush scrub/ (needle grass, blue wild rye, California brome), has occurred since the site was originally developed in the 1950's. This existing

disturbance and activity from the surrounding developed environment reduce the quality of these sensitive natural communities, both as examples of the natural communities themselves, and in the habitat quality of these grasslands for native fauna. Preserves within a few miles of the project site (i.e., Golden Gate National Recreation Area, Ring Mountain Preserve, Old Saint Hilary's Preserve, La Cresta Open Space, Atkinson Open Space, Mt. Burdell Preserve) contain areas where the characteristic signature of perennial grasslands (e.g., rough, clumpy texture) can be seen from Google Earth aerial imagery. These preserves have documented and protected the presence of perennial grasslands on their lands. Therefore, while these vegetation communities are vulnerable in the context of the distribution of relic perennial grassland statewide, loss of needle grass – melic grass grassland and coyote brush scrub / (needle grass, blue wild rye, California brome) from the project site would not represent a substantial adverse effect on these resources in the region, due to the degraded existing conditions of these communities and the abundance of high-functioning examples of these communities protected in preserves surrounding the project site.

Fuels management, grading, construction of new buildings, roads, trails, and other project components would not have a substantial adverse effect on Monterey pine forest, California bay forest, needle grass – melic grass grassland or coyote brush scrub / (needle grass, blue wild rye, California brome), for the reasons discussed above. Therefore, the project would not threaten to eliminate these plant communities and the impact from the project on these sensitive natural communities would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.4-7: Potential Degradation or Loss of Oak Woodlands

Fuels management, grading, construction of new buildings, roads, trails, and other project components could spread sudden oak death into the project site and result in substantial loss of oak woodland, and threatens to locally eliminate this plant community, which would be a **potentially significant** impact.

Coast live oak woodland is present throughout the project site, in small fragments, and in larger stands within the woodland buffer on the northern portion of the project site and along Seminary Drive. Oak woodland is not considered a sensitive natural community by CDFW; however, the loss of oak woodlands is subject to specific mitigation requirements set forth in the Oak Woodlands Conservation Act (Public Resources Code Section 21083.4) and the Marin Countywide Plan (Goal BIO-1: Enhanced Native Habitat and Biodiversity); therefore, coast live oak is considered a sensitive habitat for the purpose of this analysis.

Fuels management, grading, construction of new buildings, roads, trails, and other project components would result in the removal of 87 oak trees within the development footprint of the project the majority of which are located in the Reed/Storer/Shuck Planning area, Shuck Drive Knoll Planning Area, Hodges/Shuck Planning Area, the proposed expanded playing field, and fitness and daycare center (Forest Management and Tree Removal Plan, Appendix H); however, many of these trees were determined to be in poor to marginal condition, and removal of these trees would not result in conversion or net loss of oak woodland to other land cover types. In addition, further reducing the likelihood that oak woodland would be converted, oaks would be replanted on the project site (Section 2.6.3, "Landscaping, Wildfire Resilience and Site Improvements").

Fuels management, grading, construction of new buildings, roads, trails, and other project components would result in substantial adverse effects on oak woodlands on the project site if these activities led to spread of sudden oak death into the project site. Sudden oak death is caused by the pathogen *Phytophthora ramorum* that can be spread by contaminated construction and forestry equipment. Marin County has widespread documented occurrences of sudden oak death and the introduction of this pathogen into the project site may result in the substantial loss of oak woodlands. The loss of oak woodlands due to introduction of sudden oak death threatens to locally eliminate this plan community and would be a **potentially significant** impact.

Mitigation Measures

Mitigation 3.4-7: Avoid and Minimize Introduction and Spread of Sudden Oak Death

To avoid loss of oak woodland by avoiding or minimizing the introduction and spread of sudden oak death, when working in oak woodlands on the project site, the applicant shall implement the following best management practices.

- Clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at the project site.
- Include training on sudden oak death by a qualified biologist or certified arborist in worker awareness training.
- Minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment for forest management activities.
- Follow the relevant procedures listed in the *Guidelines to Minimize Phytophthora Contamination in Restoration Projects* (Working Group for Phytopthoras in Native Habitats 2016) when working within oak woodlands on the project site.
- A report detailing the procedures implemented to prevent the introduction of sudden oak death shall be submitted to the County on an annual basis.

Significance after Mitigation

The implementation of Mitigation Measure 3.4-7 would avoid and minimize adverse effects on oak woodlands from the implementation of the proposed project by reducing the likelihood that sudden oak death would be introduced into the oak woodlands on the project site. Therefore, with the implementation of Mitigation Measure 3.4-3, the impact to oak woodlands would be reduced to **less than significant with mitigation incorporated**.

Impact 3.4-8: Potential Disturbance or Loss of State or Federally Protected Wetlands or Other Waters

The project site contains 0.04 acre of the freshwater emergent wetland land cover type. Two of the three wet areas are located within the proposed disturbance area. An aquatic resources delineation has not been performed for the project site; therefore, the status of these wet areas as jurisdictional has not been formally established. Based on the size, isolation, and composition of the features within the disturbance area, these wetlands do not provide substantial water quality benefits or important habitat for wildlife, and the disturbance of these features would not constitute a substantial adverse effect; substantially reduce the habitat of a fish or wildlife species; or cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, or threatened species. Therefore, the impact of the project would be **less than significant**.

The project site contains a total 0.04 acre of the freshwater emergent wetland land cover type present in two wet areas within roadside ditches and a third wet area along a drainage feature that appears to be the result of irrigation runoff from an adjacent residential property. One of these features is outside of the disturbance area of the project, and the wet areas within the two roadside ditches are within the disturbance area. These wet areas are small, ephemeral, and isolated; they contain weedy species and do not provide substantial water quality benefits or important habitat for wildlife. These ditches are not expected to qualify as waters of the US, because they are excavated wholly in and draining only in dry land, and do not carry a relatively permanent flow of water (USEPA and USACE 2022). In addition, the definition of waters of the State (SWRCB 2019) excludes ditches with ephemeral flow that are not a relocated water of the State or excavated in a water of the State. Because a protocol aquatic resources delineation has not been performed for the project site, the jurisdictional status of these wet areas has not been confirmed; however, based on the size, isolation, composition, and functional impairment of wet areas within the disturbance area, project-related actions would not constitute a substantial adverse effect on wetlands or other waters. Furthermore, the project would not substantially reduce the habitat of a fish or wildlife species; or cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or

substantially reduce the number or restrict the range of an endangered, rare, or threatened species. Therefore, the impact of the project would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.4-9: Potential to Impede Wildlife Movement and the Use of Native Wildlife Nursery Sites

The project site is unlikely to support regional wildlife movement corridors, and no habitat connectivity corridors are documented to occur on site. Therefore, the project is not likely to have a substantial adverse effect on wildlife movement through the project site. Use of the site as nursery habitat for shorebirds, marine mammals, and mule deer is unlikely given the existing and ongoing human disturbance on the project site; therefore, the project would have a **less-than-significant** impact.

The potential impacts to the maternity and hibernation roosts of special-status and common bats and overwintering monarch butterflies are addressed in Impact 3.4-2 and Impact 3.4-5. This impact analysis addresses other species.

The project site is located on the Strawberry Peninsula, which is surrounded on three sides by Richardson Bay. Its location makes the project site unlikely to support regional wildlife movement corridors. Furthermore, the project site is not located in any documented habitat connectivity corridor as shown in either the Essential Habitat Connectivity database (CNDDB 2022b) or the Conservation Lands Network map of landscape connectivity (Bay Area Open Space Council 2019). While the project site is located within the Pacific flyway, the developed character and lack of large wetlands on the project site would not constitute an important stop for migrating waterfowl. Therefore, the project would not have a substantial adverse effect on regional wildlife movement through the project site.

Shorebirds such as great blue heron and great egret (*Ardea alba*) use the marshlands across Seminary Drive from the project site, and there is a documented great blue heron rookery on Silva Island across Strawberry Cove from the project area (CNDDB 2022a); however, there are no documented shorebird rookeries on the project site. The project site contains no bay habitat or bay shoreline, so marine mammals would not use the site for nursery purposes. In addition, while the project site may be used by mule deer for foraging, the existing human presence on the project site makes it unlikely to be used as a fawning area. Substantial function of the project site as a wildlife nursery is not otherwise documented. Therefore, the project would not impede wildlife movement, the use of a native wildlife nursery site, or otherwise substantially reduce the habitat of a fish or wildlife species; or cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, or threatened species and impacts would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.4-10: Potential Conflict with Local Policies or Ordinances Protecting Biological Resources

The Marin Countywide Plan contains policies related to habitat for special-status species, sensitive natural communities, wildlife nursery areas and movement corridors, and woodland and forested habitats. The plan also contains policies related to invasive plants, plant pathogens, use of herbicides and insecticides, as well as restrictions on disturbance in sensitive habitat during nesting season. The potential for adverse effects on these resources are addressed in Impact 3.4-1, 3.4-2, 3.4-4, and 3.4-5. Policy BIO-3.1 of the Marin Countywide Plan includes buffers and other requirements for the protection of jurisdictional wetlands. Three wet areas do not appear to qualify as jurisdictional, so the requirements of Policy BIO-3.1 would not apply. The Marin County Code contains protections for certain trees. The project would remove 89 protected trees and a tree removal permit and replacement of these trees would be required. The project would comply with all required permits and policies, and for these reasons, implementation of the project would not conflict with any local policies or ordinances and the impact would be **less than significant**.

As discussed in Section 3.4.1, "Regulatory Setting," the Marin Countywide Plan contains policies related to habitat for special-status species, sensitive natural communities, wildlife nursery areas and movement corridors, and woodland and forested habitats. The plan also contains policies related to invasive plants, plant pathogens, use of herbicides and insecticides, as well as restrictions on disturbance in sensitive habitat during nesting season. The potential for adverse effects on these resources are addressed in Impact 3.4-1, 3.4-2, 3.4-3, and 3.4-5. The project would not result in any significant and unavoidable effects on any of these resources, and where mitigation is required, the measures applied would be consistent with Policy BIO-2.1, achieving no net loss of sensitive habitat acreage, values, and function. Therefore, the project would be consistent with the protections required by the Marin Countywide Plan.

Policy BIO-3.1 of the Marin Countywide Plan requires the establishment of a Wetland Conservation Area (WCA) for jurisdictional wetlands to be retained, which includes the protected wetlands and associated buffer area. Development shall be set back a minimum distance to protect the wetland and provide an upland buffer; for parcels more than 2 acres in size, this minimum distance is 100-feet. Furthermore, this policy requires that a site assessment is required either where incursion into a WCA is proposed or where full compliance with all WCA would not be met. As discussed in Impact 3.4-4, the project site contains three wet areas that do not appear to qualify as jurisdictional. Although a protocol delineation has not been conducted, based on conditions determined by field survey, Policy BIO-3.1 would not apply because it applies to jurisdictional wetlands.

The Marin Countywide Plan and Marin County Code also contain protections for protected and heritage trees. The Code defines protected trees and heritage trees in Article VIII Chapter 22.130, based on the DBH for each species of tree. For example, a coast live oak is a protected tree at 6 inches DBH and a heritage tree at 18 inches DBH, whereas a Douglas fir is a protected tree at 10 inches DBH and a heritage tree at 30-inch DBH. Some tree species are not included in the definition of protected or heritage trees (i.e., Monterey pine). The project would require the removal of 89 protected trees, including 1 bay laurel, 87 coast live oaks, and 1 coast redwood. Of these protected trees, 41 were determined to be in poor to marginal condition, while the remaining 48 trees were determined to be in fair or good condition. The removal of protected trees would require a Tree Removal Permit pursuant to County Code Section 22.62.020 and would be replaced in accordance with County Code Section 22.27.040. Additionally, several Monterey pine trees on the project site pose potential safety risks related to limb and tree failure and wildfire risk and would be removed. The project would comply with all required permits and policies and for these reasons, implementation of the project would not conflict with any local policies or ordinances and the impact would be **less than significant.**

Mitigation Measures

No mitigation is required for this impact.

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3.5 ENERGY

This section was prepared pursuant to CEQA Guidelines Section 15126 and Appendix F of the CEQA guidelines, which require that EIRs include a discussion of the potential energy impacts of projects. The analysis considers whether North Coast Land Holdings would result in inefficient, wasteful, and unnecessary consumption of energy.

Energy related to the project would include energy directly consumed for space heating and cooling, and electric facilities and lighting at residential units, the academic campus, daycare facility, fitness center, and residential care facility. Indirect energy consumption would be associated with the generation of electricity at power plants. Transportation-related energy consumption includes the use of fuels and electricity to power cars, trucks, and public transportation. Energy would also be consumed by equipment and vehicles used during project construction and routine maintenance activities.

Scoping comments received regarding energy in response to the NOP requested that the EIR address energy consumption during project operation and how new buildings will meet energy efficiency goals. See Appendix A for all NOP comments received.

3.5.1 Regulatory Setting

Energy conservation is required by many federal, State, and local statutes and policies. At the federal level, energy standards apply to numerous products (e.g., the U.S. Environmental Protection Agency's [EPA] EnergyStar™ program) and transportation (e.g., fuel efficiency standards). At the State level, Title 24 of the California Code of Regulations sets forth energy standards for buildings. Further, the State provides rebates/tax credits for installation of renewable energy systems, and offers the Flex Your Power program, which promotes conservation in multiple areas. At the local level, individual cities and counties establish policies in their general plans and climate action plans (CAPs) related to the energy efficiency of new development and land use planning and to the use of renewable energy sources.

FEDERAL

Energy Policy and Conservation Act and CAFE Standards

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Pursuant to this Act, the National Highway Traffic and Safety Administration, part of the U.S. Department of Transportation (DOT), is responsible for revising existing fuel economy standards and establishing new vehicle economy standards.

The Corporate Average Fuel Economy (CAFE) program was established to determine vehicle manufacturer compliance with the government's fuel economy standards. Compliance with the CAFE standards is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the country. EPA calculates a CAFE value for each manufacturer based on the city and highway fuel economy test results and vehicle sales. The CAFE values are a weighted harmonic average of the EPA city and highway fuel economy test results. Based on information generated under the CAFE program, DOT is authorized to assess penalties for noncompliance. Under the Energy Independence and Security Act of 2007 (described below), the CAFE standards were revised for the first time in 30 years.

The CAFE Standards, which were first enacted by Congress in 1975, set fleet-wide averages that must be achieved by each automaker for its car and truck fleet. The purpose of the CAFE Standards is to reduce energy consumption by increasing the fuel economy of cars and light trucks. On April 1, 2022, Transportation Secretary Pete Buttigieg unveiled new CAFE standards for 2024–2026 model year passenger cars and light-duty trucks, requiring new vehicles sold in the US to average at least 40 miles per gallon.

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally-fueled fleets in metropolitan areas. EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in EPAct. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 is designed to improve vehicle fuel economy and help reduce U.S. dependence on oil. It represents a major step forward in expanding the production of renewable fuels, reducing dependence on oil, and confronting global climate change. The Energy Independence and Security Act of 2007 increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly five-fold increase over 2007 levels; and reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020—an increase in fuel economy standards of 40 percent.

By addressing renewable fuels and the CAFE standards, the Energy Independence and Security Act of 2007 builds upon progress made by the Energy Policy Act of 2005 in setting out a comprehensive national energy strategy for the 21st century.

STATE

CEQA Guidelines Appendix F

California Environmental Quality Act (CEQA) Guidelines Appendix F requires that EIRs include a discussion of the potential energy impacts of proposed projects. Furthermore, it provides a list of items that may be considered in the energy analysis, as described below in Section 3.5.3, "Impacts and Mitigation Measures," under the "Thresholds of Significance" subheading.

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, commonly known as the California Energy Commission (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 regulates privately owned utilities in the energy, rail, telecommunications, and water fields.

State of California Energy Action Plan

CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The previous plan was the 2003 *Energy Action Plan* (2008 update), which calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assisting public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs, as well as encouraging urban design that reduces vehicle miles traveled (VMT) and accommodates pedestrian and bicycle access.

The 2008 update has been supplemented by the 2019 California Energy Efficiency Action Plan, which includes three goals to drive energy efficiency: doubling energy efficiency savings by 2030, removing and reducing barriers to

energy efficiency in low-income and disadvantaged communities, and reducing greenhouse gas (GHG) emissions from the buildings sector (CEC 2019).

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to AB 2076 (Chapter 936, Statutes of 2000), CEC and the California Air Resources Board (CARB) prepared and adopted a joint agency report in 2003, *Reducing California's Petroleum Dependence*. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT (CEC and CARB 2003). Further, in response to the CEC's 2003 and 2005 *Integrated Energy Policy Reports*, Governor Davis directed CEC to take the lead in developing a long-term plan to increase alternative fuel use.

A performance-based goal of AB 2076 was to reduce petroleum demand to 15 percent below 2003 demand by 2030.

Integrated Energy Policy Report

SB 1389 (Chapter 568, Statutes of 2002) 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 energy policies 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 preparation of the first Integrated Energy Policy Report (IEPR).

CEC adopts an IEPR every 2 years and an update every other year. The 2022 IEPR Update Report, which is the most recent IEPR, was adopted on November 9, 2022. The 2022 IEPR Update Report 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 report include progress toward Statewide renewable energy targets and issues facing future renewable development; efforts to increase energy efficiency in existing and new buildings; progress by utilities in achieving energy efficiency targets and potential; improving coordination among the State's energy agencies; streamlining power plant licensing processes; results of preliminary forecasts of electricity, natural gas, and transportation fuel supply and demand; future energy infrastructure needs; the need for research and development efforts to Statewide energy policies; and issues facing California's nuclear power plants (CEC 2022).

Legislation Associated with Electricity Generation

The State has passed multiple pieces of legislation requiring the increasing use of renewable energy to produce electricity for consumers. California's Renewable Portfolio Standard (RPS) Program was established in 2002 (SB 1078) with the initial requirement to generate 20 percent of their electricity from renewable by 2017, 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011), 52 percent by 2027 (SB 100 of 2018), 60 percent by 2030 (also SB 100 of 2018), and 100 percent by 2045 (also SB 100 of 2018). More detail about these regulations is provided in Section 3.7, "Greenhouse Gas Emissions and Climate Change."

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

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) 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, Statutes 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 non-petroleum 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 greenhouse gas (GHG) emissions, and increase in-State production of biofuels without causing a significant degradation of public health and environmental quality.

California Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the California Energy Code. The code 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 nonresidential buildings. CEC updates the California Energy Code every 3 years, typically including more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions. The 2022 California Energy Code went into effect on January 1, 2023. The 2022 California Energy Code advances the on-site energy generation progress started in the 2019 California Energy Code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar photovoltaic (PV) system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. CEC estimates that the 2022 California Energy Code will save consumers $1.5 billion and reduce GHGs by 10 million metric tons of carbon dioxide-equivalent over the next 30 years (CEC 2021).

California Green Building Standards (Title 24, Part 11)

The California Green Building Standards, also known as CALGreen, is a reach code (i.e., optional standards that exceed the requirements of mandatory codes) developed by CEC that provides green building standards for Statewide residential and nonresidential construction. The current version is the 2022 CALGreen Code, which took effect on January 1, 2023. As compared to the 2019 CALGreen Code, the 2022 CALGreen Code strengthened sections pertaining to electric vehicle (EV) and bicycle parking, water efficiency and conservation, and material conservation and resource efficiency, among other sections of the CALGreen Code. The CALGreen Code sets design requirements equivalent to or more stringent than those of the California Energy Code for energy efficiency, water efficiency, waste diversion, and indoor air quality. These codes are adopted by local agencies that enforce building codes and used as guidelines by State agencies for meeting the requirements of Executive Order B-18-12.

Legislation Associated with Greenhouse Gas Reduction

The State has passed legislation that aims to reduce GHG emissions. The legislation often has an added benefit of reducing energy consumption. SB 32 requires a Statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. AB 1279 requires carbon neutrality and a Statewide GHG emission reduction of 85 percent below 1990 levels by 2045.

SB 375 aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. The Advanced Clean Cars program, approved by CARB, combines the control of GHG emissions and criteria air pollutants and the increase in the number of zero-emission vehicles into a single package of standards. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. In August 2022, CARB adopted the ACC II program, which sets sales requirements to reach the goal of 100 percent ZEV sales in the State by 2035. Additionally, in April 2023, CARB adopted the Advanced Clean Fleets regulation, which sets a goal of achieving a fully zero-emission truck and bus fleet within the State by 2045. Implementation of the State's legislation associated with GHG reduction will have the co-benefit of reducing California's dependency on fossil fuel and making land use development and transportation systems more energy efficient.

More details about legislation associated with GHG reduction are provided in the regulatory setting of Section 3.7, "Greenhouse Gas Emissions and Climate Change."

LOCAL

Marin County General Plan

The Atmosphere and Climate element of the *Marin Countywide Plan* (Marin County 2023) addresses air quality:

GOAL Air-4: Minimization of Contributions to Greenhouse Gases. Prepare policies that promote efficient management and use of resources in order to minimize greenhouse gas emissions. Incorporate sea level rise and more extreme weather information into the planning process.

- **Policy AIR-4.1: Reduce Greenhouse Gas Emissions.** Adopt practices that promote improved efficiency and energy management technologies; shift to low-carbon and renewable fuels and zero emission technology.

GOAL EN-1: Decreased Energy Use. Reduce total and per-capita nonrenewable energy waste and peak electricity demand through energy efficiency and conservation.

- **Policy EN-1.1: Adopt Energy Efficiency Standards.** Integrate energy efficiency and conservation requirements that exceed State standards into the development review and building permit process.

Marin County Code

Marin County has adopted a reach code that supersedes the mandatory requirements of the 2022 California Building Code. Section 19.04.135 of the Marin County Code demonstrates that the County has adopted many of the Tier 1 and Tier 2 requirements of the 2022 CalGreen Code as it pertains to building EV charging. Section 19.04.125 includes provisions instructing new development to be fully electric with exceptions granted for permitted emergency generators, outdoor propane appliances, and industrial processes. These requirements for fully electric development were added to the Marin County Code through Ordinance No. 3776, which was adopted by the Marin County Board of Supervisors on November 15, 2022, and became effective on January 1, 2023.

Following the court decision in *California Restaurant Association v. City of Berkeley*, 89 F.4th I 094 (9th Circ. 2024) (herein referred to as the Berkeley Decision), the County has been evaluating how best to approach the requirements of Ordinance No. 3776 in light of the decision. Based on the results of that evaluation, staff recommends to the County Board of Supervisors to take action to suspend enforcement of the requirements of Ordinance No. 3776. Staff currently anticipates presenting that recommendation at a public hearing in July 2024. In the interim before the Board takes action, the Community Development Agency has administratively suspended the enforcement of Ordinance No. 3776 and the program is voluntary at this time.

Marin County Climate Action Plan

Marin County adopted its Climate Action Plan 2030 (CAP) in December 2020. The current CAP builds upon previous versions of the county's CAPs to align with the reduction targets established in SB 32. The county CAP sets a mitigation only target of reducing the county's emissions by 40 percent below 1990 levels by 2030 (a reduction of 251,799 metric tons of carbon dioxide equivalent [$MTCO_2e$]), a mitigation plus sequestration target of 60 percent below 2005 levels by 2030 (a reduction of 197,474 $MTCO_2e$), as well as a goal of carbon neutrality by 2045 (County of Marin 2020). Measures in the CAP that would reduce energy demand and increase the County's capacity to generate renewable resources and would be applicable to the project include:

- **LCT-C1: Zero Emission Vehicles.** Take actions that will result in 45% of passenger vehicles in the County to be zero emission vehicles (ZEVs), including plug-in electric vehicles (EVs) and hydrogen fuel cell electric vehicles, by 2030. Actions include:

    1. Work with Drive Clean Bay Area to develop a new collaborative campaign to accelerate widespread adoption of zero-emission vehicles by Marin's residents and employees. Promote the campaign, assist with securing funding, and help build relationships with schools, businesses, and other entities.
    2. Support development of a countywide EV plan that can be adopted by all Marin jurisdictions that identifies strategies to accelerate EV adoption. The plan will identify the number and type of chargers needed in each jurisdiction to achieve a 45 percent ZEV penetration target; potential locations for public, workplace, and multi-family charging; best practices for charging station siting, installation and signage; and model code language and guides for permit streamlining and charging infrastructure requirements.
    3. Provide directional signage to public EV chargers on local streets and, as appropriate, from state highways.
    4. Work with the Transportation Authority of Marin (TAM), MCE, the California Energy Commission (CEC) and other entities to provide technical assistance and incentives, such as rebates, for multi-family and workplace charging sites.

5. Participate in a countywide effort by MCE, Pacific Gas & Electric (PG&E), and others to provide rebates for new or used electric vehicles.
6. Pursue and evaluate opportunities to expand the County's EV charging network through innovative programs, such as installing chargers at curbside, streetlight, and power pole locations.
7. As the County's Green Building Ordinance is updated, continue to require new and remodeled single-family, multi-family and commercial projects to install electrical service, add conduits and chargers, as appropriate, for potential electric vehicle use beyond state standards.
8. Investigate adopting an ordinance requiring new and remodeled gas stations to provide EV fast chargers and/or hydrogen fueling stations.
9. Participate in regional efforts and grant programs to encourage widespread availability of EV charging stations.
10. Ensure that programs supporting EV adoption and infrastructure include specific targets and resources for low income and disadvantaged communities.
11. Participate in programs to promote EV adoption, including "Drive an EV" events and other media and outreach campaigns.
12. Encourage or require, as practicable, ride hailing and delivery service companies to utilize zero emission vehicles.
13. Promote adoption of electric bicycles, scooters, and motorcycles.
14. Pursue and evaluate opportunities to establish EV sharing programs and sites.

- LCT-C2: Bicycling and Micromobility[1]. Encourage Bicycling and micromobility as an alternative to vehicular travel.
  1. Promote bicycling and micromobility, including e-bikes, electric scooters, and electric skateboards, through outreach channels and partner agencies.
  2. Establish and maintain a system of bicycle facilities that are consistent with the Marin County's Unincorporated Area Bicycle and Pedestrian Master Plan and "complete streets" policies.
  3. Implement the Marin County's Unincorporated Area Bicycle and Pedestrian Master Plan's recommendations to support and expand bicycling.
  4. Support regional efforts to establish a bike and/or scooter share program.
- RE-C1: Renewable Energy Generation and Storage. Accelerate installation of solar and other renewable energy systems and energy storage systems.
  1. Provide solar permit streamlining and reduce or eliminate fees, as feasible.
  2. Amend building codes, development codes, design guidelines, and zoning ordinances, as necessary, to facilitate small, medium, and large-scale solar installations.
  3. Encourage installation of solar panels on carports and over parking areas on commercial projects, schools, and large-scale residential developments through ordinance, engagement campaigns, and/or agency incentives.
  4. Identify and promote financing and loan programs for residential and non-residential projects.
  5. Encourage installation of battery storage in conjunction with renewable energy generation projects through engagement campaigns and partner agency incentives.

[1] Micromobility refers to forms of transportation, human-powered or electric, that can occupy space alongside bicycles. It includes electric scooters and skateboards, docked and dockless shared bikes, and other forms of small, lightweight devices operating at speeds typically below 20 mph. Micromobility devices do not have an internal combustion engine (County of Marin 2020).

6. Maintain an online hub that provides information and connects users to resources on solar and battery storage system options, design, installation, permitting, and financing.
7. Work with Marin Municipal Water District and MCE to pursue in-pipe microturbines as way of generating renewable energy that can be used during evening peak energy demand periods when renewable energy sources are less available on the grid.

- RE-C2: GHG-Free Electricity. Encourage residents and businesses to switch to 100 percent renewable electricity (MCE Deep Green, MCE Local Sol, and PG&E Solar Choice) through engagement campaigns and partner agency incentives and work with MCE Clean Energy to assure that it reaches its goal to provide electricity that is 100 percent GHG-free by 2022.
- EE-C3: Cool Pavements and Roofs. Use reflective, high albedo material for roadways, parking lots, and sidewalks and cool roofs to reduce the urban heat island effect and save energy.
  1. Evaluate the use of high albedo pavements when resurfacing County streets or re-roofing County facilities.
  2. Adopt mandatory building code measures to require new development to use high albedo material for driveways, parking lots, walkways, and patios, and cool roofing.
- EE-C4: Green Building Reach Code
  1. Continue to adopt a green building ordinance for new and remodeled commercial and residential projects that requires green building methods and energy efficiency savings above the State building and energy codes.
  2. Prohibit the use of natural gas end uses in new residential buildings in the County's green building ordinance that aligns with the 2022 California Building Standards code update. Extend the same prohibition to new nonresidential buildings in the 2025 code cycle.

3.5.2 Environmental Setting

PHYSICAL SETTING

Energy Facilities and Services in the Project Area

Electricity and natural gas are supplied to the County from Pacific Gas and Electric (PG&E). The unincorporated County is also serviced by the Community Choice Aggregate (CCA) Marin Clean Energy (MCE) Community Choice Energy, which provides decarbonized energy options to its customers in partnership with PG&E. Customers may elect to enroll in MCE with options for either 60 or 100 percent electricity sourced from renewable sources depending on the package purchased. CCAs in the San Francisco Bay Area, including MCE, utilize PG&E infrastructure to deliver low-carbon electricity to their customers. The project site is not currently enrolled in MCE. See Section 3.14, "Utilities and Service Systems," for more detailed information on electrical and natural gas infrastructure specifically serving the project area.

The proportion of PG&E-delivered electricity generated from eligible renewable energy sources is anticipated to increase over the next three decades to comply with the SB 100 goals described in Section 3.5.1, "Regulatory Setting."

Energy Types and Sources

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. One-third of energy commodities consumed in California is natural gas. In 2021, approximately 38 percent of natural gas consumed in the State was used to generate electricity. Large hydroelectric powered approximately 9 percent of electricity and renewable energy from solar, wind, small hydroelectric, geothermal, and biomass combustion totaled 34 percent (PG&E 2023). In 2021 PG&E provided its customers with 48 percent eligible renewable energy (i.e., biomass combustion, geothermal, small scale hydroelectric, solar, and wind); 39 percent from nuclear power; 4 percent, from large scale hydroelectric, and 9 natural gas (PG&E 2023). The

contribution of in- and out-of-State power plants depends on the precipitation that occurred in the previous year, the corresponding amount of hydroelectric power that is available, and other factors.

Alternative Fuels

A variety of alternative fuels are used to reduce demand for petroleum-based fuel. The use of these fuels is encouraged through various Statewide regulations and plans (e.g., Low Carbon Fuel Standard, AB 1279 Scoping Plan to Achieve Carbon Neutrality). Conventional gasoline and diesel may be replaced (depending on the capability of the vehicle) with many transportation fuels, including:

- biodiesel,
- electricity,
- ethanol (E-10 and E-85),
- hydrogen,
- natural gas (methane in the form of compressed and liquefied natural gas),
- propane,
- renewable diesel (including biomass-to-liquid),
- synthetic fuels, and
- gas-to-liquid and coal-to-liquid fuels.

California has a growing number of alternative fuel vehicles through the joint efforts of CEC, CARB, local air districts, federal government, transit agencies, utilities, and other public and private entities. As of August 2023, California contained over 43,264 alternative fueling stations (AFDC 2023).

ENERGY USE FOR TRANSPORTATION

In 2021, the transportation sector comprised the largest end-use sector of energy in the State totaling 37.8 percent, followed by the industrial sector totaling 23.2 percent, the residential sector at 20.0 percent, and the commercial sector at 19.0 percent (EIA 2022). On-road vehicles use about 90 percent of the petroleum consumed in California. CEC reported retail sales of 86 million and 5 million gallons of gasoline and diesel, respectively, in Marin County in 2022 (the most recent data available) (CEC 2023).

ENERGY USE AND CLIMATE CHANGE

Scientists and climatologists have produced evidence that the burning of fossil fuels by vehicles, power plants, industrial facilities, residences, and commercial facilities has led to an increase of the earth's temperature. For an analysis of GHG production and the project's impacts on climate change, refer to Section 3.8, "Greenhouse Gas Emissions and Climate Change."

3.5.3 Impacts and Mitigation Measures

METHODOLOGY

Levels of construction- and operation-related energy consumption by the project, measured in megawatt-hours of electricity, therms of natural gas, gallons of gasoline, and gallons of diesel fuel. Energy consumption estimates were calculated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 computer program. Where project-specific information was not known, CalEEMod default values based on the project's location were used. Table 3.5-1 summarizes the levels of energy consumption for the first year of operation during the buildout year of 2027.

THRESHOLDS OF SIGNIFICANCE

The following significance criteria area based on CEQA Guidelines Appendix F (energy), under which implementation of the project would have a potentially significant adverse impact if the project would:

- result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation; and/or
- conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

ISSUES NOT DISCUSSED FURTHER

All the issues identified in the preceding list of thresholds are addressed in the following impact analysis.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: Wasteful, Inefficient, or Unnecessary Consumption of Energy, During Project Construction or Operation

Implementation of the project would result in the consumption of additional energy supplies during construction in the form of gasoline and diesel fuel. However, this energy expenditure would not be considered wasteful, because construction would be temporary, and standard construction practices would be implemented. Project operations would result in additional energy consumption. The project would include various sustainability features including on-site photovoltaic solar systems to supply electricity to the project site. In addition, the project would include bicycle infrastructure for visitors and employees and design features to reduce the project's energy consumption resulting from the urban heat island effect. Therefore, the project would not result in wasteful, inefficient, or unnecessary consumption of energy during project construction or operations. This impact would be **less than significant**.

Construction-Related Energy Use

Energy use would be required to construct each phase of the project. Most of the construction-related energy consumption for the project would be associated with off-road equipment and the transport of equipment and materials using on-road haul trucks. For example, energy would be required to transport construction equipment, waste, and excavated materials. The one-time energy expenditure required to construct development would be nonrecoverable. Additional gasoline and diesel would be consumed for worker commute trips associated with project construction. An estimated 886,626 gallons of gasoline (worker trips) and 504,410 gallons of diesel fuel (off-road equipment, hauling trips) may be used during project construction. (See Appendix C for a summary of construction calculations.)

The energy needs for construction would be spread throughout the project site. The energy needs for project construction would be temporary and would not increase energy demand in a wasteful or inefficient manner. There would be no atypical construction-related energy demand associated with the development, because construction would follow standard practices related to energy consumption. Where available, electric heavy construction equipment may be used, if charging infrastructure is available to support the equipment; however, as a conservative approach (i.e., to avoid the risk of understating an impact), the analysis does not assume use of electric heavy equipment. Nonrenewable energy would not be consumed in a wasteful, inefficient, or unnecessary manner when compared to other construction activity in the region. In addition, on-road gasoline and diesel fuel consumption associated with construction activity would go down every year as the vehicle fleet becomes more fuel-efficient over time.

Operation-Related Energy Use

Table 3.5-1 summarizes the anticipated energy use by sector associated with operation of the project. Modeling assumptions, and details can be found in Appendix C. Energy expenditure for project operations would be typical for a mixed-use land use development project and would include electricity for lighting, space and water heating, climate control, and landscape maintenance activities.

Table 3.5-1 Operation-Related Building Energy Consumption

Energy Sector	Energy Consumption	Units
Mobile (Gasoline)	183,688,709	Gallons
Mobile (Diesel)	6,028,422	Gallons
Area	1,678,638	KWh
Energy	3,927,703	kBTU

Note: kWh = kilowatt hours, kBtu/year = British thermal units per year.

Source: Calculations prepared by Ascent Environmental in 2022 (Appendix C).

To ensure that no wasteful, inefficient, or unnecessary consumption of energy would occur during project operations, the project would include arrays of PV solar systems on the building roofs of new residential units, as required by building codes, and comply with the mandatory provisions of Section 19.04.135 of the Marin County Code, which requires that new development meet various voluntary standards pertaining to EV charging requirements of the CalGreen Code as well as on-site solar infrastructure. In addition, the project would include bicycle infrastructure for visitors and employees and design features to reduce the project's energy consumption resulting from the urban heat island effect. Therefore, operational energy consumption for the project would not be wasteful or inefficient.

Transportation Energy Use

The project would require an increased amount of energy related to employees, students, and visitors driving and taking public transportation to and from the project site. The project would include bicycle parking and related infrastructure to support alternative modes of transportation. By full buildout in 2027, when passenger vehicles would be more efficient and cleaner, gasoline and diesel fuel consumption would also decrease. Therefore, the use of transportation-related energy during project construction and operation would not be wasteful, inefficient, or unnecessary.

Summary

The project would result in energy consumption from construction activities, operations on the site, and transportation. Construction energy would be a one-time energy expenditure required to construct the project and would not include atypical construction-related energy demand. The project would include solar arrays on the building roofs of new residential buildings for renewable energy and would comply with the mandatory provisions of Section 19.04.135 of the Marin County Code, which requires that new development meet various voluntary standards pertaining to EV charging requirements of the CalGreen Code as well as on-site solar infrastructure. In addition, the project would include bicycle infrastructure for visitors and employees, which would reduce gasoline and diesel fuel consumption associated with new vehicle trips generated by the project. Furthermore, the project would include design features to reduce the project's energy consumption resulting from the urban heat island effect. Therefore, implementation of the project would not result in the wasteful, inefficient, or unnecessary consumption of energy. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.5-2: Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency

The Marin County CAP recommends various project-level measures that have been applied to the project as a component of the project's inherent design. The project would include EV chargers in accordance with County Code Section 19.04.135, which amends the mandatory requirements of the CalGreen Code in the form of a County-specific reach code. The project would include bicycle infrastructure consistent with Strategies LCT-C1 and LCT-C2 of the County's CAP. Additionally, the project would include on-site solar consistent with direction provided in Strategy RE-C1. Moreover, the project would be designed to use high albedo pavements and roofs to reduce the urban heat island effect, in accordance with CAP Strategy EE-C3. The incorporation of these policies demonstrates that the project would not conflict with the County of Marin's CAP. These measures are generally consistent with the direction provided to local governments in Appendix D of the 2022 Scoping Plan, which directs projects to reduce VMT, promote renewable energy, and provide EV charging meeting the Tier 2 requirements of the CalGreen Code. Therefore, the project would not conflict with the 2022 Scoping Plan. This impact would be **less than significant**.

The project would be consistent with the County of Marin's CAP, which would result in reduced energy demand and GHG emissions. The CAP, although designed to reduce GHG emissions, also plays a role in improving energy efficiency and enhancing renewable energy resources and therefore serves as the renewable energy or energy efficiency plan applicable to the project. As mentioned in Section 3.5.1, "Regulatory Setting" above, several measures in the County's CAP that would reduce energy demand and increase the County's capacity to generate renewable resources would apply to the project:

- **LCT-C1: Zero Emission Vehicles.** The project would include EV infrastructure consistent with the mandatory requirements of the County's reach code as it pertains to EV charging for residential and nonresidential development.
- **LCT-C2: Bicycling and Micromobility.** The project would install bicycle infrastructure to promote alternate modes of transportation to the project site.
- **RE-C1: Renewable Energy Generation and Storage.** The project would be equipped with on-site PV solar systems to supply renewable energy to the project site and decrease the project's consumption of fossil-fuel powered electricity.
- **EE-C3: Cool Pavements and Roofs**. The project would use high albedo (reflective) pavements to reduce the urban heat island effect, thus decreasing the energy demand associated with the operation of cooling systems such as heat pumps and HVAC units.
- **EE-C4: Green Building Reach Code:** The project would comply with the County's green building ordinance for new and remodeled commercial and residential projects that requires green building methods and energy efficiency savings above the State building and energy codes including the prohibition of the use of natural gas end uses in new residential buildings in alignment with the 2022 California Building Standards code update. The County's green building ordinance, which the project would comply with, entails extending the same prohibition to new nonresidential buildings in the 2025 code cycle. Notably, in response to the Berkeley Decision, the County is currently electing to not enforce this policy at the time of writing this Draft EIR; however, projects may implement this measure voluntarily.
- **WC-C1: Community Water Use**. Landscape design would include features to reduce water consumption, including a plant palette of native and drought-tolerant species and mulched shrub and groundcover areas. Also, the storm drain system would consist of vegetated and cobble swales and storm water treatment and detention BMPs. In addition, individual yards in residential areas would be eliminated to reduce waste of potable water through efficient technologies, conservation efforts, design and management practices, and by better matching the source and quality of water to the user's needs.

These elements of the proposed project would reduce the project's overall energy demand and would contribute to the countywide energy reductions identified in the CAP. These measures are generally consistent with the direction provided to local governments in Appendix D of the 2022 Scoping Plan, which directs projects to be reduce VMT, promote renewable energy, and provide EV charging meeting the Tier 2 requirements of the CalGreen Code. Therefore, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

3.6 GEOLOGY AND SOILS

This section describes current geology and soil conditions at the North Coast Land Holdings (Project) site. It includes a description of site geology, soils, and seismicity, analysis of environmental impacts, and mitigation measures for any significant or potentially significant impacts. The most recent geotechnical report for the project was prepared by Reese and Associates dated December 1, 2021 (Appendix I). This report provides consultation, review of preliminary plans, and review of previous reports. As part of later detailed design development, geotechnical engineering would include further exploration and laboratory testing to inform project design. The primary source of information used for this analysis is the Preliminary Geotechnical Design Report prepared by Purcell, Rhodes & Associates (PRA) of Pleasant Hill, California dated June 8, 2016 (Appendix J), Stage 1 Feasibility Study by PRA dated August 23, 2010 (Appendix K), and Geotechnical Reconnaissance Report by Donald Herzog Associates (DHA) dated May 19, 1982 (Appendix L). Reports submitted by the applicant have been subject to independent review and analysis; they are attached in Appendices I through L of this Draft EIR. Scoping comments received regarding geology and mineral resources in response to the NOP requested that the EIR address landslides, potential for debris flow, liquefaction risk, fill materials present on site, and structural integrity of development in terms of seismological risk. See Appendix A for all NOP comments received.

3.6.1 Regulatory Setting

FEDERAL

National Earthquake Hazards Reduction Act

In October 1977, the U.S. Congress passed the Earthquake Hazards Reduction Act to reduce the risks to life and property from future earthquakes in the United States. To accomplish this, the act established the National Earthquake Hazards Reduction Program (NEHRP). The mission of NEHRP includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improved building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improved mitigation capacity; and accelerated application of research results. The NEHRP designates the Federal Emergency Management Agency (FEMA) as the lead agency of the program and assigns several planning, coordinating, and reporting responsibilities.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program, authorized by Section 402(p) of the federal Clean Water Act, controls water pollution by regulating point sources, such as construction sites and industrial operations that discharge pollutants into waters of the United States. NPDES permits are issued by states that have obtained EPA approval to issue permits or by EPA Regions in states without such approval. California is fully authorized to issue NPDES permits and are described below.

STATE

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Alquist-Priolo Act) (PRC Sections 2621-2630) intends to reduce the risk to life and property from surface fault rupture during earthquakes by regulating construction in active fault corridors, and by prohibiting the location of most types of structures intended for human occupancy across the traces of active faults. The act defines criteria for identifying active faults, giving legal support to terms such as active and inactive, and establishes a process for reviewing building proposals in Earthquake Fault Zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across these zones is strictly regulated if they are "sufficiently active" and "well-defined." A fault is considered sufficiently active if one or more of its segments or strands shows evidence of

surface displacement during Holocene time (defined for purposes of the act as within the last 11,000 years). A fault is considered well defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment (Bryant and Hart 2007). Before a project can be permitted in a designated Alquist-Priolo Earthquake Fault Zone, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults. The law addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards.

Seismic Hazards Mapping Act

The intention of the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) is to reduce damage resulting from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including ground shaking, liquefaction, and seismically induced landslides. The act's provisions are similar in concept to those of the Alquist-Priolo Act: The State is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped Seismic Hazard Zones. Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development.

California Building Code

The California Building Code (CBC) (California Code of Regulations, Title 24) is based on the International Building Code. The CBC has been modified from the International Building Code for California conditions, with more detailed and/or more stringent regulations. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the CBC. The CBC identifies seismic factors that must be considered in structural design. Chapter 18 of the CBC regulates the excavation of foundations and retaining walls, while Chapter 18A regulates construction on unstable soils, such as expansive soils and areas subject to liquefaction. Appendix J of the CBC regulates grading activities, including drainage and erosion control. The CBC contains a provision that provides for a preliminary soil report to be prepared to identify "…the presence of critically expansive soils or other soil problems which, if not corrected, would lead to structural defects." (CBC Section §1803.1.1.1).

National Pollutant Discharge Elimination System Construction General Permit

As authorized by the Clean Water Act, the NPDES Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Examples of pollutants include, but are not limited to, rock, sand, dirt, and agricultural, industrial, and municipal waste discharged into waters of the United States. See section 122.2 of 40 Code of Federal Regulations for the definitions of point source, pollutant, and water of the United States.

The NPDES Program is a federal program which has been delegated to the State of California for implementation through the State Water Resources Control Board and the nine Regional Water Quality Control Boards, collectively Water Boards. In California, NPDES permits are also referred to as waste discharge requirements (WDRs) that regulate discharges to waters of the United States.

Dischargers whose projects disturb one (1) or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development of a storm water pollution prevention plan (SWPPP) by a certified Qualified SWPPP Developer. A SWPPP describes the potential pollution sources that could come into contact with storm water, the best management practices (BMPs) required to minimize the potential for mobilization of pollutants, and sampling requirements for any stormwater leaving the site.

NPDES Stormwater Permit for Discharges from Small Municipal Separate Storm Sewer Systems

The Municipal Stormwater Permitting Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s). Stormwater is runoff from rain or snow melt that runs off surfaces such as rooftops, paved streets, highways or parking lots and can carry with it pollutants such as oil, pesticides, herbicides, sediment, trash, bacteria and metals. The runoff can then drain directly into a local stream, lake, or bay. Often, the runoff drains into storm drains which eventually drain untreated into a local waterbody.

Although prior to being regulated under the Small MS4 Permit, the municipalities in Marin County formed the Marin County Stormwater Pollution Prevention Program (MCSTOPPP) for the purpose of developing a countywide program to satisfy the requirements of the CWA and Basin Plan. In 2021 their name was updated to the Marin Countywide Stormwater Pollution Prevention Program. The MCSTOPPP also developed a stormwater management plan (Action Plan 2010) to comply with the requirements of the Small MS4 Permit. The Action Plan 2010 includes Performance Standards for the program elements that must be addressed under the Small MS4 Permit: municipal maintenance activities (including road repair and maintenance); illicit discharge controls; new development, redevelopment and construction site controls; industrial and commercial discharge controls; and public information and participation. Local Small MS4 Permit activities (MCSTOPPP) are overseen by the Water Board.

LOCAL

Marin County Code

Chapter 19.04.010 Marin County Building Code. The Marin County Building Code applies to all new construction, sizable repairs, demolitions, and renovations in Marin County. The promotion of healthy, safe, and sustainable communities; the preservation of Marin's unique environmental heritage; and the welfare and meaningful participation of the people of the County of Marin and protection of the property situated therein require adopting the following codes:

1) The 2022 edition of the California Building Code, known as California Code of Regulations, Part 2 of Title 24, incorporating the 2021 edition of the "International Building Code" published by the International Code Council, including: Appendix C for group U agricultural buildings; with exceptions, additions and deletions as provided in this title.
2) The 2022 edition of the California Residential Code, known as California Code of Regulations, Part 2.5 of Title 24, incorporating the 2021 edition of the "International Residential Code" published by the International Code Council, including: Appendix AJ for existing buildings and structures; Appendix AQ for tiny houses; Appendix AR for light straw-clay construction; Appendix AS for strawbale construction; Appendix AU for cob construction (monolithic adobe); and Appendix AW for 3D-printed building construction; with exceptions, additions and deletions as provided in this title.
3) The 2022 edition of the California Electrical Code, known as California Code of Regulations, Part 3 of Title 24, incorporating the 2020 edition of the "National Electrical Code" published by the National Fire Protection Association, with exceptions, additions and deletions as provided in this title.
4) The 2022 edition of the California Mechanical Code, known as California Code of Regulations, Part 4 of Title 24, incorporating the 2021 edition of the "Uniform Mechanical Code" published by the International Association of Plumbing and Mechanical Officials, with exceptions, additions, and deletions as provided in this title.
5) The 2022 edition of the California Plumbing Code, known as California Code of Regulations, Part 5 of Title 24, incorporating the 2021 edition of the "Uniform Plumbing Code" as published by the International Association of Plumbing and Mechanical Officials, with exceptions, additions, and deletions as provided in this title.
6) The 2022 edition of the California Energy Code known as California Code of Regulations, Part 6 of Title 24.
7) The 2022 edition of the California Historical Building Code known as California Code of Regulations, Part 8 of Title 24.

8) The 2022 edition of the California Existing Building Code, known as California Code of Regulations, Part 10 of Title 24, incorporating content from the 2021 edition of the "International Existing Building Code" published by the International Code Council.

9) The 2022 edition of the California Green Building Standards Code known as California Code of Regulations, Part 11 of Title 24, including Division A4.6 for Tier 1, with exceptions, additions, and deletions as provided in this Title.

10) The 2022 edition of the California Referenced Standards Code known as California Code of Regulations, Part 12 of Title 24.

11) Article 8 (commencing with Section 74) of Subchapter 1 of Chapter 1 of Title 25 of the California Code of Regulations, with changes or modifications as provided in Chapter 19.20 of the Marin County Code.

12) The 2021 edition of the International Property Maintenance Code, with exceptions, additions, and deletions as provided in this title.

Title 22. Development Code. The purpose of Title 22 Development Code is to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the County. The Development Code carries out the policies of the Marin Countywide Plan by classifying and regulating the uses of land and structures within the unincorporated areas of Marin County. The Marin Countywide Plan includes policies to preserve and enhance the natural environment of the County, and to strive for a high quality built environment. The following sections outlined below are related to geology and soils and would be applicable to the project.

Chapter 22.20.040 Outdoor Construction Activities. Outdoor construction activities that require Building Permits shall meet the standards enumerated below in addition to any other requirements imposed by Federal, State, or local agencies.

E. Archaeological, Historical, and Paleontological Resources. In the event that archaeological, historic, or paleontological resources are discovered during any construction, construction activities shall cease, and the Agency shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may occur in compliance with State and Federal law. The disturbance of an Indian midden may require the issuance of an Excavation Permit by the Department of Public Works, in compliance with Chapter 5.32 (Excavating Indian Middens) of the County Code.

Chapter 22.100.030 Subdivision Grading, Erosion, and Sediment Control. All subdivision grading and construction operations shall be conducted to provide proper erosion and sediment control, and shall otherwise comply with all applicable provisions of Title 23, Chapter 23.08 (Excavation, Grading, and Filling), and Title 24, Sections 24.620 (Grading) of the County Code.

Chapter 22.100.040 Soils Reports. Marin County requires the submittal of a preliminary soils report for development applications. A preliminary geotechnical report based upon adequate test borings must be prepared by a registered civil engineer required and required for every subdivision. The preliminary geotechnical report must be submitted for many types of applications, including discretionary and non-discretionary permits.

The preliminary geotechnical report may be divided into two parts: a soils reconnaissance and a final soils investigation and report. The soil reconnaissance must include a complete description of the site based on a field investigation of soils matters, including stability, erosion, settlement, feasibility of construction of the proposed improvements, description of soils related hazards and problems and proposed methods of eliminating or reducing these hazards and problems. The final soils investigation and report must include field investigation and laboratory tests with detailed information and recommendations relative to all aspects of grading, filling and other earthwork, foundation design, pavement design and subsurface drainage.

Additionally, the preliminary geotechnical report must recommend any required corrective action for the purpose of preventing structural damages to the subdivision improvements and the structures to be constructed on the lots. The report must also recommend any special precautions required for erosion control, and the prevention of sedimentation or damage to off-site property. A preliminary geotechnical report contains sufficient information to use as substantial evidence in determining the significance of impacts under CEQA. If the preliminary geotechnical

report indicates the presence of critical soils problems which, if not corrected, would lead to structural defects (e.g., the stability, erosion, settlement, and feasibility of construction issues discussed above), a subsequent soils investigation of each lot in the subdivision may be required and submitted to the Department of Public Works to further define engineering solutions before approval of a Parcel or Final Map.

A final geotechnical report prepared by a registered civil engineer must be required where a preliminary geotechnical report was required, unless the final report is waived by the Director of Public Works. The report guides project engineering and must contain sufficient information to ensure compliance with all recommendations of the preliminary geotechnical report and the specifications for the project. The report must also contain information relative to soils conditions encountered that differed from that described in the preliminary geotechnical reports, if any, along with any corrections, additions or modifications not shown on the approved plans.

Title 23. Natural Resources. The purpose of Title 23 is to protect and promote the public health, safety and general welfare, to preserve environmental qualities, and to protect the value, worth and enjoyment of the use of real property to the fullest extent possible, through the regulation of the uses or activities of the property in a manner which will prevent serious public injury consisting of, but not limited to, the following related to geology and soils:

- soil erosion;
- soil instability, movement or displacement, particularly in response to earth tremors or shock waves created by natural causes or otherwise; and
- change of the environment which is detrimental to the public health, safety and general welfare.

Chapter 23.08 Excavating, Grading and Filling. Marin County requires the submittal of a geotechnical report for many types of applications including discretionary and non-discretionary permits. The geotechnical report must be signed by a registered geotechnical engineer or a State certified engineering geologist. The geotechnical report must address the geotechnical conditions at the site and must commit to appropriate and comprehensive mitigation measures sufficient to reduce geotechnical risks associated with the proposed development to an acceptable level. The geotechnical report must also address the impact of proposed development, including site grading and geotechnical remediation on adjacent lands, and the potential impacts of off-site geotechnical conditions on the proposed project. For example, if a proposed project does not have an impact on an existing landslide and would not further exacerbate the existing landslide, and the applicant chooses not to take measures to remedy the landslide, then the Department of Public Works (DPW) does not require conditions of approval that require the existing landslide to be repaired or remedied.

Marin DPW relies on the recommendations of the project geotechnical engineer concerning landslide repair and remediation. Marin DPW reviews the geotechnical report for adequacy and takes into consideration the findings of any peer review in initial studies and EIRs. If Marin DPW determines that the recommendations contained in a geotechnical report are not adequate, they may ask for an independent peer review.

As part of the grading permit information required include plans and specifications showing: locations of creeks, lakes and wetlands; property lines; existing structures; topography; planned grading elevations; drainage devices; grading quantities; and existing vegetation. Where work poses undue erosion potential and/or risk to adjacent property, roadways, the watershed or related elements, the Director of Public Works may require additional plans, reports and information such as: a map showing the drainage area and estimated runoff of the area of work and adjacent areas; revegetation plans and specifications; geotechnical investigation report that includes data regarding the nature, distribution and strength of existing soils, adequate description of the geology of the site, conclusions and recommendations for grading procedures and design criteria; and Erosion and Sedimentation Control Plan (ESCP).

Title 24. Development Standards. The purpose of the Title 24 Development Standards is to establish standards of improvement and construction for the development of land within the unincorporated area of Marin County in order to implement the Marin Countywide Plan; protect the public health, safety and welfare; and inform developers of private property of the normal minimum requirements of the county.

Chapter 24.04.520 through 24.04.560 Drainage Facilities. The purpose of these sections of Title 24 Development Standards is provide development standards for drainage facilities including the following. Due to the extensive requirements outlined in these sections, an abbreviated list of the facilities is provided. See Marin County Code for specific design criteria:

- hydrologic and hydraulic design;
- alignment, slope protection and structural design;
- constructed channels;
- conduits; and
- drainage setbacks.

Chapter 24.04.620 through 24.04740 Grading. The purpose of these sections of Title 24 Development Standards is provide development standards for grading. All grading shall conform to the requirements of Chapter 23.08, Excavating, Grading and Filling, of the Marin County Code and comply with the following:

- Grading shall be held to a minimum. Grading shall be permitted only where the developer clearly demonstrates every reasonable effort has been made to retain the natural features of the land to the maximum extent possible, e.g., skyline and ridge tops, rolling land forms, knolls, significant native vegetation, trees, rock outcroppings, streambeds and watercourses.
- Depending on the nature and extent of the proposed grading, the agency may require plans, specifications, surface and/or subsurface exploration, geotechnical reports, material testing and any other information deemed necessary by the agency for the proper evaluation of the proposed grading. Such plans, specifications, etc., shall be prepared by registered professionals as required by the agency.

In addition, these sections provide specific requirements for the following site improvement activities during construction. Due to the extensive requirements outlined in these sections, an abbreviated list of the improvement activities is provided. See Marin County Code for specific criteria:

- erosion and sediment control,
- permanent stormwater controls for new and redevelopment,
- site work deposit,
- slopes,
- retaining walls,
- creation of new lots,
- banks,
- padding,
- contour grading,
- setbacks,
- drainage and terracing,
- subsurface drainage,
- construction on fill.

Marin Countywide Plan

The *Marin Countywide Plan* was adopted in 2007 and was amended most recently in January 2023. It is a comprehensive long-range general plan for the unincorporated areas of Marin County. The *Marin Countywide Plan* (Marin County 2023) includes the overarching theme of "planning sustainable communities" and promotes leading edge strategies started in 1974, when Marin County set in place policies that prevented runaway development and protected open space. The Marin Countywide Plan contains the following goals, policies and implementing programs related to geology and mineral recourses that apply to the Project.

Safety Element

Section 2.6 of the Countywide Plan contains Marin County's Safety Element, one of the State-mandated elements of the Plan and was most recently updated and adopted in January 2023. It presents the County's overall goals, policies, and implementing programs to facilitate community resilience and reduce future loss of life and property, injuries, environmental damage, and social and economic disruption resulting from environmental hazards. The Marin County

Safety Element contains the following policies and actions related to geology and mineral recourses that apply to the Project.

GOAL EHS-2: Disaster Mitigation, Preparedness, Response, and Recovery. Support continuing public awareness of hazards, including avoidance, disaster preparedness, and emergency response procedures. Ensure readiness in and after emergency situations and create an effective evacuation route network.

- Policy EHS 2.4: Effective Emergency Access and Evacuation. Ensure that first responders have adequate emergency access routes and that County residents, businesses, workers, and visitors can effectively evacuate during or after a disaster.

GOAL EHS-3: Safety from Geologic and Seismic Hazards. Minimize the loss of life, injury, and property damage due to seismic and related geological hazards.

- Policy EH-3.1: Avoid Geologic Hazards. Require development to avoid or minimize potential geologic hazards from earthquakes and unstable ground conditions.
- Policy EH-3.3: Ensure Seismic Safety of New and Existing Structures. Design and construct all new buildings and substantial remodeling projects to be earthquake resistant. The minimum level of design necessary would be in accordance with seismic provisions and criteria contained in the most recent version of the State and County Codes. Construction would require effective oversight and enforcement to ensure adherence to the earthquake design criteria.
- Implementing Program EHS-3.1.b: Require Geotechnical Reports. Continue to require any applicant for land division, master plan, development approval, grading, or new construction in a geologic hazard area to submit a geotechnical report prepared by a State-certified Engineering Geologist or a Registered Geotechnical Engineer that: evaluates soil, slope, and other geologic hazard conditions; commits to appropriate and comprehensive mitigation measures sufficient to reduce risks to acceptable levels, including post-construction site monitoring, if applicable; addresses the impact of the project on adjacent lands, and potential impacts of offsite conditions; and meets the requirements of other agency regulations with jurisdiction in the hazard area, such as BCDC requirements for the safety of fills consistent with the Bay Plan.
- Implementing Program EHS-3.2.a: Prohibit Structures in Active Fault Traces. Prohibit placement of specified types of structures intended for human occupancy within 50 feet of an active fault trace in compliance with the Alquist-Priolo Earthquake Fault Zoning Act.
- Implementing Program EHS-3.2.b: Limit Building Sites in Alquist-Priolo Zones. Prohibit new building sites in any Alquist-Priolo Earthquake Fault Zone, unless a geotechnical report prepared by a professional geologist establishes that the development will comply with all applicable State and County earthquake standards and regulations.
- Implementing Program EHS-3.3.a: Avoid Known Landslides Areas. Continue to prohibit development in landslide areas and on landslide-prone deposits on steep slopes, except where the required geotechnical report indicates that appropriate mitigation measures can stabilize the site for construction.
- Implementing Program EH-3.3.b: Protect Development from Increased Geologic Hazards. Plan for and protect development from increased risk of landslide, debris flows, post-fire debris flows, and subsidence resulting from climate change impacts by implementing Stability Report requirements and subsidence evaluation guidelines.
- Implementing Program EHS-3.3.e: Identify Compressible Soil Potential. Require that geotechnical reports for projects on land underlain by compressible materials (such as fill, bay mud, and marsh or slough areas) delineate locations where settlement will be greatest and subsidence may occur, and recommend site preparation and construction techniques necessary to reduce risk and public liability to an acceptable level.
- Implementing Program EHS-3.3.f: Require Construction Observation and Certification. Require any work or construction undertaken to correct slope instability or mitigate other geologic hazard conditions to be supervised and certified by a geotechnical engineer and/or an engineering geologist.

- Implementing Program EHS-3.3.g: Reliability of Lifelines and Access (Evacuation) Routes. In cooperation with utility system providers, emergency management agencies, and others, assist in the development of strategies to reduce adverse effects of geologic hazards, especially fault surface rupture and landslides to critical public lifelines, and access (i.e., evacuation) routes in an emergency.
- Implementing Program EHS-3.4.a: Address Tsunami Potential. Review tsunami wave run-up and inundation maps, along with other applicable information to be considered in coastal planning and development.

Socioeconomic Element

Section 4.6 the Socioeconomic Element contains the County's goals, policies and implementing programs related to public safety. The following implementing program would be applicable to the project.

- Implementing Program PS-3.k: Ensure Seismic Design Regulations. Continue to implement County ordinances to ensure that new construction meets California Building Code seismic design requirements, provides seismic shut-off devices, and anchors liquid petroleum gas tanks. Require geological assessment (for example, Soils Investigation and Geologic/Geotechnical reports) for grading permits to determine the effects of seismic ground shaking on proposed grading and associated new construction.

Amendments to the Strawberry Community Plan

III. Development Guidelines

E. General Design Guidelines

Erosion Control - Site designs should be prepared and construction activities implemented to minimize adverse impacts upon adjacent marshes and natural resource areas. Individual environmental assessments should clearly review development proposals and indicate the potential for erosion, the possible impacts and methods for mitigating those impacts.

3.6.2 Environmental Setting

SITE LOCATION AND TOPOGRAPHIC SETTING

The project site is in the central part of the Strawberry Point peninsula in unincorporated southeastern Marin County. The project site comprises approximately 101 acres of land above the tidal zone. The site is bounded to the west by Seminary Drive and to the north, east, and south by existing single- and multi-family residential development along Richardson Avenue, East Strawberry Drive, and Seminary Drive, respectively.

The site generally consists of a north-trending ridgeline with west-trending spur ridges at the northwest and southwest ends. The southern spur ridge is generally traversed by Chapel Drive, while the northern spur ridge lies just northwest of Shuck Drive and Judson Lane. These areas are generally developed with existing single- and multi-family residential development and associated infrastructure. The central part of the site contains a shallow saddle between the spur ridges that is occupied by the primary existing campus facilities, including administration, classroom, and other buildings. A broad, prominent swale on the west side of the saddle is occupied by the existing grass athletic field and terraced asphalt parking lots.

Site elevations within the project site range from approximately 15-feet above mean sea level (amsl) along Seminary Drive at the playfield to a maximum of about 250-feet amsl at the northern property line near Richardson Avenue. Slopes are typically inclined between about 3:1 (horizontal:vertical) and 5:1 in the upper, ridgeline part of the site, while slightly steeper inclinations are locally present in the southwest part of the site along Seminary Drive and along the southeastern and northeastern edges of the existing main campus buildings in the south-central part of the site.

REGIONAL GEOLOGY

Marin County lies within the Coast Ranges geomorphic province of California, a region characterized by active seismicity, steep, young topography, and landsliding and erosion, partly due to the relatively high annual rainfall. The regional basement rock consists of sedimentary, igneous, and metamorphic rock of the Jurassic-Cretaceous age (65-190 million years ago) Franciscan Complex and marine sedimentary strata of the Great Valley Sequence, which is of similar age. Within central and northern California, the Franciscan and Great Valley rocks are locally overlain by a variety of late Cretaceous and Tertiary-age sedimentary and volcanic rocks which have been deformed by episodes of folding and faulting. The youngest geologic units in the region are Quaternary-age (last 1.8 million years) sedimentary deposits. These unconsolidated deposits partially fill many of the valleys of the region.

Geologic structure in Marin County is dominated by the San Andreas Fault Zone, which trends northwest along the Marin County coastline and marks an active tectonic boundary between the North American Plate to the east and the Pacific Plate to the west. Geology west of the fault consists predominantly of Cretaceous granites, which are locally overlain by younger sedimentary and igneous rocks. East of the fault, bedrock geology is dominated by complexly deformed and altered sedimentary, igneous, and metamorphic rock of the Jurassic-Cretaceous age (65 to 190-million years old) Franciscan Complex, which is locally overlain by geologically young alluvial and colluvial deposits, including Bay Mud.

LOCAL GEOLOGY

A number of geologists have mapped and studied the Tiburon area in various levels of detail. The earliest available regional geologic map covering the site was prepared in 1974 by the U.S. Geological Survey (USGS) and depicts nearly all of the project site as being underlain by sandstone of the Franciscan Complex (Blake et al. 2000). A small outcrop of greenstone bedrock is shown near the shoreline at the west edge of the site, while zones of man-made fill over Bay Mud are shown in swale areas downslope to the northeast and southwest of the site, respectively. Later mapping was prepared at a more detailed scale and indicates that upland parts of the project site are typically underlain by sandstone and shale as mapped by USGS (Rice and Smith 1976). However, swale areas, including slopes on the east and southwest side of the site as well as the existing grass athletic field along Seminary Drive are shown as underlain by colluvial soils. Colluvium is typically composed of unconsolidated, poorly-sorted clay, silt, sand, and rock fragments which accumulate on and at the base of slopes via gravity and natural weathering processes. The Rice and Smith geologic mapping of the site is shown on Figure 3.6-1, "Regional Geologic Map." The most recent mapping by USGS was performed at a less detailed scale and shows the whole site as underlain by Franciscan "mélange," a tectonic mixture of resistant rock types, including sandstone, greenstone, and others, embedded in a matrix of sheared shale and mudstone (Blake et al. 2000).

The regional geology maps also provide zones of relative stability (Rice and Smith 1976). The project site contains areas mapped as Zones 1, 3 and 4. Zone 1 being the most stable and Zone 4 the least stable. The planned development areas are located on Zones 1 and 3, as shown on Figure 3.6-2, "Relative Slope Stability."

SITE-SPECIFIC GEOLOGY

Site-specific geologic mapping was performed by DHA (Appendix L), and subsurface exploration was undertaken by both DHA (Appendix L) and PRA (Appendix K), including backhoe test pits and auger borings. A summary of subsurface exploration in PRA's report indicates that the site is underlain by a variety of geologic materials, ranging from shallow meta-sedimentary bedrock of the Franciscan Complex to moderately deep earthflow landslide deposits. Notably, the PRA report does not include a legible site-wide geologic map aside from a reproduction of Herzog's 1982 "mitigation map" as incorporated into PRA's Figure 5, "Site Aerial Photo and PRA Boring Locations" (Appendix K). This graphic depicts "areas of weak soil per Herzog site geology map" but does not label individual geologic units or provide detailed description/identification of individual "weak soil" areas. The local geologic instabilities as interpreted from the reference geological reports are shown on Figure 3.6-3, "Geologic Hazards General Overview."

PRA's report summary indicates that Franciscan bedrock types underlying the planning areas primarily include light to dark brown sandstone and dark gray shale. More sparsely distributed rock types include chert, meta-chert, metagraywacke, and serpentinite. Few outcrops are exposed within the planning area aside from local cut slope exposures. The meta-sedimentary rocks typically strike northwest and dip moderately to steeply toward the northeast.

Natural slopes throughout the site are underlain by 6-inches to 6-feet of clayey, silty, and sand colluvial and residual soils which are prone to downslope creep. Shallow earthflows, typically less than 10-feet deep, are also common throughout the site as shown on Herzog's map.

The field area in the southwest part of the site is mapped underlain by fill over bay mud, and local undocumented fills are also present beneath various portions of the existing developed campus area.

GROUNDWATER

Groundwater is not directly addressed in the 2010 and 2016 PRA reports (Appendices J and K). Most exploratory borings did not encounter groundwater. A few deeper borings encountered groundwater at depths of 13- to 18-feet below the ground surface, typically in weathered siltstone bedrock. Test pit logs from DHA's 1982 work (Appendix L) indicate relatively shallow seepage, typically at depths within 5-feet of the ground surface, in both colluvial/residual soil materials and underlying weathered bedrock. Seepage is common on several slopes, particularly after seasonal rains; especially where cut slopes intersect with the soil/rock interface and poor surface drainage. As noted in the 2016 PRA (Appendix J), several surface drain inlets and v-ditches were observed at the site that represented past efforts to mitigate surface drainage issues. Areas of loose fill commonly display ponded water and some drainage ditches were noted to be clogged and non-functional. Additionally, culverted drainpipes were occasionally noted to be draining onto unprotected slopes and fills, causing gully erosion. The State's Geotracker website did not identify groundwater monitoring wells near the project site.

SOILS

As a result of previous/existing development at the site, natural soil complexes that comprised the original, unaltered soil horizon have locally been truncated, mixed, or otherwise altered. Where native soils still exist, soil types are expected to be similar to those of nearby areas, consisting of those identified in Table 3.6-1 (USDA 1985). In their unaltered state, most of these soils have low to moderate shrink-swell potential, but rarely can have high shrink-swell characteristics. Taken together, these soils are susceptible to a variety of soil risk factors such as shallow hardpan, shallow bedrock, caving, flooding, and low strength. Construction on these soils generally requires design features that reduce or eliminate structural damage or failure risks.

Table 3.6-1 Summary of Soil Characteristics

Soil Group	Texture	Shrink-Swell Potential	Risk and Restrictive Soil Features for Building-Site Development
Los Osos-Bonnydoon Complex, 15 to 50% slopes	Clay loam, clay, gravelly loam, weathered bedrock	Low to High	Slight to severe: depth to bedrock, shrink-swell, prone to erosion and instability on steep slopes, low strength, slow permeability
Xerothrents – Fill	Variable, typically loamy	Low to High	Slight to severe: subsidence, erosion

Source: USDA 1985.

LEGEND

Qaf — **Artificial Fill -** Deposits of rock, soil, garbage, and trash, or bay mud placed by man upon natural surfaces, mostly for engineering purposes. Highly variable from place to place as to composition, degree of compaction, etc. Qaf/Qm indicates artificial fill placed upon bay mud.

Debris Flow Landslides - Predominantly deposits of unconsolidated and unsorted soil and rock debris (colluvium) that have moved downslope en masse or in increments by flow or creep processes. Slip surfaces in the base materials of these landslides are roughly planar and approximately parallel to the slope surface.

Qc — **Colluvium -** Unconsolidated and unsorted soil material and weathered rock fragments accumulated on or at the base of slopes by natural gravitational or slope wash processes. Derived by weathering and decomposition of bedrock materials underlying the slopes.

Ks — **Sandstone and Shale -** With very minor amounts of conglomerate. Occurrences of principal rock types and associations in this unit are indicated on the map by the following lithologic symbols.

ss — **Sandstone -** Mainly thickly bedded, medium- to coarse-grained arkose composed predominantly of fairly well sorted, angular to subrounded grains of quartz and feldspar, with minor fine-grained matrix. Individual beds are as much as 50-feet thick, so exposures commonly appear massive, with evidence of bedding obscure.

ssh — **Sandstone and Shale -** Thin beds of light gray, fine-grained, sandstone that grade upward into and alternate rhythmically with, thin beds of gray to black shale.

Fault - Shown solid where fault traces are located with confidence, dashed where approximately located in bedrock areas, and dotted where assumed to be located but buried beneath Quaternary deposits. Queried where considerable doubt exists as to the location of the concealed trace.No evidence of recent faulting was found for any of the faults on this map, therefore all of the faults shown are presumed to be inactive.

Planned Construction Areas

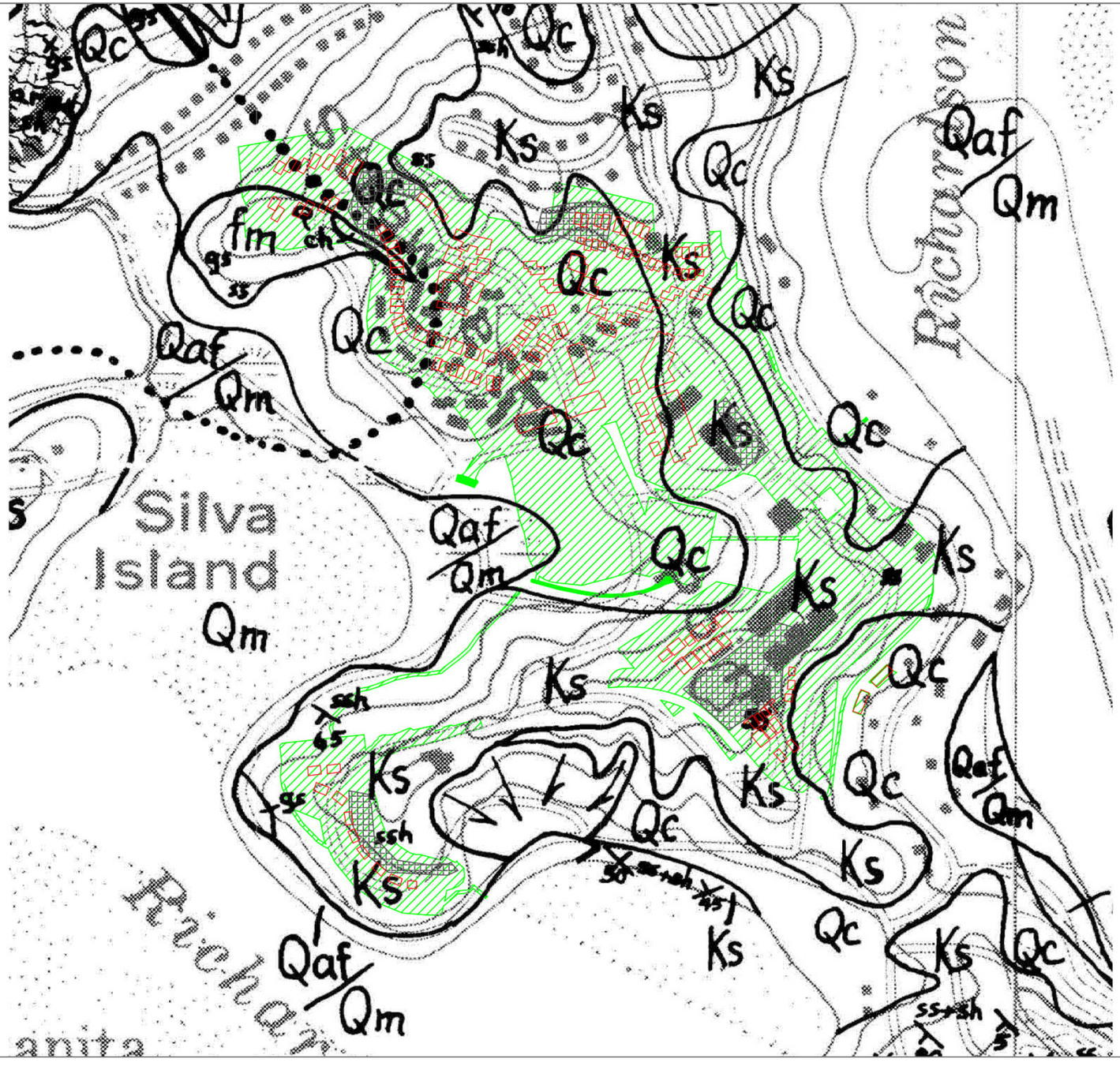
Approximate Fill Areas

Planned New Structures

Reference: Rice, Salem J. and Smith, Theodore C. (1976), "Geology of the Tiburon Peninsula, Sausalito, and Adjacent Areas, Marin County, California", USGS, Scale 1:12,000.

20210009.01 GRX 008

0 100 460 FEET



Source: Image produced and provided by Miller Pacific Engineering Group in 2022.

Figure 3.6-1 Regional Geologic Map

LEGEND

Zone 1 - The most stable category. This zone includes resistant rock that is either exposed or is covered only by shallow colluvium or soil. Also included in this zone are broad, relatively level areas along the tops of ridges or in valley bottoms that may be underlain by material that is quite weak (such as Franciscan melange and alluvium) but occupies a relatively stable position.

Zone 2 - Includes narrow ridge and spur crests that are underlain by relatively competent bedrock, but are flanked by steep, potentially unstable slopes.

Zone 3 - Areas where the steepness of the slopes approaches the stability limits of the underlying geologic materials. Some Landslide deposits that appear to have relatively more stable positions than those classified within Zone 4 are also shown here.

Zone 4 - The least stable category. This includes most landslide deposits in upslope areas, whether presently active or not, and slopes where there is substantial evidence of downslope creep of the surface materials. These areas should be considered naturally unstable, subject to potential failure even in the absence of an's activities and influences. Banks along deeply incised streams are also included in Zone 4.

These judgements are interpretive, and generally apply to large areas. Within each area conditions may range locally in detail through all stability categories. Hence, an area designated 1 may locally contain unmapped landslides and an area designated 4 may locally contain relatively stable sites.

Planned Construction Areas

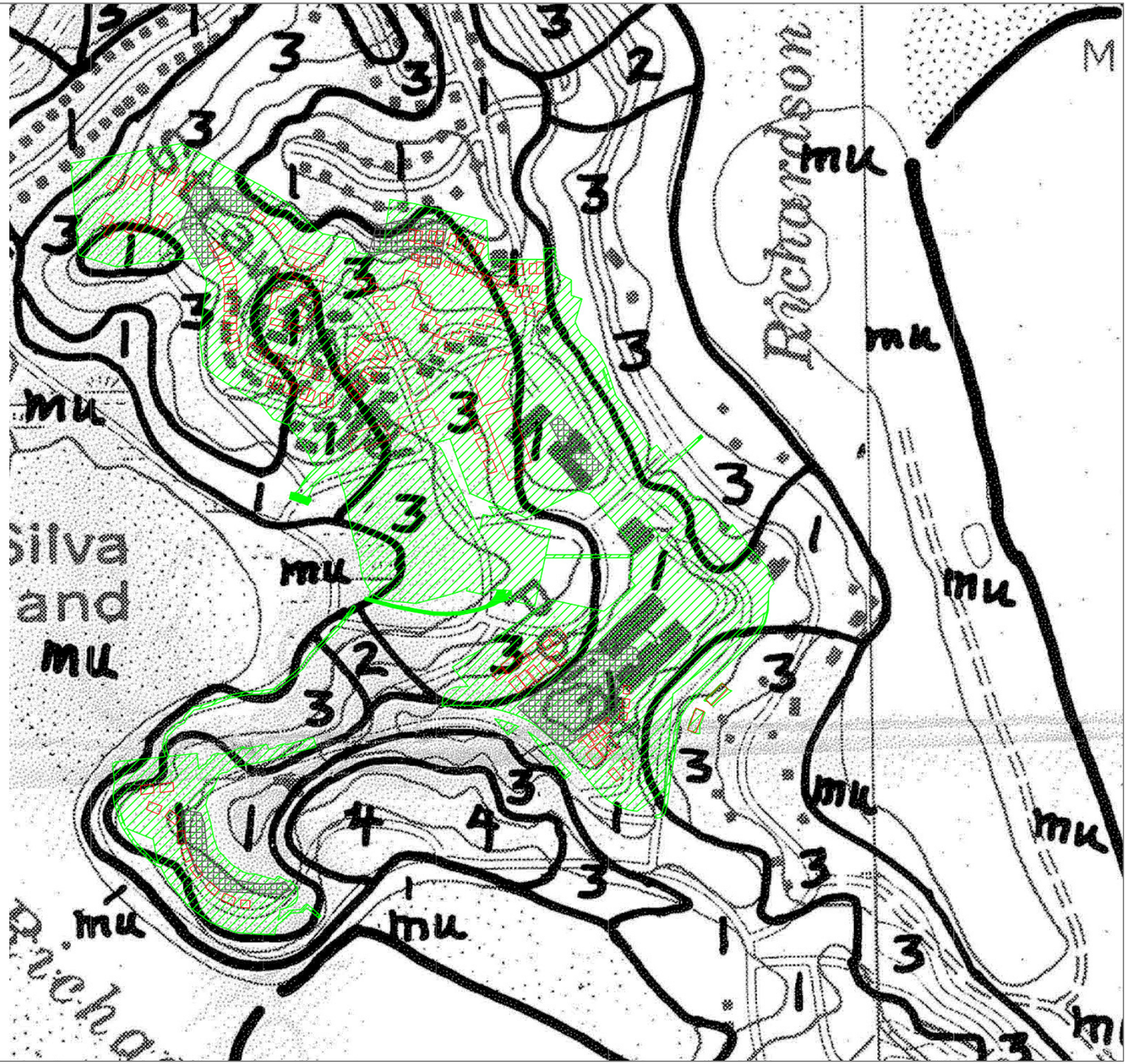
Approximate Fill Areas

Planned New Structures

Reference: Rice, Salem j., Smith, Theodore C., and Strand, Rudolph G. (1976), "Geology for Planning: Central and Southeastern Marin County, California", USGS.

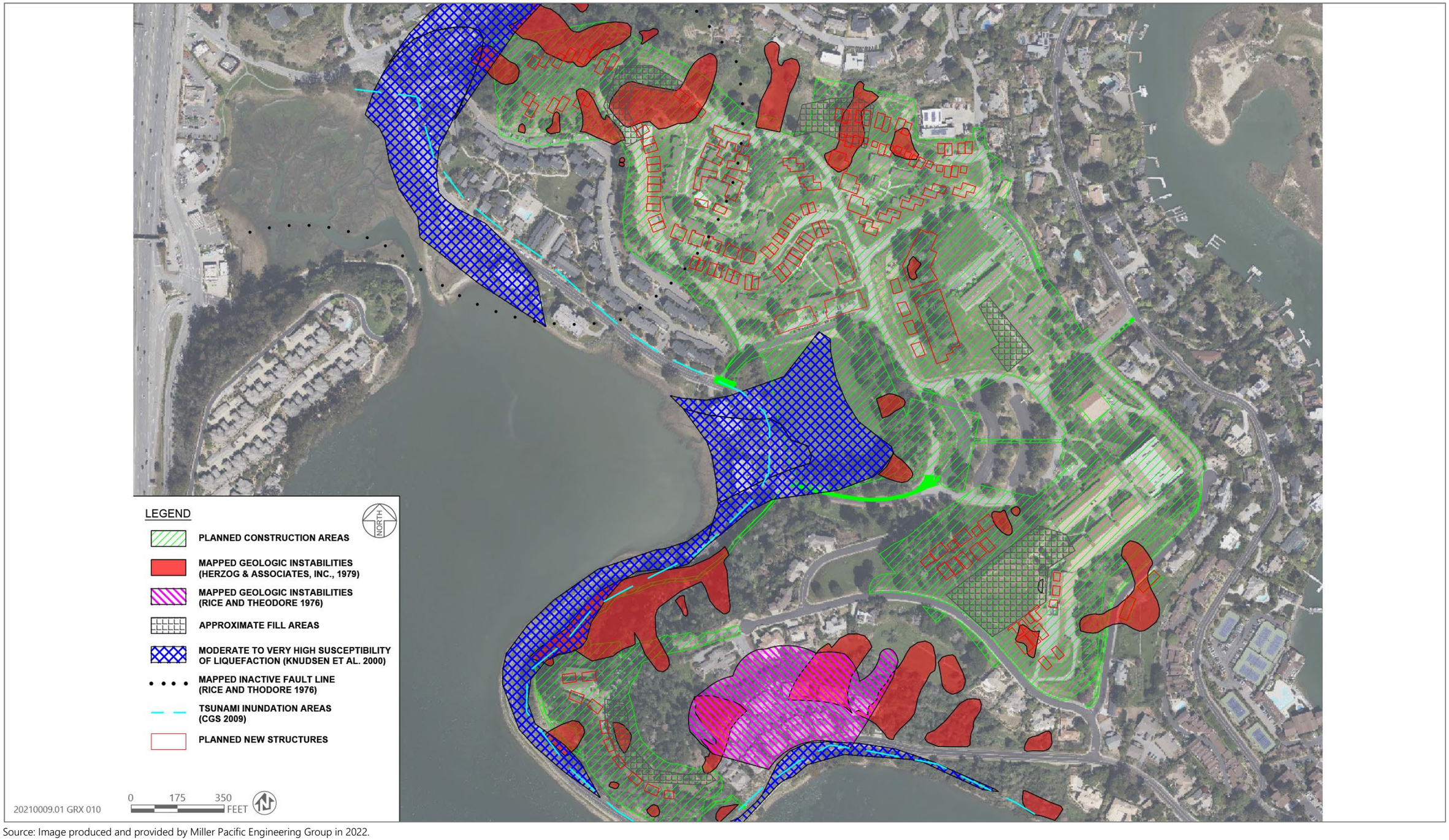
20210009.01 GRX 009

0 100 460 FEET



Source: Image produced and provided by Miller Pacific Engineering Group in 2022.

Figure 3.6-2 Relative Slope Stability



Source: Image produced and provided by Miller Pacific Engineering Group in 2022.

Figure 3.6-3 Geologic Hazards General Overview

EROSION

Soil erosion occurs primarily when dirt is left exposed to strong winds, hard rains, and flowing water. In some cases, human activities, especially land clearing, leave soil vulnerable to erosion. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation and the Revised Universal Soil Loss Equation to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat) (USDA 2023). For example, soils high in clay have low K values, about 0.05 to 0.15, because they are resistant to detachment. Coarse textured soils, such as sandy soils, have low K values, about 0.05 to 0.2 (USGS 2023b). Values of K for the proposed project area range from 0.28 to 0.32, therefore, the susceptibility of soil to erosion and the rate of runoff is relatively low (USDA 2023).

SUBSIDENCE

Land subsidence is the gradual settling or sinking of an area with very little horizontal motion. Subsidence can be induced by both natural and human phenomena. Natural phenomena include shifting of tectonic plates and dissolution of limestone resulting in sinkholes. Subsidence related to human activity includes pumping water, oil, and gas from underground reservoirs; collapse of underground mines; drainage of wetlands; fill placement over compressible soils and soil compaction/hydro-compression.

The 2016 PRA report (Appendix J) indicates that the proposed development area is underlain by various materials including shallow bedrock, native colluvial/residual soils, earthflow and other landslide deposits, as well as undocumented fills. Landslide deposits, undocumented fill, and naturally occurring soft compressible old marsh deposits (bay mud) are susceptible to subsidence with application of new loads from site grading, structures, or added water. The Geotechnical Reconnaissance Report (Appendix L) also indicated that the areas adjacent to Seminary Drive, between Hodges Drive and Gilbert Drive, is underlain by soft and compressible marsh deposits known as bay mud. However, these marsh deposits are relatively thin and the majority of settlement due to existing fill loads has already occurred. The area between Lower Chapel Drive and Seminary Drive is underlain with several feel of heterogeneous fill. Light settlement tolerant structures could be supported on stiffened spread footing foundation supported in a few feet of recompacted fill in this area. Mapped areas of bay mud and potential geologic instability are shown on Figures 3.6-1, "Regional Geologic Map," through 3.6-3, "Geologic Hazards General Overview."

EXPANSIVE SOILS

Expansive soils (also known as shrink-swell soils) are soils that contain expansive clay minerals that can absorb significant amounts of water. The presence of these clay minerals makes the soil prone to large changes in volume in response to changes in water content. When an expansive soil becomes wet, water is absorbed and it increases in volume, and as the soil dries it contracts and decreases in volume. This repeated change in volume over time can produce enough force and stress on buildings, underground utilities, and other structures to damage foundations, pipes, and walls. Where expansive soils occur on sloping ground, these volumetric changes can result in a slow-moving mode of instability known as slope "creep."

Soil deposits with a higher clay content tend to be expansive. The quantity and type of expansive clay minerals affects the potential for the soil to expand or contract. Where native soils still exist, soil types may be expected to be similar to those of the nearby areas. These soil types range in shrink-swell potential from low to high (Table 3.6-1). Neither the 2010 nor the 2016 PRA reports (Appendices J and K) address the potential for expansive soils but do note that "soils on all natural slopes are undergoing slow downslope transport in the form of creep."

MASS WASTING AND LANDSLIDES

Mass wasting refers to the collective group of processes that characterize down slope movement of rock and unconsolidated sediment overlying bedrock. These processes include landslides, slumps, rockfalls, flows, and creeps. Many factors contribute to the potential for mass wasting, including geologic conditions as well as the drainage, slope inclination, and vegetation of the site.

A landslide refers to the downward movement of slope-forming materials (such as rock, soil, or fill). This downward movement typically occurs along a surface (geologic contact, slide plane, landslide plane, or discrete slip surface). Landslides are typically caused by one or a combination of the following factors:

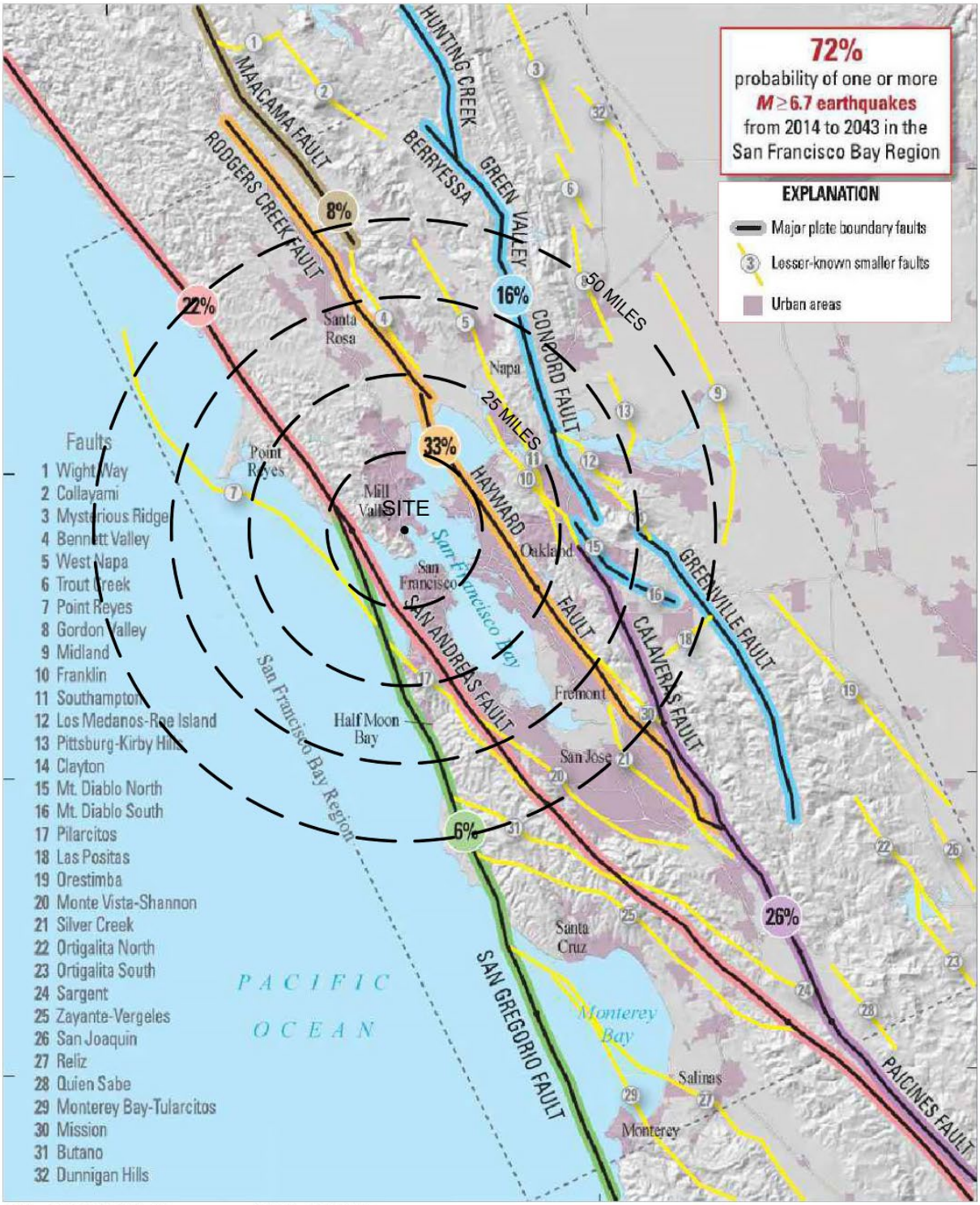
- adding weight (driving force) to the upper portion of a potential slide area,
- removing mass (lateral or toe support) from the base or lower margins of a potential slide area,
- increasing the volume of water into a potential or existing non-flow landslide, and/or
- lateral loading from earthquakes.

Reconnaissance landslide mapping (Wentworth and Frizzell 1975, Wentworth et al. 1997) indicates the majority of the site, generally including all sloping areas and omitting only the ridgelines, is underlain by widespread debris-flow landslide deposits. These maps were prepared on the primary basis of aerial photograph interpretation with limited supplemental field mapping. Engineering geologists identify potential landslide areas based on evaluations of sites' geology, geomorphology (land shape), and topography (land surface). Both 2010 and 2016 PRA reports (Appendix K and Appendix J) indicate that several landslides are present at the site, as catalogued in the 1982 DHA report (Appendix L), which typically include earthflows and slumps. DHA's report included a detailed map showing proposed slide mitigation measures, but the PRA reports indicate that they were unable to confirm the presence of such mitigation being performed on-site. No updated mapping or additional study of individual slides appears to have been performed by PRA or Reese. Examples of standard landslide mitigation methods include grading, installing surface and subsurface drains, and constructing retaining walls or caissons, prior to construction of the project. When properly implemented and integrated with the site conditions, these methods can eliminate or minimize the potential for damage to man-made structures and off-site improvements.

SEISMICITY

Most earthquakes originate along fault lines. A fault is a fracture in the Earth's crust along which rocks on one side are displaced relative to those on the other side due to shear and compressive crustal stresses. Most faults are the result of repeated displacement that may have taken place suddenly and/or by slow creep (Bryant and Hart 2007). The state of California has a classification system that designates faults as either active, potentially active, or inactive, depending on how recently displacement has occurred along them. Faults that show evidence of movement within the last 11,000 years (the Holocene geologic period) are considered active, and faults that have moved between 11,000 and 1.6 million years ago (comprising the later Pleistocene geologic period) are considered potentially active. The location of active faults relative to the project site is shown on Figure 3.6-4, "Active Faults."

Most of the geologic structure on the Tiburon Peninsula is faulted and folded into a series of thrust belts. Active faults are typically defined as geologic contacts between differing bedrock types and are often zones that impede groundwater flow. An inactive fault is mapped on the project site (see Figure 3.6-3, "Geologic Hazards General Overview") A review of available published geologic and seismic hazards maps indicates that there are no known active faults identified within or adjacent to Mill Valley, which is located approximately 5.6 kilometers northeast of the project area. However, the region has experienced numerous instances of moderate to severe ground shaking as a result of earthquakes originating on other nearby faults in the region. The nearest known active fault mapped by the California Geological Survey is the San Andreas Fault, located about 14.3 kilometers west of the site. A summary of the nearest active faults to the site is provided in Table 3.6-2.



Source: Image produced and provided by Miller Pacific Engineering Group in 2022.

Figure 3.6-4 Active Faults

Table 3.6-2 Summary of Nearest Holocene-Active Faults

Fault Name	Distance from Fault to Project Site (Kilometers)[1]	Age of Movement[2]	Characteristic Earthquake (moment magnitude)[2]
San Andreas	14.3	Holocene	8.0
Hayward-Rodgers Creek	15.0	Holocene	7.6
San Gregorio	17.4	Holocene	7.4
West Napa	29.3	Holocene	7.0
Green Valley	40.1	Holocene	6.8

Sources: [1] USGS 2021a; [2] BSSA/USGS 2014.

Seismic hazards resulting from earthquakes include surface fault rupture, ground shaking, and liquefaction. Each of these potential hazards is discussed below.

Surface Fault Rupture

Surface rupture is the surface expression of movement along a fault. Structures built over an active fault can be torn apart if the ground ruptures. The potential for surface rupture is based on the concepts of recency and recurrence. Surface rupture along faults is generally limited to a linear zone a few meters wide. The Alquist-Priolo Act (see the Regulatory Setting discussion above) was created to prohibit the location of structures designed for human occupancy across, or within 50 feet of, an active fault, thereby reducing the loss of life and property from an earthquake.

In Marin County, the San Andreas Fault and the Hayward Fault are the only faults considered sufficiently active to be zoned under the Alquist-Priolo Earthquake Fault Zoning Act. The San Andreas Fault is the only land-based zoned fault and the last surface ground rupture was in 1906. The possibility of fault rupture on some of the other known faults in the region or on potentially unknown faults still exists.

Research (Johnson et al. 2004) indicates that there exists the potential for blind thrust fault(s) to be present beneath Marin County. These faults are not exposed at the surface. A blind thrust fault is suggested for the anomalously high Mt. Tamalpais, which is approximately 8.5 kilometers northeast of the project site. Due to the buried nature of these thrust faults, their existence has typically not been known until they produce an earthquake. The risk for surface rupture potential of these buried thrust faults is inferred to be low.

The project site is not located within an Alquist-Priolo Earthquake Fault Zone, and none of the regional maps or project documents indicate the presence of any active or potentially-active faults within or in immediate proximity to the site.

Ground Shaking

The intensity of seismic shaking, or strong ground motion, during an earthquake is dependent on the distance and direction from the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions of the surrounding area. Ground shaking could potentially result in the damage or collapse of buildings and other structures. The probable seismic ground shaking expected at the project site is anticipated to produce peak ground accelerations between 41 percent of the acceleration of gravity (0.41g) for a 10 percent in 50-year (475 year return period) event, and 73 percent of the acceleration of gravity (0.73g) for a 2 percent in 50 year (2,475 year return period) event (USGS 2021b). Earthquake intensities generally associated with this amount of ground shaking are typically between VIII and X on the Modified Mercalli Intensity Scale (MMI) (Table 3.6-3). An expected characteristic earthquake on the entire San Andreas Fault System is a Moment Magnitude scale (Mw) of 8.04 and is probably the largest and nearest earthquake that would be felt at the project site. Given the distance between the San Andreas Fault and the project site, the felt intensity would be expected to be on the order of VIII to IX (severe shaking) (BSSA/USGS 2014).

Table 3.6-3 The Modified Mercalli Scale of Earthquake Intensities

If most of these effects are observed	Then the intensity is
Earthquake shaking not felt but people may observe marginal effects of large distance earthquakes without identifying these effects as earthquake-caused. Among them: trees, liquids, bodies of water sway slowly, or doors swing slowly.	I
Effect on people: Shaking felt by those at rest, especially if they are indoors, and by those on upper floors.	II
Effect on people: Felt by most people indoors. Some can estimate duration of shaking but many may not recognize shaking of building as caused by an earthquake; the shaking is like that caused by the passing of light trucks.	III
Other effects: Hanging objects swing. Structural effects: Windows or doors rattle. Wooden walls and frames creak.	IV
Effect on people: Felt by everyone indoors and by most people outdoors. Many now estimate not only the duration of shaking but also its direction and have no doubt as to its cause. Sleepers wakened. Other effects: Hanging objects swing. Standing autos rock. Crockery clashes, dishes rattle or glasses clink. Structural effects: Doors close, open or swing. Windows rattle.	V
Effect on people: Felt by everyone indoors and by most people outdoors. Many now estimate not only the duration of shaking but also its direction and have no doubt as to its cause. Sleepers wakened. Other effects: Hanging objects swing. Shutters or pictures move. Pendulum clocks stop, start, or change rate. Standing autos rock. Crockery clashes, dishes rattle or glasses clink. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Structural effects: Weak plaster and Masonry D* crack. Windows break. Doors close, open, or swing.	VI
Effect on people: Felt by everyone. Many are frightened and run outdoors. People walk unsteadily. Other effects: Small church or school bells ring. Pictures thrown off walls, knickknacks and books off shelves. Dishes or glasses broken. Furniture moved or overturned. Trees, bushes shaken visibly, or heard to rustle. Structural effects: Masonry D* damaged; some cracks in Masonry C*. Weak chimneys break at roof line. Plaster, loose bricks, stones, tiles, cornices, unbraced parapets, and architectural ornaments fall. Concrete irrigation ditches damaged.	VII
Effect on people: Difficult to stand. Shaking noticed by auto drivers. Other effects: Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Furniture broken. Hanging objects quiver. Structural effects: Masonry D* heavily damaged; Masonry C* damaged, partially collapses in some cases; some damage to Masonry B*; none to Masonry A*. Stucco and some masonry walls fall. Chimneys, factory stacks, monuments, towers, elevated tanks twist or fall. Frame houses move on foundation if not bolted down; loose panel walls thrown out. Decayed piling broken off.	VIII
Effect on people: General fright. People thrown to ground. Other effects: Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes. Steering of autos affected. Branches broken from trees. Structural effects: Masonry D* destroyed; Masonry C* heavily damaged, sometimes with complete collapse; Masonry B* is seriously damaged. General damage to foundations. Frame structures, if not bolted, shifted off foundations. Frames cracked. Reservoirs seriously damaged. Underground pipes broken.	IX
Effect on people: General panic. Other effects: Conspicuous cracks in ground. In areas of soft ground, sand is ejected through holes and piles up into a small crate, and, in muddy areas, water fountains are formed. Structural effects: Mast masonry and frame structures destroyed along with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, and embankments. Railroads bent slightly.	X
Effect on people: General panic. Other effects: Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Structural effects: General destruction of buildings. Underground pipelines completely out of service. Railroads bent greatly.	XI
Effect on people: General panic. Other effects: Same as for Intensity X. Structural effects: Damage nearly total, the ultimate catastrophe. Other effects: Large rock masses displaced. Lines of sight and level distorted. Objects thrown into air.	XII

* Masonry A: Good workmanship and mortar, reinforced, designed to resist lateral forces.

* Masonry B: Good workmanship and mortar, reinforced.

* Masonry C: Good workmanship and mortar, unreinforced.

* Masonry D: Poor workmanship and mortar and weak materials, like adobe.

Overall, the project site is in a seismically active area and is expected to experience moderate to severe ground shaking from future earthquakes originating on any of several active faults in the San Francisco Bay region. The historical records do not directly indicate either the maximum credible earthquake or the probability of such a future event. To evaluate earthquake probabilities in California, the USGS has assembled a group of researchers into the "Working Group on California Earthquake Probabilities" (Aagaard, et. al. 2016) to estimate the probabilities of earthquakes on active faults. These studies have been published cooperatively by the USGS, CGS, and Southern California Earthquake Center as the Uniform California Earthquake Rupture Forecast, Versions 1, 2, and 3. In these studies, potential seismic sources were analyzed considering fault geometry, geologic slip rates, geodetic strain rates, historic activity, micro-seismicity, and other factors to arrive at estimates of earthquakes of various magnitudes on a variety of faults in California. The study specifically analyzed fault sources and earthquake probabilities for the seven major regional fault systems in the Bay Area region and the entire state of California and updated some of the analytical methods and models. A 2016 study (UCERF3) further expanded the database of faults considered and allowed for consideration of multi-fault ruptures, among other improvements. Conclusions from the most recent UCERF3 and USGS (Aagaard et. al. 2016) indicate the highest probability of a M>6.7 earthquake on any of the active faults in the San Francisco Bay region by 2043 is assigned to the San Andreas Fault, located approximately 14.3-kilometers west of the site, at 22 percent. The second nearest known active fault, the Hayward Fault; located 15.0-kilometers east, is assigned a 33 percent probability of a M>6.7 earthquake by 2043. Additional studies by the USGS regarding the probability of large earthquakes in the Bay Area are ongoing. These current evaluations include data from additional active faults and updated geological data.

Liquefaction and Lateral Spreading

Liquefaction is a phenomenon in which loose, saturated, granular soil deposits lose a significant portion of their shear strength because of excess pore water pressure buildup. An earthquake typically causes an increase in pore water pressure and subsequent liquefaction. These soils behave like a liquid during seismic shaking and re-solidify when shaking stops. The potential for liquefaction is highest in areas with high groundwater and loose, fine, sandy soils at depths of less than 50 feet.

Regional mapping (Association of Bay Area Governments 2021) indicates that the majority of the project site lies in an area of "very low" liquefaction susceptibility. Small zones of "very high" susceptibility are located around the shoreline area, as well as at the athletic field in the southwest part of the site.

Liquefaction may also lead to lateral spreading. Lateral spreading is the horizontal movement or spreading of soil toward an "open face," such as a streambank, the open side of fill embankments, or the sides of levees. It often occurs in response to liquefaction of soils in an adjacent area. The potential for failure from lateral spreading is highest in areas where there is a high groundwater table, where there are relatively soft and recent alluvial deposits, and where creek banks are relatively high.

Subsurface exploration undertaken by PRA and DHA indicates that upland areas, constituting the majority of the project site, are typically underlain by weathered bedrock and non-liquefiable native soils. No exploration is known to have been performed in the area of the athletic field where regional mapping indicates the highest susceptibility to liquefaction.

PALEONTOLOGICAL RESOURCES

Paleontological resources include fossil remains, as well as fossil localities and rock or soil formations that have produced fossil material. Paleontological resources are often encountered as small outcroppings protruding from the ground surface or during grading activities when soils are disturbed. The underlying geologic formations in an area can give a strong indication of the type of paleontological resource most likely to be encountered because different types of geologic strata (sedimentary rock layers) are better able to preserve paleontological resources than others. Marin County's surficial geologic units include young alluvial fan deposits less than 30,000 years old, with even younger areas of Holocene San Francisco Bay mud (less than 11,800 years old). The Holocene unit is typically not considered paleontologically sensitive because of the geological youth of the remains which would be too young to be fossilized. Even so, these deposits may contain remains that are lifted from older deposits by the movement of the geologic units.

The age of most layered (sedimentary) rocks can often be determined through study of the fossils these rocks contain; the great bulk of the fossil record is dominated by fossils of animals with shells and microscopic remains of plants and animals, which are widespread in sedimentary rocks (USGS 2023a). In Marin County, there are documented finds of rocks containing both megafossils and microfossils (radiolaria and dinoflagellates) of the Late Jurassic and Early Cretaceous age; however, sedimentary rocks would be most likely to contain fossils (Appendix I).

The online collections database of the University of California Museum of Paleontology (UCMP) was searched for fossil localities within the geologic units mapped as occurring in the project area. Data provided through the UCMP's online database includes taxonomic identification, locality number and name, age, and county, and sometimes geologic formation. Precise locality data is not always provided; however, in some cases the locality name can be used to further refine the general vicinity of the locality within the county. The database does not identify any paleontological resources within the project area (UCMP 2023).

3.6.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

The examination of geology, soils, and seismicity is based on information obtained from reviews of:

- the project description;
- available literature, including documents published by the County of Marin, State and federal agencies, and published information dealing with geotechnical conditions in the Marin County area;
- site reconnaissance;
- applicable elements from the Marin Countywide Plan; and
- geotechnical engineering reports prepared for the project site and/or North Coast Land Holdings Project (Appendices I-L).

Information obtained from these sources was reviewed and summarized to describe existing conditions and to identify potential environmental effects, based on the standards of significance presented in this section. In determining the level of significance, the analysis assumes that the project would comply with relevant federal, state, and local laws, ordinances, and regulations.

THRESHOLDS OF SIGNIFICANCE

A geology or mineral resources impact is considered significant if implementation of the North Coast Land Holdings Project would do any of the following:

- directly or indirectly cause potential substantial adverse impacts to structures or people, including the risk of loss, injury, or death, through the surface rupture of a known earthquake fault, strong seismic shaking, seismic-related ground failure, soil liquefaction, or landslides;
- result in substantial soil erosion or the loss of topsoil;
- locate project facilities 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-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- locate project facilities on expansive soil, creating substantial risks to property;
- 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; and/or
- directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Section 15126.2 of the State CEQA Guidelines states that an EIR shall identify and focus on the significant environmental effects of the proposed project. Typically, this analysis is limited to changes in the existing physical conditions. EIRs also should evaluate any potentially significant impacts of locating development in areas susceptible to hazardous conditions as identified in authoritative hazard maps, risk assessments, or in land use plans addressing such hazard areas. This EIR analyzes the project's potential effect on existing landslides or potential effects of locating development in areas susceptible to landslides. It should be noted that if an existing condition on the project site (such as the identified landslides) is not impacted by the proposed project, other than the fact that the existing condition remains, is not a significant impact of the proposed project under CEQA.

The California Supreme Court concluded in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 377-378, "agencies subject to CEQA generally are not required to analyze how existing environmental conditions will impact a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment—and not the environment's impact on the project—that compels an evaluation of how future residents or users could be affected by exacerbated conditions." With this ruling, CEQA no longer considers the impact of the environment on a project (such as the impact of existing seismic ground shaking hazards on new project receptors) to be an impact requiring consideration under CEQA, unless the project could exacerbate an existing environmental hazard. The project would not alter the risk or magnitude of seismic activity, so it would not exacerbate the level of earthquake hazard). Therefore, discussions of these existing environmental hazards are provided for informational purposes only without a determination of impact significance.

ISSUES NOT DISCUSSED FURTHER

Surface Earthquake Fault Rupture

The project site is not located within an Alquist-Priolo Earthquake Fault Zone, and none of the regional maps or project documents indicate the presence of any active or potentially-active faults within or in immediate proximity to the site. This issue is not discussed further in this document.

Soils Incapable of Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems

The campus is currently served by the Richardson Bay Sanitation District and is connected to the existing infrastructure. This would not change for the project, and the project does not propose to use septic or alternative wastewater disposal systems. Therefore, no impact would occur as a result of implementation of the project related to the use of septic tanks or alternative wastewater disposal systems and this issue is not discussed further in this section.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.6-1: Directly or Indirectly Cause Potential Substantial Adverse Impacts to Structures or People, Including the Risk of Loss, Injury, or Death, Through Seismic Ground Shaking

Strong seismic ground shaking would expose structures and occupants to potential adverse effects including risk of loss, injury, or death. Several active fault systems, including the San Andreas, San Gregorio, Hayward-Rodgers Creek, and others, lie in close proximity to the project site and are likely to generate strong seismic ground shaking during the expected design life of the project. However, the proposed project would not cause any change in the risk of loss of life or injury, because it would not exacerbate the existing environmental hazard and would adhere to CBC and Marin County Code requirements. This conclusion is provided for informational purposes but is **not within the purview of CEQA for a determination of impact significance**.

Seismic ground shaking is a term used to describe the movement of the ground during an earthquake. Ground shaking is the primary cause of earthquake damage to man-made structures. When the ground shakes strongly, buildings can be damaged or destroyed and their occupants may be injured or killed. The project site would be susceptible to ground shaking and ground failure during a major earthquake on the active faults of the San Francisco Bay Area. The seismic risk to a structure depends on the distance from the epicenter; the characteristics of the earthquake; the geologic, groundwater, and soil conditions underlying the structure and its vicinity; and the nature of the construction.

A moderate to large magnitude earthquake on a regional fault could cause moderate to severe seismic shaking in the County, thus exposing people or structures on the project site to potential substantial adverse effects, including the risk of loss, injury, or death. The possibility of moderate to high ground acceleration or shaking in the County is similar to the entire Northern California region. The intensity of ground shaking on the project site would depend upon the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter and the project site. As discussed in the 2010 PRA report, although indications of bedrock faults were indicated by sheared rock, there is no indication for the presence of an active earthquake fault to be present within the project site. The site, as is expected for other surrounding communities, would be expected to be impacted by seismic ground shaking during earthquakes on active faults within the San Francisco Bay region (Appendix K). Therefore, while ground shaking at the site would be likely to occur during the life of the project, since there is no mapped active fault recognized by the California Geological Survey as crossing the site, the hazard for surface rupture through the subject site is unlikely from known active faults of the region.

The proposed project would be designed and constructed in accordance with all applicable seismic provisions of the latest edition of the CBC, the goals and policies of the Marin Countywide Plan's Environmental Hazards Element, and Marin County Code 19.04.010 (Marin County Building Codes). Presently, the 2022 CBC is the latest applicable seismic design code. In general, compliance with the seismic design provisions of the CBC would result in structures capable of withstanding moderate ground shaking without structural damage, and capable of resisting collapse in the event of very strong shaking. Given the existing seismically-active nature of the greater San Francisco Bay Area region, it is likely that the project area would experience seismic ground shaking. The potential for exposure to strong ground shaking cannot feasibly be eliminated.

Numerous controls would be imposed on the project through the permitting process. As mentioned above, the County regulates development (and reduces potential seismic and geologic impacts) under the requirements of the CBC, Marin County Code, and project specific design features. All structures associated with the proposed development must be designed to withstand a recommended "design-level" earthquake, as set forth in the latest edition of the CBC. The potential adverse impacts to new structures due to strong, seismically-induced, vibratory ground motion would be sufficiently abated through proper seismic design. No significant geotechnical-related constraints that would preclude designing adequate foundations and structural elements for the taller structures are anticipated. The 2010 and 2016 PRA reports (Appendix K and Appendix J) both indicate that the site is typically underlain by a few inches to several feet of loose/soft to medium dense/stiff sandy to silty and clayey topsoil, residual soil, colluvium, landslide debris, and undocumented fill in the primary development area. No exploration has been performed in the mapped fill and bay mud area under the planned playfield. Additionally, as required by Marin County Code Section 22.100.040, subsurface conditions would be explored and evaluated as part of a design-level geotechnical report for the project.

Per Marin County Code Section 22.100.040, the applicant's geotechnical engineer would provide updated CBC seismic design criteria as part of a future design-level geotechnical investigation. The applicant's contractor would be responsible for ensuring project plans and specifications are following the geotechnical engineer's recommendations and all applicable provisions of the CBC. The County's Building Official would be responsible for monitoring compliance through plan review, construction inspection, and collection/review of inspection records provided by the applicant. The project is committed and required to comply with regulatory building requirements, including CBC seismic design criteria, Marin County Code, and design-level geotechnical recommendations. Thus, the project would not cause any change in the risk of loss of life or injury from seismic ground shaking. Because this issue involves exposure to an existing environmental hazard that would not be exacerbated by the project, and the project would not cause any change in the risk of loss of life or injury, this discussion is provided for informational purposes but is **not within the purview of CEQA for a determination of impact significance**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.6-2: Directly or Indirectly Cause Potential Substantial Adverse Impacts to Structures or People, Including the Risk of Loss, Injury, or Death, Through Seismically-Induced Ground/Structural Failure Including Slope Instability, Liquefaction, and Lateral Spreading

Due to the presence of areas mapped within the project site as "fill," "colluvium," and "earthflows," as well as, areas regionally mapped with steep slopes, bay mud, or as potentially liquefiable, seismically-induced ground failure is an existing environmental condition and has the potential to occur within the effective design life of the project, which would expose structures and occupants to adverse effects potentially including risk of loss, injury, or death. Several active fault systems, including the San Andreas, San Gregorio, Hayward-Rodgers Creek, and others, lie in close proximity to the project site and have the potential to induce ground failure during the expected design life of the project. The construction of the new playfield and bioretention and stormwater dissipation facilities would be located within or proximal to previously-mapped areas of instability (Figure 3.6-2, " Relative Slope Stability"), and thus could exacerbate potential risks associated with this instability from seismically-induced ground failure. Additionally, new cut and fill slopes, as well as the discharge of additional storm water can reduce slope stability which would increase the potential for seismically induced instability and lateral displacements. Thus, the proposed project could exacerbate existing environmental hazards related to seismically-induced ground failure resulting in exposure of structures and occupants to risk of loss, injury, or death. Impacts would be **potentially significant**.

Seismically-induced ground failure is defined as any earthquake-generated process that leads to deformations within a soil medium, which in turn results in permanent horizontal or vertical displacements of the ground surface. As a result, relative movements occur on the ground and structures affected by these movements may be damaged. Identifying areas prone to earthquake-induced ground failure is important to prevent damage. These areas include areas prone to slope instability (such as previous landslides, slumps, and flows), liquefaction, lateral spreading, lurching and ground cracking, and ground surface settlement (as a result of liquefaction or seismic densification of loose/soft soils).

As discussed under Impact 3.6-1 above, because of the proximity of the project site to the Hayward-Rodger's Creek, San Andreas, and other active faults, there is a high probability that the site would experience seismically induced ground failure during the lifetime of any proposed structures. Ground failure could reactivate dormant landslides, induce instability of weak soil deposits (colluvial soils on slopes, poorly-compacted/undocumented man-made fills), and activate landslides in overly-steep cut slopes. In general, areas and materials that may be susceptible to seismically induced ground failure include those mapped by DHA and PRA as "fill," "colluvium," and "earthflows," as well as, areas with steep slopes, bay mud, or potentially liquefiable areas (Figures 3.6-1, "Regional Geologic Map," and 3.6-3, "Geologic Hazards General Overview"). Seismically-induced ground failure could undermine or create debris blockages of emergency evacuation or access routes, disruption or damage to utilities and infrastructure, debris impact to structures, and alteration/disruption of natural drainage patterns.

As discussed in the 2010 and 2016 PRA reports (Appendix K and Appendix J) and indicated on the site maps reproduced from DHA's earlier report (Appendix L), portions of the site are underlain by existing landslides, earthflows, and weak colluvial soil deposits which locally range to more than 10-feet thick, as shown on Figure 3.6-3, "Geologic Hazards General Overview." Regional mapping identifies zones of moderate to very high liquefaction potential as shown on Figure 3.6-3, "Geologic Hazards General Overview." This area is regionally mapped as fill material over bay mud. The fill material (and potential underlying alluvial sand layers) may be liquefiable, while the underlying bay mud is generally not liquefiable. The new playfield is planned in a mapped liquifiable area. If liquefiable soils or weak bay mud are present under the planned playfield, the fill placement could significantly increase pseudo-static (seismic) slope instability and cause increased lateral spreading / displacement during a seismic event.

Preliminary plans indicate that new unretained fill slopes up to about 25 to 30 feet high would be constructed in the playfield area of the development. Other fills of similar thickness would locally be retained with walls, while new cut slopes up to about 15 feet are planned elsewhere. Plans indicate that some at-grade bioretention and stormwater

dissipation facilities may be located within or proximal to previously-mapped areas of instability. New cut and fill slopes, as well as the discharge of additional storm water can reduce slope stability which would increase the potential for seismically induced instability and lateral displacements.

Both PRA reports generally state that site grading, drainage improvements, and retaining structures would reduce seismically-induced hazards. However, the 2010 and 2016 PRA reports (Appendix K and Appendix J) recognize unresolved risks of reduced stability of landslides or zones of potential instability by indicating that geotechnical criteria and recommendations need to be refined with specific improvements and conditions as part of future engineering design to confirm planned development would not cause reduced seismic stability. Therefore, impacts would be **potentially significant** without mitigation.

Mitigation Measures

Mitigation Measure 3.6-2: Geotechnical Engineering to Address Seismically Induced Ground/Structural Failure

The PRA reports recommended that geotechnical engineering of potential seismic-induced slope instability areas be included in the design-level geotechnical report to be prepared as part of compliance with Marin County Code, Section 23.08. These additional engineering measures shall include exploration and laboratory testing of soil samples in or near mapped potentially liquefiable areas or areas mapped as underlain by bay mud. Geotechnical engineering shall be performed to confirm a factor of safety above 1.0 is achieved for the design level seismic acceleration. If the calculated factor of safety is less than 1.0, seismic displacement analyses shall be performed as part of geotechnical engineering to confirm seismic induce displacements are equal or less than pre-construction conditions, and will not affect planned or existing improvements. If the calculated displacement caused by the project exceeds the pre-project condition, engineering improvements shall be implemented to reduce seismic deformations to acceptable levels. For CEQA purposes, the performance standard for the engineering improvements to mitigate the impact would be to maintain risks of lateral spreading and instability at the same or less than existing conditions. The engineering improvements must also meet building codes for safety and structural integrity, which would provide an additional margin of safety for avoiding lateral spreading and instability. The design-level geotechnical engineering shall include geotechnical seismic design recommendations and criteria per the most recent version of the CBC for structures in Seismic Zone 4. In addition, the geotechnical report shall include seismic surcharge loads for retaining structures over 7 feet. While the specific engineering improvements to reduce the risk of lateral spreading and instability would be determined based on project site conditions, typical examples of design features potentially effective in meeting the performance standard could include: retaining walls to hold back spreading soil or downslope movement; surface and subsurface drainage features to direct stormwater away from areas of instability; soil stabilization techniques like surcharging, compaction, or geosynthetic reinforcement; creating terraces or stepped slopes with gabion or retaining wall support; slope contouring to reduce slope angle or profile; and replanting of stabilizing vegetation.

Significance after Mitigation

Implementation of Mitigation Measure 3.6-2 would at least maintain the risk of seismically induced ground failure resulting from potential lateral spreading or greater instability caused by the project at pre-project levels and may reduce the risk. The measure would also result in definition of construction requirements needed to meet building code criteria and the recommendations outlined in the 2010 and 2016 PRA reports, which are intended to prevent structural collapse and risk of loss, safety, and death. The basic requirement is that new structures should withstand ground movement from a minor earthquake without damage; from a moderate earthquake without structural damage; and from a major earthquake without collapse. It is acknowledged that the potential for seismically induced ground failure impacts cannot be entirely eliminated even with site-specific geotechnical investigations and building requirements. Repairing or improving areas of instability by incorporating design features such as those mentioned in Mitigation Measure 3.6-2 (retaining walls, surface and subsurface drainage features, soil stabilization techniques, creating terraces or stepped slopes, slope contouring, and replanting of stabilizing vegetation) would reduce the project's potential to exacerbate existing environmental hazards related to seismically induced ground failure. Therefore, implementation of Mitigation Measure 3.6-2 would reduce impacts related to seismically induced ground failure to a **less-than-significant** level.

Impact 3.6-3: Result in Substantial Soil Erosion

Erosion would occur throughout the design life of the project as a result of natural rainfall, sloping site conditions, and exposed surface soils. Erosion may be exacerbated by alteration of natural drainage patterns, local concentration of stormwater runoff, denudement of previously-vegetated slopes, or site grading. However, the erosion factor (or K value) for the project site ranges from 0.28 to 0.32. Therefore, the susceptibility of soil to erosion and the rate of runoff is considered relatively low. While the greatest risk of erosion would be during construction, requirements to comply with the Construction General Permit and Section 23.18 of the Marin County Code, which requires the development of a SWPPP and implementation of BMPs, would decrease the potential for erosion. Additionally, the project would include a storm drain system and all disturbed areas would be stabilized per permit conditions which would minimize the risk of erosion during project operations. Therefore, this impact would be **less than significant**.

Fine-grained (silty and clayey) soils on steep slopes and granular soils (sand and gravel) on moderate to steep slopes are typically prone to erosion when subjected to concentrated surface water flows. Susceptibility is generally increased where soils are disturbed by grading, excavation, burrowing animals, or other means. Erosion is commonly exacerbated by concentration of stormwater or irrigation runoff or by diversion/alteration of natural drainage patterns and would generally be highest during project grading and construction when soils are exposed to the elements for extended periods of time prior to construction of new improvements and re-establishment of vegetation in disturbed areas. Buildout of the project would include retention of existing storm drain infrastructure as well as installation of new drainage inlets, storm drainpipes, and stormwater best management practices (e.g., bioretention and detention facilities). The Marin County Department of Public Works would be responsible for the maintenance of the existing and proposed Marin County storm drain system. Maintenance of storm drain infrastructure on private property is the responsibility of the property owner if a drainage easement that was dedicated and accepted by the County does not exist (Armstrong, pers. comm., 2022). Per the NPDES Stormwater Permit for Discharges from Small Municipal Separate Storm Sewer Systems and the Marin County Code Chapter 24.04.520, "Hydrologic and Hydraulic Design," regulations, all stormwater drainage calculations shall be designed to minimize runoff associated with a 100-year storm. Proposed storm drain infrastructure is described in Section 3.10, "Hydrology," Impact 3.10-3, for each component of the project site (see Figure 2-3, "Project Site Planning Areas," in Section 2, "Project Description"). Stormwater bioretention areas are shown in Figures 2-4, "Illustrative Site Plan (West)," and 2-5, "Illustrative Site Plan (East)," in Section 2, "Project Description."

The 2010 and 2016 PRA reports (Appendix K and Appendix J) indicate that the project site is typically underlain by a few inches to several feet of loose/soft to medium dense/stiff sandy to silty and clayey topsoil, residual soil, colluvium, landslide debris, and undocumented fill. Existing slopes exhibit evidence of erosion, manifest in the form of localized rills and gullies up to several inches deep, particularly where roof gutter downspouts discharge directly to sparsely- or unvegetated slopes. Seepage is common on several slopes, particularly after seasonal rains; especially where cut slopes intersect with the soil/rock interface and poor surface drainage.

As noted in the 2016 PRA (Appendix J), several surface drain inlets and v-ditches were observed at the site that represented past efforts to mitigate surface drainage issues. Areas of loose fill commonly display ponded water and some drainage ditches were noted to be clogged and non-functional. Additionally, culverted drainpipes were occasionally noted to be draining onto unprotected slopes and fills, causing gully erosion. Site grading can alter both the surface and subsurface flow of water. Concentrated surface water can erode soils on sloping terrain, undermine structures, deposit soil debris at the base of slopes, and add sediment to the storm drainage system.

The proposed project would be required to comply with the NPDES Construction General Permit for construction activities. As part of the Construction General Permit requirements, the applicant would prepare a SWPPP that would require the implementation of BMPs, spill prevention, and other erosion and sediment control features (including wind erosion) to reduce the project's potential for soil erosion. Site grading would be performed during the dry season, typically between April 15 and October 15. Any site grading not completed (including installation of permanent erosion control) before October 15, would be winterized with the placement of temporary erosion control measures (i.e. mulch.).

Project improvements would comply with the BASMAA post-construction manual, which provides a low impact development approach to implementing Provision E.12 "Post-Construction Stormwater Management Program," and mandates the County to control pollutants in runoff from newly created or replaced impervious surfaces. To meet the requirements for a Regulated Project, site design measures will include:

- Routing runoff to stormwater treatment facilities (i.e. bioretention area) sized and designed according to Chapter 4 of the BASMAA Post-Construction Manual. Bioretention areas are sized at approximately 4 percent of the equivalent DMA.
- Providing for ongoing maintenance of bioretention facilities
- Identifying potential source of pollutants and implementing corresponding source control measures

During operation, the project site would be stabilized to best detain runoff and decrease erosion potential within the project site. Marin County Code 23.18 requires routine vegetation management, sediment and debris removal, and annual inspection and maintenance of structures. Vegetation management would likely occur annually or on an as-needed basis and would not include ground-disturbing activities and would employ hand tools, thus minimizing risks of water quality impacts from spills or equipment leaks in the channel or erosion from disturbed soils.

The proposed project would comply with all Construction General Permit, Marin County Code, and BASMAA post-construction manual requirements including preparation of a SWPPP as well as inspection and reporting. During operation, the Marin County Department of Public Works would be responsible for the maintenance of the existing and proposed Marin County storm drain system. These measures would minimize the potential for erosion. Therefore, the impact associated with soil erosion would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.6-4: Directly or Indirectly Cause Potential Substantial Adverse Impacts to Structures or People, Including the Risk of Loss, Injury, or Death Through Slope Instability/Landsliding

Slope instability and landsliding is common throughout Marin County. Existing landslides and other potentially unstable deposits (weak colluvial soils) underlie various portions of the project site, including areas which have been historically filled. Application of new fill soil or building loads, grading and alteration of slopes, and redirection or alteration of existing drainage patterns, could exacerbate/re-activate existing areas of slope instability or generate new slope instability. Thus, impacts related to slope instability and landsliding would be **potentially significant**.

Marin County has experienced landslides in the past. A published geologic report by the U.S. Geological Survey shows that in the 1968-1969 winter season, more than 40 landslides were reported in Marin County (Appendix J). During the 1972-1973 storms, over 100 landslides occurred in Marin County. During the winter of 1982, over 4,600 debris flow landslides occurred in Marin County in early January, and two homes were damaged and one person was killed by debris flows.

Slope instability is an existing geologic hazard at the site. As discussed in the 2010 and 2016 PRA reports and indicated on the site maps reproduced from DHA's earlier report (reproduced on Figure 3.6-3, "Geologic Hazards General Overview"), portions of the site are underlain by existing landslides, earthflows, and weak colluvial soil deposits which locally range to more than 10-feet thick. Seepage is also common on several slopes, particularly after seasonal rains; especially where cut slopes intersect with the soil/rock interface and poor surface drainage. Several surface drain inlets and v-ditches were observed at the site that represented past efforts to mitigate surface drainage issues. Additionally, culverted drainpipes were occasionally noted to be draining onto unprotected slopes and fills, causing gully erosion. Previous development included placement of undocumented fills and permanent cut slopes, and in some areas existing fills overlie landslide debris and colluvial soils (Appendix K and Appendix J).

PRA's report indicates that mitigation for slope instability hazards may be provided by any or a combination of site grading, drainage improvements, and retaining structures. The PRA report provides preliminary recommendations for

permanent fill slopes; including minimum keyway depth; drainage provisions; and fill quality, placement, and compaction. Preliminary recommendations are also given for permanent cut slope height, inclination, configuration, and drainage, as well as for basic retaining wall design and drainage. The 2010 and 2016 PRA reports (Appendix K and Appendix J) indicate that geotechnical criteria and recommendations should be refined for specific improvements and conditions as part of a future design-level investigation.

Preliminary plans indicate that new unretained fill slopes up to about 25 to 30 feet high would be constructed in the playfield area of the development. New cut slopes and fill slopes up to 15 feet are also planned in the Residential Care Facility and in the new west residential development areas. Site grading for Shuck Land, Green Lane, and planned residential lots appear to overlay mapped areas of geologic instability as shown on Figure 3.6-3, "Geologic Hazards General Overview." Plans also indicate that some at-grade bioretention and stormwater dissipation facilities may be located within or proximal to previously-mapped areas of instability below Chapel Lane and the residential extension area in the north end of the site. Practices such as fill placement near the top of a landslide/unstable area or cutting near the lower portion (toe) could all decrease slope stability and re-activate or cause new landslides. Erosion of placed fill and/or shallow sloughing of steep graded slopes can damage structures and improvements constructed near the toe or top of graded slopes. Therefore, impacts would be **potentially significant** without mitigation.

Mitigation Measures

Mitigation Measure 3.6-4: Geotechnical Engineering to Address Slope Instability and Landsliding

To minimize potential risks of the project exacerbating existing hazards related to slope instability and landsliding, the project shall be designed and constructed in accordance with the geotechnical engineering design requirements as part of compliance with Marin County Code, Section 22.100.040, as well as all applicable provisions of the PRA report and latest edition of the California Building Code (or any superseding local code in effect) at the time of building permit application. Currently, the 2023 CBC is the latest applicable site grading design code including setback distances from graded slopes, and drainage terraces for taller slopes. The geotechnical engineering design shall provide grading requirements for keying, benching, fill compaction, subsurface drainage, and maximum inclinations of both temporary and permanent cut and fill slopes. Specific foundation design shall be provided for structures on fill or weak soils. The project Civil Engineer shall provide surface drainage collection and/or drainage terraces above and on graded slopes.

An updated, site-specific geologic map shall be prepared and included in the geotechnical engineering design that clearly identifies and delineates the limits of the geologic materials present at the site, including all existing landslides, colluvial deposits, undocumented fills, or other areas of instability. The applicant's geotechnical engineer shall also individually catalogue and evaluate mapped areas of instability and undocumented fills and assign each a "Risk Level" in the geotechnical engineering design.

Risk level A landslides would include active and dormant landslides within 100 feet of a building envelope, debris flow source areas, and flow paths that crosses building envelopes / residential use areas, or active landslides that could impact public or private property. Risk Level B landslides would present a lower risk of damage and include all active, dormant or potential landslide areas on the property that do not have the potential to significantly damage property or improvements within or outside the property. In most instances, Risk Level B landslides would be located in proposed open space areas or in areas outside of any building envelope and any residential use area. The risk level assignments shall guide site-specific geotechnical engineering design.

The geotechnical consultant shall perform supplemental subsurface exploration, laboratory testing, and engineering analyses to define the slope stabilization and landslide avoidance, improvement, or repair required in the design of project features in each catalogued area of instability. In general, landslides that have a higher potential to of being mobilized by construction (Risk Level A landslides) should be improved or repaired, while Level B landslides should be improved or avoided in accordance with the definitions below:

- Landslide Avoidance - requires locating structures and improvements an adequate distance from an existing landslide so that any future movement of the landslide would not affect the structures or improvements.

- Landslide Improvement - requires increasing the slope stability to a level such that the calculated factor of safety is at least 1.2 for static conditions. Improvement may also include the construction of protective structures below the landslide to protect down slope improvements.
- Landslide Repair – shall improve the slope stability of the landslide area such that the calculated factor of safety defined as the ratio of the resisting forces to the driving forces) is at least 1.5 for static conditions and greater than 1.0 for pseudo-static (seismic) conditions. The improved stability may be accomplished by various methods including: (1) excavation of unstable material, installation of subsurface drainage and construction of a compacted earth fill buttress; (2) design and construction of retaining structures; (3) de-watering with subsurface drainage; (4) removal of the entire unstable landslide mass; or (5) other methods for landslide stabilization acceptable to the County of Marin.

Examples of repair and/or improvement of landslides may include one or a combination of the following methods, or other engineering strategies defined during geotechnical engineering design:

- excavation of unstable material, installation of subsurface drainage and construction of a compacted earth fill buttress;
- design and construction of retaining structures (above and below ground pile walls and shear keys);
- de-watering with subsurface drainage;
- removal of the entire unstable landslide mass; or
- other methods as deemed acceptable to Marin County.

Design drainage facilities shall also be documented during geotechnical engineering. On cut and fill slopes, terrace drains shall be included at intervals necessary to adequately drain slopes, such as every 30 feet of vertical height. The terrace drains shall have a minimum flowline gradient of six percent to make them self-cleaning (per the California Building Code). Storm drainage facilities shall convey surface water away from areas of instability and discharge into the storm drainage system. The Geotechnical Engineer shall review the planned storm water discharge locations (bio-swales and dissipators) and identify design requirements to avoid the potential for this water to exacerbate any existing areas of mapped instability or induce new instability as confirmed during Marin County engineering review of the applicant's geotechnical engineering design.

Significance after Mitigation

Implementation of Mitigation Measure 3.6-4 would at least maintain the risk of slope instability/landsliding resulting from project implementation to pre-project levels and may reduce the risk. The measure would also define the geotechnical design requirements needed to meet the goals and policies of the Marin Countywide Plan's Environmental Hazards Element, and requirements of the Marin County Code, Section 22.100.040, which are intended to prevent structural collapse and protect life safety. Repairing or improving areas of instability by incorporating design features such as those mentioned in Mitigation Measure 3.6-4 (excavation of unstable material, construction of retaining structures, de-watering with subsurface drainage) would reduce slope instability/landsliding impacts to a **less-than-significant** level.

Impact 3.6-5: Locate Project Facilities on Expansive Soils

Expansive soils may be locally present at the site. Where utilized for new fill slopes, expansive soils can cause lateral extension and settlement, and where present at subgrade in flat-lying areas can cause differential heave/settlement of foundations, flatwork, pavements, drainage facilities, and other surface improvements, all of which could present some risk of loss, injury, or property damage. However, the proposed project would not exacerbate an existing environmental hazard and would adhere to CBC and Marin County Code requirements, therefore, impacts related to expansive soils would be **less than significant**.

When saturated via absorption of water in pore spaces, certain clay-rich soils may be naturally prone to significant volumetric expansion. Such expansion can exert significant uplift pressures on foundations, slabs, pavements, and

other surface improvements. Likewise, when desiccated, these soils may shrink volumetrically, resulting in ground surface settlement. Exposure to additional pore water via stormwater runoff, irrigation, and other "built environment" sources can exacerbate expansive behavior. Expansive soils are also prone to "slope creep," a slow-moving mode of instability in which seasonal wetting/drying cycles result in lateral extension and settlement of the slope.

PRA's report does not explicitly address the expected extents or nature of expansive soils at the site. Their boring logs indicate that plasticity test results on samples from Borings 17 and 18 yielded Plasticity Indices of 11 and 6, respectively, which are generally considered non-expansive. Elsewhere, however, PRA's report alludes to soil creep and provides extensive preliminary recommendations for moisture-conditioning, compaction, and subgrade maintenance of expansive materials. No expansion index or other direct testing has apparently been performed.

As part of compliance with Marin County Code Section 22.100.040 and the CBC, the proposed project would require the applicant's engineer to prepare a preliminary soils report as part of the future design-level Geotechnical Investigation. The requirements of the soil report are listed in Marin County Code Section 22.100.040A and include test borings, a description of soil hazards, and the proposed methods of eliminating or reducing these hazards.

If the preliminary soils report indicates the presence of critically expansive soils or other soils problems which, if not corrected, would lead to structural defects, or environmental impacts, a subsequent soils investigation of each lot in the subdivision may be required and submitted to the Department of Public Works before approval of a Parcel or Final Map (Marin County Code Section 22.100.040A). The applicant's geotechnical engineer would provide recommendations to address specific expansive soils conditions at the design and construction phase. The applicant's construction contractor would be responsible for adhering to professional design recommendations and constructing the work accordingly. The County Building Official in collaboration with the County Department of Public Works would be responsible for monitoring compliance through plan review, construction inspection, and collection/review of inspection records from the applicant's design consultants.

The geotechnical investigation required by Marin County Code Section 22.100.040 would reduce expansive soil impacts by confirming the presence or absence of expansive soils, and if present, by removal or mitigation of expansive soil to reduce project impacts. Therefore, the impact is **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.6-6: Locate Project Facilities on a Geologic Unit that is Unstable or that Would Become Unstable as a Result of Subsidence

Subsidence as a result of natural processes, such as groundwater/subsurface resource withdrawal or bedrock dissolution, is not likely within the development area. Subsidence can also occur where new loads are applied to compressible soils, such as bay mud. The bay mud areas on the project site are limited to near the shoreline area, as well as the southern edge of the planned playfield. Subsidence may also occur as a result of differential settlement where new loads are applied across a transition between geologic materials of differing support characteristics. While the greatest risk of subsidence would occur post construction, requirements to comply with Marin County Code and CBC would decrease the potential for subsidence. Such compliance with regulatory requirements would ensure that the potential for subsidence would not change as a result of implementation of the project. Therefore, the impact would be **less than significant**.

The 2010 and 2016 PRA reports (Appendix K and Appendix J) indicate that the site is typically underlain by a few inches to several feet of loose/soft to medium dense/stiff sandy to silty and clayey topsoil, residual soil, colluvium, landslide debris, and undocumented fill in the primary development area. The Geotechnical Reconnaissance Report (Appendix L) also indicated the areas adjacent to Seminary Drive, between Hodges Drive and Gilbert Drive, are relatively thin and the majority of settlement due to existing fill loads has already occurred. The area between Lower Chapel Drive and Seminary Drive indicated that light settlement tolerant structures could be supported on stiffened spread footing foundation supported in a few feet of recompacted fill in this area. No exploration has been performed in the mapped fill and bay mud area under the planned playfield. However, as part of compliance with Marin County Code, Section

23.08 and the CBC, subsurface conditions would be explored and evaluated as part of a design-level geotechnical report for the project. No long-term groundwater withdrawal is proposed as part of the project.

As part of compliance with Marin County Code, Section 23.08, the applicant's licensed engineer would prepare plans that evaluate subsurface conditions with exploration and laboratory soil testing to determine the consolidation/ settlement potential of the native soils underlying the project site including the playfield and undocumented fill soil in the planned building areas. Geotechnical recommendations to address subsidence would be provided in the design-level geotechnical investigation report. Adequate quality control would be provided during construction to ensure that all fill material quality, moisture-conditioning, placement, and compaction is performed in accordance with the plans and specifications. New foundations would be provided with adequate embedment into suitable bearing materials as to reduce the risk of subsidence. Surface and subsurface drainage improvements would be provided around proposed structures to reduce the risk of soil saturation and differential performance.

Additionally, as part of the design-level geotechnical investigation, the applicant's geotechnical consultant would provide design-level recommendations for site grading operations, fill quality, placement, and compaction, and would be responsible for performing quality-control during construction. The structural engineer would be responsible for specifying foundation embedment based on the geotechnical engineer's recommended design criteria. The applicant's construction contractor would be responsible for adhering to professional design recommendations and constructing the work accordingly. The County's Building Official in collaboration with the County Department of Public Works would be responsible for reviewing project specifications for conformance to the geotechnical engineer's recommendations, and for collecting and reviewing the summarized results of construction-phase quality control from the geotechnical engineer. The County's Building Official would also monitor compliance through plan review, construction inspection, and collection/review of inspection records from the applicant. Therefore, with implementation and compliance with County regulatory requirements and the recommendations of the design-level geotechnical investigation, impacts related to the placement of project facilities on soils susceptible to subsidence would be less than significant. Because the project would comply with recommendations from the geotechnical investigation report, which would address subsidence by confirming the presence or absence of soils with settlement potential, and if present, by removal or mitigation of these soil to reduce project impacts, the impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.6-7: Potential for Disturbance of Paleontological Resources

Paleontological resources are the fossilized remains or impressions of plants and animals, including vertebrates, invertebrates, and microscopic plants and animals. Fossils can be used to determine the relative ages of the depositional layers in which they occur and of the geologic events that created those deposits. The proposed project would involve extensive subsurface disturbance that could potentially encounter and damage previously undiscovered buried paleontological resources or unique geological features. However, the Franciscan Complex found at the project site would not contain identifiable fossils and it would be highly unlikely to encounter paleontological resources within the geologic units to be excavated within the confines of the project site. Moreover, in the event of an unanticipated discovery of paleontological resources, the project would be required to comply with County Code 22.20.040. Therefore, impacts associated with the potential for disturbance of paleontological resources would be **less than significant**.

Marin County's surficial geologic units include young alluvial and Bay mud deposits and even younger areas of Holocene San Francisco Bay mud, with the underlying Franciscan Complex (USDA 2023). Although there are documented finds in Marin County of sedimentary rocks that would contain paleontological resources, the Franciscan Complex found at the project site would not contain identifiable fossils. This is because the Franciscan Complex is a unit that has been repetitively pulverized from the nearby tectonic boundary (UCMP 2023). Therefore, it is highly unlikely that the proposed project would uncover or disturb significant paleontological resources. Moreover, in the event of an unanticipated discovery of paleontological resources, the project would be required to comply with

County Code 22.20.040 and cease construction activities until the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may occur in compliance with State, Federal, and local regulations. Therefore, impacts associated with the disturbance or discovery of unknown paleontological resources would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

3.7 GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE VULNERABILITY

This section presents a summary of statutes, regulations, and plans applicable to greenhouse gas (GHG) emissions; a summary of climate change science and GHG sources in California; quantification of project-generated GHGs and discussion about their contribution to global climate change; and analysis of the project's resiliency to climate change-related risks. In addition, mitigation measures are recommended to reduce the project's contribution to climate change.

Scoping comments received regarding greenhouse gas emissions and climate change vulnerability in response to the notice of preparation (NOP) requested that the EIR address greenhouse gas emissions from increased traffic and idling; greenhouse gas emissions from students and workers commuting to the project site; and consideration of the risks of sea level rise following guidance from the State of California Sea-Level Rise Guidance/2018 Update and Marin Shoreline Sea Level Rise Vulnerability Assessment/Bay Waterfront Adaptation & Vulnerability Evaluation. See Appendix A for all NOP comments received.

3.7.1 Regulatory Setting

FEDERAL

Supreme Court Ruling – Carbon Dioxide is an Air Pollutant

In *Massachusetts et al. v. Environmental Protection Agency et al.*, 549 U.S. 497 (2007), the Supreme Court of the United States ruled that carbon dioxide (CO_2) is an air pollutant as defined under the federal Clean Air Act and that the U.S. Environmental Protection Agency (EPA) has the authority to regulate GHG emissions.

In 2010, EPA started to address GHG emissions from stationary sources through its New Source Review permitting program, including operating permits for "major sources" issued under Title V of the federal Clean Air Act.

National Highway Traffic Safety Administration – Corporate Average Fuel Economy Standards

The National Highway Traffic Safety Administration regulates vehicle emissions through the Corporate Average Fuel Economy (CAFE) Standards. On April 1, 2022, the Secretary of Transportation unveiled new CAFE standards for 2024–2026 model year passenger cars and light-duty trucks. These new standards require new vehicles sold in the US to average at least 40 miles per gallon and apply to all states except those that enforce stricter standards.

STATE

Plans, policies, regulations, and laws established by the state agencies are generally presented in the order they were established.

Statewide GHG Emission Targets and Climate Change Scoping Plan

Reducing GHG emissions in California has been the focus of the State government for nearly two decades. GHG emission targets established by the State Legislature include reducing statewide GHG emissions to 1990 levels by 2020 (AB 32 of 2006) and reducing them to 40 percent below 1990 levels by 2030 (SB 32 of 2016). Executive Order (EO) S-3-05, signed by former Governor Arnold Schwarzenegger, calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. This target was superseded by AB 1279, which codifies a goal for carbon neutrality and the reduction of emissions by 85 percent below 1990 levels by 2045. These targets are in line with the scientifically established levels needed in the U.S. to limit the rise in global temperature to no more than 2 degrees Celsius, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are

projected; these targets also pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (United Nations 2015).

On December 16, 2022, CARB adopted the *Final 2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan), which traces the State's pathway to achieve its carbon neutrality and an 85 percent reduction in 1990 emissions goal by 2045 using a combined top-down, bottom-up approach under various scenarios. It identifies the reductions needed by each GHG emission sector (e.g., transportation [including off-road mobile source emissions], industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste) to achieve these goals.

The state has also passed more detailed legislation addressing GHG emissions associated with transportation, electricity generation, and energy consumption, as summarized below.

Transportation-Related Standards and Regulations

As part of its Advanced Clean Cars program, CARB established more stringent GHG emission standards and fuel efficiency standards for fossil fuel–powered on-road vehicles than EPA has done. In addition, the program's zero-emission vehicle (ZEV) regulation requires battery, fuel cell, and plug-in hybrid electric vehicles (EVs) to account for up to 15 percent of California's new vehicle sales by 2025 (CARB 2018a). In August 2022, CARB adopted the Advanced Clean Cars (ACC) II program, which sets sales requirements for ZEVs to ultimately reach the goal of 100 percent ZEV sales in the state by 2035.

EO B-48-18, signed by former Governor Jerry Brown in January 2018, requires all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as 200 hydrogen-fueling stations and 250,000 EV-charging stations installed by 2025. It specifies that 10,000 of these charging stations must be direct-current fast chargers.

CARB adopted the Low Carbon Fuel Standard (LCFS) in 2007 to reduce the carbon intensity (CI) of California's transportation fuels. Low-CI fuels emit less CO_2 than other fossil fuel–based fuels such as gasoline and fossil diesel. The LCFS applies to fuels used by on-road motor vehicles and off-road vehicles, including construction equipment (Wade, pers. comm., 2017).

In addition to regulations that address tailpipe emissions and transportation fuels, the state Legislature has passed statutes to address the amount of driving by on-road vehicles. Since passage of SB 375 in 2008, CARB requires metropolitan planning organizations (MPOs) to develop and adopt sustainable communities strategies (SCSs) as a component of the federally-prepared regional transportation plans (RTPs) to show reductions in GHG emissions from passenger cars and light-duty trucks in their respective regions for 2020 and 2035 (CARB 2018b). These plans link land use and housing allocation to transportation planning and related mobile-source emissions. The Metropolitan Transportation Association/Association of Bay Area Governments (MTC/ABAG) serves as a combined entity fulfilling the MPO requirements for the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. The project site is in Marin County. Under the most recent targets of SB 375 (i.e., achieve a 10-percent and 19-percent below 2005 per capita reduction in automobile emissions by 2020 and 2035, respectively), MTC/ABAG completed and adopted its most recent RTP/SCS, Plan Bay Area 2050, in 2021 (MTC/ABAG 2021). CARB's technical evaluation of Plan Bay Area 2050 confirmed that the plan was sufficient to meet the reduction targets of SB 375 (CARB 2022).

Legislation Associated with Electricity Generation

The State has passed legislation requiring the increasing use of renewables to produce electricity for consumers. California utilities are required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011); 44 percent by 2024 (SB 100 of 2018); 52 percent by 2027 (also SB 100 of 2018); 60 percent by 2030 (also SB 100 of 2018); 90 percent by 2035 (SB 1020 of 2022); 95 percent by 2040 (also SB 1020 of 2022); and 100 percent by 2045 (also SB 100 of 2018). By 2035, 100 percent of electricity procured by state agencies shall be from renewables (also SB 1020 of 2022).

Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the California Energy Code. The code 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 nonresidential buildings. CEC updates the California Energy Code every 3 years, typically including more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions.

The 2022 California Energy Code went into effect on January 1, 2023. The 2022 California Energy Code advances the onsite energy generation progress started in the 2019 California Energy Code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar photo voltaic (PV) system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. CEC estimates that the 2022 California Energy Code will save consumers $1.5 billion and reduce GHGs by 10 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) over the next 30 years (CEC 2021).

California Green Building Standards (Title 24, Part 11)

The California Green Building Standards, also known as CALGreen, is a reach code (i.e., optional standards that exceed the requirements of mandatory codes) developed by CEC that provides green building standards for statewide residential and nonresidential construction. The current version is the 2022 CALGreen Code, which took effect on January 1, 2023. As compared to the 2019 CalGreen Code, the 2022 CalGreen Code strengthened sections pertaining to EV and bicycle parking, water efficiency and conservation, and material conservation and resource efficiency, among other sections of the CalGreen Code. The CALGreen Code sets design requirements equivalent to or more stringent than those of the California Energy Code for energy efficiency, water efficiency, waste diversion, and indoor air quality. These codes are adopted by local agencies that enforce building codes and used as guidelines by state agencies for meeting the requirements of EO B-18-12.

LOCAL

Bay Area Air Quality Management District

The BAAQMD is the primary agency responsible for addressing air quality concerns in the San Francisco Bay Area. Its role is discussed further in Section 3.3, "Air Quality." BAAQMD also recommends methods for analyzing project-related GHG emissions in CEQA analyses and recommends multiple GHG reduction measures for land use development projects. The BAAQMD's *2022 CEQA Guidelines* (CEQA Guide) provides a qualitative approach to assessing a project's cumulative contribution to climate change for CEQA analyses (BAAQMD 2022). The CEQA Guide is intended to be used to uniformly evaluate the significance of operation-related emissions from land use development projects. For land use development projects, BAAQMD recommends that, either as a project design feature or recommended mitigation, projects include the following measures:

- The elimination of on-site natural gas infrastructure to power appliances;
- The installation of EV charging stations meeting the Tier 2 requirements of the most recent version of Part 11 of the Title 24 California Building Code (CalGreen);
- No impacts from the unnecessary, wasteful, or inefficient use of energy resources; and
- Achievement of the VMT reductions established by the Governor's Office of Planning and Research for residential (15 percent below a regional average), commercial (15 percent below a regional average), and retail projects (no net increase from a regional average).

The CEQA Guide also provides guidance for assessing the significance of climate change impacts through a climate action plan (CAP) or greenhouse gas reduction plan (GHGRP) consistency analysis using a qualified CAP or GHGRP. (A "qualified CAP" is one prepared in compliance with CEQA Guidelines section 15183.5.) BAAQMD makes the direct connection between these two qualitative, performance-based options to a project's ability to demonstrate that it is doing its "fair share" in assisting the state in meeting the long-term GHG reduction target of achieving carbon neutrality by 2045, as mandated by AB 1279.

Marin Countywide Plan

The Atmosphere and Climate element of the *Marin Countywide Plan* (Marin County 2023) addresses air quality:

GOAL Air-4. Minimization of Contributions to Greenhouse Gases. Prepare policies that promote efficient management and use of resources in order to minimize greenhouse gas emissions. Incorporate sea level rise and more extreme weather information into the planning process.

- Policy AIR-4.1. Reduce Greenhouse Gas Emissions. Adopt practices that promote improved efficiency and energy management technologies; shift to low-carbon and renewable fuels and zero emission technology.
- Policy AIR-4.2. Foster the Absorption of Greenhouse Gases. Foster and restore forests and other terrestrial ecosystems that offer significant carbon mitigation potential.

GOAL Air-5. Adaptation of Climate Change. Adopt policies and programs that promote resilient human and natural systems in order to ease impacts of climate change.

- Policy AIR-5.1. Determine Marin-Specific Climate Change. Participate in research that examines the effects of climate change on human and natural systems in Marin.
- Policy AIR-5.2. Prepare Response Strategies for Impacts. Prepare appropriate response strategies that aid systems in adapting to climate change based on sound scientific understanding of the potential impacts.

GOAL EN-1. Decreased Energy Use. Reduce total and per-capita nonrenewable energy waste and peak electricity demand through energy efficiency and conservation.

- Policy EN-1.1: Adopt Energy Efficiency Standards. Integrate energy efficiency and conservation requirements that exceed State standards into the development review and building permit process.

Marin County Code

Marin County has adopted a reach code that supersedes the mandatory requirements of the 2022 California Building Code. Section 19.04.135 of the Marin County Code demonstrates that the County has adopted many of the Tier 1 and Tier 2 requirements of the 2022 CalGreen Code as it pertains to building EV charging. Specifically, the Marin County Code mirrors the Tier 1 and Tier 2 voluntary standards, which comprise the same requirements of the CalGreen Code for EV charging for single-family development. For multi-family and nonresidential development, the Marin County Code exceeds the mandatory requirements of the CalGreen Code; however, the requirements do not align completely with the Tier 1 or Tier 2 voluntary standards for EV charging. Section 19.04.125 includes provisions instructing new development to be fully electric with exceptions granted for permitted emergency generators, outdoor propane appliances, and industrial processes. These requirements for fully electric development were added to the Marin County Code through Ordinance No. 3776, which was adopted by the Marin County Board of Supervisors on November 15, 2022, and became effective on January 1, 2023.

Following the court decision in *California Restaurant Association v. City of Berkeley*, 89 F.4th I 094 (9th Circ. 2024) (herein referred to as the Berkeley Decision), the County has been evaluating how best to approach the requirements of Ordinance No. 3776 in light of the decision. Based on the results of that evaluation, staff recommends to the County Board of Supervisors to take action to suspend enforcement of the requirements of Ordinance No. 3776. Staff currently anticipates presenting that recommendation at a public hearing in July 2024. In the interim before the Board takes action, the Community Development Agency has administratively suspended the enforcement of Ordinance No. 3776 and the program is voluntary at this time.

Marin County Climate Action Plan

Marin County adopted its Climate Action Plan 2030 (CAP) in December 2020. The current CAP builds upon previous versions of the county's CAPs to align with the reduction targets established in SB 32. The county CAP sets a mitigation-only target of reducing the county's emissions by 40 percent below 1990 levels by 2030 (a reduction of 251,799 $MTCO_2e$), a mitigation plus sequestration target of 60 percent below 2005 levels by 2030 (a reduction of 197,474 $MTCO_2e$), as well as a goal of carbon neutrality by 2045 (Marin County 2020).

3.7.2 Environmental Setting

THE PHYSICAL SCIENTIFIC BASIS OF GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected toward space. The absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. The Sixth Assessment Report contains IPCC's strongest warnings to date on the causes and impacts of climate change. Importantly, the report notes that, in terms of solutions, "We need transformational change operating on processes and behaviors at all levels: individual, communities, business, institutions, and governments. We must redefine our way of life and consumption" (IPCC 2021).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any GHG molecule depends on multiple variables and cannot be determined with any certainty, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO_2 emissions, approximately 55 percent are estimated to be sequestered through ocean and land uptake every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remain stored in the atmosphere (IPCC 2013:467).

The quantity of GHGs in the atmosphere responsible for climate change is not precisely known, but it is enormous. No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

GREENHOUSE GAS EMISSION SOURCES

As discussed previously, GHG emissions are attributable in large part to human activities. Marin County conducted the most recent GHG inventory for the unincorporated county in 2022 for a baseline year of 2020; emissions totaled 86.6 $MMTCO_2e$ (Marin County 2022). Table 3.7-1 summarizes the GHG inventory for the Marin County by $MMTCO_2e$ and percentage.

As shown in Table 3.7-1, transportation, industry/commercial, and electricity/co-generation comprise the greatest sources of GHGs in unincorporated Marin County.

Emissions of CO_2 are byproducts of fossil fuel combustion. Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices, landfills, and forest fires. Nitrous oxide is also largely attributable to agricultural practices and soil management. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb

CO_2 through sequestration and dissolution (CO_2 dissolving into the water) and are two of the most common processes for removing CO_2 from the atmosphere.

Table 3.7-1 Marin County GHG Emissions by Economic Sector

Sector	$MMTCO_2e$	Percent
Transportation	118	31%
Built Environment (Electricity)	15	4%
Built Environment (Natural Gas)	94	24%
Waste	14	4%
Water	<1	<1%
Wastewater	2	1%
Off-Road	11	3%
Agriculture	133	34%
Total	**386**	**100%**

Note: $MMTCO_2e$ = million metric tons of carbon dioxide equivalent.

Source: Marin County 2022.

EFFECTS OF CLIMATE CHANGE ON THE ENVIRONMENT

The global average temperature is expected to increase by 3 to 7°F by the end of the century, depending on future GHG emission scenarios (IPCC 2007). According to California's Fourth Climate Change Assessment, depending on future GHG emissions scenarios, average annual maximum daily temperatures in California are projected to increase between 3.6 and 5.8°F by 2050 and by 5.6 to 8.8°F by 2100 (OPR, CEC, and CNRA 2018).

Other environmental resources could be indirectly affected by the accumulation of GHG emissions and resulting rise in global average temperature. In recent years, California has been marked by extreme weather and its effects. Climate model projections for California demonstrate that impacts will vary throughout the state and show a tendency for the northern part of the state to become wetter while the southern portion of California to become drier (Pierce et al. 2018). According to California Natural Resources Agency's report, *Safeguarding California Plan: 2018 Update* (CNRA 2018), California experienced the driest four-year statewide precipitation on record from 2012 through 2015; the warmest years on average in 2014, 2015, and 2016; and the smallest and second smallest Sierra snowpack on record in 2015 and 2014 (CNRA 2018). Climate model projections included in California's Fourth Climate Change Assessment demonstrate that seasonal summer dryness in California may be prolonged due to earlier spring soil drying and would last longer into the fall and winter rainy season. Increases in temperature are also predicted to result in changes to California's snowpack. Based on climate model projections, the mean snow water equivalent, a common measurement which indicates the amount of water contained within snowpack, in California is anticipated to decline to two-thirds of its historic average by 2050 and between less than half and less than one-third of historic average by 2100, depending on future emissions scenarios (OPR, CEC, and CNRA 2018).

Climate model projections demonstrate that California will experience variation in precipitation patterns as well. The Northern Sierra Nevada range experienced its wettest year on record in 2016 (CNRA 2018). With a shifting climate, California has been more susceptible to the adverse effects of atmospheric rivers, which are large scale, high-precipitation events that deposit above-average levels of rainfall to California's coasts within a short duration. These events have the capacity to overwhelm existing stormwater systems leading to localized flooding impacts.

Climate change is also projected to result in tertiary impacts on energy infrastructure throughout California. Changes in temperature, precipitation patterns, extreme weather events, and sea-level rise have the potential to affect and decrease the efficiency of thermal power plants and substations, decrease the capacity of transmission lines, disrupt electrical demand, and threaten energy infrastructure with the increased risk of flooding (CNRA 2018).

According to California's Fourth Climate Change Assessment, climate change will create impacts on the state's transportation network that will have 'ripple effects,' including direct and indirect impacts on interdependent infrastructure networks as well as negative impacts on the economy. Without appropriate adaptations strategies for roadway materials (i.e., asphalt and pavement), researchers estimate that the median total cost to California for 2040-2070 will be between $1 billion and $1.25 billion (OPR, CEC, and CNRA 2018). The California Department of Transportation (Caltrans) owns and operates more than 51,000 miles along 265 highways, as well as three of the busiest passenger rail lines in the nation. Sea level rise, storm surge, and coastal erosion are imminent threats to highways, roads, bridge supports, airports, transit systems and rail lines near sea level and seaports. Shifting precipitation patterns, increased temperatures, wildfires, and increased frequency in extreme weather events also threaten transportation systems across the state. Temperature extremes and increased precipitation can increase the risk of road and railroad track failure, decreased transportation safety, and increased maintenance costs (CNRA 2018). Modeling for flood events in California demonstrates that approximately 370 miles of highways are susceptible to flooding in a 100-year storm event by the year 2100 (OPR, CEC, and CNRA 2018).

Water availability and changing temperatures affect the prevalence of pests, disease, and species, which will directly impact crop development, forest health, and livestock production. Other environmental concerns include decline in water quality, groundwater security, and soil health (CNRA 2018). Vulnerabilities of water resources also include risks to degradation of watersheds, alteration of ecosystems and loss of habitat, (OPR, CEC, and CNRA 2018).

California's Fourth Climate Change Assessment also identifies the impacts climate change will have on public health and social systems. Average temperature increases in California are estimated to have impacts on human mortality, with 6,700 to 11,300 additional annual deaths in 2050, depending on higher or lower emissions scenarios (Ostro et al. 2011). Studies have also shown that impacts from climate change can also have indirect impacts on public health, such as increased vector-borne diseases, and stress and mental trauma due to extreme events, economic disruptions, and residential displacement (Gould and Dervin 2012; McMichael and Lindgren 2011; US Global Change Research Program 2016).

With respect to Marin County, by the end of the century, average daily temperatures are projected to increase from 2.8–4.7 degrees Fahrenheit as compared to a climate average of 47 degrees Fahrenheit. Wildfire impacts are anticipated to increase moderately into the future in very high and high wildfire zones. Sea level rise is a particular concern to Marin, where many homes, businesses, roads, utilities, and natural resources are at risk for flooding. Sea level has already risen 8" in San Francisco Bay in the past century and is expected to rise another 10 inches by 2040. Within this short time period, homes and facilities along the eastern shoreline in Waldo Point, Greenbrae, and Paradise Cay, as well as Shoreline Highway through Almonte, could be exposed to tidal flooding. As sea level rises, other bayside unincorporated areas become vulnerable, including Bel Marin Keys, Santa Venetia, Tamalpais Valley, Greenwood Cove, Strawberry, and Kentfield. On the ocean coast, Stinson Beach neighborhoods, downtown Bolinas, and the Tomales Bay shorelines in Inverness and East Shore are vulnerable (Marin County 2020).

3.7.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

GHG emissions associated with the project would be generated during project construction and operation after the project is built. Methods used to estimate levels of construction- and operation-related GHGs are described below.

Construction-Related Greenhouse Gas Emissions

Construction-generated GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0, as recommended by BAAQMD and other air districts in California (CAPCOA 2020). Modeling was based on project-specific information (e.g., building size, area to be graded, area to be paved) where available; assumptions based on typical construction activities; and default values in CalEEMod that are based on the project location and land use types.

Buildout of the project is proposed to occur within several phases categorized by the project components: residential development, academic uses, and landscaping and site improvements. Each phase of the project was modeled separately, based on the anticipated level of development that would occur during that phase (e.g., building size and type). Default construction phasing in CalEEMod was used, ensuring that the total construction timing was within the anticipated phase buildout time period. To account for the potential for increased construction intensity, equipment numbers per phase, were increased. Total annual GHG emissions per year of construction were reported for informational purposes as BAAQMD does not apply a threshold for determining the significance of construction emissions.

Operational Greenhouse Gas Emissions

Operation-related emissions of GHGs were estimated for the following sources: energy use (i.e., electricity and natural gas/propane demand), water use, solid waste generation, and mobile sources. Energy consumption, water use, and solid waste generation was derived from CalEEMod default values (Appendix C).

Specifically, operational-related mobile-source GHG emissions were modeled based on the estimated level of VMT and trip generation rates that the project would generate, using transportation model outputs used to prepare Section 3.15, "Transportation" (Appendix Q). Default trip length and trip rates in CalEEMod were adjusted such that the resulting daily trip and VMT calculated by CalEEMod would be consistent with project-specific data. CalEEMod default emissions factors were updated using CARB's Emission Factor (EMFAC2021) model and these emissions factors were further adjusted off-model to account for the CARB Advanced Clean Cars II regulation, which will rapidly scale down light-duty passenger vehicle emissions for vehicles with model years between 2026 and 2035.

Detailed model assumptions and inputs for these calculations are presented in Appendix C.

THRESHOLDS OF SIGNIFICANCE

The issue of global climate change is inherently a cumulative issue because the GHG emissions of individual projects cannot be shown to have any material effect on global climate. Thus, the project's impact on climate change is addressed only as a cumulative impact.

State CEQA Guidelines Section 15064.4 and relevant portions of Appendix G recommend that a lead agency consider a project's consistency with relevant, adopted plans and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. Under criteria derived from Appendix G of the State CEQA Guidelines, implementing a project would result in a cumulatively considerable contribution to climate change if it would:

- generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or
- conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs

BAAQMD recommends methods for analyzing project-related GHG emissions in CEQA analyses and recommends multiple GHG reduction measures for land use development projects. The BAAQMD recently developed and finalized its Justification Report (BAAQMD 2022). BAAQMD provides two pathways for determining the significance of a GHG impact. The first option available is to implement on-site project features, including the elimination of on-site natural gas, implementation of EV chargers consistent with the most recent version of the CalGreen Code Tier 2 requirements, and meeting the VMT goals of the OPR's guidance in SB 743 for various land use types. With respect to the proposed project's land uses, the current Tier 2 requirements of the 2022 CalGreen code require that nonresidential (i.e., for this project, academic campus and the proposed fitness and daycare facilities) projects introducing more than 201 parking spaces require 45 percent of all parking spaces be EV capable and 33 percent be EV capable with installed chargers (EVSEs). Notably, these standards apply to "nonresidential" development, which includes several land use types including commercial, industrial, educational, and retail; as the project proposes new educational spaces, the nonresidential development standards apply to that portion of the project.

The current Tier 2 requirements of the 2022 CalGreen Code require that residential projects proposing 20 or more dwelling units install a minimum of 15 percent of a project's total parking spaces with Level 2 EVSE chargers. Section

19.04.135 of Marin County's adopted reach code amends the mandatory standards of the CalGreen Code to align with the Tier 2 requirements for residential projects proposing 20 or more dwelling units to provide 15 percent EVSE chargers, which satisfies the voluntary Tier 2 standards of the CalGreen Code for multi-family development.

The second option includes consistency with an applicable CAP. BAAQMD also recommends that construction emissions be removed from consideration when determining the significance of a climate change impact.

The intent of BAAQMD's thresholds is to assist local jurisdictions within the San Francisco Bay Area in providing the necessary infrastructure to further the state's long-term GHG reduction goals, specifically carbon neutrality by 2045. This goal is mirrored in the recently adopted AB 1279, which sets the goals of reducing 1990 levels of GHG emissions by 85 percent and achieve net zero carbon emissions by 2045. Because BAAQMD is the air district that regulates emissions of air pollution and GHG emissions in the SFBAAB and because its thresholds align with the state's long-term GHG reduction goals, BAAQMD's thresholds have been applied here. Using BAAQMD's thresholds of significance, the determination of whether the project would conflict with an applicable plan for reducing GHG emissions (in this instance the 2022 Scoping Plan) can also be satisfied.

As discussed above in Section 3.7.1, "Regulatory Setting," Marin County prepared a CAP in 2020 that sets reduction targets for 2030 and 2045. By 2045, Marin County intends to achieve carbon neutrality, which is consistent with the statewide goal established in AB 1279. However, the CAP did not undergo environmental review and is not considered a CEQA-certified CAP for use in environmental documents. Therefore, BAAQMD's option (A) of including project design features will be applied in this analysis.

Therefore, BAAQMD's guidance will be applied to the project. The project would not result in a significant climate change impact if it would meet the following criteria:

- The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
- The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
- Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
  - Residential projects: 15 percent below the existing VMT per capita,
  - Office projects: 15 percent below the existing VMT per employee, and
  - Retail projects: no net increase in existing VMT.
- Achieve compliance with electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

ISSUES NOT DISCUSSED FURTHER

All issues related to climate change are discussed below.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.7-1: Generate GHG Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment

Implementation of the proposed project would result in construction- and operation-related GHG emissions that could contribute to climate change on a cumulative basis. Construction emissions would total approximately 6,643 $MTCO_2e$ over the project's four-year construction period. The project would emit an additional approximately 2,378 $MTCO_2e$ for the first full year of operations in 2027 when compared against the project's existing baseline emissions, which include natural gas usage at existing buildings that would be retained as a component of project implementation. BAAQMD's guidance recommends various project design features to conclude less-than-significant GHG impacts under CEQA. These include meeting OPR's reduction targets as mandated by SB 743 (i.e., a 15 percent reduction from a regional average for residential and nonresidential development, and a no net increase for retail development), all electric development with the exception of permitted sources, and adhering to the Tier 2 requirements of the most recent CalGreen code as it related to EV charging. As discussed in Section 3.15, "Transportation," with the addition of the project's estimated VMT, the residential components of the project would not meet OPR's reduction target for Marin County; however, the nonresidential components of the project would result in a 30 percent decrease from regional VMT. Because the project's residential components would not meet OPR's 15 percent reduction target, the project would not be considered a VMT efficient project. Additionally, while compliance with Section 19.04.135 of the Marin County Code would require the proposed multi-family residential development to comply with the Tier 2 requirements of the CalGreen Code, Section 19.04.135 does not meet the Tier 2 requirements of the CalGreen Code as it pertains to nonresidential development. Moreover, the project has not been designed to be fully electric per BAAQMD's recommendations or CARB's recommendations in Appendix D of the 2022 Scoping Plan. Therefore, because the project would allow for natural gas infrastructure, the nonresidential components of the project would not include BAAQMD's recommended standards for EV charging meeting the Tier 2 requirements of the CalGreen Code, and the project would not meet the VMT reduction targets of SB 743, the project does not demonstrate that it would be doing its "fair share" in assisting the state in meeting its long-term goal of carbon neutrality by 2045. For this reason, the project's emissions of GHGs would be **potentially significant**.

Construction

The project would emit construction emissions from the operation of heavy-duty construction equipment and from worker commute trips. The project would result in approximately 6,643 $MTCO_2e$ of GHGs during the project's construction period (2023–2026). As noted above under "Thresholds of Significance," BAAQMD does not recommend a threshold for evaluating construction emissions; nevertheless, construction emissions have been disclosed for informational purposes.

Operation

Operation of the project would directly generate GHG emissions from vehicle movement throughout the project area, on-site natural gas consumption (e.g., stoves, fireplaces, water heaters), and use of landscaping equipment. GHGs would be indirectly emitted from electricity consumption, solid waste disposal at landfills, and water and wastewater treatment.

Table 3.7-2 summarizes the anticipated level of emissions for the project by emissions sector. Refer to Appendix C for detailed input parameters and assumptions.

As shown in Table 3.7-2, the project's total operational emissions in 2027 would be approximately 3,206 $MTCO_2e$.

Table 3.7-2 Greenhouse Gas Emissions of the Project in 2027

Emissions Sector	$MTCO_2e$
Mobile Source	2,596
Electricity[1]	157
Natural Gas[1]	211
Solid Waste Generation	140
Water Consumption and Wastewater Treatment	54
Area Sources	48
Total Operational GHG Emissions	**3,206**

Notes: Totals may not add due to rounding.

$MTCO_2e$ = metric tons of carbon dioxide equivalent, $MTCO_2e$/year/SP = metric tons of carbon dioxide equivalent per year per service population.

[1] Energy was estimated in accordance with the 2019 California Energy Code (Part 6 of the Title 24 California Building Code). The California Energy Code is updated triennially and expected to enhance the energy efficiency and decarbonization of future development. The 2022 California Energy Code is in effect at the time of writing this Draft EIR; therefore, the emissions estimates for energy consumption are inherently conservative.

See Appendix C for detailed input parameters and modeling results.

Source: Modeled by Ascent Environmental in 2022 (Appendix C).

Building Energy

BAAQMD recommends that new projects undergoing CEQA evaluation prohibit the use of on-site natural gas. As discussed in Section 3.7.1, "Regulatory Setting," the Berkeley Decision rendered in 2023 called into question the legality of enforcing all-electric building ordinances in consideration of federal law; therefore, the County is currently electing to make all-electric power voluntary and to not enforce its ordinance prohibition on natural gas infrastructure as codified in Section 19.04.125. The project's existing land uses currently utilize natural gas and would continue to do so into the future; however, this level of natural gas can be characterized as part of the CEQA baseline and would not constitute a new impact for evaluation. The project includes various sustainability features including on-site solar PV systems to generate renewable electricity to serve the project site, which would reduce the carbon content of electricity serving the project site. Additionally, the project would include the planting of a tree canopy and use of reflective asphalt to improve the albedo of the project site, thus reducing the adverse effects of the urban heat island effect. This would reduce overall energy consumption associated with cooling buildings during periods of high heat. The project's additional commitment to these features would improve the project's energy efficiency and would not result in the wasteful, inefficient, or unnecessary consumption of energy. Nevertheless, because the project has not been designed to be fully electric the project would not comply with BAAQMD's guidance pertaining to building decarbonization, thus not meeting BAAQMD's recommendation for building decarbonization.

VMT Reductions

BAAQMD also recommends that projects demonstrate that additional VMT introduced from project implementation meets OPR's reduction targets under SB 743. As discussed in Section 3.15, "Transportation," the project's contribution of residential and nonresidential VMT would be 3 and 30 percent below the regional average, respectively, for the San Francisco Bay Area. While the nonresidential development under the project would exceed OPR's 15 percent reduction target, the residential development would not. This would result in a significant VMT impact and would, therefore, not satisfy BAAQMD's recommendation for reducing a project's GHG emissions.

Electric Vehicle Infrastructure and Mobile Source Electrification

BAAQMD recommends new development meet the Tier 2 voluntary requirements of the most recent CalGreen code. The project would comply with Section 19.04.135 of Marin County Code which reflects the Tier 1 voluntary requirements of the CalGreen code, with few exceptions. Section 19.04.135 includes requirements for multi-family housing that adhere to the Tier 2 requirements of the CalGreen Code; however, Section 19.04.135 includes EV charging requirements for nonresidential spaces that align with the Tier 1 requirements of the CalGreen Code.

BAAQMD recommends that projects meet the Tier 2 voluntary requirements of the most recent CalGreen code; therefore, this statutory requirement would not be sufficient to demonstrate consistency with BAAQMD guidance with respect to the proposed nonresidential development proposed under the project. This project design feature, in tandem with building decarbonization and VMT efficiency, are intended to reduce project-level emissions to the degree that a project may demonstrate it is doing its "fair share" in meeting the state's long-term climate goal of carbon neutrality by 2045 as well as demonstrating consistency with the 2022 Scoping Plan. BAAQMD's thresholds are intended to set the infrastructural framework for the deployment of statewide policies and actions including building decarbonization, the electrification of the vehicle fleet, and statewide reductions in VMT.

While new single-family dwelling units would adhere to the requirements of Section 19.04 of the Marin County Code, which aligns with the most stringent voluntary requirements of the CalGreen Code (Tier 1 and Tier 2 requirements for single-family dwelling units are the same), the current version of Section 19.04.135 does not yet adhere to the Tier 2 requirements of the CalGreen Code as it pertains to nonresidential development.

The following environmental significance determination reflects the current code as a conservative approach, i.e., avoiding the risk of understating an impact. Because the project does not include design features to meet the Tier 2 EV charging requirements of the most recent CalGreen Code (2022) for nonresidential development, the project would generate GHG emissions that are not consistent with BAAQMD guidance, which would either directly or indirectly result in a cumulatively considerable contribution to climate change and would conflict with the state's long-term GHG reduction goals. Impacts would be **potentially significant**.

Mitigation Measures

Implement Mitigation Measure 3.14-2 (Develop and Implement a Transportation Demand Management Program for Market Rate Residential Uses), as described in Section 3.14.

Mitigation 3.7-1a: Installation of EV Charging Stations Meeting the Tier 2 Requirements of the Most Recent CalGreen Code

Prior to the issuance of construction permits, the project applicant shall incorporate the appropriate number of EV chargers to meet the Tier 2 requirements of Part 11 of the Title 24 California Building Code (CalGreen code) in effect at the time of project construction.

The Tier 2 requirements of the 2022 CalGreen code require that nonresidential projects (which includes academic land uses) introducing more than 201 parking spaces require 45 percent of all parking spaces be EV capable and 33 percent be EV Charging Stations (EVCS) – EV capable with installed chargers. Furthermore, EVCS parking spaces count towards EV Capable Spaces. Considering the project's proposed 241 spaces for academic uses, the project shall install 109 EV capable spaces (spaces equipped with the electrical infrastructure to support an EV charger), 80 of which shall have EVSE. In other words, the project shall install 109 EV capable spaces, 80 of which shall have EVCS.

Mitigation 3.7-1b: Mitigation Measure 3.7-1b: Decarbonize Buildings or Purchase Offsets If Marin County Has an Adopted GHG Offset Policy and Program

The applicant shall reduce GHG emissions from buildings to the maximum extent feasible. As one option, the applicant may voluntarily commit to the County that the new buildings in the project will be constructed entirely without natural gas infrastructure or, if not fully avoiding natural gas infrastructure, new buildings will use all-electric appliances (e.g., heating and cooling systems, stoves/ovens, dishwashers, and water heaters) to the extent feasible. The applicant shall provide the information necessary for the County to confirm that the applicant has met this voluntary commitment prior to the issuance of occupancy permits, as demonstrated by constructed buildings or approved design plans.

If new buildings in the project will rely on natural gas, which contributes to GHG emissions, the applicant shall provide other GHG-reducing measures consistent with BAAQMD and CARB recommendations to reduce building-related GHG emissions to the maximum extent feasible. The Bay Area Air Quality Management District (BAAQMD) and California Air Resources Board (CARB) recommend that lead agencies prioritize on-site design features, such as those listed under Mitigation Measure 3.7-1a and Mitigation Measure 3.14-2, and direct investments in GHG reductions

within the communities surrounding the project site to provide potential local air quality and economic co-benefits. While emissions of GHGs and their contribution to climate change is a global problem, emissions of air pollutants, which have an adverse localized effect, are often emitted from similar activities that generate GHG emissions (i.e., mobile, energy, and area sources), so reductions in GHG emissions can also result in the accessory benefit of reduced local air pollutant emissions. For example, direct investment in a local building retrofit program in existing nearby Marin County communities could pay for cool roofs, solar panels, solar water heaters, smart meters, energy efficient lighting, energy efficient appliances, energy efficient windows, insulation, and water conservation measures for homes within the vicinity of the project. Directing local investments to low-income and middle-income households can address equity in the investments. Other examples of local direct investments include financing the installation of regional EV charging stations, paying for electrification of public school buses, and investing in local urban forests. These investments would help achieve GHG reductions as well as improve regional and local ambient air quality. The actions to reduce GHG emissions must meet the criteria of being real, quantifiable, permanent, verifiable, enforceable, and in addition to any GHG emission reductions otherwise required by law or regulation, consistent with the standards set forth in Health and Safety Code section 38562, subdivisions (d)(1) and (d)(2).

At this time, Marin County has no identifiable GHG emission off-set policy or program that has been codified and/or adopted for development purposes. However, if at the time of the project's consideration for approval by the Board of Supervisors, if Marin County has adopted a GHG offset policy and implementation program, the applicant shall define offsets that feasibly meet the County program requirements and state protocols and standards. If a County policy and implementation program do not exist at the time of project consideration for approval, use of GHG offsets would be administratively infeasible to monitor and enforce. Such credits shall comply with protocols approved by CARB, consistent with Section 95972 of Title 17 of the California Code of Regulations. Credits must be purchased through one of the following: (i) a CARB-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard; (ii) any registry approved by CARB to act as a registry under the California Cap and Trade program; or (iii) through the California Air Pollution Control Officers Association's (CAPCOA's) GHG Rx and BAAQMD, if available.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-1a would provide the necessary EV charging infrastructure for the electrification of the state's mobile source sector. This measure is necessary to demonstrate that a project is doing its "fair share" in assisting the state in meeting its long-term GHG reduction goals of carbon neutrality by 2045 as mandated by AB 1279. CARB has identified mobile source electrification as a key action needed in the 2022 Scoping Plan to reduce the state's GHG emissions and implementation of Mitigation Measure 3.7-1a would provide the infrastructure possible to facilitate the deployment of EVs. Mitigation Measure 3.7-1b would provide the applicant with the flexibility to either construct the project without natural gas infrastructure (i.e., fully electric), or at a minimum have all-electric appliances and, under specific circumstances as noted above, rely on carbon offsets as a mechanism to close the gap of GHG emissions generated from natural gas combustion through a qualified offset registry. If all-electric development is infeasible and the County has adopted an offset policy and implementation program, the purchasing of sufficient GHG offsets would demonstrate that the project would be aligned with the carbon neutrality goal of AB 1279. However, it cannot be assured at this time that Mitigation Measure 3.7-1b is feasible. For instance, the cost or availability of offsets that meet the criteria of being real, quantifiable, permanent, verifiable, enforceable, and in addition to any GHG emission reductions otherwise required by law or regulation is unknown. In addition, Mitigation Measure 3.14-2a would require the project applicant to implement a Transportation Demand Management (TDM) Program for the proposed market rate residential uses to achieve a 39 percent reduction in weekday home-based VMT per capita. Furthermore, Mitigation Measure 3.14-2b would require the dedication of housing to campus-affiliated residents to further reduce vehicle trips and associated VMT associated with the residential uses of the project. However, it cannot be assured that implementation of these mitigation measures would be sufficient to achieve the required VMT reduction target. Therefore, while implementation of Mitigation Measure 3.7-1a would satisfy BAAQMD's qualitative thresholds with respect to the electrification of the mobile source sector, implementation of Mitigation Measures 3.7-1b, 3.14-2a, and 3.14-2b would not be sufficient to meet BAAQMD's VMT reduction requirements or building decarbonization goals. Therefore, the project's contribution of GHGs would conflict with the 2022 Scoping Plan. This impact would be **significant and unavoidable**.

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3.8 HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE

This section includes a summary of applicable regulations that govern hazards, hazardous materials, and wildfire, a discussion of existing hazard, hazardous materials, and wildfire conditions, and an analysis of potential construction and operational impacts related to hazards, hazardous materials, and wildfire resulting from development of the proposed project. The evaluation of hazards and hazardous materials impacts in this section is based, in part, on review of the Phase I Environmental Site Assessment (ESA) prepared by The Consulting Group, dated May 28, 2014 (Appendix M). Reports submitted by the applicant have been subject to independent review and analysis.

Scoping comments received regarding hazards, hazardous materials, and wildfire in response to the NOP requested that the EIR address underground storage tank and abandoned hydraulic lift identified in a previous Phase I ESA for the site; senior living facility operations and use of medical supply and waste; asbestos present in imported soils and lead paint contaminations around structures; and debris, drums, and oil containers in the maintenance shed area and Shuck Knoll shed area. See Appendix A for all NOP comments received.

3.8.1 Regulatory Setting

FEDERAL

Management of Hazardous Materials

Various federal laws address the proper handling, use, storage, and disposal of hazardous materials, as well as requiring measures to prevent or mitigate injury to health or the environment if such materials are accidentally released. The U.S. Environmental Protection Agency (EPA) is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are primarily contained in Code of Federal Regulations (CFR) Titles 29, 40, and 49. Hazardous materials, as defined in the Code, are listed in 49 CFR 172.101. Management of hazardous materials is governed by the following laws.

- **Toxic Substances Control Act of 1976 (15 U.S. Code [USC] Section 2601 et seq.)** regulates the manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials. Section 403 of the Toxic Substances Control Act establishes standards for lead-based paint hazards in paint, dust, and soil.
- **Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.)** is the law under which EPA regulates hazardous waste from the time the waste is generated until its final disposal ("cradle to grave").
- **Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also called the Superfund Act or CERCLA) (42 USC 9601 et seq.)** gives EPA authority to seek out parties responsible for releases of hazardous substances and ensure their cooperation in site remediation.
- **Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499; USC Title 42, Chapter 116),** also known as SARA Title III or the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), imposes hazardous materials planning requirements to help protect local communities in the event of accidental release.

Transport of Hazardous Materials

The U.S. Department of Transportation (USDOT) regulates transport of hazardous materials between states and is responsible for protecting the public from dangers associated with such transport. The federal hazardous materials transportation law, 49 USC 5101 et seq. (formerly the Hazardous Materials Transportation Act 49 USC 1801 et seq.), is the basic statute regulating transport of hazardous materials in the United States. Hazardous materials transport regulations are enforced by the Federal Highway Administration, the U.S. Coast Guard, the Federal Railroad Administration, and the Federal Aviation Administration.

Worker Safety

The federal Occupational Safety and Health Administration (OSHA) is the agency responsible for assuring worker safety in the handling and use of chemicals identified in the Occupational Safety and Health Act of 1970 (Public Law 91-596, 9 USC 651 et seq.). OSHA has adopted numerous regulations pertaining to worker safety, contained in CFR Title 29. These regulations set standards for safe workplaces and work practices, including standards relating to the handling of hazardous materials and medical waste and those required for excavation and trenching.

14 CFR Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace

The Federal Aviation Administration (FAA) provides regulations controlling land use in airport vicinities. Code of Federal Regulations, Title 14, Part 77 establishes the requirements to provide notice to the FAA of certain proposed construction of structures or alteration of existing structures. Part 77 also establishes standards used to determine obstructions to air navigation and navigational and communication facilities, the process for aeronautical studies to determine potential effects on navigable space, and the process to petition the FAA for discretionary review of determinations related to construction or alteration. These regulations require that any proposed new construction or expansion of existing structures that would penetrate any of the FAA Part 77 based "imaginary" horizontal and sloping navigational surfaces for airports would be deemed incompatible unless specifically determined otherwise by the FAA. Projects that plan construction or alterations which may affect navigable airspace are required to file notice with the FAA.

STATE

Management of Hazardous Materials

In California, both federal and state community right-to-know laws are coordinated through the Governor's Office of Emergency Services (OES). The federal law, SARA Title III or EPCRA, described above, encourages and supports emergency planning efforts at the state and local levels and to provide local governments and the public with information about potential chemical hazards in their communities. Because of the community right-to-know laws, information is collected from facilities that handle (e.g., produce, use, store) hazardous materials above certain quantities. The provisions of EPCRA apply to four major categories:

- emergency planning,
- emergency release notification,
- reporting of hazardous chemical storage, and
- inventory of toxic chemical releases.

The corresponding state law is Chapter 6.95 of the California Health and Safety Code (Hazardous Materials Release Response Plans and Inventory). Under this law, qualifying businesses are required to prepare a Hazardous Materials Business Plan, which would include hazardous materials and hazardous waste management procedures and emergency response procedures, including emergency spill cleanup supplies and equipment. Once an applicant begins to use hazardous materials at levels that reach applicable state and/or federal thresholds, the plan is required to be submitted to the administering agency. Marin County requires all hazardous materials handlers operating under the jurisdiction of the County to submit an updated HMBP, including the hazardous materials inventory, site map, contingency plan, and employee training plan information via the Statewide information management system which is also known as the California Environmental Reporting System.

The California Department of Toxic Substances Control (DTSC), a division of the California Environmental Protection Agency (CalEPA), has primary regulatory responsibility over hazardous materials in California, working in conjunction with CalEPA to enforce and implement hazardous materials laws and regulations. Section 65962.5 of the California Government Code requires DTSC to maintain a hazardous waste and substances site list for the State, known as the Cortese List, and to develop a framework for how these sites will continue to be monitored and addressed by the State. The Cortese List includes hazardous waste facilities and sites listed by DTSC, Department of Health Services lists of contaminated drinking water wells, sites listed by the State Water Resources Control Board (SWRCB) as having

underground storage tank leaks or a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

CCR, Title 23, Division 3, Chapter 16 (Underground Tank Regulations), identifies the regulations applicable to new and existing underground storage tanks. These regulations establish monitoring, maintenance, reporting, abatement, and closure procedures for all underground storage tanks (USTs) in the state. Individual regional water quality control boards (RWQCBs) are the lead agencies responsible for identifying, monitoring, and cleaning up leaking USTs. The San Francisco Bay RWQCB (Region 2) has jurisdiction over the project site.

Transport of Hazardous Materials

The State of California has adopted USDOT regulations for the movement of hazardous materials originating within the state and passing through the state; state regulations are contained in CCR, Title 22. State agencies with primary responsibility for enforcing state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation (Caltrans). Together, these agencies determine container types used and license hazardous waste haulers to transport hazardous waste on public roads.

Management of Construction Activities

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act) (Water Code Section 13000 et seq.). The Porter-Cologne Act grants the SWRCB and each of the nine RWQCBs power to protect water quality and is the primary vehicle for implementation of California's responsibilities under the Clean Water Act.

Through the Porter-Cologne Act and the National Pollution Discharge Elimination System (NPDES) program, RWQCBs have the authority to require proper management of hazardous materials during project construction. For a detailed description of the Porter-Cologne Water Quality Act, the NPDES program, and the role of the San Francisco Bay RWQCB, see Section 3.10, "Hydrology and Water Quality."

The SWRCB requires projects disturbing more than one acre of land during construction to obtain coverage under the SWRCB NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order 2022-0057-DWQ). Under the terms of the Construction General Permit, applicants must file a Notice of Intent with the RWQCB to be covered. Construction activities subject to the Construction General Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters. A stormwater pollution prevention plan (SWPPP) must be developed and implemented for each site covered by the permit. The SWPPP must include best management practices (BMPs) designed to prevent construction pollutants from contacting stormwater and keep products of erosion from moving off-site into receiving waters throughout the construction and life of the project; the BMPs must address source control and, if necessary, pollutant control. The current version of the Construction General Permit was adopted by the SWRCB on September 8, 2022, and became effective on September 1, 2023.

Worker Safety

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are typically more stringent than federal OSHA regulations and are presented in CCR, Title 8. Cal/OSHA conducts onsite evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

Asbestos and Lead Programs

The removal and handling of asbestos-containing materials is governed primarily by EPA regulations under Title 40 of the CFR but is implemented by the Bay Area Air Quality Management District (BAAQMD). This program is described further in Section 3.3, "Air Quality." The federal OSHA also has a survey requirement under Title 29 CFR, which is implemented by Cal/OSHA under CCR, Title 8. These regulations require facilities to take all necessary precautions to protect employees and the public from exposure to asbestos. These standards regulate exposure to asbestos in all construction work including demolition of structures. These regulations establish entry and exit procedures after

working in asbestos contaminated areas and establish specific control measures designed to protect workers, depending on the type of asbestos they are handling. Such procedures include minimum air circulations, use of respirators, wetting of materials, clothing laundering, construction and demolition equipment requirements, and shielding specifications. Notification procedures are also in place that require building owner and employee noticing as well as external and internal hazard signage. All asbestos workers are required to complete training programs and register as an asbestos contractor, depending on the type of asbestos being removed. Medical examination requirements are also required to monitor worker health.

The Cal/OSHA lead standard for construction activities is also implemented under CCR, Title 8. The standard applies to any construction activity that may release lead dust or fumes, including, but not limited to, manual scraping, manual sanding, heat gun applications, power tool cleaning, rivet busting, abrasive blasting, welding, cutting, or torch burning of lead-based coatings. Unless otherwise determined by approved testing methods, all paints and other surface coatings are assumed to contain lead at prescribed concentrations, depending on the application date of the paint or coating.

Medical Waste Management Act

The Medical Waste Management Act (California Health and Safety Code Sections 117600 – 118360) is enforced by the California Department of Public Health and governs medical waste management at the facility where waste is generated, at transfer stations, and at treatment facilities. It also governs the tracking of medical waste beyond what is required in federal shipping documents (i.e., those subject to CFR Title 49) and regulates aspects of the transport of regulated medical waste.

Office of the State Fire Marshal and California Department of Forestry and Fire Protection

The Office of the State Fire Marshal evaluates and provides technical assistance for the Hazardous Material Management Plan (HMMP), the Hazardous Materials Inventory Statement (HMIS) and the Aboveground Petroleum Storage Act (APSA) Programs. The HMMP and HMIS Program are closely tied to the Business Plan Program.

The California Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of the state's privately-owned wildlands. PRC Sections 4125-4137 establish that CAL FIRE has the primary financial responsibility of preventing and suppressing fires in the state responsibility area (SRA). PRC Section 4290 states that CAL FIRE also has responsibility for enforcement of Fire Safe Standards including road standards for fire equipment access; standards for signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; fuel breaks and greenbelts. PRC Section 4291 gives CAL FIRE the authority to enforce 100 feet of defensible space around all buildings and structures on non-federal SRA lands, or non-federal forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material.

Additionally, CAL FIRE is also responsible for a broad range of programs that guide forest policy and planning within California and for implementing the Fire and Resource Assessment Program (FRAP). FRAP assesses the amount and extent of California's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. Fire Hazard Severity Zones for community planning are developed under FRAP and identify areas with very high fire hazards in both the SRA and local responsibility area (LRA).

Public Resources Code Section 4427

PRC Section 4427 includes fire safety statutes that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment with internal combustion engines; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on site for various types of work in fire-prone areas.

California Building Code

The California Building Standards Code (CBC) (California Code of Regulations, Title 24) provides minimum standards for the design and construction of buildings and structures in California. Minimum standards are organized under Part 1 to 12 and include code standards for buildings, mechanical, plumbing, energy, historical buildings, fire safety,

and green building standards. State law mandates that local government enforce these regulations, or local ordinances, with qualified reasonably necessary and generally more restrictive building standards than provided in the CBC. Title 24 is applicable to all occupancies, or structures, throughout California, whether or not the local government takes an affirmative action to adopt Title 24.

California Fire Code

The California Fire Code (Title 24, Part 9, California Code of Regulations [CFC]) establishes the minimum requirements consistent with nationally recognized good practices for providing life safety and property protection from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency situations. The CFC specifies fire resistant ratings for building materials and finishes, installation of sprinklers, use and storage of hazardous or flammable materials, and means of egress. Many local jurisdictions have adopted the CFC as part of their local codes.

Assembly Bill 747

Assembly Bill (AB) 747 was enacted on October 19, 2019 and required jurisdictions, upon the next revision of a local hazard mitigation plan on or after January 1, 2022, or beginning on or before January 1, 2022, if a local jurisdiction has not adopted a local hazard mitigation plan, to review and update their General Plan Safety Elements to identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. AB 747 also allows cities and counties with an adopted local hazard mitigation plan, emergency operations plan, or other document that fulfills commensurate goals and objectives to summarize and incorporate by reference that information in their Safety Element to comply with the bill.

State of California Emergency Plan

The State of California Emergency Plan (Emergency Plan) was prepared to describe how state government mobilizes and responds to emergencies and disasters in coordination with partners in all levels of government, the private sector, non-profits, and community-based organizations. The Emergency Plan also works in conjunction with the California Emergency Services Act and outlines a robust program of emergency preparedness, response, recovery, and mitigation for all hazards, both natural and human caused. All local governments with a certified disaster council are required to develop their own emergency operations plan for their jurisdiction that meet state and federal requirements. Local emergency operation plans contain specific emergency planning considerations, such as evacuation and transportation, sheltering, hazard specific planning, regional planning, public-private partnerships, and recovery planning (California Governor's OES 2017). The current version of the plan was adopted on October 1, 2017.

The Office of Emergency Services coordinates the responses of other agencies, including the EPA, California Highway Patrol, Regional Water Quality Control Boards, Air Quality Management Districts, and county disaster response offices.

Standardized Emergency Management System Chapter 2, Division 2, Title 19 of the California Code of Regulations

The Standardized Emergency Management System (SEMS) is intended to standardize responses to emergencies involving multiple jurisdictions or multiple agencies. SEMS requires that emergency response agencies use basic principles and components of emergency management, multi-agency or inter-agency coordination, the operational area concept, and established mutual aid systems. Local government must use SEMS to be eligible for State funding of response-related personnel costs.

LOCAL

San Francisco Regional Water Quality Control Board

One of nine regional boards in California, the San Francisco Bay RWQCB: (1) protects surface and groundwater quality from toxic contamination and pollutants discharged or threatened to be discharged to the Waters of the State; (2) regulates public water systems; and (3) enforces the federal and State Safe Drinking Water acts through the Drinking

Water Program. The RWQCB issues and enforces NPDES permits and regulates leaking underground storage tanks and other sources of groundwater contamination.

Bay Area Air Quality Management District

BAAQMD regulates the demolition and renovation of buildings and structures that may contain asbestos, and the manufacture of materials known to contain asbestos. BAAQMD is vested with authority to regulate airborne pollutants through both inspection and law enforcement and is to be notified 10 days in advance of any proposed demolition or abatement work. BAAQMD regulations must always be followed when removing asbestos or demolishing buildings.

Marin County Sheriff's Office of Emergency Services

The Marin County Sheriff's Office of Emergency Management (OEM) coordinates emergency operations activities among all the various local jurisdictions and develops written guidelines for emergency preparedness, response, recovery, and mitigation to natural or manmade disasters. The OEM serves as the liaison between the state and all the local government political subdivisions comprising Marin County. The OEM has established a fully functional Emergency Operations Center from which centralized emergency management can be performed.

Marin County Operational Area Emergency Operations Plan

The Marin County Sheriff's OEM maintains the Operational Area Emergency Operations Plan (EOP). The EOP is the primary emergency planning and management document for the County and Operational Area (cities/towns, special districts, and unincorporated areas within the County), and describes how emergency management will be coordinated; identifies personnel responsibilities and actions necessary to protect health and safety, property, and the environment; and details procedures before, during, and after a major event. The EOP would be activated for a hazardous materials incident or emergency when additional resources or extended response activities are needed.

Certified Unified Program Agency

The California Environmental Protection Agency designates specific local agencies as Certified Unified Program Agencies (CUPA), typically at the county level. The Marin County Public Works Department is the CUPA in Marin County. CUPA responsibilities and requirements are codified in the Marin County Code Title 7 (Health and Sanitation), Chapters 7.80-7.84. As the CUPA, the Marin County Public Work Department has responsibility for implementing all the unified programs within its jurisdiction. Unified programs regulate: the preparation of hazardous materials business plans, hazardous waste generators, hazardous waste onsite treatment, underground storage tanks, and aboveground storage tanks. Emergency response, as coordinated with California OES, is also included under the CUPA. Chapters 7.80-7.84 of the Marin County Code include standards and procedures regarding the reporting of the location, type, quantity and health risks of hazardous materials; the generation, handling, use, storage and disposal of hazardous materials; underground storage tanks; aboveground storage of petroleum products; hazardous materials business plans; and the California Accidental Release Prevention Program.

Marin County Multi-Jurisdictional Local Hazard Mitigation Plan

The Marin County Multi-Jurisdictional Local Hazard Mitigation Plan (MLHMP) was developed pursuant to the Disaster Mitigation Act of 2000. The MLHMP assesses risks posed by natural hazards and includes mitigation strategies for reducing risks in the County. Several jurisdictions and special districts participated in the creation of the Marin County MLHMP. The risks and mitigations in the plan are broad and encompass the entirety of Marin County. The Marin County MLHMP incorporates each local jurisdictions' individual MLHMP as appendices to ensure jurisdiction-specific information supplements the vulnerability mitigation included in the Marin County MLHMP. The County recently adopted a comprehensive update to the Marin County MLHMP in 2023 in accordance with the Disaster Mitigation Act of 2000, which requires the plan to be updated every 5 years. The prior version of the Marin County MLHMP was adopted in November 2018.

Section 3.7 of the 2018 MLHMP identifies the various life, safety warning, and evacuation systems in place in the county, including the Emergency Alert System, AlertMarin "Reverse 911" System, Nixle, Tsunami Watch and Warning

Messages, various local warning sirens and horns, and law enforcement/fire agency evacuation procedures. Each of the primary systems are described below.

- **Emergency Alert System:** The Emergency Alert System is a network of all radio, TV broadcast stations, and cable TV networks in the county. Messages normally "enter" the system at two points: (1) Marin's Emergency Operations Center (EOC), and (2) the NWS headquarters in Monterey, CA. Messages are received by local radio broadcast stations and then relayed to all other radio, TV broadcast stations, and cable companies within the county. Any message transmitted from either the EOC or NWS will be broadcast countywide via all of the stations and cable companies within the county. Messages transmitted through the Emergency Alert System utilize power lines and telephone lines.
- **AlertMarin "Reverse 911" System:** Emergency officials use the AlertMarin Emergency Notification System to deliver incident-specific information or potentially life-saving instruction to the precise geographic area(s) affected. Messages are sent to recipients' cell phone or VoIP (voice over internet protocol) phone to receive emergency alerts sent by call, text, email, or smartphone application from the County of Marin.
- **Nixle:** Nixle is a Community Information Service dedicated to helping you stay connected to the information that matters most to you, depending on your physical location. You stay connected to your local police department ensuring that you receive trusted and immediate, geographically relevant information. Information is immediately available over your cell phone by text message, by email, and over the web.
- **Tsunami Watch and Warning Messages:** Tsunami "Watch" (a tsunami may have been generated) and "Warning" (a tsunami has been generated) messages are issued for Marin County by the West Coast and Alaska Tsunami Warning Center located in Alaska, with the Pacific Tsunami Warning Center, located in Hawaii, serving as a backup. Both centers also transmit "Information" messages when significant seismic events occur under the sea floor, even when the seismic events do not have the potential to generate a tsunami. Watch and Warning messages are transmitted by the respective Warning Centers over the NOAA Weather Wire system directly to each other, Coastal NWS Forecast Offices and their Area of Responsibility's State Warning Centers.

In addition, the 2023 MLHMP identifies the hazard mitigation actions from the prior version of the MLHMP and indicates whether they have been completed, are ongoing, or have not been started, as well as identify any new hazard mitigation actions for Marin County, including the jurisdiction/agency responsible for their implementation. Each of the hazard mitigation actions are assigned with a high, medium, or low implementation priority.

Marin County Hazardous Materials Area Plan

The Marin County Hazardous Materials Area Plan (Area Plan) establishes the policies, responsibilities, and procedures required to protect the health and safety of Marin County's citizens, the environment, and public and private property from the effects of hazardous materials emergency incidents. The Area Plan establishes the emergency response organization for hazardous materials incidents occurring within Marin County. The Area Plan documents the operational and general response procedures for the Marin County Hazardous Materials Response Team, which is the primary hazardous materials response group for Marin County.

The Area Plan is the principal guide for agencies of Marin County, its incorporated cities, and other local entities in mitigating hazardous materials emergencies. The Area Plan is consistent with the National Incident Management System, which is a unified framework for incident management within which government and private entities at all levels can work together effectively.

Marin Countywide Plan

The Marin Countywide Plan (Marin County 2023) was first adopted in 2007 and partially updated in 2023 with the Housing and Safety Element Updates. The plan guides the conservation and development of Marin County and serves as the County's general plan. The Countywide Plan contains three elements that address the legally required general plan topics, which includes conservation, open space, safety, land use, housing, circulation, and noise, as well as several optional topics. The three elements of the Countywide Plan are the Natural Systems and Agriculture Element, Built Environment Element, and Socioeconomic Element. Related to hazards and hazardous materials, the

Natural Systems and Agriculture Element and Socioeconomic Element contain goals, policies, and implementing programs that address both natural and manmade hazards (including exposure to hazardous materials and remediation for existing and future development) and emergency planning and preparedness.

Natural Systems and Agriculture Element

GOAL EHS-2: Disaster Mitigation, Preparedness, Response, and Recovery. Support continuing public awareness of hazards, including avoidance, disaster preparedness, and emergency response procedures. Ensure readiness in and after emergency situations and create an effective evacuation route network.

- **Policy EHS 2.1: Enhance Public Awareness.** Make hazard studies, data, maps, services, and related information more accessible to residents and include more robust and targeted outreach in vulnerable communities.
- **Policy EHS 2.3: Disaster Readiness.** Maintain a level of preparedness to respond to emergency situations that will save lives, protect property, and facilitate recovery with minimal disruption.
- **Policy EHS 2.4: Effective Emergency Access and Evacuation.** Ensure that first responders have adequate emergency access routes and that County residents, businesses, workers, and visitors can effectively evacuate during or after a disaster.
- **Policy EHS 2.5: Adequate Services.** Improve existing and increase future capacity of critical services and infrastructure.
- **Implementing Program EHS-2.4.e: Ensure Access to New Development.** Require new development to include adequate roadway ingress/egress for emergency access and evacuation routes.

GOAL EHS-5: Safety from Wildfire. Protect people and property from hazards associated with wildland and structure fires.

- **Policy EH-5.1: Implement a Regional Fire Management Plan with Marin Fire Agencies: the Marin Wildfire Prevention Authority, County Fire, and FireSAFE Marin.** Develop a collaborative, proactive approach to manage wildfire losses by identifying hazard risks and enacting effective mitigation strategies.
- **Policy EH-5.2: Ensure Adequate Fire Protection.** Ensure that adequate fire protection, including adequate evacuation routes, is provided in new development and when modifications are made to existing development.
- **Policy EH-5.3: Regulate Land Uses to Protect from Wildland Fires.** Use land use regulations, including but not limited to subdivision approvals and denials and permits for remodeling existing structures, as means of protecting people and property from hazards associated with wildland fires.
- **Policy EH-5.4: Limit Risks to Structures.** Ensure that adequate fire protective features are in place in new development and when modifications are made to existing structures.
- **Policy EH-5.5: Remove Hazardous Vegetation.** Abate the buildup of vegetation around existing structures or on vacant properties that could help fuel fires. (See also Natural Systems and Agriculture Element, BIO-1.4, Support Vegetation and Wildlife Disease Management Programs).
- **Implementing Program EHS-5.2.b: Consider Development Impacts to Fire Service.** Consider additional impact or mitigation fees, or a benefit assessment, to offset the impact of new development on fire services.
- **Implementing Program EHS-5.4.b: Review Applications for Fire Safety.** Ensure new development meets all current building code and fire safety standards, including but not limited to ensuring the provision of an adequate water supply for fire suppression and fire flow requirements, providing sufficient road width for emergency vehicles and equipment, as well as evacuation for residents provided from more than one point, identification and maintenance of defensible space around structures, and that structures are built consistent with the most current build code and Cal Fire requirements for high fire hazard areas. Continue to work with local and State fire agencies to ensure that the California Fire Code (with local amendments), County Development Code, and State and local standards for construction are applied uniformly countywide.

- **Implementing Program EHS-5.4.c: Require Compliance with Fire Department Conditions.** Continue to refer land development and building permit applications to the County Fire Department or local fire district for review, and incorporate their recommendations as conditions of approval as necessary to ensure public safety. Continue to require compliance with all provisions of the most recently adopted version of the California Fire Code (with local amendments).
- **Implementing Program EHS-5.4.d: Require Sprinkler Systems.** Continue to require installation of automatic fire sprinkler systems in all new structures and existing structures undergoing substantial remodeling, and provide incentives for sprinkler installation in all other habitable structures, especially those in high fire hazard areas.
- **Implementing Program EHS-5.5.a: Require Adequate Clearance Vegetation Removal.** Require standards for clearance of vegetation on vacant lots, and around structures, and landscaped areas to ensure timely and adequate removal of potential fire fuel on both public and private property according to State requirements (Public Resource Code 4291) and local ordinances.

Socioeconomic Element

GOAL PS-3: Effective Emergency and Disaster Preparedness. Provide proper emergency and disaster preparedness services through effective and coordinated emergency management plans and procedures.

- **Policy PS-3.1: Plan Thoroughly for Emergencies.** Ensure that the County, its citizens, businesses, and services are prepared for effective response and recovery in the event of emergencies or disasters.

GOAL PS-4: Decreased Exposure to Hazardous Materials. Reduce the risks to human and environmental health from hazardous materials.

- **Policy PS-4.1: Regulate and Reduce Hazardous Material Use.** Control the use and storage of hazardous materials to minimize their presence in, and potential dangers to, the community and environment.
- **Implementing Program PS-4.b: Regulate Hazardous Material Use.** Identify businesses that use, store, dispose of, or transport hazardous materials, and require them to follow measures that protect public health and safety.

Marin County Code, Titles 16 and 19

Title 16 of the Marin County Code establishes the County's regulations related to fire. Relevant chapters of Title 16 include Chapter 16.16, which adopts the 2019 California Fire Code, 2018 International Fire Code, and Appendix A of the 2018 Wildland-Urban Interface Code, and Chapter 16.17, which establishes and incorporates the Urban-Wildland Interface Code. The purpose of the Urban-Wildland Interface Code is to regulate and govern the mitigation of hazard to life and property from the intrusion of fire from wildland exposures, fire from adjacent structures and prevention of structure fires from spreading to wildland fuels.

As stated in County Code Title 19, the County has adopted the 2019 editions of the CBC and the California Residential Code, with exceptions, additions, and deletions as provided in that County Code title. County Code Section 19.04.064 incorporates amendments to Chapter 7A of the 2019 CBC that apply to new buildings, additions and exterior remodels to buildings located in any Fire Hazard Severity Zone (FHSZ) or any Wildland Urban Interface (WUI) Fire Area designated by the enforcing agency and requires use of fire-resistant materials and construction techniques for new buildings, additions, and exterior remodels to buildings located in a designated FHSZ or WUI fire area.

Marin Community Wildfire Protection Plan

The Marin Community Wildfire Protection Plan (CWPP) was developed in collaboration between Marin County fire agencies, county officials, community members, and county, state, and federal land management agencies, and was prepared in accordance with the federal Healthy Forests Restoration Act. The Marin CWPP provides a scientifically based assessment of wildlife hazards and threats to homes in the WUI of Marin County. The purpose of the CWPP is to provide fire agencies, land managers, and other stakeholders in Marin County with guidance and strategies to reduce fire hazard and the risk of catastrophic wildfires in the WUI, while promoting the protection and enhancement of the county's economic assets and ecological resources (MCFD 2020).

3.8.2 Environmental Setting

The following describes the existing conditions for hazardous materials, airport and airstrip hazards, schools, and wildfire hazards.

HAZARDOUS MATERIALS

For purposes of this section, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. A "hazardous material" is defined in Title 49 of the CFR as "a substance or material that … is capable of posing an unreasonable risk to health, safety, and property when transported in commerce" (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

> "Hazardous material" means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

"Hazardous wastes" are defined in California Health and Safety Code Section 25141(b) as wastes that:

> … because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

The project site is in an established residential neighborhood within the community of Strawberry in the County of Marin. The area around the project site is largely residential, with multi-family units, condominiums, and single-family homes. The project site is located on the former Golden Gate Baptist Theological Seminary site, which has been historically used as a school campus with residential units since it was first developed in the 1950s. Specifically, the project site uses currently consist of an academic campus, residential area, daycare, recreation and open space areas, and a network of internal roads. The existing zoning of the project site is a mix of RMP-2.47 and BFC-RMP-2.47 designations. The RMP-2.47 zoning designation regulates Residential, Multiple Planned District, and the BFC designation indicates a parcel's location in the Bayfront Conservation combining district. Academic uses are allowed in the RMP-2.47 district with the 1953 Conditional Use Permit. The Marin Countywide Plan designates the land use in the project area as MF2, indicating Low Density Residential.

The Phase I ESA prepared for the proposed project (Appendix M) consisted of both a physical inspection of the property and surrounding area and a database search. The project site and its boundaries with adjacent parcels were walked and inspected for any evidence of surface contamination, staining, or other unusual conditions. The results of the inspection were used to determine whether any of the following conditions were present: Recognized Environmental Conditions (RECs), Controlled RECs (CRECs), Historic RECs (HRECs), or Non-RECs. Per the American Society of Testing Materials (ASTM) standards, a REC is defined as the presence or likely presence of any hazardous substances or petroleum products on a property that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." This definition does not include "de minimis conditions that generally do not pose a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies" (Appendix M). The conditions identified during the site inspection are provided in Table 3.8-1.

Table 3.8-1 Site Inspection Results

Address	Non-REC	REC	CREC	HREC
Golden Gate Baptist Seminary	Suspect Asbestos Containing Materials (ACM) Suspect Lead Based Paint (LBP) and Lead Containing Material (LCM) Suspect Mercury Switches and Fluorescent Tubes Suspect PCB Light Ballasts	None	None	None

Notes: REC = Recognized Environmental Condition, CREC = Controlled Recognized Environmental Condition [subset of REC], HREC = Historical Recognized Environmental Condition.

Source: Appendix M.

As shown in Table 3.8-1 above, the project site does not contain any RECs, CRECs, or HRECs. However, ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and polychlorinated biphenyl (PCB) light ballasts were all identified as non-RECs that are potentially present on the project site. In addition to the site inspection, an area/neighborhood drive by was also performed to identify whether any conditions of concern were present within one-third of a mile of the project site, which is the outer radius for the Vapor Encroachment Condition (VEC) Screen Report. The area/neighborhood drive did not identify any RECs, CRECs, or HRECs. The Phase I ESA also involved a regulatory database search and review in accordance with ASTM standards and included five separate radii:

- the project site,
- within one-eighth mile of the project site,
- one-eighth mile to one-quarter mile,
- one-quarter mile to one-half mile, and
- one-half mile to one mile.

The project site was not identified on any databases that were searched. Although the database search identified sites of environmental concern within the search radii, the Phase I ESA determined that none of these sites pose an environmental risk to the project site. A full list of the sites identified during the database search is provided in the Phase I ESA (Appendix M of this EIR). Comments provided in response to the NOP (Appendix A) suggested the potential presence of an underground storage tank and abandoned hydraulic lift on the site identified in a previous Phase I ESA, as well as debris, drums, and oil containers in the maintenance shed area and Shuck Knoll shed area. However, no further documentation was provided as part of the NOP comments, and none of these conditions were observed during the field investigation completed for the current Phase I ESA (Appendix M). Additionally, the project site was not identified on SWRCB's GeoTracker or DTSC's EnviroStor databases, which identify sites of known contamination including those associated with underground storage tanks (SWRCB 2023; DTSC 2023a).

Further, the Phase I ESA included a review of historical information and records, including U.S. Geological Survey historical topographic maps; historical aerial photographs; a city directory; an environmental lien and activity and use limitation report; a property tax report; and a building permits report. The historical records review did not identify any conditions of concern as it relates to hazardous materials.

The Phase I ESA also evaluated geologic and hydrologic conditions at the project site and surrounding area. As part of the evaluation of geologic and hydrologic conditions, the Phase I ESA included a review of a VEC Screen Report. A review of the VEC Screen Report indicated that the project site was not found on any databases. One listed site was found within 528 feet, and the other thirteen listed sites were found between 528 feet and 1,760 feet. Of the fourteen total listed sites, all were ruled out as a VEC because they are not an environmental concern listing, are closed, or are outside the 0.1-mile threshold used for evaluation in the VEC report. As such, chemicals of concern are not likely to be a vapor threat to the project site. The VEC Screen Report is included as Appendix 11 in the Phase I ESA (Appendix M of this EIR).

AIRPORT AND AIRSTRIP HAZARDS

Gnoss Airfield is the only public use airport in Marin County. Gnoss Airfield is located east of the City of Novato, adjacent to U.S. 101, and north of Black John Slough and Rush Creek preserve, approximately 17 miles north of the project site. There are four other private use facilities in the County, which include San Rafael Airport and San Rafael Private Heliport, both in San Rafael, as well as Commodore Center Heliport and Commodore Center Seaplane Base, both in Sausalito. The San Rafael Airport and San Rafael Private Heliport are located approximately 8.5 miles north and 4.0 miles northeast, respectively, of the project site. The Commodore Center Heliport and Commodore Center Seaplane Base are both approximately 0.4-mile southwest of the project site, across Richardson Bay. Both of these facilities are privately owned and operated.

The Marin County Airport Land Use Commission (ALUC) is responsible for studying and making recommendations to the County Board of Supervisors regarding land use in and around Gnoss Airfield. Policy direction for the Gnoss Airfield is guided by the airport land use plan (ALUP). The ALUP only applies to Gnoss Airfield; private airports are not required to prepare land use plans. The ALUP sets forth policies for evaluating proposed development and land use plans in the vicinity of Gnoss Airfield and establishes a "referral area boundary" within which review and approval by the ALUC is required, with some exceptions for projects and zoning changes unlikely to create compatibility problems with the airfield. This boundary has been established as two miles from the future boundary of the airfield. Because the project site is greater than two miles from Gnoss Airfield, it is outside of the airport's "referral area boundary" and therefore is not subject to review and approval by the ALUC.

SCHOOLS

Children are particularly susceptible to long-term effects from emissions of hazardous materials. Therefore, locations where children spend extended periods, such as schools, are sensitive to hazardous air emissions and accidental release associated with the handling of extremely hazardous materials, substances, or wastes. This risk is considered substantial where the potential release is within 500 feet of a school (CARB 2005); however, Appendix G of the CEQA Guidelines recommends considering effects on schools within 0.25 mile of a project. There are no existing or proposed K-12 schools within 0.25-mile of the project site. The closest K-12 school is Strawberry Point Elementary School, located approximately 0.40-mile north of the project site. However, portions of the project site are currently occupied by Olivet University, a private Christian university, with an existing enrollment of approximately 100 students. The existing university consists of an academic campus, daycare, and other associated facilities.

EMERGENCY RESPONSE AND EVACUATION

The Marin County Sheriff's OEM is responsible for emergency management services in the Marin Operational Area, which is comprised of 11 cities and towns, over 300 special districts, and the unincorporated areas within the county. The OEM coordinates emergency operations activities among all the various local jurisdictions and serves as the liaison between the State and all the local government political subdivisions comprising Marin County. The OEM also maintains the Operational Area EOP, the primary emergency planning and management document for the County and Operational Area (cities/towns, special districts, and unincorporated areas within the County). The EOP describes how emergency management will be coordinated; identifies personnel responsibilities and actions necessary to protect health and safety, property, and the environment; and details procedures before, during, and after a major event. The EOP would be activated for a hazardous materials incident or emergency when additional resources or extended response activities are needed.

In addition, as part of the County's evacuation planning and response efforts, the entire county has been divided into individual evacuation zones, which are used for rapid evacuation notification. Pre-established evacuation zones assist first responders and emergency service agencies with preparation prior to an emergency, which helps effective evacuation by reducing confusion and helping residents evacuate quickly. The project site is in zone SOM-E081. The County currently uses ZoneHaven, a community evacuation interface that allows the public access to real-time status updates and instructions for their evacuation zone and provides County municipalities and fire responders with an

evacuation planning application. The County can use ZoneHaven to issue evacuation, shelter in place, and other emergency orders. Individual zones are described by name, borders, current status, and additional information. If a zone is activated for evacuation order or warning, or for shelter in place, the reason for the activation will be provided and, if necessary, additional information such as temporary evacuation point, evacuation route or routes, and other critical information will be provided.

WILDFIRE HAZARDS

Local Wildfire Conditions

Approximately 60,000 acres, or 18 percent of Marin County's land area, falls within the WUI, which denotes where residences (i.e., homes and structures) are intermixed with open space and wildland vegetation. This translates to approximately 65 percent of all living units in the County being within the WUI. Because of the mix and density of structures and natural fuels combined with limited access and egress routes, fire management is more complex in WUI environments (MCFD 2020). As described in the Marin Countywide Plan, fire has become a greater hazard in Marin because of increased fuel loads resulting from the suppression of natural fires and increased residential development adjacent to wildlands (Marin County 2015). While the term WUI does not represent an actual wildfire hazard designation, it does denote areas that are at increased risk of wildfire due to the adjacency of urban development to undeveloped lands, which are typically more fire-prone (MCFD 2020). The project site is situated in a predominantly residential neighborhood and is not within or adjacent to any wildlands, nor is it located within the WUI.

CAL FIRE designates FHSZs at the federal, state, and local level throughout the state, which are mapped as part of its Fire and Resource Assessment Program. These areas are mapped based on fuels, terrain, weather, and other relevant factors, and include several classifications including Moderate, High, Very High. According to the FHSZ maps for Marin County, the project site and surrounding area are within an LRA and are designated as "urban, unzoned". There are no Moderate, High, or Very High FHSZs mapped within or surrounding the project site (Marin County 2020). The closest SRA is approximately 0.7-mile north of the project site, encompassing an area on the north side of Bay Vista Drive, and is designated as a Moderate FHSZ. This Moderate FHSZ-designated area adjoins another SRA designated as a High FSZH, approximately 1 mile north of the project site. The closest Very High FSZH-designated area is approximately 1.3 miles west of the project site; however, this area is separated from the project site by urban development and Richardson Bay.

Wildfire Protection and Response

Wildfire protection and response in California is the responsibility of either the federal, state, or local government. On federally owned land, or federal responsibility areas (FRA), fire protection is provided by the federal government, often in partnership with local grants and contracts. In SRAs, CAL FIRE has a legal responsibility to provide fire protection. CAL FIRE is not responsible for densely populated areas, incorporated cities, agricultural lands, or federal lands. LRAs, which include incorporated cities and cultivated agriculture lands, are under the responsibility of city fire departments, fire protection districts, or counties, or in some cases by CAL FIRE under contract to local government (MCFD 2020).

Fire protection in Marin County is provided by the Marin County Fire Department (MCFD), as well as 12 service fire agencies and one volunteer fire department. Additionally, CAL FIRE contracts with MCFD to provide wildland fire protection and associated fire prevention activities within the county's SRAs, which make up more than half of the total land area in Marin County. The MCFD provides fire protection services for approximately 200,000 acres of SRA within the County and is the primary agency responsible for responding to wildfires within these areas. In addition to SRAs, MCFD also provides fire protection services to approximately 100,000 acres of FRA in the county. Moreover, MCFD maintains the Emergency Command Center, which provides dispatching services for MCFD and local volunteer fire departments, coordinates wildland fire responses within the county's SRAs and FRAs, and serves as the California Governor's Office of Emergency Services coordination center for fire dispatching (MCFD 2020).

The project site is within an LRA and is under the jurisdiction of the Southern Marin Fire Protection District, specifically within Zone 9 (Strawberry, Sutton, and Almonte) of its operational service area. Zone 9 is protected with one type I engine with each of the zones cross-staffing at least one specialty piece of equipment such as a rescue, fire boat, and ladder truck. In addition to fire suppression, the Southern Marin Fire Protection District provides hazardous materials response, urban search and rescue, emergency medical services, and marine emergency response (SMFD 2021). The project site is served by Southern Marin Fire Protection District Station 9 (Strawberry), located immediately adjacent to the north at 308 Reed Boulevard.

Wildfire Evacuation Planning

Fire Safe Marin, Marin County's Fire Safe Council, promotes public and private partnerships to enhance wildfire safety and build Firewise Communities. Fire Safe Marin is a nonprofit organization with the dual mission of reducing wildland fire hazards and improving fire safety awareness in Marin County. However, Fire Safe Marin and many Marin fire agencies, cities and towns, and other partners are working together to develop improved wildfire evacuation maps and messaging for residents of Marin's WUI communities. Fire Safe Marin hosts a website with interactive evacuation route maps, referred to as FireClear maps. These FireClear maps, funded by fire agencies, cities, and towns, as well as a grant from CALFIRE, were published as they were completed over the course of 2020. However, there is currently no FireClear map for the Strawberry Peninsula.

Additionally, the Marin Wildfire Prevention Authority (MWPA) was formed in March 2020 to develop and implement a comprehensive wildfire prevention and emergency preparedness plan for a majority of Marin County. The MWPA consists of seventeen member agencies, including the Southern Marin Fire Protection District. MWPA recently completed an evacuation/ingress/egress study to understand and address the risks associated with evacuation routes in Marin County. MWPA defined evacuation risks as factors that hinder timely evacuation and the ability to arrive at a safe location, such as a lack of access to a vehicle, failure to receive notifications due to cellular zones, and heavy traffic burdens. This information could be used to help agencies identify areas of concern, policies and mitigation actions that can reduce risks associated with evacuation. Based on the results of the study, MWPA developed a GIS map viewer that shows current conditions, which includes contextual data, evacuation difficulty scores maps, and currently approved MWPA vegetation projects aimed at reducing risk. The GIS map viewer also includes Major and Minor evacuation roads as identified under AB 747 as well as high-risk roads (as defined by CALFIRE) that serve as the single egress route for a minimum of 30 residential parcels (MWPA 2024). MWPA notes that the GIS map viewer is only intended for planning purposes and should not be used in the event of an actual evacuation.

According to MWPA's evacuation difficulty maps, the roadways that would likely serve as primary evacuation routes for the project site have difficulty scores (roadway and aggregate) ranging from minimal to low. These roadways include Seminary Drive from Gilbert Drive to US Highway 101 (minimal), Seminary Drive from Gilbert Drive to Strawberry Lane (low), and E. Strawberry Drive from Strawberry Lane to approximately Island Drive (low). Other potential evacuation routes in the project area have difficulty scores ranging from moderate to high, including portions of E. Strawberry Drive (moderate and high), Belvedere Drive (high), and S. Knoll Road (high).

3.8.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

The following reports and data sources document potential presence of hazards and hazardous materials at the project site and surrounding area and were reviewed for this analysis:

- materials prepared by the architect team for the proposed project;
- available literature, including documents published by federal, State, County, and City agencies; and
- *Phase I Environmental Site Assessment for the North Coast Land Holdings Project*, prepared by The Consulting Group (2014); refer to Appendix M.

The hazardous materials information gathered from these sources was used to determine whether the proposed project would result in an increased health or safety hazard to people or the environment. In addition, the impact analysis considers the potential for increased wildfire risk and associated secondary effects from implementation of the proposed project. The analysis also evaluates the effects of the proposed project on emergency planning and evacuation in the event of a wildfire or other natural hazard, as well as any conflicts with existing emergency plans and policies.

THRESHOLDS OF SIGNIFICANCE

Impacts related to hazards and hazardous materials would be significant if the proposed project would:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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;
- (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) result in a safety hazard or excessive noise for people residing or working in the project area;
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- 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;
- 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; and/or
- expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

The thresholds involving wildfire risks and the potential for flooding and landslides must be understood in light of the California Supreme Court's decision in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 377-378. In that case, the court held that "agencies subject to CEQA generally are not required to analyze how existing environmental conditions will impact a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment—and not the environment's impact on the project—that compels an evaluation of how future residents or users could be affected by exacerbated conditions."

ISSUES NOT DISCUSSED FURTHER

Emit Hazardous Emissions or Handle Acutely Hazardous Materials, Substances, or Wastes within 0.25 Mile of an Existing or Proposed School

The DTSC defines acutely hazardous wastes as those that would cause death, disabling personal injury, or serious illness, and are therefore more hazardous than ordinary hazardous wastes (DTSC 2023b).

There are no existing or proposed K-12 schools within 0.25-mile of the project site. As discussed in Section 3.8.2, the closest existing K-12 school to the project site is Strawberry Point Elementary School, located approximately 0.40-mile to the north. However, there is an existing daycare center on the project site that would be relocated from its current location in the existing academic building to a new shared daycare and fitness center facility in the central portion of the site. Additionally, the existing academic campus on the project site would remain onsite upon completion of the proposed project.

The proposed project involves the renovation of an existing academic campus, construction/renovation of residential housing, construction of a residential care facility, construction of a new fitness center, and relocation of an existing daycare center, among other various site improvements. The proposed project does not involve the development of any uses that would emit or handle acutely hazardous materials, substances, or wastes. Project-related construction activities would involve the routine transport, use, and disposal of hazardous materials typically used in construction. Similarly, operation of the residential uses would use, store, and dispose of typical household hazardous substances associated with these uses. The routine transport, use, and disposal of these common hazardous materials would occur in accordance with applicable local, State, and federal regulations. Although the residential care facility would involve the storage and use of medical supplies and therefore generate small amounts of associated medical waste, any medical supplies and waste would be stored, used, handled, and disposed of in accordance with applicable federal, state, and local regulations, including CFR Title 49, OSHA regulations, and the Medical Waste Management Act. Moreover, this medical waste would not be considered acutely hazardous waste as defined by DTSC. Lastly, as detailed in Section 3.2, Air Quality, the project does not propose any land use types that would generate long-term operational emissions of toxic air contaminants. For these reasons, there would be no impact on existing or proposed schools associated with the emitting of hazardous emissions or handling of hazardous materials or acutely hazardous waste during construction or operation of the project. Therefore, this issue is not discussed further.

Hazards Related to Proximity to Existing Sites of Known Contamination

Neither SWRCB's GeoTracker nor DTSC's EnviroStor databases identified sites of known contamination on or near the project site (SWRCB 2023; DTSC 2023a). Additionally, the project site was not identified on any other databases searched as part of the Phase I ESA prepared for the proposed project. Although the database search identified several sites of environmental concern within each of the remaining search radii, the Phase I ESA determined that none of these sites pose an environmental risk to the project site. Further, the Phase I ESA did not identify any RECs, CRECs, or HRECs on the project site or surrounding area. Comments provided in response to the NOP suggested the potential presence of an underground storage tank and abandoned hydraulic lift on the site identified in a previous Phase I ESA, as well as debris, drums, and oil containers in the maintenance shed area and Shuck Knoll shed area. However, no further documentation was provided as part of the NOP comments, and none of these conditions were observed during the field investigation completed for the current Phase I ESA (Appendix M). For these reasons, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and there is no potential to create a significant hazard to the public or the environment. Therefore, this issue is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: Create a Hazard to the Public or Environment through the Routine Transport, Use, or Disposal of Hazardous Materials

Construction activities for the proposed project would involve the routine transport, use, and disposal of hazardous materials typically used in construction, including paints, oils, solvents, fuels, lubricants, asphalt products, and other materials. All hazardous materials would be transported, used, stored, handled, and disposed of according to the manufacturers' recommendations and in accordance with local, State, and federal regulations and plans. Additionally, ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts were all identified as non-RECs that are potentially present on the project site, which could be released into the environment during the demolition and renovation of existing structures. However, compliance with applicable regulations would ensure that ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts are handled and disposed of properly. The proposed project does not include any uses that would involve the routine use, transport, or disposal of hazardous materials during operations. All medical supplies and waste generated by the residential care facility would be stored, used, handled, and disposed of in accordance with applicable federal, state, and local regulations. Further, the project would not result in any changes to campus operations, and the use and transport of any hazardous materials on the campus for academic purposes (e.g., science labs) would continue to comply with all hazardous materials standards and would occur under the oversight of the Marin County Public Works Department, the CUPA in Marin County. This impact would be **less than significant**.

Construction

The proposed project involves the renovation of an existing academic campus, relocation of an existing daycare center, construction of a new fitness center, construction of a new residential care facility, upgrades to existing housing and construction of new housing, retention and access improvements to existing open space and recreation areas, and creation of new bicycle and pedestrian paths within the property.

Construction activities for the proposed project would involve the routine transport, use, and disposal of hazardous materials typically used in construction, including paints, oils, solvents, fuels, lubricants, asphalt products, and other materials. Hazardous waste generated during construction may consist of welding materials, fuel and lubricant containers, paint and solvent containers, and cement products containing strong basic or acidic chemicals. Generally, incidents involving construction-related hazardous materials are small fuel or oil spills that would have a negligible impact on public health. All hazardous materials would be used, stored, handled, and disposed of according to the manufacturers' recommendations and in accordance with local, State, and federal regulations and plans, the intent of which is to minimize risks to human health and the environment. These regulations and plans include the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, California Hazardous Material Management Act, CCR, Title 22, the Marin County Area Plan, and Chapter 7.80-7.84 of the Marin County Code. Similarly, any spills would be cleaned up in accordance with applicable regulations.

The proposed project would also be subject to the SWRCB's Construction General Permit (2022-0057-DWQ) because it would involve more than 1 acre of ground disturbance during construction. The SWRCB Construction General Permit (2022-0057-DWQ) requires development and implementation of a SWPPP by a Qualified SWPPP Developer, which includes the preparation of a spill prevention and containment plan as a component of the SWPPP to avoid spills and releases of hazardous materials and wastes into the environment. Additionally, the Construction General Permit requires the Qualified SWPPP Developer and Qualified SWPPP Practitioner to conduct onsite inspections to verify consistent implementation of General Construction Permit conditions and the BMPs intended to avoid and minimize the potential for spills and releases and to ensure a response to them, including their immediate cleanup. Potential BMPs include the designation of special storage areas and labeling, containment berms, coverage from rain, and concrete washout areas, among others. Compliance with the Construction General Permit would minimize the potential risk of a spill or accidental release of hazardous materials during construction.

As detailed in Section 3.8.2, the project site does not contain any RECs, CRECs, or HRECs. Although comments provided in response to the NOP suggested the potential presence of an underground storage tank, abandoned

hydraulic lift, and debris, drums, and oil containers in the maintenance shed area and Shuck Knoll shed area, none of these conditions were observed during the field investigation completed for the current Phase I ESA (Appendix M). However, ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts were all identified as non-RECs that are potentially present on the project site. As such, the demolition and renovation of existing structures could result in the release of these materials into the environment, potentially exposing construction workers and surrounding residents to hazardous materials. However, there are federal, state, and local regulations that address the handling and disposal of hazardous materials during demolition. The removal and handling of asbestos-containing materials is governed primarily by EPA regulations under Title 40 of the CFR but is implemented by BAAQMD. The federal OSHA also has a survey requirement under Title 29 CFR, which is implemented by Cal/OSHA under Title 8 CCR. These regulations require facilities to take all necessary precautions to protect employees and the public from exposure to asbestos. The Cal/OSHA lead standard for construction activities is also implemented under Title 8 of the CCR.

Asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the State Department of Health Services. In addition, Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. Contractors are also required to stop work and inform the County if they encounter material believed to be asbestos, PCBs, lead, or other hazardous materials. Specific actions required by law include the following.

- Asbestos. Prior to demolition, all structures would be tested for the presence of asbestos-containing materials. Any asbestos would be removed and disposed of by an accredited contractor in compliance with federal, state, and local regulations (including the Toxic Substances Control Act and the National Emission Standard for Hazardous Air Pollutants). Compliance with these regulations would result in the safe handling and disposal of asbestos-containing materials.
- Lead-based paint or other coatings. A survey for indicators of lead-based coatings would be conducted before demolition to further characterize the presence of lead at the project site. For the purposes of compliance with Cal/OSHA regulations, all coated surfaces would be assumed to potentially contain lead. There is also a potential for soil contamination because of deposition of deteriorated (i.e., flaked, peeled, chipped) lead-based paint adjacent to structures where lead-based exterior paints were used. Loose or peeling paint may be classified as a hazardous waste if concentrations exceed total threshold limits. Cal/OSHA regulations require air monitoring, special work practices, and respiratory protection during demolition where even small amounts of lead have been detected.
- Heavy metals and PCBs. Spent fluorescent light bulbs and ballasts, thermostats, and other electrical equipment may contain heavy metals, such as mercury, or PCBs. If concentrations of these materials exceed regulatory standards, they would be handled as hazardous waste in accordance with hazardous waste regulations. Fluorescent light ballasts containing PCBs are disposed of by the County.

Compliance with these regulations would ensure that ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts are handled and disposed of properly and would not create a significant hazard to the public or the environment.

Lastly, trucks transporting construction-related hazardous materials could increase the risk of accidents and associated release of hazardous materials for other drivers and people along truck routes, which involve many of the same freeways, arterials, and local streets as other traffic. These incidents could result in accidental spills, leaks, toxic releases, fire, or explosion. However, the USDOT Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as described in Title 49 CFR. Specifically, Title 49 CFR prescribes packaging and labeling requirements for hazardous materials. Standard accident and hazardous materials recovery training and procedures are enforced by the State and followed by private State-licensed certified and bonded

transportation companies and contractors. Compliance with these regulations would minimize the potential for accidental release of construction-related hazardous materials being transported to or from the project site.

For the reasons described above, construction associated with the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. This impact would be **less than significant**.

Operation

The proposed project does not include any uses that would involve the routine use, transport, or disposal of hazardous materials during operations. The proposed new residential development would be expected to use, store, and dispose of typical household hazardous substances associated with residential uses (e.g., paint, cleaners). However, the use, storage, and disposal of typical household hazardous waste would be subject to applicable local, State, and federal regulations. In addition, the County operates a household hazardous waste facility located at 565 Jacoby Street in San Rafael, approximately 4 miles north of the project site. The facility is open to all residents of Marin County (except Novato) and accepts drop-off of wastes such as electronic waste, household batteries, light bulbs, household cleaning products, paint and related products, personal care products, and other hazardous wastes.

The proposed residential care facility would include support and back-of-house facilities for Certified Medical Technical personnel to provide onsite medical services for residents at the facility. As such, the residential care facility would involve the storage and use of medical supplies and therefore would generate small quantities of potentially hazardous medical waste such as surgical gloves, bandages, and pharmaceuticals. However, medical supplies and waste would be stored, used, handled, and disposed of in accordance with applicable federal, state, and local regulations, including CFR Title 49, OSHA regulations, and the Medical Waste Management Act. Compliance with these regulations would ensure that these materials do not create a significant hazard for residents at the facility or the surrounding residential land uses.

Regarding the proposed improvements to the academic campus, the proposed project would renovate the existing administration building, demolish the existing maintenance building, and construct a new maintenance building. These improvements would not result in any changes to campus operations related to hazardous materials, which would be consistent with current campus operations. The use of any hazardous materials on the campus for academic purposes (e.g., science labs) would continue to comply with all hazardous materials standards and would occur under the oversight of the Marin County Public Works Department, the CUPA in Marin County, to ensure safe handling, storage and disposal of such materials and chemicals. The transportation of any hazardous materials to and from the campus would be subject to all hazardous materials transportation regulations established by the USDOT and California Highway Patrol pursuant to the California Vehicle Code. Specifically, the USDOT Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials in Title 49 CFR. Compliance with regulations would minimize the potential for accidental release of hazardous materials being transported to or from the campus.

For the reasons discussed above, operation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.8-2: Create a Hazard to the Public or Environment through Reasonably Foreseeable Upset or Accident Conditions

There are no known sites with contamination on or near the project site identified on SWRCB's GeoTracker or DTSC's EnviroStor databases. Additionally, the project site was not identified on any other databases searched as part of the Phase I ESA. However, ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts were all identified as non-RECs that are potentially present on the project site. As such, the demolition and renovation of existing structures could result in the release of these materials into the environment. Compliance with applicable regulations would ensure that ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts are handled and disposed of properly and would not create a significant hazard to the public or the environment. This impact would be **less than significant**.

Construction

There are no known sites with contamination on or near the project site identified on SWRCB's GeoTracker or DTSC's EnviroStor databases (SWRCB 2023; DTSC 2023a). Additionally, the project site was not identified on any other databases searched as part of the Phase I ESA (Appendix M) prepared for the proposed project. Although the database search identified several sites of environmental concern within each of the search radii, the Phase I ESA determined that none of these sites pose an environmental risk to the project site. Further, the Phase I ESA did not identify any RECs, CRECs, or HRECs on the project site or surrounding area.

However, as discussed under Impact 3.8-1, ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts were all identified as non-RECs that are potentially present on the project site. As such, the demolition and renovation of existing structures could result in the release of these materials into the environment, potentially exposing construction workers and surrounding residents to hazardous materials. However, there are several federal, state, and local regulations that address the handling and disposal of these hazardous materials during demolition, including Title 40 CFR, Title 29 CFR, and Title 8 CCR. Compliance with these regulations would ensure that ACMs, LBP, LCMs, mercury switches and fluorescent tubes, and PCB light ballasts are handled and disposed of properly and would not create a significant hazard to the public or the environment.

Therefore, project construction would not create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions. This impact would be **less than significant**.

Operation

Once operational, the proposed project does not include any components that would create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions. The proposed residential development, academic campus improvements, daycare and fitness center, and residential care facility do not involve the types of uses that could result in upset or accident conditions. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.8-3: Safety Hazard or Excessive Noise Related to Proximity to an Airport

The project site is not located within the ALUP for Gnoss Airfield or within 2 miles of a public airport or public use airport. However, the privately owned and operated Commodore Center Heliport and Commodore Center Seaplane Base are both located approximately 0.4-mile southwest of the project site. Because private airports are not required to prepare land use plans and the Marin County ALUC authority is limited to Gnoss Airfield, the proposed project has the potential to result in airport safety hazards associated with the Commodore Center Heliport and Commodore Center Seaplane Base. Compliance with FAA notification requirements would ensure that the project would not result in any air safety hazards. This impact would be **less than significant**.

Gnoss Airfield is the only public use airport in Marin County and is located approximately 17 miles north of the project site. Policy direction for the Gnoss Airfield is guided by the ALUP; however, private airports are not required to prepare land use plans and therefore are not subject to the ALUP. The project site is greater than two miles from Gnoss Airfield, it is outside of the airport's "referral area boundary" and therefore is not subject to review and approval by the Marin County ALUC. As such, the project site is not located within the ALUP for Gnoss Airfield or within 2 miles of a public airport or public use airport. Although the project site is not within the boundaries of an ALUP or within 2 miles of a public airport, the privately owned and operated Commodore Center Heliport and Commodore Center Seaplane Base are both located approximately 0.4-mile southwest of the project site.

Because private airports are not required to prepare land use plans and the Marin County ALUC authority is limited to Gnoss Airfield, the proposed project has the potential to result in airport safety hazards associated with the Commodore Center Heliport and Commodore Center Seaplane Base. However, federal law requires proposed structures that exceed 14 CFR Part 77 height criteria to undergo an Obstruction Evaluation/Airport Airspace Analysis. Part 77 regulations apply to any construction or alteration that is more than 200 feet above the ground anywhere in the United States, and any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the slopes identified in the regulations. Projects proposing the development of these structures must submit a Notice of Proposed Construction or Alteration to the FAA under 14 CFR Part 77. FAA review and issuance of a determination that a proposed structure would not be a hazard to air navigation, which could include factors other than height, such as flight direction and trajectory, and project compliance with any conditions set forth in such FAA determinations, ensure that new structures do not result in air safety hazards.

The FAA website contains a noticing criteria tool to assist agencies and developers in determining whether temporary and permanent structures (e.g., new buildings, construction cranes) would exceed the Part 77 Notice Criteria, and therefore would be required to file a Notice of Proposed Construction or Alteration. Using the FAA's notice criteria tool, FAA notification would not be required for the new structures proposed as part of the project because they do not meet the FAA noticing criteria outlined in 14 CFR Part 77 (FAA 2023). Therefore, notification to the FAA would not be required for new individual structures associated with the proposed project, at this time. However, upon final design, FAA notification may be required if the proposed building heights would exceed the FAA noticing criteria. If determined to be applicable, compliance with FAA regulations would ensure that any new structures associated with the proposed project would not result in air safety hazards. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.8-4: Impair Implementation of, or Physically Interfere with, an Adopted Emergency Response Plan or Emergency Evacuation Plan

Construction of the proposed project could temporarily obstruct or interfere with emergency response due to the presence of large construction equipment or the temporary, partial closure of roadways during certain construction activities. However, participants in construction activities would be subject to Section 3310.1 of the 2019 California Fire Code, which identifies minimum requirements to provide required emergency access during construction activities. Additionally, the proposed project does not include any components that would impair or interfere with the use of existing emergency notification systems or tools in the event of an emergency, nor would it impede the ability of first responders to implement the Operational Area EOP or MLHMP. Therefore, for the reasons described above, construction and operation of the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. This impact would be **less than significant**.

An analysis of the proposed project's physical impacts on evacuation routes is provided in Section 3.14, "Transportation," of this EIR. The analysis below focuses on the proposed project's potential to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Construction of the proposed project could temporarily obstruct or interfere with emergency response due to the presence of large construction equipment or the temporary, partial closure of roadways during certain construction

activities. However, participants in construction activities would be subject to Section 3310.1 of the 2019 California Fire Code, which identifies minimum requirements to provide required emergency access during construction activities.

Emergency response and evacuation are the responsibility of the police and fire protection service providers, as detailed in Section 3.14, "Public Services." The Marin County Sheriff's OES coordinates emergency operations activities among all the various local jurisdictions and develops written guidelines for emergency preparedness, response, recovery, and mitigation to natural or manmade disasters. The OEM serves as the liaison between the state and all the local government political subdivisions comprising Marin County. The OEM has established a fully functional Emergency Operations Center from which centralized emergency management can be performed. The Marin County OEM maintains the Operational Area EOP, which serves as the primary emergency planning and management document for the County and Operational Area (cities/towns, special districts, and unincorporated areas within the County), and would activate the plan in the event of an emergency. Marin County also maintains the MLHMP, which was developed pursuant to the Disaster Mitigation Act of 2000 and assesses risks posed by natural hazards as well as includes mitigation strategies for reducing risks in the County. Section 3.7 of the 2018 MLHMP identifies the various life, safety warning, and evacuation systems in place in the county, including the Emergency Alert System, AlertMarin "Reverse 911" System, Nixle, Tsunami Watch and Warning Messages, various local warning sirens and horns, and law enforcement/fire agency evacuation procedures.

Neither the Operational Area EOP nor the MLHMP identify specific emergency response or evacuation routes for Marin County. As discussed in Section 3.8.2, "Environmental Setting," MWPA recently completed an evacuation/ingress/egress study to understand and address the risks associated with evacuation routes in Marin County. Based on the results of the study, MWPA developed a GIS map viewer that shows current conditions, which includes contextual data, evacuation difficulty scores maps, and currently approved MWPA vegetation projects aimed at reducing risk. The GIS map viewer also includes Major and Minor evacuation roads as identified under AB 747 as well as high-risk roads (as defined by CALFIRE) that serve as the single egress route for a minimum of 30 residential parcels. According to MWPA's evacuation difficulty maps, the roadways that would likely serve as primary evacuation routes for the project site have difficulty scores (roadway and aggregate) ranging from minimal to low. These roadways include Seminary Drive from Gilbert Drive to US Highway 101 (minimal), Seminary Drive from Gilbert Drive to Strawberry Lane (low), and East Strawberry Drive from Strawberry Lane to approximately Island Drive (low). Other potential evacuation routes in the project area have difficulty scores ranging from moderate to high, including portions of East Strawberry Drive (moderate and high), Belvedere Drive (high), and S. Knoll Road (high).

Rather than relying on static maps, the Marin County Sheriff's Office uses a web-based evacuation mapping tool called Zonehaven. As part of the County's evacuation planning efforts, the entire county has been divided into individual evacuation zones, which are used to provide rapid evacuation notifications to affected areas. The project site is within zone SOM-E081 on the Zonehaven mapping tool. This mapping tool provides access to real-time weather, traffic, and fire information, and also has the ability to model traffic and fire spread scenarios. If a zone is activated for evacuation order or warning, or for shelter in place, the reason for the activation will be provided and, if necessary, additional information such as temporary evacuation point, evacuation route or routes, and other critical information will be provided at that time. In the event of an emergency, first responders use this mapping tool to plan and execute small and large-scale evacuations. When an evacuation occurs, the community is updated with zone-specific information on the map, including real-time evacuation status, live incident updates, and relevant resources such as shelter options (Marin Wildfire Prevention Authority 2021). Zonehaven is accessible via the Marin County Public Emergency Portal website.

The proposed project does not include any components that would impair or interfere with the use of these existing notification systems or tools in the event of an emergency, nor would it impede the ability of first responders to implement the Operational Area EOP or MLHMP. Additionally, as discussed further in Section 3.14, "Transportation", the project would be designed in accordance with County design standards. The project would be subject to review by County of Marin staff and relevant emergency agencies to ensure the design of the project meets applicable safety standards to provide physical access for emergency vehicles. The project would also be required to be consistent with Countywide Implementing Program EHS-2.4.e, which requires new development to include adequate roadway ingress/egress for emergency access and evacuation routes. Furthermore, the proposed project would not

result in any permanent roadway closures or changes in circulation patterns that could affect emergency response or impair implementation of emergency response or evacuation plans. Moreover, Seminary Drive, which would likely serve as the primary evacuation route within the project area due to its direct access to US Highway 101, has been assessed by MWPA as having a minimal to low difficulty score for evacuation. Although other potential evacuation routes in the project area have difficulty scores ranging from moderate to high, specifically portions of East Strawberry Drive (moderate and high), Belvedere Drive (high), and S. Knoll Road (high), these roadways are anticipated to serve as secondary options for evacuation. The combination of potential evacuation routes, which includes a roadway with minimal to low difficulty score as the anticipated primary evacuation route, would provide first responders with the opportunity to identify the best route based on conditions at the time of evacuation as well as provide substantial evacuation capacity (see Section 3.14, "Transportation," for more details).

Therefore, for the reasons described above, construction and operation of the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.8-5: Exacerbate Wildfire Risk and Expose Project Occupants to Pollutant Concentrations or People or Structures to Significant Loss, Injury or Death Involving Wildfire

According to the FHSZ maps for Marin County, the project site and surrounding area are within an LRA and are designated as "urban, unzoned". There are no Moderate, High, or Very High FHSZs mapped within or surrounding the project site. In addition, the project site is not located within or adjacent to the WUI. Although the project site is not within or adjacent to WUI areas or a Moderate, High, or Very High FSHZ, the project site supports fire-prone vegetation, including dead and declining tree species, scrub habitat, and grasslands. As such, the project site is subject to the potential risk of wildfire. As part of the project, a defensible safe zone would be established, including 30-foot and 100-foot fuel management zones, all invasive species of brush would be removed, and remaining shrubs native shrubs would be pruned or removed to ensure no continuity with other shrub masses or trees. Additionally, the project site would be replanted with native species and trees replanted on-site would be sited accordingly in conformance with the Southern Marin County Fire Protection District's fire protection standards related to vegetation management (e.g., defensible space). No fire-prone species would be planted in fuel management zones. The implementation of vegetation management procedures and the maintenance of defensible spaces would reduce the existing level of potential wildfire risk at the project site, resulting in a net benefit with respect to this issue. Therefore, this impact would be **less than significant**.

As detailed in Section 3.8.2, CAL FIRE designates FHSZs at the federal, state, and local level throughout the state, which are mapped as part of its Fire and Resource Assessment Program. These areas are mapped based on fuels, terrain, weather, and other relevant factors, and include several classifications including Moderate, High, Very High. The project site is situated in a predominantly residential neighborhood and is not within or adjacent to any wildlands. Additionally, the project site is located on the Strawberry peninsula, which is bordered by the waters of San Francisco Bay on the west, south, and east. According to the FHSZ maps for Marin County, the project site and surrounding area are within an LRA and are designated as "urban, unzoned". There are no Moderate, High, or Very High FHSZs mapped within or surrounding the project site. The closest SRA is approximately 0.7-mile north of the project site, encompassing an area on the north side of Bay Vista Drive, and is designated as a Moderate FHSZ. This Moderate FHSZ-designated area adjoins another SRA designated as a High FSZH, approximately 1 mile north of the project site. The closest Very High FSZH-designated area is approximately 1.3 miles west of the project site; however, this area is separated from the project site by urban development and Richardson Bay.

In addition, the project site is not located within or adjacent to the WUI. While the WUI does not represent an actual wildfire hazard designation, it does denote areas that are at increased risk of wildfire due to the adjacency of urban development to undeveloped lands, which are typically more fire-prone (MCFD 2020). Therefore, although wildfire

risk poses a hazard to greater Marin County, which has experienced several large wildfires in recent years, it is not anticipated that the proposed project would exacerbate the risk of wildfire given its location in an urbanized area that is surrounded by the waters of San Francisco Bay on the west, south, and east.

Although the project site is not within or adjacent to WUI areas or a Moderate, High, or Very High FSHZ, the project site supports fire-prone vegetation, including dead and declining tree species, scrub habitat, and grasslands. As such, the potential risk of wildfire exists at the project site. Project construction would involve the use of several types of construction equipment, including an excavator, a backhoe loader, a compactor, and hand tools. Construction would include the use of equipment and materials that could be a source of wildfire ignition, and could increase the risk of wildfire at the project site. However, project construction would be required to comply with the CBC and California Fire Code, which establish requirements that would be applicable during construction and demolition, including proper storage procedures for combustible materials and the proper refueling protocol. Additionally, project construction would comply with PRC Section 4427, which includes fire safety statutes that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment with internal combustion engines; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on site for various types of work in fire-prone areas.

As part of the proposed project, several dead and declining trees would be removed from the project site, and a defensible safe zone would be established, including 30-foot and 100-foot fuel management zones. Landscape improvements within the 30-foot fuel management zone would consist primarily of non-irrigated native grasses, ground covers with shrub plantings, with limited areas of irrigated new plantings. Existing trees within the 30-foot zone would be pruned of all dead wood and branches within ten feet of the buildings. The 100-foot fuel management zone would be similar to the 30-foot zone and would consist of annual grass understory with some areas of brush and a mix of hardwoods and conifers. In this zone grasses would be mowed or grazed and all dead wood and branches within ten feet of the ground or surrounding vegetation would be removed. All invasive species of brush would be removed, and remaining shrubs native shrubs would be pruned or removed to ensure no continuity with other shrub masses or trees. Subject to recommendations by the arborist, healthy Monterey pines would be retained, and dead, dying, or diseased trees would be removed. Additionally, the project site would be replanted with native species, including clusters of oaks, buckeyes, and compatible ornamental species. Trees replanted on-site would be sited accordingly in conformance with the Southern Marin County Fire Protection District's fire protection standards related to vegetation management (e.g., defensible space). No fire-prone species would be planted in fuel management zones. The implementation of vegetation management procedures and the maintenance of defensible spaces would reduce the existing level of potential wildfire risk at the project site, resulting in a net benefit with respect to this issue.

For the reasons described above, the proposed project would not exacerbate wildfire risks related to slope, prevailing winds, and other factors, and therefore would not expose project occupants to pollutant concentrations or expose people or structures to a significant risk of loss, injury or death involving wildfire or the uncontrolled spread of a wildfire. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.8-6: Installation or Maintenance of Associated Infrastructure That May Exacerbate Fire Risk or Result in Temporary or Ongoing Impacts to the Environment

Wildfire-related infrastructure associated with the proposed project would include fuel breaks and vegetation management. The effects of the installation or maintenance of wildfire-related infrastructure on other environmental resources are addressed in the applicable resource sections throughout this EIR and are considered as part of the overall development of the proposed project. The effects associated with installation or maintenance of such infrastructure are varied and may affect certain resources, including biological resources (addressed in Section 3.5, "Biological Resources"). See Section 3.5 for a discussion of potential impacts of fuel management activities on biological resources. However, the implementation of fuel breaks and vegetation management would not exacerbate wildfire risk, but rather would reduce the existing level of wildfire risk at the project site, resulting in a net benefit with respect to this issue. Therefore, this impact would be **less than significant**.

Wildfire-related infrastructure associated with the proposed project would include fuel breaks and vegetation management. The effects of the installation or maintenance of wildfire-related infrastructure on other environmental resources are addressed in the applicable resource sections throughout this EIR and are considered as part of the overall development of the proposed project. As discussed under Impact 3.8-5, the proposed project includes the establishment of defensible safe zones, including 30-foot and 100-foot fuel management zones, as well as the removal of dead and declining trees from the project site, some of which are protected species under the County Code. Within the 100-foot fuel management zone, grasses would be mowed or grazed and all dead wood and branches within 10 feet of the ground or surrounding vegetation would be removed. All invasive species of brush would be removed, and remaining shrubs native shrubs would be pruned or removed to ensure no continuity with other shrub masses or trees. Buildout of the site would include retention of existing infrastructure as well as installation of new utility lines and infrastructure. All newly installed utility lines would be constructed within joint trenches, existing roadways, or within the footprint of existing utility infrastructure and would not require construction across undisturbed ground.

The effects associated with installation or maintenance of such infrastructure are varied and may affect certain resources, including biological resources (addressed in Section 3.4, "Biological Resources. See Section 3.4 for a discussion of potential impacts of fuel management activities on biological resources. However, the implementation of fuel breaks and vegetation management would not exacerbate wildfire risk, but rather would reduce the existing level of wildfire risk at the project site. Therefore, this impact would be **less than significant**. As with Impact 3.8-5 discussed above, the net effect compared with existing conditions would be beneficial.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.8-7: Expose People or Structures to Significant Post-Wildfire Risks

The project site and surrounding area are not in or near an SRA, but rather are within an LRA and are designated as "urban, unzoned" according to the FHSZ maps for Marin County. There are no Moderate, High, or Very High FHSZs mapped within or surrounding the project site. In addition, the project site is not located within or adjacent to the WUI. However, the project site supports fire-prone vegetation, including dead and declining tree species, scrub habitat, and grasslands. As such, the potential risk of wildfire already exists at the project site. The proposed project includes the establishment of defensible safe zones, including 30-foot and 100-foot fuel management zones, as well as the removal of dead and declining trees from the project site, some of which are protected species under the County Code. These changes in existing conditions would make the project site safer from a fire risk standpoint than it currently is, resulting in a net benefit with respect to this issue. This impact would be **less than significant**.

As mentioned in Impact 3.8-5 above, the project site and surrounding area are not in or near an SRA, but rather are within an LRA and are designated as "urban, unzoned" according to the FHSZ maps for Marin County. There are no Moderate, High, or Very High FHSZs mapped within or surrounding the project site. In addition, the project site is not

located within or adjacent to the WUI. However, the project site supports fire-prone vegetation, including dead and declining tree species, scrub habitat, and grasslands. As such, the potential risk of wildfire exists at the project site. As part of the proposed project, several dead and declining trees would be removed from the project site, and a defensible safe zone would be established, including 30-foot and 100-foot fuel management zones. Landscape improvements within the 30-foot fuel management zone would consist primarily of non-irrigated native grasses, ground covers with shrub plantings, with limited areas of irrigated new plantings. Existing trees within the 30-foot zone would be pruned of all dead wood and branches within ten feet of the buildings. The 100-foot fuel management zone would be similar to the 30-foot zone and would consist of annual grass understory with some areas of brush and a mix of hardwoods and conifers. In this zone, grasses would be mowed or grazed and all dead wood and branches within ten feet of the ground or surrounding vegetation would be removed. All invasive species of brush would be removed, and remaining shrubs native shrubs would be pruned or removed to ensure no continuity with other shrub masses or trees. Subject to recommendations by the arborist, healthy Monterey pines would be retained, and dead, dying, or diseased trees would be removed. Additionally, the project site would be replanted with native species, including clusters of oaks, buckeyes, and compatible ornamental species. Trees replanted on-site would be sited accordingly in conformance with the Southern Marin County Fire Protection District's fire protection standards related to vegetation management (e.g., defensible space). No fire-prone species would be planted in fuel management zones. The implementation of vegetation management procedures and the maintenance of defensible spaces would reduce the potential wildfire risk at the project site, resulting in a net benefit with respect to this issue.

For these reasons, the proposed project would not exacerbate wildfire risk, and therefore would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

3.9 HYDROLOGY

This section identifies the regulatory context and policies related to hydrology and water quality, describes the existing hydrologic conditions at the project site, and evaluates potential hydrology and receiving water-quality impacts of construction and operation of the Project. Potential effects on the delivery infrastructure and capacity of water supply, sewer/wastewater treatment, and drainage/stormwater facilities are addressed in Section 3.16, "Utilities and Service Systems." The Hydrology and Hydraulic Study for The Seminary, which was independently reviewed and analyzed for use in the preparation of this section, is included as Appendix N (CSW|ST2 2021).

Scoping comments received regarding hydrology and water quality in response to the notice of preparation (NOP) requested that the EIR address seepages potentially qualifying as jurisdictional wetlands, stormwater impacts to neighboring properties, existing drainage facilities, impacts on shoreline flooding, and sea level rise. See Appendix A for all NOP comments received.

3.9.1 Regulatory Setting

FEDERAL

Clean Water Act

The US Environmental Protection Agency (EPA) is the lead federal agency responsible for water quality management. The Clean Water Act (CWA) is the primary federal law that governs and authorizes water quality control activities by EPA as well as the states. Various elements of the CWA address water quality and are discussed below.

CWA Water Quality Criteria/Standards

Pursuant to federal law, EPA has published water quality regulations under Title 40 of the Code of Federal Regulations (CFR). Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the act, water quality standards consist of designated beneficial uses of the water body in question and criteria that protect the designated uses. Section 304(a) requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. As described in the discussion of state regulations below, the State Water Resources Control Board (State Water Board) and its nine regional water quality control boards (RWQCBs) have been delegated the authority in California to identify beneficial uses and adopt applicable water quality objectives.

CWA Section 303(d) Impaired Waters List

Under Section 303(d) of the CWA, states are required to develop lists of water bodies that do not attain water quality objectives after implementation of required levels of treatment by point source dischargers (municipalities and industries). Section 303(d) requires that the state develop a total maximum daily load (TMDL) for each of the listed pollutants. TMDL is the amount of the pollutant that the water body can receive and still comply with water quality objectives. The TMDL is also a plan to reduce loading of a specific pollutant from various sources to achieve compliance with water quality objectives. In California, implementation of TMDLs is achieved through water quality control plans, known as Basin Plans, of the State RWQCBs. See "State Plans, Policies, Regulations, and Laws," below.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the CWA to regulate municipal and industrial discharges to surface waters of the United States. NPDES permit regulations have been established for broad categories of discharges including point source waste discharges and nonpoint source stormwater runoff. Each NPDES permit identifies limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits.

"Nonpoint source" pollution originates over a wide area rather than from a definable point. Nonpoint source pollution often enters receiving water in the form of surface runoff and is not conveyed by way of pipelines or discrete conveyances. Two types of nonpoint source discharges are controlled by the NPDES program: discharges caused by general construction activities and the general quality of stormwater in municipal stormwater systems. The goal of the NPDES nonpoint source regulations is to improve the quality of stormwater discharged to receiving waters to the maximum extent practicable. The RWQCBs in California are responsible for implementing the NPDES permit system (see the discussion of "State Plans, Policies, Regulations, and Laws" section below).

National Flood Insurance Act

The Federal Emergency Management Agency (FEMA) is tasked with responding to, planning for, recovering from and mitigating against disasters. The Federal Insurance and Mitigation Administration within FEMA is responsible for administering the National Flood Insurance Program (NFIP) and administering programs that aid with mitigating future damages from natural hazards.

FEMA prepares Flood Insurance Rate Maps that delineate the regulatory floodplain to assist local governments with the land use planning and floodplain management decisions needed to meet the requirements of NFIP. Because the project site contains no flood hazard areas, the National Flood Insurance Act would not apply to the project site.

STATE

California Porter-Cologne Act

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act) (Water Code Section 13000 et seq.). The Porter-Cologne Act grants the State Water Board and each of the nine RWQCBs power to protect water quality and is the primary vehicle for implementation of California's responsibilities under the Clean Water Act. The applicable RWQCB for the proposed project is the San Francisco Bay RWQCB. The State Water Board and the San Francisco Bay RWQCB have the authority and responsibility to adopt plans and policies, regulate discharges to surface and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substances, sewage, or oil or petroleum products.

Under the Porter-Cologne Act, each RWQCB must formulate and adopt a water quality control plan (known as a "Basin Plan") for its region. The Basin Plan for the San Francisco Bay Region includes a comprehensive list of waterbodies within the region and detailed language about the components of applicable Water Quality Objectives (WQOs). The Basin Plan recognizes natural water quality, existing and potential beneficial uses, and water quality problems associated with human activities throughout the San Francisco Bay Basin. Through the Basin Plan, the San Francisco Bay RWQCB executes its regulatory authority to enforce the implementation of TMDLs, and to ensure compliance with surface WQOs. The Basin Plan includes both narrative and numerical WQOs designed to provide protection for all designated and potential beneficial uses in all its principal streams and tributaries. Applicable beneficial uses include municipal and domestic water supply, irrigation, non-contact and contact water recreation, groundwater recharge, fresh water replenishment, hydroelectric power generation, and preservation and enhancement of wildlife, fish, and other aquatic resources.

The San Francisco Bay RWQCB also administers the adoption of waste discharge requirements (WDRs), manages groundwater quality, and adopts projects within its boundaries under the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit).

NPDES Construction General Permit for Stormwater Discharges Associated with Construction Activity

The SWRCB requires projects disturbing more than one acre of land during construction to obtain coverage under the SWRCB NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order 2022-0057-DWQ). Under the terms of the Construction General Permit, applicants must file a Notice of Intent with the RWQCB to be covered. Construction activities subject to the Construction General Permit clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or

reduce non stormwater discharges to storm sewer systems and other waters. A stormwater pollution prevention plan (SWPPP) must be developed and implemented for each site covered by the permit. The SWPPP must include best management practices (BMPs) designed to prevent construction pollutants from contacting stormwater and keep products of erosion from moving off-site into receiving waters throughout the construction and life of the project; the BMPs must address source control and, if necessary, pollutant control. The current version of the Construction General Permit was adopted by the SWRCB on September 8, 2022 and became effective on September 1, 2023.

NPDES Stormwater Permit for Discharges from Small Municipal Separate Storm Sewer Systems

The Municipal Stormwater Permitting Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s). Stormwater is runoff from rain or snow melt that runs off surfaces such as rooftops, paved streets, highways or parking lots and can carry with it pollutants such as oil, pesticides, herbicides, sediment, trash, bacteria and metals. The runoff can then drain directly into a local stream, lake, or bay. Often, the runoff drains into storm drains which eventually drain untreated into a local waterbody.

Although prior to being regulated under the Small MS4 Permit, the municipalities in Marin County formed the Marin County Stormwater Pollution Prevention Program (MCSTOPPP) for the purpose of developing a countywide program to satisfy the requirements of the CWA and Basin Plan. In 2021 their name was updated to the Marin Countywide Stormwater Pollution Prevention Program. The MCSTOPPP also developed a stormwater management plan (Action Plan 2010) to comply with the requirements of the Small MS4 Permit. The Action Plan 2010 includes Performance Standards for the program elements that must be addressed under the Small MS4 Permit: municipal maintenance activities (including road repair and maintenance); illicit discharge controls; new development, redevelopment and construction site controls; industrial and commercial discharge controls; and public information and participation. Local Small MS4 Permit activities (MCSTOPPP) are overseen by the Water Board.

California Department of Water Resources

The California Department of Water Resources (DWR) manages some of California's most important water resources, systems, and infrastructure, including the State Water Project (SWP). DWR's responsibilities and duties include: preventing and responding to floods, droughts, and catastrophic events; informing and educating the public on water issues; developing scientific solutions; restoring habitats; planning for future water needs, climate change impacts, and flood protection; constructing and maintaining facilities; generating power; ensuring public safety; and providing recreational opportunities.

Water Quality Control Plan for the San Francisco Bay Basin

The Basin Plan (including amendments adopted through 2017) describes the beneficial uses that the San Francisco RWQCB will protect as well as the water quality objectives required to achieve these beneficial uses. Table 3.9-1 lists the existing beneficial uses (E) and potential beneficial uses (P) for the streams that flow into Richardson Bay which is where runoff from the project site drains.

Table 3.9-1 Existing and Potential Beneficial Uses for Water Bodies in the Vicinity of the Project Site

Basin	Waterbody	IND: Industrial Service supply	COMM: Commercial and Sport Fishing	SHELL: Shellfish Harvesting	COLD: Cold Freshwater Habitat	EST: Estuarine Habitat	MIGR: Fish Migration	RARE: Preservation of Rare and Endangered Species	SPWN: Fish Spawning	WARM: Warm Freshwater Habitat	WILD: Wildlife Habitat	REC-1: Water Contact Recreation	REC-2: Noncontact Water Recreation	NAV: Navigation
Richardson Bay		E	E	E		E	E	E	E		E	E	E	E
	Arroyo Corte Madera del Presidio*			E	E		E	E	E	E	E	E	E	
	Coyote Creek*				E					E	E	E	E	

Notes: E = existing beneficial uses, P = potential beneficial uses

*Flows into Richardson Bay

Source: SFBRWQCB 2017.

Groundwater Management

Groundwater Management is outlined in the California Water Code, Division 6, Part 2.75, Chapters 1-5, Sections 10750 through 10755.4. The Groundwater Management Act was first introduced in 1992 as AB 3030, and has since been modified by SB 1938 in 2002, AB 359 in 2011, and the Sustainable Groundwater Management Act (SB 1168, SB 1319, and AB 1739) in 2014. The intent of the Acts is to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions and to provide a methodology for developing a groundwater management plan.

The Sustainable Groundwater Management Act of 2014 became law on January 1, 2015, and applies to all groundwater basins in the state (Water Code Section 10720.3). The proposed project is not located within a groundwater basin, so the Groundwater Management Act does not apply to the project site.

LOCAL

Marin County Flood Control and Water Conservation District

The mission of the Marin County Flood Control and Water Conservation District is to reduce the risk of flooding for the protection of life and property while utilizing sustainable practices. The District aims to meet this mission through effective, transparent, and responsive planning, design, construction, operation, and maintenance of County-owned facilities such as stormwater pump stations, detention basins, bypass drains, creeks, ditches, and levees.

Marin County Code

Chapter 23.18 Urban Runoff Pollution Prevention. The Code protects and enhances watercourses by minimizing discharges other than storm runoff to storm drains or watercourses; responding to the discharge of spills, preventing and controlling the discharge of spills to storm drains or watercourses and prohibiting dumping or disposal of materials other than stormwater; reducing pollutants in stormwater discharges to the maximum extent practicable; requiring operators of construction sites, new or redeveloped land, and industrial and commercial facilities to install, implement, or maintain appropriate best management practices (BMPs); and maintaining pre-development stormwater runoff rates and preventing nonpoint source pollution whenever possible, through stormwater management controls and ensuring that these management controls are properly maintained.

Chapter 23.18.093 – Construction-phase best management practices. This Code requires that any person performing construction activities in the county shall implement appropriate BMPs to prevent the discharge of construction wastes, including soil or sediment, or contaminants from construction materials, tools and equipment from entering a county storm drain, watercourse, bay or ocean.

Chapter 23.18.094 – Permanent best management practices for new and redevelopment. The agency[1] may require, as a condition of project approval, permanent controls designed to remove sediment and other pollutants and to mimic the pre-project site hydrology by controlling the flow rates and/or the volume of stormwater runoff from the project's added and/or replaced impervious surfaces. These controls may include limits on impervious area. The selection and design of such controls shall be in general accordance with criteria established or recommended by federal, state and local agencies, and where required by the agency, the Bay Area Stormwater Management Agencies Association (BASMAA) Post Construction Manual. Where physical and safety conditions allow, the preferred control measure is to retain drainageways above ground and in as natural a state as possible or other biological methods such as bioretention areas. For each new development and redevelopment project subject to phase II stormwater permit provision E.12, or where required by the nature and extent of a proposed project and where deemed appropriate by the agency, every applicant shall develop, submit and implement a stormwater control plan according to the requirements in Section 24.04.627.

[1] Chapter 23.18.030 of the Marin County Code defines "agency" as the public works department of the county of Marin, unless otherwise stated. Per Chapter 23.18.040 of the Marin County Code, this chapter of the Code shall be administered for the county by the agency. Where storm drains and/or watercourses have been accepted for maintenance by a public agency legally responsible for certain storm drains and/or watercourses, then the responsibility for enforcing the provisions of this chapter may be assigned to such agency (through contract or agreement with the county) with respect to those storm drains and/or watercourses for which they have accepted maintenance. In administering this chapter, the agency has the authority to request and require the submittal of information deemed necessary to assess compliance with this chapter and the phase II stormwater permit.

Chapter 24.04.520 – Hydrologic and hydraulic design. Drainage calculations for future storm events shall be based on the 100-year design storm.

Marin Countywide Plan

The Water Resources and Safety elements of the Marin Countywide Plan contain the following policies related to hydrology and water quality (Marin County 2023):

- **Policy WR-1.1: Protect Watersheds and Aquifer Recharge.** Give high priority to the protection of watersheds, aquifer-recharge areas, and natural drainage systems in any consideration of land use.
- **Policy WR-1.2: Restore and Enhance Wetlands.** Support watershed restoration efforts, coordinate County watershed activities with efforts by other groups, and simplify permit acquisition for watershed restoration and enhancement projects.
- **Policy WR-1.3: Improve Infiltration.** Enhance water infiltration throughout watersheds to decrease accelerated runoff rates and enhance groundwater recharge. Whenever possible, maintain or increase a site's predevelopment infiltration to reduce downstream erosion and flooding.
- **Policy WR-2.1: Reduce Toxic Runoff.** Reduce the volume of urban runoff from pollutants — such as pesticides from homes, golf courses, cleaning agents, swimming pool chemicals, and road oil and of excess sediments and nutrients from agricultural operations.
- **Policy WR-2.2 Reduce Pathogen, Sediment, and Nutrient Levels.** Support programs to maintain pathogen and nutrient levels at or below target levels set by the Regional Water Quality Control Board, including the efforts of ranchers, dairies, agencies, and community groups to address pathogen, sediment, and nutrient management in urban and rural watersheds.
- **Policy WR-2.3: Avoid Erosion and Sedimentation.** Minimize soil erosion and discharge of sediments into surface runoff, drainage systems, and water bodies. Continue to require grading plans that address avoidance of soil erosion and on-site sediment retention. Require developments to include onsite facilities for the retention of sediments, and, if necessary, require continued monitoring and maintenance of these facilities upon project completion.
- **Policy WR-2.4: Design County Facilities to Minimize Pollutant Input.** Design, construct, and maintain County buildings, landscaped areas, roads, bridges, drainages, and other facilities to minimize the volume of toxics, nutrients, sediment, and other pollutants in stormwater flows, and continue to improve road maintenance methods to reduce erosion and sedimentation potential.
- **Policy EH-3.4: Protect Coastal Areas from Tsunamis.** Refer to tsunami wave run-up and inundation maps when reviewing proposed development along coastal areas of Marin County.
- **Policy EHS-4.2: Retain Natural Conditions.** Ensure that flow capacity is maintained in stream channels and flood plains, and achieve flood management using flood plain restoration and biotechnical techniques instead of storm drains, culverts, riprap, and other forms of structural stabilization.

Amendments to the Strawberry Community Plan

The Strawberry Community Pan includes the following design guideline for protecting marshes and natural resource areas from erosion:

III. Development Guidelines

E. General Design Guidelines

Erosion Control - Site designs should be prepared and construction activities implemented to minimize adverse impacts upon adjacent marshes and natural resource areas. Individual environmental assessments should clearly review development proposals and indicate the potential for erosion, the possible impacts and methods for mitigating those impacts.

3.9.2 Environmental Setting

HYDROLOGY AND DRAINAGE

Regional Hydrology

The project site is located on the Strawberry Point peninsula surrounded by Richardson Bay, approximately 13 miles north of San Francisco. Richardson Bay is a shallow, biologically-rich estuary that joins the San Francisco Bay where the water depth becomes 30 feet or more. The project site is part of the larger San Francisco Bay Delta watershed, which covers more than 75,000 square miles and includes the only inland delta in the world. The San Francisco Bay Delta watershed is divided into subwatersheds, including the Arroyo Corte Madera Del Presidio-Frontal San Francisco Bay Estuaries subwatershed and the Angel Island-San Francisco Bay Estuaries subwatershed, in the portion of the San Francisco Bay where the project is proposed. Creeks within these subwatersheds include Old Mill Creek, Arroyo Corte Madera Del Presidio Creek, and Coyote Creek, which are tributaries to Richardson Bay. The subwatersheds and the creeks within them are shown on Figure 3.9-1, "Subwatersheds."

The project site has a temperate Mediterranean climate, with heavy rain in the winter and warm dry summers. Historically the maximum temperature at the project site is 78.5°F and occurs in August. The minimum is 57.4° F and occurs in January. Between 1981 to present, the maximum rainfall was 59.4," the minimum was 11.5," and the mean is 31.6" per year (DWR 2022a).

Local Hydrology

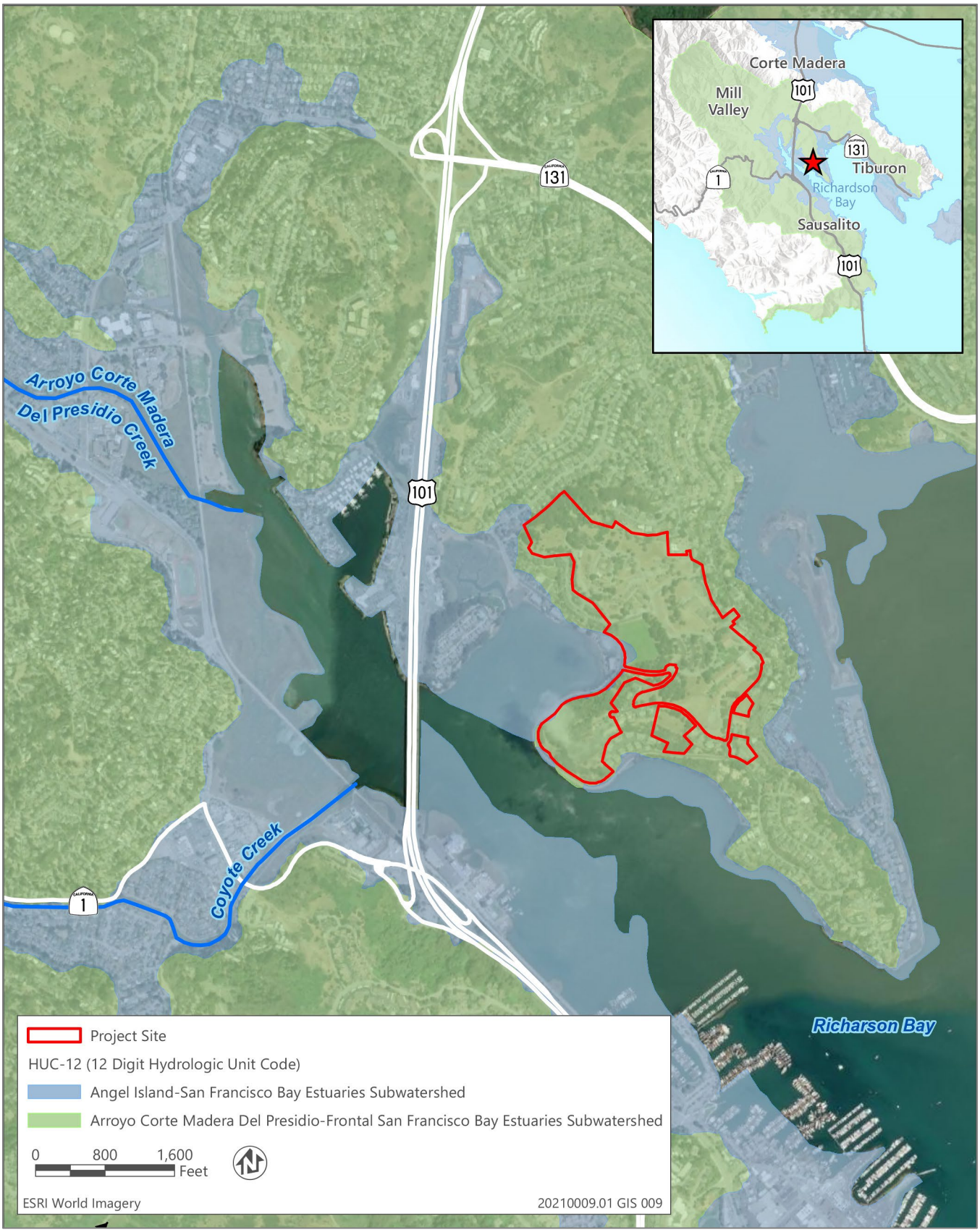
The topography of the project site consists primarily of hillsides and ridgeline on the Strawberry Peninsula with a range of elevation from approximately 10 to 250 feet above mean sea level. The topography of the project site generally slopes east to west with north and south facing slopes varying in steepness from 25 to 43 percent (CSW|ST2 2021). The peninsula is surrounded on three sides by Richardson Bay and contains no named streams or creeks.

Stormwater Drainage

The project site contains 18.9 acres of existing impervious area (roofs, roads, parking areas, etc.) which are drained with an existing storm drain system. The existing storm drain system includes 14 outlets that ultimately drain to Richardson Bay (CSW|ST2 2021), as shown on Figure 3.9-2, "Existing Stormwater infrastructure." Most of the outlets are on the west side of the peninsula but a small area flows east into Richardson Bay through two outlets (CSW|ST2 2021). The County maintains the storm drains and inlets both within and outside of the project site that are located within County-maintained roadway right-of-way. A homeowner's association (HOA) west of the project site has indicated that the storm drain that runs under their property has failed. They assert that storm water originates on the project site and have expressed concern that the project would increase the amount of storm water flowing through the system. The existing project site storm drain system currently directs flows down Hodges Drive and through the drains that convey stormwater under the HOA property. This storm drain also includes runoff from a large portion of Seminary Drive. According to Marin County Public Works Department, maintenance of storm drain infrastructure on private property is the responsibility of the property owner if a drainage easement that was dedicated and accepted by the County does not exist (Armstrong, pers. comm., 2022).

Flood Conditions

There are no mapped FEMA flood zones in the project site (EPA 2022). The project site is outside the 500-year flood zone. There are no dams with mapped dam breach inundation areas that would affect the project site in the case of dam failure (DWR 2022b). Base flood elevations in the project vicinity are dictated by the conditions of Richardson Bay and the greater San Francisco Bay Delta watershed. Storm water flows from the project site have minimal influence on the base flood elevation (CSW|ST2 2021).



Sources: Data downloaded from USGS in 2022; adapted by Ascent in 2022.

Figure 3.9-1 Subwatersheds

Sources: Data received from Marin County, DSW/Stuber-Stroeh Engineering Group, and Mark Cavagnero Associates in 2022; adapted by Ascent in 2022.

Figure 3.9-2 Existing Stormwater Infrastructure

Tsunami and Seiche Hazard

A tsunami is a long, high sea wave caused by an earthquake, submarine landslide, or other disturbance. Richardson Bay is located inside the San Francisco Bay, which is partially protected from a tsunami originating in the Pacific Ocean. A California Geological Survey map shows the shoreline of Strawberry Point as having a potential for being inundated by a tsunami, which may flood the low-lying areas adjacent to the shoreline on or near Seminary Drive and the low-lying area between Silva Island and the northwest corner of the site (Appendix J). Additionally, East Strawberry Drive north of Ricardo Lane is in a Tsunami Hazard Area (California Department of Conservation 2023). A seiche is a temporary disturbance or oscillation in the water level of a partially enclosed body of water caused by changes in atmospheric pressure, earthquake, or underwater landslide. A seiche wave could occur in the San Francisco Bay and impact the project site. The largest seiche recorded in the San Francisco Bay was 1.97 feet amplitude waves near Benicia (Miller Pacific 2016). The project site is above this height.

Sea Level Rise

Projected high tides under current conditions generally range between 5 and 8 feet above mean sea level (Tide-Forecast 2023). These heights increase during storm events and king tides, i.e., peak high tides that occur just after a new or full moon. As sea levels rise, the king tide elevations will be reached more frequently. The low elevation access roads to the project site and areas along Seminary Drive are currently impacted by flooding during high tide events during storms and king tides. A king tide event that was observed in December 2021 flooded areas of the low-lying parts of Redwood Highway Frontage Road on the west side of the highway near the intersection with Seminary Drive as well as shoulders of Seminary Drive.

Sea level rise (SLR) is an increase in the level of the world's oceans due to the effects of global warming. To help address potential vulnerability from SLR along the bay shoreline, Marin County prepared the Marin Bay Waterfront Adaptation and Vulnerability Evaluation (BayWAVE). The fundamental goal of the BayWAVE project is to increase awareness and preparation for future impacts. SLR scenarios include near-term, mid-term, and long-term impacts with and without a 100-year storm event. The BayWAVE vulnerability assessment identifies specific risk and impacts along the entire bay shoreline for several sea level rise scenarios, which were selected using the best available science and state guidance, and includes the high tide and storm flooding currently being experienced along the shoreline. The near-term (approximately 2030) scenario anticipates ten inches of SLR which becomes 46 inches in the 100-year storm. The mid-term (approximately 2050) scenario anticipates 20 inches of SLR which becomes 56 inches in the 100-year storm. The long-term (approximately 2100) scenario anticipates 60 inches of SLR which becomes 96 inches in the 100-year storm. Even in the long-term, 100-year storm scenario, the project site is not inundated by SLR. Figure 3.9-3, "Sea Level Rise Scenarios near the Project Site," shows the project site relative to these scenarios. Seminary Drive would be inundated by SLR in the near term 2030 scenario during the 100-year storm and the inundation extent would become more severe with SLR.

GROUNDWATER

The project site is not located in a groundwater basin. The closest groundwater basin is the Ross Valley basin located approximately 1.4 miles to the north (DWR 2022c). Marin County groundwater supplies are limited due to the presence of underlying bedrock (Marin County 2023). No wells extract groundwater resources from beneath the project site.

Soil borings conducted by the Geotechnical Engineer in 2010 encountered groundwater in two of the deeper of the 18 bore holes completed throughout the project area (Appendix J). Groundwater was encountered at 13 to 17 feet depth (Appendix J). Groundwater elevations are highly dependent on storm events and fluctuate seasonally (CSW|ST2 2021). As described in Section 3.5, Biological Resources, there are three isolated wet areas where a combination of surficial groundwater and localized runoff may be the source of surface water in the project area. They contain hydrophytic vegetation demonstrating that they are wet for enough of a portion of the year to support water-dependent vegetation. One of these potential wet areas is located outside and uphill from the disturbance footprint of the project. Two of these three wet areas are within the disturbance footprint of the project. These two wet areas likely do not meet the State definition of an aquatic resource because they are associated with roadside ditches that

Sources: Data downloaded from Our Coast Our Future in 2022; adapted by Ascent in 2022.

Figure 3.9-3 Sea Level Rise Scenarios near the Project Site

are not a relocated water of the State, or are excavated in a water of the state, and do not flow directly from or through another water into a water of the State, nor do they meet the federal definition because they are ditches excavated wholly in and draining only uplands that do not carry a relatively permanent flow of water.

WATER QUALITY

Surface Water Quality

There are no surface water bodies within the project site. Stormwater flows from the project site into Richardson Bay. Richardson Bay is listed as impaired on the EPA Clean Water Act 303 (d) List for fecal coliform (SFBRWQCB 2018). The main sources of pathogens from high fecal coliform bacteria concentrations are sanitary sewer system failures, stormwater runoff, and houseboat and vessel discharges (SFBRWQCB 2018). A TMDL for pathogens in Richardson Bay and its watershed was adopted in 2009 and has resulted in clear reductions in fecal coliform levels. Richardson Bay is also impaired by Dieldrin (an insecticide), Dioxin compounds (by-products of burning or industrial processes), E Coli and Enterococcus (bacteria), Furan Compounds (found in heat treated commercial foods), Metals [Mercury, PCBs (Polychlorinated biphenyls), chlordane], and Dichlorodiphenyltrichloroethane (an insecticide) (SWRCB 2022). Coyote Creek and Arroyo Corte Madera Del Presidio Creek which flow into Richardson Bay west of the project site are both impaired by Diazinon (an insecticide) (SWRCB 2022).

Groundwater Quality

Groundwater quality can be affected by many things, but the chief controls on the characteristics of groundwater quality are the source and chemical composition of recharge water, properties of the host sediment, and history of discharge or leakage of pollutants. Groundwater is limited in the project site due to the presence of underlying bedrock (Marin County 2019). The project site is not located in a groundwater basin. In general, groundwater quality throughout most of the region is suitable for urban and agricultural uses with only local impairments (Marin County 2019).

3.9.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Evaluation of potential hydrologic and water quality impacts is based on a review of existing documents and studies that address water resources in the vicinity of the project. Information obtained from these sources was reviewed and summarized to describe existing conditions and to identify potential environmental effects, based on the standards of significance presented in this section. In determining the level of significance, the analysis assumes that the project would comply with relevant federal, state, and local laws, ordinances, and regulations.

THRESHOLDS OF SIGNIFICANCE

A hydrology impact would be significant if implementation of the project would do any of the following:

- violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would
    - result in substantial erosion or siltation on- or off-site;
    - result in flooding on-site or off-site;

- create or contribute runoff water that would exceed the capacity of existing or planned stormwater- drainage systems or provide substantial additional sources of polluted runoff;
- impede or redirect flood flows

- in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation
- conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan; and/or
- Exacerbate any existing and/or projected damage to the environment, including existing structures, human health, and sensitive resources, associated with reasonably foreseeable future sea level rise and peak high tides.

ISSUES NOT DISCUSSED FURTHER

All the issues identified in the preceding list of thresholds are addressed in the following impact analysis.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.9-1: Substantially Degrade Surface Water or Groundwater Quality

Although development of the proposed project on the 127-acre former Golden Gate Baptist Theological Seminary property has the potential to diminish water quality within the project site and in Richardson Bay, standard construction requirements would protect local and regional water quality. Vegetation clearing, grading, and excavation increase the potential for erosion and sedimentation. The use of equipment during construction could cause spills or leaks of fuel, oil, and other fluids. Wet areas with hydric vegetation have been identified in the project site, which could experience construction related water quality impacts. Once constructed, the project site would be stabilized and would not degrade water quality. The origin of standard construction requirements for the project would be from compliance with Marin County Grading Code Chapter 23.18 and the California Construction General Permit Order 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012-0006-DWQ), including implementation of a stormwater pollution prevention plan and best management practices. These measures would avoid the potential for construction to substantially degrade water quality. The impact of the proposed project on water quality would be less than significant.

Development of the proposed project on the former Golden Gate Baptist Theological Seminary property would include vegetation removal, soil disturbance, earth moving, grading, excavation, cutting and filling, installation of infrastructure, stockpiling, paving, and construction of buildings which could degrade surface and ground water quality through increased erosion and sedimentation. Although borings taken in the project area show ground water at a depth of 13-17 feet, there is a potential that dewatering would be required if groundwater was encountered during excavation. Additionally, construction equipment has the potential to cause spills or fuel, oil, lubricants, and other fluids in the case of an accident or spill which could impact surface and ground water quality.

There are three wet areas described as potential aquatic resources in the project site as mapped by an Ascent wetland ecologist on September 1, 2022. The resources were mapped as potential resources based on the presence of hydrophytic vegetation and hydrology, but a regulatory aquatic resources delineation was not performed. Because one of these wet areas is located outside of and upslope from the disturbance footprint of the project, neither direct alteration nor project runoff impacts would occur in that area. Two of these three wet areas are within the disturbance footprint of the project and may be subject to water quality degradation from the project. These on-site areas do not likely meet the State definition of an aquatic resource and, therefore, do not offer substantial resource quality, because they are associated with roadside ditches that do not flow directly from or through another water source into a water of the State. Also, they do not meet the federal definition because they are ditches excavated wholly in and draining only uplands that do not carry a relatively permanent flow of water. These features are dry for most of the year. Project runoff into these two wet ditches would not result in significant water quality impacts,

because of the absence of substantial resource qualities and the ditch's predominantly dry condition during most of the year.

The project would comply with the SWRCB Construction General Permit (2022-0057-DWQ), which would require water quality protection through standard construction specifications. This permit requires the development of a SWPPP and the installation of erosion and sediment controls; implementation and maintenance of temporary construction BMPs to control and effectively manage site runoff; and waste control measures to prevent leakage or spill of hazardous materials into soils and surface waters. The SWPPP would have the following required elements:

- Site-specific temporary BMPs would be identified to prevent the transport of earthen materials and other construction waste materials from disturbed land areas, stockpiles, and staging areas during periods of precipitation or runoff. BMPs could include using filter fences, fiber rolls, erosion control blankets, mulch (such as wood chips), temporary drainage swales, settling basins, and other erosion-control methods.
- Site-specific temporary BMPs would be identified to prevent the tracking of earthen materials and other waste materials from the project site to off-site locations. BMPs could include using stabilized points of entry/exit for construction vehicles/equipment and designated vehicle/equipment rinse stations and sweeping.
- Site-specific temporary BMPs would be identified to prevent wind erosion of earthen materials and other waste materials from the project site. BMPs could include routine application of water to disturbed land areas and covering of stockpiles with plastic or fabric sheeting.
- A site-specific spill prevention and containment plan would be prepared and implemented. Project contractors would be responsible for storing on-site materials and implementing temporary BMPs capable of capturing and containing pollutants from fueling operations, fuel storage areas, and other areas used for the storage of hydrocarbon-based materials. This would include maintaining materials on-site (such as oil absorbent booms and sheets) for the cleanup of accidental spills, using drip pans beneath construction equipment, training site workers in spill response measures, immediately cleaning up spilled materials in accordance with directives from SFBRWQCB, and properly disposing of waste materials at an approved off-site location that is licensed to receive such wastes.
- Site-specific temporary BMPs would be identified to capture and contain pollutants generated by concrete construction, including using lined containment for rinse water to collect runoff from washing of concrete delivery trucks and equipment.
- Protective fencing would be used to prevent damage to trees and other vegetation that would remain after construction, including tree protection fencing and individual tree protection, such as wood slats strapped along the circumference of trees.
- Daily inspection and maintenance of temporary BMPs would be required. The prime contractor would be required to maintain a daily log of temporary construction BMP inspections and keep the log on-site during project construction for review by SFBRWQCB.
- Tree removal activities, including the dropping of trees, would be confined to the construction limit boundaries.
- Construction boundary fencing would be required to limit disturbance and prevent access to areas not under active construction.
- Postconstruction BMPs and the BMP maintenance schedule would be identified. Postconstruction BMPs must address water quality, channel protection, overbank flood protection, and extreme flood protection.
- Disturbed areas would be revegetated or stabilized with approved native seed mixes and/or mulch.

If dewatering operations were required, dewatering effluent would be discharged in accordance with the General Order for Dewatering, Order No. R2-2018-0036. The discharge from the dewatering operations would be treated and made part of the project SWPPP to minimize any degradation of water quality.

During construction, the project would also comply with Marin County Code Chapter 23.18, *Urban Runoff Pollution Prevention*. The Code protects and enhances watercourses by minimizing discharges other than storm runoff to storm

drains or watercourses; responding to the discharge of spills, preventing and controlling the discharge of spills to storm drains or watercourses and prohibiting dumping or disposal of materials other than stormwater; reducing pollutants in stormwater discharges to the maximum extent practicable; and requiring operators of construction sites, new or redeveloped land, and industrial and commercial facilities to install, implement, or maintain appropriate BMPs. The Code also requires any person performing construction activities in the County to implement appropriate BMPs to prevent the discharge of construction wastes, including soil or sediment, or contaminants from construction materials, tools and equipment from entering a county storm drain, watercourse, bay or ocean.

During operation, the project site would be stabilized and stormwater basins would detain and treat runoff, improving runoff water quality in the project site. Marin County Code 23.18.095 requires routine vegetation, sediment and debris removal, and annual inspection and maintenance of structures. Vegetation removal would not include healthy bank vegetation and would likely occur annually or on an as-needed basis and would not include ground-disturbing activities and would employ hand tools, thus minimizing risks of water quality impacts from spills or equipment leaks in the channel or erosion from disturbed soils.

Compliance with the Construction General Permit, including preparation and implementation of the SWPPP and associated BMPs, as well as inspection and reporting, as well as compliance with Chapter 23.18 of the Marin County Code, would effectively avoid the potential for substantial degradation of surface and groundwater quality during construction and operation of the project. This would result in a water quality impact that would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.9-2: Substantially Decrease Groundwater Supplies or Interfere with Groundwater Recharge Such That the Project May Impede Sustainable Groundwater Management of the Basin

The project is not located in a groundwater basin and groundwater resources are not extracted from beneath the project site. The project would be served by Marin Municipal Water District, which sources its water from surface water and would not deplete groundwater resources. Although the proposed project would increase impervious surfaces by approximately 5.3 acres over current conditions, bioretention areas and stormwater detention tanks are proposed onsite to allow for the infiltration of stormwater throughout the project site, retaining groundwater recharge opportunities. For these reasons, implementing the project would have a **less-than-significant** impact on groundwater resources and recharge.

The proposed project would increase impervious surfaces in the project area by approximately 5.3 acres over current conditions. Impervious surfaces prevent infiltration of stormwater and impede groundwater recharge. After construction, however, 78.1 acres of the project site (approximately 75 percent of the dry land project area) would remain pervious. Several bioretention areas and stormwater detention tanks are proposed onsite to allow for the infiltration of stormwater throughout the project site. Bioretention areas are sized and designed according to Chapter 4 of the BASMAA post construction manual, which requires bioretention for treatment of runoff at approximately 4 percent of each drainage management area (DMA). The project would be required by County Code 24.04.520 and BASMAA to detain stormwater such that post-development 100-year peak discharge does not exceed pre-development peak discharge. This would allow for similar recharge of groundwater resources as currently occurs.

The project site is not located in a groundwater basin. The closest groundwater basin is the Ross Valley basin located approximately 1.4 miles to the north (DWR 2022c). Groundwater is limited in the project site due to the presence of underlying bedrock (Marin County 2019).

Marin Water's water supply originates from seven reservoirs and water from the Sonoma County Water Agency, which comes from the Russian River system (Marin Water 2021). The project site is served by Marin Water and because Marin County does not use groundwater, the project would not deplete groundwater resources. Thus, the project's stormwater bioretention and detention facilities would allow for groundwater recharge and the project's

water supply is sourced from surface water. Therefore, the project would have a **less-than-significant** impact on groundwater depletion and recharge.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.9-3: Substantially Alter the Existing Drainage Pattern of Project Area

There are no streams or rivers in the project site. The proposed storm drain system incorporates stormwater bioretention and detention as required by Marin County Code (Sections 24.04.520 and 24.04.627) and BASMAA. While the project would increase impervious area and alter the existing storm drain system, which would change the rate and timing of stormwater drainage and could result in erosion, siltation, flooding, and exceedance of adjacent storm drain systems and drainageways, compliance with the standard requirements of county ordinance requirements would avoid substantial changes. These storm water management measures would detain stormwater runoff and maintain flow rates such that post-project peak runoff flow rates would be less than pre-project levels (CSW|ST2 2021). Therefore, the project would not result in substantial off-site erosion, flooding, or contribute runoff that would exceed existing storm drain systems. The impact would be **less than significant**.

The development of the proposed project would result in a net increase of impervious surface area within the project site of approximately 5.3 acres. This impervious area causes an overall increase between pre-development and post-development in peak runoff in the 100-year storm for most subwatersheds in the project site (CSW|ST2 2021). Bioretention and detention facilities are proposed and would be installed to increase detention time of runoff, such that the 100-year post-development peak discharge flow rates would not exceed pre-development peak discharge rates. Buildout of the project would include retention of existing storm drain infrastructure as well as installation of new drainage inlets, storm drain pipes, and stormwater best management practices (e.g., bioretention and detention facilities). The Marin County Department of Public Works would be responsible for the maintenance of the existing and proposed Marin County storm drain system. Maintenance of storm drain infrastructure on private property is the responsibility of the property owner if a drainage easement that was dedicated and accepted by the County does not exist (Armstrong, pers. comm., 2022). Proposed storm drain infrastructure is described below for each component of the project site (See Figure 2-3, "Project Site Planning Ares," in Chapter 2, "Project Description"). Stormwater bioretention areas are shown in Figures 2-4, "Illustrative Site Plan (West)," and 2-5, "Illustrative Site Plan (East)," in Chapter 2, "Project Description."

- **Existing 2-acre seminary playing field**: The field would be raised approximately 25-30 feet to create a landscaped berm adjacent to Seminary Drive. An at-grade style stormwater bioretention area would be developed along the northern border of the field.
- **Academic Campus Planning Area:** No new storm drain is proposed in this planning area.
- **Chapel Hill Planning Area:** A new storm drain and stormwater treatment area are proposed.
- **Dormitory Hill Planning Area:** A new storm drain and stormwater treatment area are proposed.
- **Hodges/Shuck Planning Area:** A new storm drain and stormwater treatment area are proposed.
- **Mission Drive Planning Area:** A new storm drain, relocation of an existing storm drain along Mission Drive, and stormwater treatment area are proposed.
- **Seminary Point Planning Area:** A new storm drain and stormwater treatment area are proposed.
- **Shuck Drive Knoll Planning Area:** A new storm drain and stormwater treatment area are proposed.

The project would also provide appropriate drainage for any required transportation facilities improvements including widening sidewalks and roadways within the project site. Project improvements would comply with the BASMAA post-construction manual, which provides a low impact development approach to implementing Provision E.12 "Post-Construction Stormwater Management Program," and mandates the County to control pollutants in runoff

from newly created or replaced impervious surfaces. To meet the requirements for a Regulated Project, site design measures will include:

- Routing runoff to stormwater treatment facilities (i.e. bioretention area) sized and designed according to Chapter 4 of the BASMAA Post-Construction Manual. Bioretention areas are sized at approximately 4 percent of the equivalent DMA.
- Providing for ongoing maintenance of bioretention facilities.
- Identifying potential source of pollutants and implementing corresponding source control measures.

The project is required to detain 77,017 cubic feet as calculated by the *Hydrology and Hydraulic Study for The Seminary* (Hydrology Study), which was based on 4.7 acres of impervious area and the requirements listed above. Subsequent to preparation of the Hydrology Study, the total impervious area for the project increased by 0.7 acre to a total of 5.4 acres. All of the increase in impervious area is proposed in subwatershed 1B where the existing detention proposed is 57.19 cubic feet. The detention capacity was not increased in project plans to accommodate the increase in impervious area in subwatershed 1B, but there is sufficient physical space to increase the size of the proposed detention area, if necessary. To comply with county ordinances and be permitted by Marin County, subwatershed 1B must demonstrate compliance with Section 2404.627 (Stormwater Control Plan) and 24.04.520 (Hydrologic and Hydraulic Design) and Chapter 4 of the BASMMA post construction manual. This would be completed during preparation of the final hydrologic and hydraulic design, which is subject to review and approval for compliance by County staff. The Hydrology Study demonstrates that adequate stormwater detention is proposed in all other subwatersheds besides 1B (CSW|ST2 2021). Based on the Study and compliance with required County and BASMAA regulations, peak discharge runoff would be reduced from current conditions (CSW|ST2 2021). Therefore, less stormwater would be delivered to the off-site storm drain system from the project site (CSW|ST2 2021). The project would result in a lower potential for substantial off-site erosion, flooding, or contribution of runoff that would exceed existing storm drain systems than current conditions. Because peak-runoff rates are decreased with the proposed detention basins, the impact on the surrounding storm drain system would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.9-4: Risk Release of Pollutants due to Project Inundation from Flood Hazard, Dam Failure, Tsunami, or Seiche

The project site is not located in a mapped FEMA flood zone and is not located in a dam failure inundation area. In addition, the project site would not have a potential for being inundated by a tsunami or seiche, though low-lying areas adjacent to the site including Seminary Drive could be inundated by tsunami (Appendix J). Because the project is not located in a mapped FEMA flood zone or dam inundation area and is located above the area that could be impacted by a tsunami or seiche, the risk of release of pollutants from flooding would be **less than significant.**

There are no mapped FEMA flood zones in the project site (EPA 2022). The project site is outside the 100-year and 500-year flood zones. There are no dams with mapped dam breach inundation areas that would affect the project site in the case of dam failure (DWR 2022b).

There is a potential for a tsunami to originate in the Pacific Ocean and enter the San Francisco Bay. Richardson Bay is located inside the San Francisco Bay, and, due to the small opening of the bay to the ocean, is partially protected from a tsunami originating in the Pacific Ocean. A CGS map shows the shoreline of Strawberry Point as having a potential for being inundated by a tsunami, but this hazard would not impact the project site because the vulnerable area is located below the project site (PRA 2016). Additionally, East Strawberry Drive north of Ricardo Lane is in a Tsunami Hazard Area (California Department of Conservation 2023); however, this hazard would not impact the project site because the vulnerable area is located approximately 0.4 mile below the project site. Areas adjacent to the site such as areas near the shoreline and low-lying portions of Seminary Drive, as well as the low-lying area between De Silva Island and the northwest corner of the site, could be inundated by tsunami (Appendix J). Seminary

Drive is used to access the project site. A seiche wave could occur in the San Francisco Bay and impact the project site. The largest seiche recorded in the San Francisco Bay had 1.97 feet amplitude waves near Benicia (Miller Pacific 2016). The project site is above this height.

Because the project is not located in a mapped FEMA flood zone or dam inundation area and is located above the area that could be impacted by a tsunami or seiche, the risk of release of pollutants due to flooding would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.9-5: Conflict with or Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan

The project would adhere to all applicable plans, permits, and regulations regarding water quality. The project would not require the use of groundwater. During construction and operation, the project would comply with the Marin County Code Chapter 23.18, the Construction General Permit, as well as all SWPPP requirements including temporary and permanent BMPs. Further, the implementation of stormwater bioretention areas and detention facilities would control stormwater flow and discharges and prevent contamination of surface water resources. For these reasons, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This impact would be **less than significant**.

The project would not use groundwater because the source of water serving the site would be surface water provided by Marin Water. The *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) presents water quality standards and control measures for surface water and groundwater for a significant portion of the San Francisco Bay, including the watershed within which the project area is located. The Basin Plan designated beneficial uses for water bodies and established water quality objectives, waste discharge prohibitions, and other implementation measures to protect those beneficial uses. The Basin Plan contains both narrative and numeric water quality objectives for the region. Ambient water quality standards are set as objectives for a body of water and effluent limits (or discharge standards) are enforced through conditions in state or federal wastewater discharge permits, such as the NPDES permits. The Basin Plan identifies land uses and activities that could degrade water quality and BMPs that could be used to address various nonpoint sources of pollution. During construction, the project would comply with Marin County Code Chapter 23.18, *Urban Runoff Pollution Prevention*, as well as the California Construction General Permit 2009-0009-DWQ, which requires the development and implementation of a SWPPP as described under Impact 3.9-1. Stormwater bioretention and detention facilities would be installed to increase retention and detention time of runoff, resulting in less stormwater flowing to the off-site storm drain system, which would result in a lower potential for substantial off-site erosion (CSW|ST2 2021). The project would not conflict with or obstruct the implementation of the Basin Plan. Therefore, the impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.9-6: Exacerbate any Existing and/or Projected Damage to the Environment, Including Existing Structures, Human Health, and Sensitive Resources, Associated with Reasonably Foreseeable Future Sea Level Rise and Peak High Tides

As the Earth warms due to climate change, sea-level rise (SLR) and peak high tides have the potential to exacerbate existing and/or projected damage to the environment, including existing structures, human health, and sensitive resources. The proposed project site is located adjacent to the San Francisco Bay, which is likely to experience sea level rise in the future (OPC 2018). There are no buildings or roadways in the proposed project site vulnerable to future SLR in the long-term scenario even with 60-inches of SLR and 100-year storm event in the proposed project site (CSW|ST2 2021). The frontage roads leading to the project site currently experience peak tide flooding. Increases in traffic exposure to the existing hazard would occur with construction of the project. The project would not exacerbate any existing and or projected damage to the environment associated with future sea level rise and peak high tides. Therefore, the impact would be **less than significant**.

Sea-level rise is caused by the thermal expansion of warming ocean water and melting of land ice as the Earth warms (OPC 2018). Sea-level rise is an immediate and real threat to lives, livelihoods, transportation, economies, and the environment in California (OPR 2018). Because the project site is adjacent to the San Francisco Bay, it could be impacted by sea-level rise.

To help address potential vulnerability from SLR along the bay shoreline, Marin County prepared the Marin BayWAVE. The fundamental goal of the BayWAVE project is to increase awareness and preparation for future SLR impacts. SLR scenarios include near-term, mid-term, and long-term impacts with and without a 100-year storm event. The BayWAVE vulnerability assessment identifies specific risk and impacts along the entire bay shoreline for several sea level rise scenarios, which were selected using the best available science and state guidance, and includes the high tide and storm flooding currently being experienced along the shoreline. The near-term (approximately 2030) scenario anticipates 10 inches of SLR, which becomes 46 inches in the 100-year storm. The mid-term (approximately 2050) scenario anticipates 20 inches of SLR, which becomes 56 inches in the 100-year storm. The long-term (approximately 2100) scenario anticipates 60 inches of SLR, which becomes 96 inches in the 100-year storm. In the long-term scenario, the project site is not inundated by SLR. Figure 3.9-3, "Sea Level Rise Scenarios near the Project Site," shows the project site relative to these scenarios. There are no buildings or roadways vulnerable to future SLR even with 60-inches of SLR and a 100-year storm event in the proposed project site (CSW|ST2 2021). The frontage roads leading to the project site currently experience peak tide flooding, and flooding would increase under SLR. Although the project does not exacerbate the hazard, increases in traffic exposure to the existing hazard would occur with construction of the project. The project would not exacerbate any existing and or projected damage to the environment associated with future sea level rise and peak high tides. Therefore, the impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

3.10 LAND USE AND PLANNING

This section evaluates consistency of the proposed project with applicable land use plans and policies adopted for the purpose of avoiding or mitigating environmental impacts. The physical environmental effects associated with the project that relate to land use compatibility (e.g., noise, aesthetics, air quality) are evaluated in other sections of Chapter 3. Scoping comments received in response to the notice of preparation (NOP) regarding land use and planning requested that the EIR address consistency with the Strawberry Community Plan, the zoning code and RMP (Residential, Multiple Planned District) zoning designation, the San Francisco Bay Plan, and McAteer-Petris Act. See Appendix A for all NOP comments received.

3.10.1 Regulatory Setting

FEDERAL

No federal plans, policies, regulations, or laws related to land use are applicable to the project.

STATE

California Government Code Section 65300

California Government Code Section 65300 et seq. requires each county and city in the state to adopt a comprehensive, long-range general plan to guide the physical development of the county or city, as well as any land outside its boundaries that, in the county's or city's judgment, bears relation to its planning. Each general plan is required to contain several mandatory elements (i.e., topics), including land use, circulation, housing, conservation, open space, noise, safety, and environmental justice, as well as any optional elements included by the county or city. In addressing these topics, the general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the county's or city's vision for the area.

California Government Code Section 65800

The State Zoning Law (California Government Code Section 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific district, are required to be consistent with the general plan and any applicable specific plans. When amendments to the general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure the land uses designated in the general plan would also be allowable by the zoning ordinance (California Government Code Section 65860[c]).

McAteer-Petris Act

The McAteer-Petris Act, enacted on September 17, 1965, established the San Francisco Bay Conservation and Development Commission (BCDC) as a temporary state agency. The act required BCDC to prepare a comprehensive plan (i.e., the San Francisco Bay Plan) that establishes policies for reviewing and acting on projects in and around San Francisco Bay. The McAteer-Petris Act was amended in August 1969 to make BCDC a permanent agency and to incorporate the policies of the San Francisco Bay Plan into law. The Act has been subject to several subsequent amendments, with the most recent amendment in 2008 to allow BCDC to develop regional strategies, as needed, for addressing the impacts of sea level rise and other climate change effects on the Bay and affected shoreline areas. BCDC prepared the San Francisco Bay Plan to implement provisions of the McAteer-Petris Act.

Senate Bill 375

SB 375, signed by the Governor in September 2008, aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or Alternative Planning Strategy, showing prescribed land use allocation in each MPO's Regional Transportation Plan. The California Air Resources Board, in consultation with

the MPOs, is to provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in their respective regions for 2020 and 2035. Implementation of SB 375 will have the co-benefit of reducing California's dependence on fossil fuels and making land use development and transportation systems more energy efficient.

The Association of Bay Area Governments (ABAG) serves as the MPO for Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties.

REGIONAL

Plan Bay Area 2050

On October 21, 2021, the Metropolitan Transportation Commission (MTC) and the Executive Board of ABAG jointly adopted Plan Bay Area 2050 and certified the associated Final EIR. Plan Bay Area 2050 is a 30-year plan consisting of four primary elements, including housing, the economy, transportation and the environment, which are connected through 35 strategies. These strategies are intended to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. In the short-term, the plan's Implementation Plan identifies more than 80 specific actions for MTC, ABAG and partner organizations to take over the next five years to make headway on each of the 35 strategies. The plan serves as the Regional Transportation Plan/Sustainable Communities Strategy for the Bay Area region as required by State legislation (Government Code Section 65080 et seq.) and by federal regulation (Title 23 U.S. Code Section 134).

San Francisco Bay Plan

The McAteer-Petris Act of 1965, which created BCDC, required the agency to prepare an enforceable plan to guide the future protection and use of the Bay. The San Francisco Bay Plan was prepared by BCDC and adopted by the Legislature in 1969. Later that year, the Legislature approved the Commission's Bay Plan and revised the McAteer-Petris Act by designating BCDC as the agency permanently responsible for protecting the Bay and its great natural resources and guiding its development by allowing the minimum necessary amount of fill and the maximum amount of feasible public access for any project. The McAteer-Petris Act directs BCDC to exercise its authority to issue or deny permit applications for placing fill, extracting material, or changing use of any land, water or structure within its jurisdiction in conformity with the provisions and policies of both the McAteer-Petris Act and the San Francisco Bay Plan. The law also directs BCDC to keep the San Francisco Bay Plan up to date through a program of continuing review. The latest update to the plan was adopted in May 2020.

LOCAL

Marin Countywide Plan

The Marin Countywide Plan, first adopted in 1973 and most recently updated in 2023 with the updates to the Housing and Safety Elements, guides the conservation and development of Marin County and serves as the County's general plan. The Countywide Plan contains conservation, open space, safety, land use, housing, circulation, and noise policies, as well as several optional topics. The three elements of the Countywide Plan include the Natural Systems and Agriculture Element (includes the Safety Element), Built Environment Element (includes the Housing Element), and Socioeconomic Element. The following policies from the Countywide Plan related to land use and planning are applicable to the proposed project:

Natural Systems and Agriculture Element

- **Policy TRL-1.2: Expand the Countywide Trail System.** Acquire additional trails to complete the proposed countywide trail system, providing access to or between public lands and enhancing public trail use opportunities for all user groups, including multi-use trails, as appropriate.
- **Policy TRL-2.1: Preserve the Environment.** In locating and designing trails, protect sensitive habitat and natural resources by avoiding those areas.

- **Policy TRL-2.6 Provide Multiple Access Points.** Design trails with multiple access points to maximize accessibility and minimize concentrating access.

Built Environment Element

- **Policy CD-1.1: Direct Land Uses to Appropriate Areas.** Concentrate urban development in the City-Centered Corridor, where infrastructure and facilities can be made available most efficiently. Protect sensitive lands in the Baylands Corridor. Emphasize agricultural uses in the Inland Rural Corridor, along with preservation of resources, habitat, and existing communities. Focus on open space, recreational, and agricultural land uses, as well as preservation of existing communities, in the Coastal Corridor.
- **Policy CD-1.2: Direct Urban Services.** Discourage extension of urban levels of service to serve new development beyond urban service areas.
- **Policy CD-2.1: Provide a Mix of Housing.** The range of housing types, sizes, and prices should accommodate workers employed in Marin County. This includes rental units affordable to lower-wage earners and housing that meets the needs of families, seniors, disabled persons, and homeless individuals and families.
- **Policy CD-2.5: Locate Housing Near Activity Centers.** Provide housing near jobs, transit routes, schools, shopping areas, and recreation to discourage long commutes and lessen traffic congestion.
- **Policy CD-2.8: Limit Development in Resource or Hazard Areas.** Discourage development in areas with high natural resource value or threats to life or property, and restrict development in such areas to minimize adverse impacts.
- **Policy CD-2.11: Promote Diverse Affordable Housing Strategies.** Promote a diverse set of affordable housing strategies to convert existing market rate units to permanently affordable units in addition to building affordable housing in appropriate locations.
- **Policy CD-4.1: Update Community Plans.** Amend existing community plans as necessary to define how policies and programs of the Countywide Plan will be implemented. (See [Countywide Plan] Map 3-3, Community Plan Areas, and Map Set 3-34, Land Use Policy Maps, in the Planning Areas Section).
- **Policy CD-5.1: Assign Financial Responsibility for Growth.** Require new development to pay its fair share of the cost of public facilities, services, and infrastructure, including but not limited to transportation, incremental water supply, sewer and wastewater treatment, solid waste, flood control and drainage, schools, fire and police protection, and parks and recreation. Allow for individual affordable housing projects to be exempted from the full cost of impact fees, subject to meeting specified criteria.
- **Policy CD-5.2: Correlate Development and Infrastructure.** For health, safety, and general welfare, new development should occur only when adequate infrastructure is available, consistent with the following findings:

    a. Project-related traffic will not cause the level of service established in the circulation element to be exceeded (see TR-1.e).

    b. Any circulation improvements or programs needed to maintain the established level of service standard have been programmed and funding has been committed.

    c. Environmental review of needed circulation improvement projects or programs has been completed.

    d. The time frame for completion of the needed circulation improvements or programs will not cause the established level of service standard to be exceeded.

    e. Wastewater, water (including for adequate fire flows), and other infrastructure improvements will be available to serve new development by the time the development is constructed.

- **Policy NO-1.1: Limit Noise from New Development.** Direct the siting, design, and insulation of new development to ensure that acceptable noise levels are not exceeded.

- **Policy NO-1.2: Minimize Transportation Noise.** Ensure that transportation activities do not generate noise beyond acceptable levels, including in open space, wilderness, wildlife habitat, and wetland areas.
- **Policy NO-1.3: Regulate Noise Generating Activities.** Require measures to minimize noise exposure to neighboring properties, open space, and wildlife habitat from construction-related activities, yard maintenance equipment, and other noise sources, such as amplified music.

Housing Element

- **Policy 1.1: Land Use.** Enact policies that encourage efficient use of land to foster a range of housing types in our community.
- **Policy 1.2: Regional Housing Needs Assessment.** Maintain an adequate inventory of residential and mixed-use sites to fully accommodate the County's RHNA by income category throughout the planning period.
- **Policy 1.3: Housing Sites.** Recognize developable land as a scarce community resource. Protect and expand the supply and residential capacity of housing sites, particularly for lower income households.
- **Policy 2.1: Special Needs Groups.** Expand housing opportunities for special needs groups, including seniors, people living with disabilities (including mental, physical, and developmental disabilities), agricultural workers and their families, individuals and families experiencing homelessness, single-parent families, large households, lower income (including extremely low-income) households, and other persons identified as having special housing needs in Marin County.
- **Policy 2.3: Workforce Housing.** Implement policies that facilitate housing opportunities to meet the needs of Marin County's workforce, especially those earning lower incomes.
- **Policy 2.5: Preserve Existing Housing.** Protect and enhance the housing we have and ensure that existing affordable housing remains affordable and residents are not displaced.
- **Policy 2.6: Preserve Permanent Housing Inventory.** Preserve our housing inventory for permanent residential uses. Discourage or mitigate the impact of short-term rentals and units unoccupied for extended periods of time.

Strawberry Community Plan

The existing Strawberry Community Plan was originally adopted by the Marin County Board of Supervisors on August 27, 1974, and last amended in February 1982. Within the broader framework of the Countywide Plan, the Strawberry Community Plan is intended to provide a community-specific vision for development on the Strawberry Peninsula by identifying community goals, identifying major issues within the community plan area, specifying the amount, density, and location of development, and providing recommendations and restrictions for such development. Additionally, the plan includes an action plan that outlines recommended actions by community priority, the techniques for implementation, and the parties responsible for funding each recommendation. The community plan consists of several elements, including Land Use – Open Space; Housing; Transportation; Schools; and Public Facilities. Each element contains a policy framework for future development within the plan area.

The 1982 amendments to the community plan were the result of a plan review undertaken by the Strawberry Community Plan Review Citizens' Advisory Committee, planning and transportation consultants, and Marin County planning staff. The amendments provided updated goals related to community amenities, housing balance, and transportation, development guidelines for the four remaining large undeveloped parcels in the community plan area, including the Golden Gate Theological Baptist Seminary site, and additional community plan policies. The following goals and policies from the Strawberry Community Plan and 1982 Amendments are applicable to the proposed project.

Community Goals

- Increase the community authority and responsibility in future development decisions.
- Retain the local setting of open hillside and open Bay waters.

- Retain the existing fine grain character of the community by limiting the construction of large scale urban density developments.
- Provide convenient access to local commercial and community facilities and the resources of surrounding communities.
- Stem the increasing rate of traffic congestion, air, water, and noise pollution.

Goals

- II.A. Community Amenities: It is the desire of the Community to assure that future development provide for such amenities as visual backdrops, neighborhood separators, retention of ridgelines, and protection of environmentally important areas, through careful planning and clustering of structures. In addition, all means of open space acquisition should be pursued, including purchase and dedication.
- II.B. Housing Balance: The Community desires to retain a character that identifies the Strawberry area as a family-oriented community. Such an identity is established by the visual, physical setting of the community, as well as by the families who reside there. It is important that the social patterns, personal interaction, sights and sounds that typify single family neighborhoods be maintained and strengthened. If new development is to occur, it can strengthen this character by providing the traditional setting of detached single-family units within any new development proposed for the area. Development plan proposals should give the highest priority to incorporating detached single-family homes into the plan. Where physical constraints or opportunities dictate another housing type (i.e., attached units), the Community goal is to insure that unit size and project amenities are designed to provide the opportunity for and encourage occupancy by families with children. In this manner then the Community wishes to insure a housing balance that will continue to provide for families.
- II.C. Transportation: The Community desires that the movement of traffic through the Strawberry area be safe for both pedestrians and vehicles. The Community further desires that existing traffic movement not be further interrupted by new development and that existing potentially hazardous conditions for pedestrians and vehicles be improved to an acceptable level of safety. Therefore, it is the goal of the Community that the overall density of new development in Strawberry be scaled to ensure future acceptable traffic levels of service. Where levels of service or safety are now currently unacceptable, or where service levels or safety conditions will deteriorate due to traffic generated by new development, improvements shall be required in conjunction with that new development. These improvements should be considered as appropriate mitigation measures to be applied to new development. Owners of the large undeveloped properties in the Strawberry area (DeSilva Island, Watertank Hill, Golden Gate Baptist Theological Seminary and Strawberry Spit/Point) will be required to contribute on a proportional basis to the funding necessary to construct required improvements. The proportion of the funding to be required from each property owner is to be determined by the traffic generated by each development and the impact of that traffic on the intersection or road to be improved. The formula for proportionality and method of collection requires further study and should be determined in the near future.

General Design Guidelines

- Landscaping. Site plans shall be designed to incorporate landscaping to screen views of proposed structures. Landscaping shall be placed to provide privacy between proposed and existing structures. All landscaping material chosen shall be of a size and heartiness to insure that the desired landscaping effects occur within the shortest time possible. In all cases, landscaping plans must be incorporated into the overall site design pattern. Approved development applications must be conditioned to insure that such landscaping plans are installed as early as possible as part of the required site improvements.
- Erosion Control. Site designs should be prepared and construction activities implemented to minimize adverse impacts upon adjacent marshes and natural resource areas. Individual environmental assessments should clearly review development proposals and indicate the potential for erosion, the possible impacts and methods for mitigating those impacts.
- Ridgelines. Hilltops, forested areas and other prominent visual landmarks in the community should be recognized in development plan proposals and preserved in their natural state.

- **View Corridors.** Existing significant view corridors should be identified and designs for maintaining those corridors should be incorporated into development proposals. Structures in view of existing development should be designed to incorporate a variety of interesting structure planes and angles while adhering to a 30 1 011 height I imitation that maintains those existing views.
- **Noise.** Noise impacts on residents and persons in nearby areas shall be minimized through placement of buildings, recreation areas, roads and landscaping. Onsite acoustical conditions should be studied and site plans should be formulated so that placement of structures helps to disperse noise rather than allow it to reverberate.

Additional Plan Policies

- **Policy D: Inclusionary Zoning.** It is the policy of the Community Plan to support the goal of achieving below market rate housing through application of the inclusionary zoning ordinance requirements. Certain developments are not suitable for inclusionary units and, therefore, in-lieu payments would be a more appropriate way of achieving below-market rate units. In particular, the potential density, location, access to public transportation and environmental impacts associated with development of inclusionary units should be evaluated as part of any Master Plan application for the four major parcels in Strawberry. In-lieu fees should be accepted if on-site inclusionary units are not economically feasible or otherwise desirable and are offered by the applicant.
- **Policy E: Landslide and Soil Stability Problems.** Because of the sloped topography of the undeveloped sites remaining in the Strawberry Community, soil stability and landslide potential are concerns that must be addressed in any development proposal. Adequate geologic and engineering investigations shall be required as part of any Master Plan, Development Plan and Design Review applications to determine the presence of any such hazards and to identify appropriate mitigations to ensure safe, stable housing and roadways.

Marin County Zoning Regulations

Article II, Zoning Districts and Allowable Land Uses, of the Marin County Municipal Code establishes zoning districts applied to property within the County, determines how the zoning districts are applied on the official zoning maps, and provides general permit requirements for development and new land uses. Under Article II, the unincorporated areas of Marin County are divided into zoning districts that consistently implement the Marin Countywide Plan.

Marin County Residential Design Guidelines

The County maintains both single- and multi-family residential design guidelines. The County's Single-Family Residential Design Guidelines, adopted by the Marin County Board of Supervisors on July 19, 2005, establish comprehensive design recommendations for all single-family residential development in the unincorporated communities of Marin. The Single-Family Residential Design Guidelines emphasize essential principles of development, particularly site planning, preservation of natural features, resource conservation, compatibility with neighboring development, location of buildings in relationship to pedestrian paths and streets, landscaping, general building form, massing, and scale. Similarly, the Multi-Family Residential Design Guidelines, adopted by the Marin County Board of Supervisors on December 10, 2013, provide guidance for multi-family residential development in the unincorporated areas of Marin County. These design guidelines are not meant to replace the requirements in the Marin County Municipal Code, but rather are intended to supplement the municipal code by providing additional direction and clear evaluation criteria used by the County in its decision-making.

3.10.2 Environmental Setting

PLANNING HISTORY AND BACKGROUND

The Golden Gate Baptist Theological Seminary (Seminary) originally developed the project site pursuant to a 1953 Conditional Use Permit (1953 CUP or CUP), which governed the development and operation of a seminary. The 1953 CUP allows for a campus operation with up to 1,000 students supported by faculty and staff. The CUP was issued with the general fact that the County review and approve a Development Plan before construction of the seminary.

Following the approval of the CUP in 1953, the Seminary completed a "Campus Plan" in 1955, which was used as the basis for planning applications to the County at that time.

The permit record indicates that an issue arose regarding the cost and alignment of public roads subsequent to the 1953 CUP, specifically regarding a public road that would go around the campus on Seminary property and be paid for by the Seminary. The Seminary sought to change the 1953 CUP with respect to the alignment and funding for a public road and requested that the Planning Commission permit the construction of buildings without the need to construct West Strawberry Drive around the western periphery of their campus. The issue was resolved in 1959 when the Board of Supervisors approved an "Improvement Plan Agreement Under Conditional Use Permit" that allowed the Seminary to occupy the site based on an assurance they would complete the road by 1961. The decision by the Board of Supervisors related only to the physical development of the site and did not change the student population or other operational restrictions imposed by the 1953 CUP. By 1982, 132 student apartments, 19 faculty/staff apartments and 60 dormitory rooms were constructed, as well as the administration building, library, cafeteria, and academic classrooms.

In March 1984, the Board of Supervisors adopted Ordinance 2819 approving a Master Plan for the Seminary property. Condition 19 of the Master Plan approval stated: "With approval of this Master Plan, the previously approved 1959 Campus Plan Use Permit shall become null and void and be of no further effect or benefit." This condition refers to the Board's 1959 approval of the "Improvement Plan Agreement Under Conditional Use Permit" that was related to the road alignments shown in the 1955 Campus Plan, not to the student population or Seminary operations. The roadway improvements were not completed, and additional buildings and residential units approved under the 1984 Master Plan were never developed. Use of the site as the Golden Gate Baptist Theological Seminary peaked with enrollment of 910 students in 1987, with most students, faculty, and staff living nearby. In 2014, after the Seminary relocated to Southern California, the applicant acquired the project site and leased the academic campus to Olivet University.

The 1984 Master Plan expired on January 1, 2018. The expiration of the Master Plan did not affect the 1953 CUP that originally authorized and continues to allow the use of the property as a school. Without the influence of the Master Plan, the land use designations and policies revert to those expressed in the Countywide Plan and the 1953 CUP.

EXISTING LAND USE AND ZONING

Project Site

The project site encompasses approximately 101 acres on the Strawberry Peninsula in the community of Strawberry, a census-designated place in unincorporated Marin County. The project site includes existing development on the former Golden Gate Baptist Seminary property. The eastern portion of the project site includes the existing academic campus and associated facilities (e.g., daycare center), which is currently tenant-occupied by Olivet University, a private Christian university. The Seminary Playing Field is located west of the academic campus, at the topographically lowest point of the site. Open space within the academic campus property, while privately owned, is and has been accessible to the public for passive outdoor recreation uses, such as walking, picnicking, sightseeing, and outdoor relaxing, and for outdoor sport use on the playing field. The open lawn on the knoll of Chapell Hill is a popular gathering place for community members and other visitors. Project site roads, campus sidewalks, and paths/trails are also open to the public for active recreation, such as walking, jogging, and bicycling.

Residential uses are dispersed throughout the project site, consisting of single- and multi-family units in one- and two-story buildings. In total, there are 145 existing residential units within the project site. This includes 16 market-rate studios, 54 one-bedroom housing units, 54 two-bedroom housing units, 18 three-bedroom housing units, and three single-family residences. There are also 66 dormitory rooms with seven shared kitchens. Within the Seminary Point planning area, which is situated in the southwestern portion of the project site, existing housing consists of 24 one-bedroom residential units in three two-story apartment buildings (14,451 sf), and one single-family residence (the President's residence). The housing is situated along Chapel Drive and east of Seminary Drive. The Hodges/Shuck planning area is situated in the northern portion of the project site and includes existing one- and two-story buildings consisting of 16 studios, 30 one-bedroom apartments, and 47 two-bedroom apartments. Existing housing is located

along Shuck Drive, Judson Lane, Oliver Lane, and Hodges Drive. The Reed/Storer/Shuck planning area includes seven existing single-story residential buildings consisting of seven two-bedroom apartments and eight three-bedroom apartments, and one single-family residence (superintendent's residence) located on the northerly corner of Reed Boulevard and Storer Drive. The Dormitory Hill planning area contains a two-building, two-story dormitory facility with 66 dorm rooms and seven shared kitchens. Lastly, the Mission Drive planning area is surrounded by existing single-family homes and consists of two vacant abutting undeveloped parcels. The existing Missionary House and Platt Village apartments (comprising one single-family residence and 10, three-bedroom units) are located in the vicinity of the intersection of Mission and Chapel Drives.

The Marin Countywide Plan designates the project site as MF2 (Multi-Family 2), which is within the Low Density Residential land use category of the Countywide Plan and allows a density of 2-4 residential units per acre. The project site is zoned RMP-2.47:AH (Residential, Multiple Planned District), and allows a density of 2.47 residential units per acre. The Bayfront Conservation combining district occurs on those portions of the site located along the San Francisco Bay, and an Affordable Housing combining district exists over a geographically unspecified 2-acre portion of project site parcels APNs 043-261-25 and -26, which total approximately 73 acres. The Affordable Housing combining district allows this portion of the site to be developed at a density of up to 20 units per acre with affordable housing units, for a total of 40 affordable units. Figures 3.10-1, "General Plan Land Use," and 3.10-2, "Zoning Designations," show the land use and zoning designations, respectively, for the project site and surrounding area. The current academic use is allowed in the RMP-2.47 district with the 1953 Conditional Use Permit. The project site is also within the Strawberry Community Plan and Plan Amendment area, which designates the project site for educational and residential development to support campus uses (Marin County 1973). A more detailed description of these zoning designations is provided below.

- **RMP (Residential, Multiple Planned) District.** The RMP zoning district is intended for a full range of residential development types within the unincorporated urban areas of the County, including single-family, and multi-family residential development, and limited commercial uses in suburban settings, along with similar and related compatible uses, where site or neighborhood characteristics require particular attention to design detail provided through the Master Plan process (Chapter 22.44 [Master Plans and Precise Development Plans]). The RMP district is applied to areas identified by the Marin Countywide Plan as capable of accommodating increased density, and is consistent with the Planned Residential and Multi-Family 2, 3, 3.5, 4, and 4.5, the General Commercial/Mixed Use, Office Commercial/Mixed Use, Neighborhood Commercial/Mixed Use, PD-Agricultural and Environmental Resource Area, PD-Reclamation Area, Public and Quasi-Public land use categories of the Marin Countywide Plan.
- **BFC (Bayfront Conservation combining district).** The parts of the project site covered by the BFC are limited to a narrow band of land around Seminary Point and does not contain any existing development. The BFC zoning district is intended to regulate land and water uses; to prevent destruction or deterioration of habitat and environmental quality; prevent further loss of public access to and enjoyment of the bayfront; preserve or establish view corridors to the bayfront; ensure that potential hazards associated with development do not endanger public health and safety; and maintain options for further restoration of former tidal marshlands. The BFC can be combined with the RMP zoning district.

Surrounding Community

The surrounding community of Strawberry is a primarily residential area within Marin County. Residential uses, including condominiums and single- and multi-family homes, surround the project site. The Club at Harbor Point, located east of the project site, offers membership access to a clubhouse and club restaurant, fitness center, pool, and tennis courts. Southern Marin Fire Protection District, Station 9, is located directly north of and adjacent to the project site.

Sources: Data downloaded from County of Marin in 2023; adapted by Ascent in 2023.

Figure 3.10-1 General Plan Land Use

Sources: Data downloaded from County of Marin in 2023; adapted by Ascent in 2023.

Figure 3.10-2 Zoning Designations

3.10.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

The evaluation of potential land use impacts is based on a review of planning documents pertaining to the project site, including the *Marin Countywide Plan,* as updated by the Housing Element (Marin County 2023), *Strawberry Community Plan*, as amended (Marin County 1982), and Marin County zoning regulations.

The proposed project must comply with applicable local ordinances and state laws and regulations, so the analysis takes this into account when determining the level of significance of impacts. However, according to case law under the Planning and Zoning Law (Gov. Code Section 65000 et seq.), a proposed project need not achieve perfect conformity with every general plan policy, as such an outcome is neither achievable nor required. (*Families Unafraid to Uphold Rural El Dorado County v. El Dorado County Bd. of Supervisors* (1998) 62 Cal.App.4th 1332, 1336.) This is because "[a] general plan must try to accommodate a wide range of competing interests—including those of developers, neighboring homeowners, prospective homebuyers, environmentalists, current and prospective business owners, jobseekers, taxpayers, and providers and recipients of all types of city-provided services—and to present a clear and comprehensive set of principles to guide development decisions. Once a general plan is in place, it is the province of elected [county] officials to examine the specifics of a proposed project to determine whether it would be 'in harmony' with the policies stated in the plan." (*Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 719.) For these reasons, a proposed project is only inconsistent with the governing general plan if the project "conflicts with a general plan policy that is fundamental, mandatory, and clear." (*FUTURE*, *supra*, 62 Cal.App.4th at pp. 1341-1342; see also *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 782.)

The analysis herein has been undertaken in light of these legal principles and is intended to inform both the public and County decision-makers. The conclusions expressed below, including those in Table 3.10-1 (Project Consistency with Applicable Local Policies), reflect the best judgment of County staff. The ultimate question of the meaning of particular Countywide Plan policies, and thus the proposed project' s consistency with them, lies with the Board of Supervisors. The language found in general plans is sometimes susceptible to varying interpretations. Case law makes it clear that: (i) the ultimate meaning of such policies is to be determined by the elected board of supervisors, as opposed to county staff and EIR consultants, project applicants, or members of the public; and (ii) the decision-making body's interpretations of such policies will prevail in challenged in court if the interpretations are "reasonable," even though other reasonable interpretations are also possible. (See *No Oil, Inc. v. City of Los Angeles* (1987) 196 Cal.App.3d 223, 245-246, 249). Furthermore, courts strive to "reconcile" or harmonize" seemingly disparate general plan policies to the extent reasonably possible (*Id.* at p. 244.)

As shown in Table 3.10-1 below, County staff has concluded that, with mitigation, the proposed project can become consistent with all of the Countywide Plan policies identified and addressed therein. Should the Board of Supervisors choose to approve the proposed project, the Board may rely on the analysis in the table as support for the conclusion that the project with recommended mitigation is consistent with the Countywide Plan. Certification of the Final EIR would indicate agreement with the conclusions in the table.

Notably, the fact that a proposed project may be inconsistent with a land use plan or policy is not necessarily a significant impact under CEQA. To qualify as such an environmental impact, any plan or policy inconsistency must foreseeably result in "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." (State CEQA Guidelines Section 15382 [definition of "significant effect on the environment"].) A policy inconsistency may have important social or economic implications for the community, but if a social or economic impact would occur without a physical environmental change, the inconsistency would not fall within CEQA's purview.

THRESHOLDS OF SIGNIFICANCE

Impacts related to land use and planning would be significant if the proposed project would:

- physically divide an established community; and/or
- cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

ISSUES NOT DISCUSSED FURTHER

Physically Divide an Established Community

The proposed project is within an existing residential neighborhood currently developed with single- and multi-family housing, as well as an academic campus. The proposed project would not result in any changes to the existing land use designations or zoning for the project site that could introduce new incompatible uses (e.g., industrial) to the surrounding area. Additionally, the project would be consistent with the allowable density for the site identified in the Marin Countywide Plan and the County's zoning regulations. Furthermore, the proposed project would not require the construction of new roadways or reconfiguration or closure of existing roadways that could divide existing development within the surrounding community. Therefore, the proposed project would not physically divide an established community and this issue is not discussed further in this EIR.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.10-1: Conflict with Land Use Plans, Policies, or Regulations Adopted to Avoid or Mitigate Environmental Effects

Potentially significant land use impacts would result when inconsistencies with goals and policies adopted to avoid or mitigate environmental effects would occur where such inconsistencies would result in a potentially significant physical impact on the environment. Inconsistencies identified as resulting in potentially significant environmental impact are noted as "potentially inconsistent unless mitigated" in Table 3.10-1. Because these policy inconsistencies could indicate or result in significant environmental impacts, the proposed project's land use impact related to these inconsistencies would be **potentially significant**.

The analysis in this section considers whether the proposed project would cause a significant environmental impact due to an inconsistency with a land use policy or plan adopted for the purpose of avoiding or mitigating an environmental effect, including from the *Countywide Plan*, *Strawberry Community Plan*, and the County's zoning ordinance standards. This analysis considered applicable policies established within each element of the *Countywide Plan* and *Strawberry Community Plan*.

Comments provided in response to the NOP request that the EIR address the project's consistency with the San Francisco Bay Plan and the McAteer-Petris Act. No development or physical changes related to the proposed project are located within BCDC's bay or shoreline band jurisdiction. As such, the San Francisco Bay Plan and McAteer-Petris Act do not apply to the project, and a discussion of the project's consistency with these plans and regulations would not be informative for decision-making.

The project site has a complex planning history and background, as discussed above in Section 3.10.2. It involves the 1953 CUP that allowed for a campus operation with up to 1,000 students supported by faculty and staff, the 1959 Improvement Plan Agreement to develop specified roadways within the site, the 1984 Master Plan that nullified the 1959 Improvement Plan Agreement, the lack of development per the Master Plan, and the expiration of the Master Plan on January 1, 2018. The 1953 CUP continues to govern the site considering the expiration of the Master Plan. In 2014, after the Seminary relocated to Southern California, the applicant acquired the project site, leased the academic campus to Olivet University, and later submitted the proposed project application.

The project site is zoned RMP-2.47:AH (Residential, Multiple Planned District), and allows a density of 2.47 residential units per acre. The Bayfront Conservation combining district occurs on those portions of the site located along the San Francisco Bay within a narrow band of land around Seminary Point. As discussed above, the BFC zoning district is intended to regulate land and water uses; to prevent destruction or deterioration of habitat and environmental quality; prevent further loss of public access to and enjoyment of the bayfront; and preserve or establish view corridors to the bayfront. Proposed project activities within the BFC zoning district would be limited to enhancing the existing Seminary Point trail and clearing any dense brush along the trail. These activities would be consistent with the BFC zoning district standards. No new structures or other development would be constructed within the BFC zoning district. Additionally, an Affordable Housing combining district exists over a geographically unspecified 2-acre portion of project site parcels APNs 043-261-25 and -26, which total approximately 73 acres. The Affordable Housing combining district allows this portion of the site to be developed at a density of up to 20 units per acre with affordable housing units, for a total of 40 affordable units. The Marin Countywide Plan designates the project area as MF2 (Multi-Family 2), which falls within the Low Density Residential land use category of the Countywide Plan and allows a density of 2-4 residential units per acre.

The proposed project would not result in any changes to the existing land use designations or zoning for the project site and would be consistent with the allowable density for the site identified in the Marin Countywide Plan and the County's Zoning Regulations. Consistent with the Countywide Plan and state Density Bonus Law, the project proposes a density of 3.3 units per acre. Although the proposed project would not involve changes to the existing land use or zoning designations, the project includes a proposed amendment to the Strawberry Community Plan to revise the residential unit count for additional housing on the site, and to remove the restriction that requires residential and other site uses be dedicated to students, faculty, and staff of the academic campus. The draft community plan amendment is provided as Appendix O of this EIR. Other land use entitlements and permits required for the project are approval of a Master Plan for large scale development and Design Review for new construction in a planned zoning district; approval of a Vesting Tentative Map application; and issuance of a Master Use Permit, Tree Removal Permit, Encroachment Permit, and Building Permit(s). A description of each of these entitlements and permits is provided in Table 2-4, "List of Required Permits and Approvals," in Chapter 2, "Project Description."

As evaluated and disclosed in other sections of the impact analysis, construction and operation of the proposed project would result in specified, significant or potentially significant environmental impacts. Applicable land use plans and policies have been analyzed relevant to those impacts within each resource section. The relationship between environmental regulations and the potential impacts is also addressed in the resource sections. As such, the consistency evaluation in Table 3.10-1 below focuses on land use-specific plans and policies.

Table 3.10-1 Project Consistency with Applicable Local Policies

Policy	Consistency Analysis
Marin Countywide Plan	
Natural Systems and Agriculture Element	
Policy TRL-1.2: Expand the Countywide Trail System. Acquire additional trails to complete the proposed countywide trail system, providing access to or between public lands and enhancing public trail use opportunities for all user groups, including multi-use trails, as appropriate.	**Consistent.** The proposed project includes the establishment of new trails and pathways throughout the project site as well as improvements to existing trails. New trails and pathways constructed as part of the project would connect to existing trails and pathways within and outside of the project site, expanding the trail system on the Strawberry peninsula. Therefore, the proposed project would be consistent with this policy.
Policy TRL-2.1: Preserve the Environment. In locating and designing trails, protect sensitive habitat and natural resources by avoiding those areas.	**Potentially Inconsistent Unless Mitigated.** The proposed project includes the establishment of new trails and pathways throughout the project site as well as improvements to existing trails. As discussed in Section 3.4, "Biological Resources," construction and grading for new trails in woodland, forest, scrub, and grassland habitats would result in potentially significant impacts on sensitive natural communities as well as habitat potentially suitable for special-status plants and wildlife species. However, as detailed in Section 3.4, mitigation measures are proposed that would reduce these potentially significant impacts to less than significant. Therefore, the proposed project would be consistent with this policy with implementation of mitigation.
Policy TRL-2.6 Provide Multiple Access Points. Design trails with multiple access points to maximize accessibility and minimize concentrating access.	**Consistent.** The new trails proposed as part of the project would extend throughout the project site. These new trails would have various access points throughout the site to maximize accessibility and would also connect to existing on- and off-site access points associated with the existing trail system. Therefore, the proposed project would be consistent with this policy.
Built Environment Element	
Policy CD-1.1: Direct Land Uses to Appropriate Areas. Concentrate urban development in the City-Centered Corridor, where infrastructure and facilities can be made available most efficiently. Protect sensitive lands in the Baylands Corridor. Emphasize agricultural uses in the Inland Rural Corridor, along with preservation of resources, habitat, and existing communities. Focus on open space, recreational, and agricultural land uses, as well as preservation of existing communities, in the Coastal Corridor.	**Consistent.** The proposed project is within the City-Centered Corridor and the project site is currently served by existing infrastructure, including roads, water and sewer lines, electric and natural gas lines, and stormwater facilities. As discussed in Section 3.15, "Utilities," the proposed project would connect to existing utilities currently serving the project site and would not require the construction of any new or expanded offsite utilities. Therefore, the proposed project would be consistent with this policy.
Policy CD-1.2: Direct Urban Services. Discourage extension of urban levels of service to serve new development beyond urban service areas.	**Consistent.** The proposed project is within the City-Centered Corridor and the project site is currently served by existing urban services. The project site is within the service areas of the Richardson Bay Sanitation District, Sewerage Agency of Southern Marin, Marin Municipal Water District, Mill Valley Refuse Service, and Pacific Gas & Electric. As such, the project would not require annexation into any urban service areas. Therefore, the proposed project would be consistent with this policy.
Policy CD-2.1: Provide a Mix of Housing. The range of housing types, sizes, and prices should accommodate workers employed in Marin County. This includes rental units affordable to lower-wage earners and housing that meets the needs of families, seniors, disabled persons, and homeless individuals and families.	**Consistent.** The proposed project includes a range of housing types, sizes, and prices. The project includes the construction of 324 new/replacement housing units, including a mix of single- and multi-family (one-, two-, and three-bedroom units), consisting of market rate and affordable housing (low-income) units. Of the 324 new/replacement housing units that could be developed under the project, up to 50 units would be affordable housing units available to low-income households. Affordable units would be offered at rates in accordance with Section

Policy	Consistency Analysis
	22.22.080(c) of the Marin County Development Code. The affordable units will be inclusionary; dispersed throughout the project site; and comparable in location, size, and exterior design to the remaining units in the overall residential development in accordance with Section 22.22.080(E) of the Marin County Development Code. Additionally, the proposed project includes a new residential care facility that would be designed to serve adults 55 and older with capacity to house up to 170 residents. The housing would consist of up to 100 independent living apartments and 50 assisted living and memory care residences. The provision of the residential care facility would provide additional housing opportunities in the county for seniors and disabled persons. Furthermore, objectives of the project include supporting a housing balance in the Strawberry community and providing housing units that contribute to meeting the housing goals outlined in the County's General Plan Housing Element. Therefore, the proposed project would be consistent with this policy.
Policy CD-2.5: Locate Housing Near Activity Centers. Provide housing near jobs, transit routes, schools, shopping areas, and recreation to discourage long commutes and lessen traffic congestion.	**Consistent.** The project is located on the former Golden Gate Baptist Seminary site, which is currently leased by Olivet University. The academic campus would continue to be occupied by a university or college following implementation of the project. The proposed project includes the construction of 324 new/replacement housing units on the project site. Preference for housing would be given to on-site workers, students, faculty, and staff; however, remaining units would be available for lease to the broader community. As such, the project would provide housing for on-site workers, students, faculty, and staff in proximity to the university in which they attend school and work, which would reduce commute distances and traffic congestion on regional roadways. Additionally, the project would maintain approximately 70 percent of the project site as open space, athletic fields, paths, and plazas, and a network of trails would be established on the site. The project would be designed to preserve existing viewsheds and the Strawberry ridgeline; establish new parks, trails, and pedestrian pathways; and provide the community with access to open space. Furthermore, the project site is approximately 0.5-mile from Strawberry Village shopping center, which includes retail, restaurants, and a grocery store. Therefore, the proposed project would be consistent with this policy.
Policy CD-2.8: Limit Development in Resource or Hazard Areas. Discourage development in areas with high natural resource value or threats to life or property, and restrict development in such areas to minimize adverse impacts.	**Potentially Inconsistent Unless Mitigated.** The proposed project is located on a developed site with existing structures and established uses in an urbanized area on the Strawberry Peninsula. As discussed in Section 3.4, although the project site supports sensitive habitat, plants, and wildlife, mitigation measures have been proposed to reduce any potentially significant impacts of the proposed project on biological resources to less than significant. Additionally, as discussed in Section 3.6, "Geology and Soils," the project site is not located within an Alquist-Priolo Earthquake Fault Zone, and there is no indication that any active or potentially active faults are present within or in immediate proximity to the site. However, the project site is within areas mapped with steep slopes, bay mud, or as potentially liquefiable; thus, the proposed project could exacerbate potential risks associated with seismically induced ground failure, slope instability, and landslides. Although the project site is in an area of geologic instability, mitigation measures are proposed that would reduce the proposed project's potential to exacerbate hazards associated with seismically induced ground failure, slope instability, and landslides. As detailed in Section 3.6, these potentially

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	significant impacts would be reduced to less than significant with mitigation. Furthermore, as discussed in Section 3.9, "Hydrology and Water Quality," the project site is not within a designated flood hazard area and would not be inundated by a tsunami or sea level rise under near-, mid-, or long-term scenarios. Therefore, the proposed project would be consistent with this policy with implementation of mitigation.
Policy CD-2.11: Promote Diverse Affordable Housing Strategies. Promote a diverse set of affordable housing strategies to convert existing market rate units to permanently affordable units in addition to building affordable housing in appropriate locations.	**Consistent.** The project site was identified as a housing opportunity site in the sites inventory for the 2023-2031 Housing Element, which was adopted by the County Board of Supervisors in January 2023 and is the 6th cycle update. The proposed project includes the development of 324 new/replacement housing units on the project site, consisting of market rate and affordable units. Up to 50 housing units would be affordable units available to low-income households and would be offered at rates in accordance with Section 22.22.080(c) of the Marin County Development Code. In addition, one of the objectives of the proposed project is to support implementation of Countywide Plan Housing Element goals and policies to provide a mix of housing units, including affordable units, that contribute to meeting the housing goals outlined in the Countywide Plan Housing Element and consistent with the Association of Bay Area Governments' Regional Housing Needs Allocation for Marin County. Also, the project would comply with Implementing Program 3 of the Housing Element and State Housing Density Bonus Law require that any project that involves demolition of affordable housing on a project site replace the number of affordable units lost with new affordable units; otherwise, the project is not eligible for the density bonus. Moreover, the County would require as a condition of project approval that all demolished affordable units be replaced with the same number of affordable units at the same affordability or that 20 percent of the total number of units be affordable, whichever is greater. Therefore, the proposed project would promote and contribute to a diverse affordable housing strategy and building affordable housing in appropriate locations and not conflict would occur. Accordingly, the proposed project would be consistent with this policy.
Policy CD-4.1: Update Community Plans. Amend existing community plans as necessary to define how policies and programs of the Countywide Plan will be implemented. (See [Countywide Plan] Map 3-3, Community Plan Areas, and Map Set 3-34, Land Use Policy Maps, in the Planning Areas Section).	**Consistent.** The proposed project involves an amendment to the existing Strawberry Community Plan to revise the residential unit count and remove the restriction that requires that residential and other site uses be dedicated exclusively to students, faculty, and staff of the academic campus. The proposed community plan amendment would make the Strawberry Community Plan consistent with the Countywide Plan, which identifies a higher residential density for the site (i.e., 2-4 units/acre) than what is in the existing community plan (i.e., 2.1 units/acre). Additionally, by removing the restrictions requiring onsite residential uses to be exclusively for university uses, the proposed community plan amendment would assist the County in meeting its Regional Housing Needs Assessment (RHNA) housing allocations identified in the 2023-2031 Housing Element by providing additional housing within the county that otherwise would not be available to the public. Therefore, the proposed project would be consistent with this policy.

Policy	Consistency Analysis
Policy CD-5.1: Assign Financial Responsibility for Growth. Require new development to pay its fair share of the cost of public facilities, services, and infrastructure, including but not limited to transportation, incremental water supply, sewer and wastewater treatment, solid waste, flood control and drainage, schools, fire and police protection, and parks and recreation. Allow for individual affordable housing projects to be exempted from the full cost of impact fees, subject to meeting specified criteria.	**Consistent.** The proposed project would pay its fair share contribution towards all required development impact fees for public facilities, services, and infrastructure. Therefore, the proposed project would be consistent with this policy.
Policy CD-5.2: Correlate Development and Infrastructure. For health, safety, and general welfare, new development should occur only when adequate infrastructure is available, consistent with the following findings: a. Project-related traffic will not cause the level of service established in the circulation element to be exceeded (see TR-1.e). b. Any circulation improvements or programs needed to maintain the established level of service standard have been programmed and funding has been committed. c. Environmental review of needed circulation improvement projects or programs has been completed. d. The time frame for completion of the needed circulation improvements or programs will not cause the established level of service standard to be exceeded. e. Wastewater, water (including for adequate fire flows), and other infrastructure improvements will be available to serve new development by the time the development is constructed.	**Consistent.** According to the Level of Service (LOS) Assessment prepared by Fehr & Peers for the proposed project (Appendix R), all intersections would operate at LOS C or better with the addition of project-generated traffic under all scenarios, which meets the County's LOS standard. No roadway or intersection changes would be required to meet the County's LOS standard. Additionally, the project site is in an urbanized area and is currently served by existing utilities. As discussed further in Section 3.16, "Utilities and Service Systems," the proposed project would include the extension of various onsite utility lines to the proposed new structures to accommodate the increased utility demands of the project. These utility improvements would be constructed simultaneously with the proposed development, and therefore would be available to serve the project by the time construction is completed and the project is operational. Therefore, the proposed project would be consistent with this policy.
Policy NO-1.1: Limit Noise from New Development. Direct the siting, design, and insulation of new development to ensure that acceptable noise levels are not exceeded.	**Potentially Inconsistent Unless Mitigated.** The proposed project would be designed in compliance with all applicable noise standards for interior noise levels. However, as detailed in Section 3.11, "Noise and Vibration," the operation of new HVAC equipment associated with the proposed project could result in a substantial increase in permanent noise during the quietest times of the night. As further detailed in Section 3.11, mitigation is proposed to reduce this impact to less than significant. Therefore, the proposed project would be consistent with this policy with implementation of mitigation.
Policy NO-1.2: Minimize Transportation Noise. Ensure that transportation activities do not generate noise beyond acceptable levels, including in open space, wilderness, wildlife habitat, and wetland areas.	**Consistent.** As detailed in Section 3.11, long-term increases in traffic noise could occur as a result of increased vehicular trips generated by the project on local roads near the project site. However, project-related traffic noise levels would not exceed applicable noise thresholds. Therefore, the proposed project would be consistent with this policy.
Policy NO-1.3: Regulate Noise Generating Activities. Require measures to minimize noise exposure to neighboring properties, open space, and wildlife habitat from construction-related activities, yard maintenance equipment, and other noise sources, such as amplified music.	**Potentially Inconsistent Unless Mitigated.** As detailed in Section 3.11, construction activities associated with the proposed project would generate noise levels that would intermittently constitute a substantial increase (perceived more than doubling of the existing noise levels) for an extended period of construction time. However, mitigation is proposed to reduce construction noise levels to the extent feasible. Therefore, the proposed project would be consistent with this policy with implementation of mitigation.

Policy	Consistency Analysis
Policy TR-1.2: Maintain Service Standards. Establish level of service standards for vehicles on streets and highways and performance standards for transit (see Map 3-8, Roadway Network of Marin County), bicycles, pedestrians, and other modes of transportation.	**Consistent.** According to the LOS Assessment prepared by Fehr & Peers for the proposed project (Appendix R), all intersections would operate at LOS C or better with the addition of project-generated traffic under all scenarios, which meets the County's LOS standard. No roadway or intersection changes would be required to meet the County's LOS standard. Therefore, the proposed project would be consistent with this policy.
Housing Element	
Policy 1.1: Land Use. Enact policies that encourage efficient use of land to foster a range of housing types in our community.	**Consistent.** The proposed project includes the development of a range of housing types. The project includes the construction of 324 new/replacement housing units, including a mix of single- and multi-family (one-, two-, and three-bedroom units), and consists of market rate and affordable housing units. Of the 324 new/replacement housing units that could be developed under the project, up to 50 units would be affordable housing units available to low-income households. Additionally, the proposed project includes a new residential care facility that would be designed to serve adults 55 and older with capacity to house up to 170 residents. The housing would consist of up to 100 independent living apartments and 50 assisted living and memory care residences. The provision of the residential care facility would provide additional housing opportunities in the county for seniors and disabled persons, further contributing a range of housing types in the community. Therefore, the proposed project would be consistent with this policy.
Policy 1.2: Regional Housing Needs Assessment. Maintain an adequate inventory of residential and mixed-use sites to fully accommodate the County's RHNA by income category throughout the planning period.	**Consistent.** The project site was identified as a housing opportunity site in the sites inventory for the 2023-2031 Housing Element, which was adopted by the County Board of Supervisors in January 2023 and is the 6th cycle update. The proposed project includes the development of 324 new/replacement housing units on the project site, consisting of market rate and affordable units. Up to 50 housing units would be affordable units available to low-income households and would be offered at rates in accordance with Section 22.22.080(c) of the Marin County Development Code. Additionally, the project includes an amendment to the existing Strawberry Community Plan to remove the restriction that requires that residential and other site uses be dedicated exclusively to students, faculty, and staff of the academic campus. By removing this restriction, a portion of the 324 new/replacement units proposed by the project would be available to lease by the broader community. However, preference would first be given to on-site workers, students, faculty, and staff. Furthermore, the proposed project includes a new residential care facility that would be designed to serve adults 55 and older with capacity to house up to 170 residents. The provision of the market rate, affordable housing, senior living units would assist the County in meeting its RHNA housing allocations as identified in the 2023-2031 Housing Element. Therefore, the proposed project would be consistent with this policy.
Policy 1.3: Housing Sites. Recognize developable land as a scarce community resource. Protect and expand the supply and residential capacity of housing sites, particularly for lower income households.	**Consistent.** The project site was identified as a housing opportunity site in the sites inventory for the 2023-2031 Housing Element. The proposed project would contribute to the housing supply within the county by including the development of 324 new/replacement units, including 50 affordable units that would be available to low-income households. Therefore, the proposed project would be consistent with this policy.

Policy	Consistency Analysis
Policy 2.1: Special Needs Groups. Expand housing opportunities for special needs groups, including seniors, people living with disabilities (including mental, physical, and developmental disabilities), agricultural workers and their families, individuals and families experiencing homelessness, single-parent families, large households, lower income (including extremely low-income) households, and other persons identified as having special housing needs in Marin County.	**Consistent.** The proposed project includes the construction of a residential care facility on the project site that would be designed to serve adults 55 and older with capacity to house up to 170 residents. The housing would consist of up to 100 independent living apartments and 50 assisted living and memory care residences. The provision of the residential care facility would provide additional housing opportunities in the county for seniors and disabled persons. Additionally, up to 50 of the 324 new/replacement housing units proposed as part of the project would be affordable housing units available to low-income residents. Affordable units would be offered at rates in accordance with Section 22.22.080(c) of the Marin County Development Code. The affordable units will be inclusionary; dispersed throughout the project site; and comparable in location, size, and exterior design to the remaining units in the overall residential development in accordance with Section 22.22.080(E) of the Marin County Development Code. Therefore, the proposed project would be consistent with this policy.
Policy 2.3: Workforce Housing. Implement policies that facilitate housing opportunities to meet the needs of Marin County's workforce, especially those earning lower incomes.	**Consistent.** The proposed project includes the construction of 324 new/replacement housing units, including up to 50 affordable housing units that would be available to low-income residents. Preference for housing would be given to on-site workers, students, faculty, and staff. Therefore, the proposed project would be consistent with this policy.
Policy 2.5: Preserve Existing Housing. Protect and enhance the housing we have and ensure that existing affordable housing remains affordable and residents are not displaced.	**Consistent.** As discussed in Section 3.12, the proposed project involves the demolition of 139 residential units, which would result in the displacement of approximately 320 people. However, in accordance with the Countywide Plan Housing Element, the project would be considered development on a nonvacant site containing existing residential units and, therefore, would be subject to the replacement requirements of Housing Element Implementing Program 3, the State Density Bonus Law, and the Housing Crisis Act of 2019, which would reduce potential impacts related to displaced residents. Implementing Program 3 of the Housing Element and State Density Bonus Law requires that any project that involves demolition of affordable housing on a project site to replace the number of affordable units lost with new affordable units; otherwise, the project is not eligible for the density bonus. Moreover, the County would require as a condition of project approval that all demolished affordable units be replaced with the same number of affordable units at the same affordability, or 20 percent of the total number of units be affordable, whichever is greater. Therefore, no affordable housing would be displaced with implementation of the project. Accordingly, the proposed project would be consistent with this policy.
Policy 2.6: Preserve Permanent Housing Inventory. Preserve our housing inventory for permanent residential uses. Discourage or mitigate the impact of short-term rentals and units unoccupied for extended periods of time.	**Consistent.** The proposed project would retain 13 existing housing units and construct 324 new/replacement units on the project site. Existing and proposed housing would be used for permanent residential uses, as well as university housing. Preference for housing would be given to on-site workers, students, faculty, and staff; however, remaining units would be available for lease to the broader community. None of the existing or proposed housing would be available for short-term rentals. Therefore, the proposed project would be consistent with this policy.

Policy	Consistency Analysis
Strawberry Community Plan (1973)	
Community Goals	
1. Increase the community authority and responsibility in future development decisions.	**Not applicable.** The proposed project would not change the community's authority or responsibility in future development decisions in the Strawberry community.
2. Retain the local setting of open hillside and open Bay waters.	**Consistent.** The proposed project does not include any in-water or shoreline development or increase in fill in Richardson Bay or San Francisco Bay, and therefore would retain the setting of open Bay waters. Additionally, as discussed in Section 3.1, "Aesthetics," the project would not block views to any regional landmarks including Richardson Bay or San Francisco Bay. As further discussed in Section 3.1, the project would preserve the natural appearance and ridgeline of Strawberry Point. The project would not interfere with views from ridges or hilltops to the Bay or lowlands. No structures would interrupt a continuous view of the visual crest of the surrounding hillsides from adjacent lowlands. Therefore, the proposed project would be consistent with this goal.
3. Retain the existing fine grain character of the community by limiting the construction of large scale urban density developments.	**Consistent.** The proposed project is located on a developed site with existing structures and established uses in an urbanized area on the Strawberry Peninsula. The project site is located on the former Golden Gate Baptist Theological Seminary site, which has been historically used as a school campus with residential uses since it was first developed in the 1950s. The academic campus is currently leased by Olivet University. The academic campus would continue to be occupied by a university or college following implementation of the project. Additionally, the proposed project would be consistent with the Countywide Plan land use and zoning designations for the site. The project's proposed apartments and dormitory structures would be generally compatible in scale with the surrounding single-family homes, condominiums, and large apartment buildings that exist along the Richardson Bay shoreline. Therefore, the proposed project would be consistent with this goal.
4. Provide convenient access to local commercial and community facilities and the resources of surrounding communities.	**Consistent.** The proposed project would maintain approximately 70 percent of the project site as open space, athletic fields, paths, and plazas, and a network of trails would be established on the site, all of which would continue to be available to the surrounding community. The project would establish new parks, trails, and pedestrian pathways and provide the community with access to open space. Additionally, the project site is approximately 0.5-mile from Strawberry Village shopping center, which includes retail, restaurants, and a grocery store. Furthermore, the proposed project includes a new residential care facility that would be designed to serve adults 55 and older with capacity to house up to 170 residents, as well as a new daycare facility. Therefore, the proposed project would be consistent with this goal.
5. Stem the increasing rate of traffic congestion, air, water, and noise pollution.	**Potentially Inconsistent Unless Mitigated.** According to the LOS Assessment prepared by Fehr & Peers for the proposed project (Appendix R), all intersections would operate at LOS C or better with the addition of project-generated traffic under all scenarios, which meets the County's LOS standard. Thus, no roadway or intersection changes would be required to meet the County's LOS standard. As discussed in Section 3.2, "Air Quality," the proposed project would generate emissions of air pollutants in exceedance of air quality thresholds during construction. However, as detailed in Section 3.2, mitigation measures are proposed that would reduce these potentially significant impacts to less than

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	significant. As discussed in Section 3.9, the proposed project would not degrade water quality with the implementation of a stormwater pollution prevention plan and best management practices during construction. During operation, the project site would be stabilized, and stormwater basins would be installed to detain and treat runoff, improving the water quality of runoff on the project site. As discussed in Section 3.11, the operation of new HVAC equipment associated with the proposed project could result in a substantial increase in permanent noise during the quietest times of the night. As further detailed in Section 3.11, mitigation is proposed to reduce this impact to less than significant. Construction activities associated with the proposed project would generate noise levels that would intermittently constitute a substantial increase (perceived more than doubling of the existing noise levels) for an extended period of construction time. However, mitigation is proposed to reduce construction noise levels to the extent feasible. Therefore, the proposed project would be consistent with this goal with implementation of mitigation.
Strawberry Community Plan and Amendments (1982) Note: The project involves a proposed amendment to the Strawberry Community Plan.	
II. Goals	
A. Community Amenities: It is the desire of the Community to assure that future development provide for such amenities as visual backdrops, neighborhood separators, retention of ridgelines, and protection of environmentally important areas, through careful planning and clustering of structures. In addition, all means of open space acquisition should be pursued, including purchase and dedication.	**Consistent**: As discussed in Section 3.1, the proposed project is consistent with this goal. See Table 3.1-2 in Section 3.1 for a discussion of the project's consistency with this goal. Therefore, the proposed project would be consistent with this goal.
B. Housing Balance: The Community desires to retain a character that identifies the Strawberry area as a family oriented community. Such an identity is established by the visual, physical setting of the community, as well as by the families who reside there. It is important that the social patterns, personal interaction, sights and sounds that typify single family neighborhoods be maintained and strengthened. If new development is to occur, it can strengthen this character by providing the traditional setting of detached single family units within any new development proposed for the area. Development plan proposals should give the highest priority to incorporating detached single family homes into the plan. Where physical constraints or opportunities dictate another housing type (i.e., attached units), the Community goal is to insure that unit size and project amenities are designed to provide the opportunity for and encourage occupancy by families with children. In this manner then the Community wishes to insure a housing balance that will continue to provide for families.	**Consistent.** The project site was identified as a housing opportunity site in the sites inventory for the 2023-2031 Housing Element, which was adopted by the County Board of Supervisors in January 2023 and is the 6th cycle update. The proposed project includes the development of a range of housing types that would assist the County in meeting its RHNA housing allocations as identified in the 2023-2031 Housing Element. The project includes the construction of 324 new/replacement housing units, including a mix of single- and multi-family (one-, two-, and three-bedroom units), and consists of market rate and affordable housing units. Up to 50 of the 324 new/replacement housing units proposed as part of the project would be affordable housing units available to low-income residents. The provision of market rate and affordable housing would provide a balance of housing as well as opportunities for families of various income levels. Furthermore, one of the objectives of the project is to create an intergenerational community for residents to live, work, and learn. The proposed project would also include a new residential care facility that would be designed to serve adults 55 and older with capacity to house up to 170 residents, as well as a new daycare facility. The provision of the residential care facility would provide additional housing opportunities in the County for seniors and disabled persons, further contributing a range of housing types in the community. Therefore, the proposed project would be consistent with this goal.

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C. Transportation: The Community desires that the movement of traffic through the Strawberry area be safe for both pedestrians and vehicles. The Community further desires that existing traffic movement not be further interrupted by new development and that existing potentially hazardous conditions for pedestrians and vehicles be improved to an acceptable level of safety. Therefore, it is the goal of the Community that the overall density of new development in Strawberry be scaled to ensure future acceptable traffic levels of service. Where levels of service or safety are now currently unacceptable, or where service levels or safety conditions will deteriorate due to traffic generated by new development, improvements shall be required in conjunction with that new development. These improvements should be considered as appropriate mitigation measures to be applied to new development. Owners of the large undeveloped properties in the Strawberry area (DeSilva Island, Watertank Hill, Golden Gate Baptist Theological Seminary and Strawberry Spit/Point) will be required to contribute on a proportional basis to the funding necessary to construct required improvements. The proportion of the funding to be required from each property owner is to be determined by the traffic generated by each development and the impact of that traffic on the intersection or road to be improved. The formula for proportionality and method of collection requires further study and should be determined in the near future.	**Potentially Inconsistent Unless Mitigated.** According to the LOS Assessment prepared by Fehr & Peers for the proposed project (Appendix R), all intersections would operate at LOS C or better with the addition of project-generated traffic under all scenarios, which meets the County's LOS standard. Thus, no roadway or intersection changes would be required to meet the County's LOS standard. As discussed in Section 3.14, the project would expand bicycle and pedestrian facilities, thereby improving access and encouraging bicycling and walking as daily forms of transportation. Additionally, the project's addition of pedestrian and bicycle improvements would enhance safety for residents, staff, students, and visitors navigating the project site by foot, bike, or other nonmotorized mode of transportation. However, as detailed in Section 3.14, streets within the project site range in width from approximately 20 feet to 28 feet without shoulders; thus, the existing roadways do not satisfy the minimum required width for collector and local streets (i.e., 40 feet and 36 feet, respectively). Furthermore, the project would result in insufficient parking for the academic campus, which would result in spillover parking on adjacent streets. Because some of the internal roadways would not meet County roadway width requirements and the project would not supply the necessary number of parking spaces to avoid parking spillover, the project could result in potential safety hazards. As detailed in Section 3.14, mitigation measures are proposed that would reduce potentially significant safety hazard impacts to less than significant. Therefore, the proposed project would be consistent with this goal with implementation of mitigation.
General Design Guidelines	
Landscaping. Site plans shall be designed to incorporate landscaping to screen views of proposed structures. Landscaping shall be placed to provide privacy between proposed and existing structures. All landscaping material chosen shall be of a size and heartiness to insure that the desired landscaping effects occur within the shortest time possible. In all cases, landscaping plans must be incorporated into the overall site design pattern. Approved development applications must be conditioned to insure that such landscaping plans are installed as early as possible as part of the required site improvements.	**Consistent**: As discussed in Section 3.1, the proposed project is consistent with this guideline. See Table 3.1-2 in Section 3.1 for a discussion of the project's consistency with this guideline.
Erosion Control. Site designs should be prepared and construction activities implemented to minimize adverse impacts upon adjacent marshes and natural resource areas. Individual environmental assessments should clearly review development proposals and indicate the potential for erosion, the possible impacts and methods for mitigating those impacts.	**Consistent.** As discussed in Section 3.9, the proposed project would not degrade water quality with the implementation of a SWPPP and BMPs during construction in accordance with the California Construction General Permit 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012-0006-DWQ). The Construction General Permit requires the installation of erosion and sediment controls; implementation and maintenance of temporary construction BMPs to control and effectively manage site runoff; and waste control measures to prevent leakage or spill of hazardous materials into soils and surface waters. During operation, the project site would be stabilized, and stormwater basins would be installed to detain and treat runoff, improving the water quality of runoff on the project site. Therefore, the proposed project would be consistent with this guideline.

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Ridgelines. Hilltops, forested areas and other prominent visual landmarks in the community should be recognized in development plan proposals and preserved in their natural state.	**Consistent**: As discussed in Section 3.1, the proposed project is consistent with this guideline. See Table 3.1-2 in Section 3.1 for a discussion of the project's consistency with this guideline.
View Corridors. Existing significant view corridors should be identified and designs for maintaining those corridors should be incorporated into development proposals. Structures in view of existing development should be designed to incorporate a variety of interesting structure planes and angles while adhering to a 30' 0" height limitation that maintains those existing views.	**Consistent**: As discussed in Section 3.1, the proposed project is consistent with this guideline. See Table 3.1-2 in Section 3.1 for a discussion of the project's consistency with this guideline.
Noise. Noise impacts on residents and persons in nearby areas shall be minimized through placement of buildings, recreation areas, roads and landscaping. Onsite acoustical conditions should be studied and site plans should be formulated so that placement of structures helps to disperse noise rather than allow it to reverberate.	**Potentially Inconsistent Unless Mitigated.** The potential noise impacts of the project are analyzed in Section 3.11 of this EIR. As discussed in Section 3.11, "Noise and Vibration," the operation of new HVAC equipment associated with the proposed project could result in a substantial increase in permanent noise during the quietest times of the night. However, as detailed in Section 3.11, mitigation is proposed to reduce this impact to less than significant. Additionally, the proposed project would be designed in compliance with all applicable noise standards for interior noise levels. Therefore, the proposed project would be consistent with this guideline with implementation of mitigation.
Additional Plan Policies	
Policy D: Inclusionary Zoning. It is the policy of the Community Plan to support the goal of achieving below market rate housing through application of the inclusionary zoning ordinance requirements. Certain developments are not suitable for inclusionary units and, therefore, in-lieu payments would be a more appropriate way of achieving below-market rate units. In particular, the potential density, location, access to public transportation and environmental impacts associated with development of inclusionary units should be evaluated as part of any Master Plan application for the four major parcels in Strawberry. In-lieu fees should be accepted if on-site inclusionary units are not economically feasible or otherwise desirable and are offered by the applicant.	**Consistent.** Implementation of the proposed project would require a Master Plan pursuant to Marin County Development Code Section 22.44.020 for the following elements: daycare and fitness center, residential development, residential care facility, administration building renovation, maintenance building replacement, landscape and hardscape improvements, and open space. The proposed residential development would include 324 new/replacement housing units, of which up to 50 would be affordable housing units available to low-income households. Affordable units would be offered at rates in accordance with Section 22.22.080(c) of the Marin County Development Code. The affordable units will be inclusionary; dispersed throughout the project site; and comparable in location, size, and exterior design to the remaining units in the overall residential development in accordance with Section 22.22.080(E) of the Marin County Development Code. Therefore, the proposed project would be consistent with this policy.
Policy E: Landslide and Soil Stability Problems. Because of the sloped topography of the undeveloped sites remaining in the Strawberry Community, soil stability and landslide potential are concerns that must be addressed in any development proposal. Adequate geologic and engineering investigations shall be required as part of any Master Plan, Development Plan and Design Review applications to determine the presence of any such hazards and to identify appropriate mitigations to ensure safe, stable housing and roadways.	**Potentially Inconsistent Unless Mitigated.** Geologic hazards and the project's potential to exacerbate such hazards are analyzed in Section 3.6, "Geology and Soils," of this EIR. As part of later detailed design development, geotechnical engineering would include further exploration and laboratory testing to inform project design. This requirement is included as mitigation in Section 3.6. Additionally, several previous geotechnical studies have been completed for the project site (Appendices I, J, K, and L). A list of these studies is provided in Section 3.6. As discussed in Section 3.6, the project site is not located within an Alquist-Priolo Earthquake Fault Zone, and there is no indication that any active or potentially active faults are present within or in immediate proximity to the site. However, the project site is within areas mapped with steep slopes, bay mud, or as potentially liquefiable; thus, the proposed project could exacerbate potential risks associated with seismically induced ground failure, slope instability, and landslides. Although the project site is in an area of geologic instability, mitigation measures are proposed that would reduce the proposed project's potential to exacerbate hazards associated with seismically induced

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	ground failure, slope instability, and landslides. As detailed in Section 3.6, these potentially significant impacts would be reduced to less than significant with mitigation. Therefore, the proposed project would be consistent with this policy with implementation of mitigation.

Potentially significant land use impacts would result when inconsistencies with goals and policies intended to avoid or mitigate environmental effects would occur where such inconsistencies would result in potentially a significant physical impact on the environment. Inconsistencies identified as resulting in potentially significant environmental impact are noted as "potentially inconsistent unless mitigated" in Table 3.10-1. Because these policy inconsistencies could indicate or result in significant environmental impacts, the proposed project's land use impact related to these inconsistencies would be **potentially significant**.

Mitigation Measures

Implement Mitigation Measure 3.2-1 (Apply Tier-4 Emission Standards to All Diesel-Powered Off-Road Equipment), as described in Section 3.2.

Implement Mitigation Measure 3.4-1a (Avoid and Minimize Impacts to Special-Status Plants), Mitigation Measure 3.4-1b (Avoid and Minimize Introduction and Spread of Invasive Plants), Mitigation Measure 3.4-2a (Avoid Disturbance of Overwintering Monarch Butterflies), Mitigation Measure 3.4-2b (Minimize Loss of Monarch Butterfly Overwintering Stands), Mitigation Measure 3.4-4 (Avoid Disturbance of White-Tailed Kite and Common Bird Nests), Mitigation Measure 3.4-5 (Avoid Disturbance of Special-Status and Common Bat Maternity and Hibernation Roosts), and Mitigation Measure 3.4-7 (Avoid and Minimize Introduction and Spread of Sudden Oak Death), as described in Section 3.4.

Implement Mitigation Measure 3.6-2 (Geotechnical Engineering to Address Seismically Induced Ground/Structural Failure) and Mitigation Measure 3.6-4 (Geotechnical Engineering to Address Slope Instability and Landsliding), as described in Section 3.6.

Implement Mitigation Measure 3.11-1 (Prepare and Implement a Construction Noise Control Plan) and Mitigation Measure 3.11-4 (Reduce Operational Stationary Source Noise), as described in Section 3.11.

Significance after Mitigation

As discussed in Sections 3.2, 3.4, 3.6, and 3.11, the implementation of mitigation measures would reduce impacts on air quality, biological resources, geology and soils, and noise (operations) to less than significant. However, as discussed in Section 3.11, the implementation of mitigation measures would reduce construction-related noise impacts, but not below a level of significance. Thus, even with implementation of all feasible mitigation, construction noise could still result in significant noise impacts intermittently for sensitive receptors. Although the project would result in a significant and unavoidable project-level construction noise impact, the proposed project would incorporate all feasible mitigation measures to minimize and reduce construction noise, consistent with Countywide Plan Policy NO-1.3. The proposed project would be consistent with all applicable policies of the Countywide Plan and Strawberry Community Plan, as well as the overall general intent of these plans as demonstrated in Table 3.10-1 above. Therefore, land use and planning impacts would be **less than significant**.

3.11 NOISE AND VIBRATION

This section includes a summary of applicable regulations related to noise and vibration, a description of ambient-noise conditions, and an analysis of potential short-term construction and long-term operational-source noise impacts associated with the project. Mitigation measures are recommended as necessary to reduce significant noise impacts. Additional data is provided in Appendix P, "Noise Measurement Data and Noise Modeling Calculations." Scoping comments received regarding noise and vibration in response to the notice of preparation (NOP) requested that the EIR address construction noise and monitoring; traffic noise; and restrictions on event noise. See Appendix A for all NOP comments received.

Prior to discussing the regulatory and environmental setting, the following definitions of commonly used noise terms throughout this section are provided. The Federal Transit Administration (FTA) and Caltrans have conducted some of the most comprehensive noise studies for construction and for noise impacts on sensitive receivers in general, so their relevant data serves as substantial evidence in this EIR.

- **Equivalent Continuous Sound Level (L_{eq}):** L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period (California Department of Transportation [Caltrans] 2013a:2-48). For instance, the 1-hour equivalent sound level, also referred to as the hourly L_{eq}, is the energy average of sound levels occurring during a 1-hour period and is the basis for noise abatement criteria used by Caltrans and FTA (Caltrans 2013a:2-47; FTA 2018: Table 3-1).
- **Maximum Sound Level (L_{max}):** L_{max} is the highest instantaneous sound level measured during a specified period (Caltrans 2013a:2-48; FTA 2018: Table 3-1).
- **Day-Night Level (L_{dn}):** L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB "penalty" applied to sound levels occurring during nighttime hours between 10 p.m. and 7 a.m. (Caltrans 2013a:2-48; FTA 2018:Table 3-1).
- **Community Noise Equivalent Level (CNEL):** CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m. and a 5-dB penalty applied to the sound levels occurring during evening hours between 7 p.m. and 10 p.m. (Caltrans 2013a:2-48).
- **Vibration Decibels (VdB):** VdB is the vibration velocity level in decibel scale (FTA 2018:Table 5-1).
- **Peak Particle Velocity (PPV):** PPV is the peak signal value of an oscillating vibration waveform. Usually expressed in inches/second (in/sec) (FTA 2018:Table 5-1).

3.11.1 Regulatory Setting

FEDERAL

U.S. Environmental Protection Agency Office of Noise Abatement and Control

The U.S. Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate Federal noise control activities. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at more local levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to state and local governments. However, documents and research completed by the EPA Office of Noise Abatement and Control continue to provide value in the analysis of noise effects.

Federal Interagency Committee on Noise

There are no state or federal regulations related to assessment of the project's noise impacts, although federal guidelines provide direction regarding what constitutes a significant change in noise conditions. The Federal Interagency Committee on Noise (FICON) determined what level of increase in noise level (measured in terms of CNEL) is noticeable; and a noticeable change may indicate a significant impact. These findings, as shown in Table 3.11-1, FICON Significance of Change in Noise Exposure, indicate that, at lower existing noise levels, a greater increase is needed to create a significant impact. The FICON findings were developed as part of an assessment related to aircraft operations, but these findings have commonly been applied to all types of community noises.

Table 3.11-1 FICON Significance of Change in Noise Exposure

Ambient Noise Level Without Project	Significant Impact Occurs if the Project Increases Ambient Noise Levels by:
< 60 dB	+5 dB or more
<60-65 dB	+3 dB or more
>65 dB	+1.5 dB or more

Source: Table based on FICON 1992:7.

Federal Transit Administration

To address the human response to ground vibration, the FTA has set forth guidelines for maximum-acceptable vibration criteria for different types of land uses. These guidelines are presented in Table 3.11-2. In addition, FTA has also established construction vibration damage criteria, shown below in Table 3.11-3.

Table 3.11-2 Ground-Borne Vibration Impact Criteria for General Assessment

Land Use Category	Ground-Borne Vibration Impact Levels (VdB re 1 micro-inch/second)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations.	65 [4]	65 [4]	65 [4]
Category 2: Residences and buildings where people normally sleep.	72	75	80
Category 3: Institutional land uses with primarily daytime uses.	75	78	83

Notes: VdB = vibration decibels referenced to 1 µ inch/second and based on the root mean square (RMS) velocity amplitude.

[1] "Frequent Events" is defined as more than 70 vibration events of the same source per day.

[2] "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

[3] "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.

[4] This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define acceptable vibration levels.

Source: FTA 2018:126.

Table 3.11-3 FTA Construction Damage Vibration Criteria

Land Use Category	PPV, in/sec
Reinforced-concrete, steel or timber (no plaster)	0.5
Engineered concrete and masonry (no plaster)	0.3
Non-engineered timber and masonry buildings	0.2
Buildings extremely susceptible to vibration damage	0.12

Notes: PPV= peak particle velocity

Source: Table based on FTA 2018:126.

In addition to vibration criteria, FTA has also established construction noise criteria based on the land use type affected by noise and depending on whether or not construction noise would occur during the daytime or nighttime. The FTA criteria are as follows:

- Residential: 90 dBA L_{eq} (day) and 80 dBA L_{eq} (night)
- Commercial/Industrial: 100 dBA L_{eq} (day and night)

STATE

California General Plan Guidelines

The State of California General Plan Guidelines 2017, published by the California Governor's Office of Planning and Research (OPR) (2017), provides guidance for the compatibility of projects within areas of specific noise exposure. Acceptable and unacceptable community noise exposure limits for various land use categories have been determined to help guide new land use decisions in California communities. In many local jurisdictions, these guidelines are used to derive local noise standards and guidance. Citing EPA materials and the State Sound Transmissions Control Standards, the State's general plan guidelines recommend interior and exterior CNEL of 45 and 60 decibels (dB) for residential units, respectively (OPR 2017:378).

California Department of Transportation

In 2013, Caltrans published the Transportation and Construction Vibration Manual (Caltrans 2013a). The manual provides general guidance on vibration issues associated with construction and operation of projects in relation to human perception and structural damage. Table 3.11-4 presents recommendations for levels of vibration that could result in damage to structures exposed to continuous vibration.

Table 3.11-4 Caltrans Recommendations Regarding Levels of Vibration Exposure

PPV (in/sec)	Effect on Buildings
0.4-0.6	Architectural damage and possible minor structural damage
0.2	Risk of architectural damage to normal dwelling houses
0.1	Virtually no risk of architectural damage to normal buildings
0.08	Recommended upper limit of vibration to which ruins and ancient monuments should be subjected
0.006-0.019	Vibration unlikely to cause damage of any type

Notes: PPV= Peak Particle Velocity; in/sec = inches per second

Source: Caltrans 2013a.

LOCAL

Marin Countywide Plan

Section 3.10 of the *Marin Countywide Plan* consists of the County's Noise Element, which contains goals, polices, and implementing programs aimed to limit noise exposure in the County (Marin County 2023). The Countywide Plan identifies traffic noise as the major source of noise in the County. Other significant local sources of noise include aircraft, trains, and construction. The following policies are applicable to the project:

- Policy NO-1.1. Limit Noise from New Development. Direct the siting, design, and insulation of new development to ensure that acceptable noise levels are not exceeded.
- Policy NO-1.2. Minimize Transportation Noise. Ensure that transportation activities do not generate noise beyond acceptable levels, including in open space, wilderness, wildlife habitat, and wetland areas.

- **Policy NO-1.4. Regulation Noise Generating Activities**. Require measures to minimize noise exposure to neighboring properties, open space, and wildlife habitat from construction related activities, yard maintenance equipment, and other noise sources, such as amplified music.

The *Marin Countywide Plan* includes allowable noise exposure from stationary sources, as shown in Table 3.11-5. The project site is also included in the adopted *Strawberry Community Plan* (1973) and *Strawberry Community Plan Amendments* (1982). However, the plans do not include any information related to noise.

Table 3.11-5 Allowable Noise Exposure from Stationary Noise Sources

	Daytime (7:00 a.m. to 10:00 p.m.)[1]	Nighttime (10:00 p.m. to 7:00 a.m.)[1]
Hourly L_{eq}, dB	50	45
Maximum Level, dB	70	65
Maximum Level, dB (Impulsive Noise)	65	60

Notes: L_{eq}= noise equivalent level.

[1] The measurements for determining noise exposure from stationary sources should be determined by applying the standards at the property line of the receiving land use. If the ambient noise level exceeds the standards in Table 13.11-5 the standard should be raised to the ambient noise level.

Source: Marin County 2023: Figure 3-43

Marin County Code

Chapter 6.70 of the Marin County Code, Loud and Unnecessary Noises, prohibits any loud, unnecessary or unusual noise which annoys, disturbs, injures, or endangers the comfort and peace of others. Section 6.70.030, Enumerated Noises, places restrictions on excessive noise levels from horns, signaling devices, radios, loudspeakers, amplifiers, and yelling between the hours of 11:00 p.m. and 7:00 a.m. Marin County Code Section 6.070.030(5) limits construction activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and 9:00 a.m. and 5:00 p.m. on Saturday. Construction is not permitted on Sundays and federal holidays.

3.11.2 Environmental Setting

ACOUSTIC FUNDAMENTALS

Prior to discussing the noise setting for the project, background information about sound, noise, and vibration is needed to provide context and a better understanding of the technical terms referenced throughout this section.

Sound, Noise, and Acoustics

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 human ear. Noise is defined as loud, unexpected, annoying, or unwanted sound.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz, or thousands of hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

Sound Pressure Levels and 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 (0.00000000001) 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 large 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 decibels (dB).

Addition of Decibels

Because decibels are logarithmic units, SPLs cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness at the same time, the resulting sound level at a given distance would be 3 dB higher than if only one of the sound sources was producing sound under the same conditions. For example, if one idling truck generates an SPL of 70 dB, two trucks idling simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level approximately 5 dB louder than one source.

A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within this range better than sounds of the same amplitude with frequencies outside of this range. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of A-weighted decibels) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgment correlates well with the A-scale sound levels of those sounds. Thus, noise levels are typically reported in terms of A-weighted decibels. All sound levels discussed in this section are expressed in A-weighted decibels. Table 3.11-6 describes typical A-weighted noise levels for various noise sources.

Table 3.11-6 Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1,000 feet	— 100 —	
Gas lawn mower at 3 feet	— 90 —	
Diesel truck at 50 feet at 50 miles per hour	— 80 —	Food blender at 3 feet, Garbage disposal at 3 feet
Noisy urban area, daytime, Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet, Normal speech at 3 feet
Commercial area, Heavy traffic at 300 feet	— 60 —	
Quiet urban daytime	— 50 —	Large business office, Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime	— 30 —	Library, Bedroom at night
Quiet rural nighttime	— 20 —	
	— 10 —	Broadcast/recording studio
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013b: Table 2-5

Human Response to Changes in Noise Levels

As mentioned above, the doubling of sound energy results in a 3-dB increase in the sound level. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different from what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear can discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In general, the healthy human ear is most sensitive to sounds between 1,000 and 5,000 Hz and perceives both higher and lower frequency sounds of the same magnitude with less intensity (Caltrans 2013b:2-18). In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness (Caltrans 2013b:2-10). Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3-dB increase in sound would generally be perceived as barely detectable.

Vibration

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Sources of vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery) or transient in nature (e.g., explosions). Vibration levels can be depicted in terms of amplitude and frequency, relative to displacement, velocity, or acceleration.

Vibration amplitudes are commonly expressed in PPV or root-mean-square (RMS) vibration velocity. PPV and RMS vibration velocity are normally described in inches per second (in/sec) or in millimeters per second. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is typically used in the monitoring of transient and impact vibration and has been found to correlate well to the stresses experienced by buildings (FTA 2018: 110; Caltrans2013b:6).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. In a sense, the human body responds to average vibration amplitude. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a 1-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as VdB, which serves to compress the range of numbers required to describe vibration (FTA 2018: 110, 199; Caltrans 2013a: 7). This is based on a reference value of 1 micro inch per second.

The typical background vibration-velocity level in residential areas is approximately 50 VdB. Ground 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 (FTA 2018: 120; Caltrans 2013a: 27).

Typical outdoor sources of perceptible ground vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur to fragile buildings. Construction activities can generate sufficient ground vibrations to pose a risk to nearby structures. Constant or transient vibrations can weaken structures, crack facades, and disturb occupants (FTA 2018: 113).

Vibrations generated by construction activity can be transient, random, or continuous. Transient construction vibrations are generated by blasting, impact pile driving, and wrecking balls. Continuous vibrations are generated by vibratory pile drivers, large pumps, and compressors. Random vibration can result from jackhammers, pavement breakers, and heavy construction equipment.

Table 3.11-7 summarizes the general human response to different ground vibration-velocity levels.

Table 3.11-7 Human Response to Different Levels of Ground Noise and Vibration

Vibration-Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Notes: VdB = vibration decibels referenced to 1 µ inch/second and based on the root mean square (RMS) velocity amplitude.

Source: FTA 2018.

Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which a noise level decreases with distance depends on the following factors:

Geometric Spreading

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Roads and highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources, thus propagating at a slower rate in comparison to a point source. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.

Ground Absorption

The propagation path of noise from a source to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective-wave canceling provides additional attenuation associated with geometric spreading. Traditionally, this additional attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), additional ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the attenuation rate associated with cylindrical spreading, the additional ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance. This would hold true for point sources, resulting in an overall drop-off rate of up to 7.5 dB per doubling of distance.

Atmospheric Effects

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels, as wind can carry sound. Sound levels can be increased over large distances (e.g., more than 500 feet) from the source because of atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also affect sound attenuation.

Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receiver attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction (Caltrans 2013b: 2-41; FTA 2018: 42). Barriers higher than the line of sight provide increased noise reduction (FTA 2018: 16). Vegetation between the source and receiver is rarely effective in reducing noise because it does not create a solid barrier unless there are multiple rows of vegetation (FTA 2018: 15).

EXISTING NOISE ENVIRONMENT

Existing Noise- and Vibration-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels, and because of the potential for nighttime noise to result in sleep disruption. Additional land uses such as schools, transient lodging, historic sites, cemeteries, and places of worship are also generally considered sensitive to increases in noise levels. These land use types are also considered vibration-sensitive land uses in addition to commercial and industrial buildings where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance.

The nearest noise-sensitive receivers are single family residences adjacent to the north, south, and east borders of the project site. Multi-family residences are located adjacent to the western border of the project site along Villa Laguna and Seminary Drive. An existing daycare is located on the southern portion of the Academic Campus Planning Area within the academic building. The nearest sensitive receivers and their location relative to the eight planning areas are shown in Table 3-11-8.

Table 3.11-8 Nearest Sensitive Receivers

Planning Area	Nearest Receiver	Distance
Academic Campus	Single family residences to the west	50 feet
Chapel Hill	Single family residences to the south	45 feet
Dormitory Hill	Single family residences to the east	45 feet
Hodges/Shuck	Multi-family residences to the west	65 feet
Mission Drive	Single family residences to the north, multi-family residences to the east	45 feet
Reed/Storer/Shuck	Single and multi-family residences to the east	45 feet
Seminary Point	Multi-family residences to the southeast	30 feet
Shuck Drive Knoll	Multi-family residences to the south	85 feet

Existing Noise Sources and Ambient Levels

To characterize the existing ambient noise environment at the project site, five short-term measurements were conducted on November 11, 2022 and a long-term (24-hour continuous) ambient noise level measurement was conducted on December 15, 2022. The locations of the noise monitoring sites are shown in Figure 3.11-1, "Noise Measurement Locations," and measurement results are summarized in Table 3.11-9. A Larson Davis LxT precision integrating sound level meter was used for the ambient noise level measurement surveys. The meters were calibrated before use with a Larson Davis Laboratories Model CAL200 acoustical calibrator to ensure measurement accuracy. The measurement equipment meets all pertinent specifications of the American National Standards Institute. Daytime noise levels on the project site range from approximately 47 to 57 dBA L_{eq}. As recorded during the long-term measurement on the site ambient noise is approximately 54 dBA CNEL/L_{dn}. Noise levels on the site are within the County's normally acceptable range for residential development and schools. On-site noise levels are categorized as quiet because the County's General Plan identifies 60 dBA L_{dn} as an appropriate benchmark for identifying and assessing potentially problematic noise (Marin County 2023). The results of the ambient noise measurement survey are summarized in Table 3.11-9.

Sources: Adapted by Ascent in 2023.

Figure 3.11-1 Noise Measurement Locations

Table 3.11-9 Summary of Existing Ambient Noise Measurements

Measurement Location Number	Location Description	Date/Time	A-Weighted Sound Level (dBA) (L_{eq})	A-Weighted Sound Level (dBA) (L_{min})	A-Weighted Sound Level (dBA) (L_{max})
ST-01	Side of Shuck Drive where the road thins after merging with Oliver Lane in Mill Valley	November 11, 2022/11:26 a.m.	48.1	40.9	61.7
ST-02	Side of Shuck Drive, outside of 5 Oliver Lane, Mill Valley	November 11, 2022/11:48 a.m.	57.2	40.0	69.3
ST-03	Side of road and across the street from 403 Storer Drive, Mill Valley	November 11, 2022/12:15 a.m.	55.1	40.9	67.2
ST-04	Side of road and across the street from 125 Chapel Road, Mill Valley	November 11, 2022/12:41 p.m.	47.1	40.9	58.4

Long-Term Measurement			CNEL/L_{dn}	Daytime Average (7 a.m.-7 p.m.) (L_{eq})	Daytime Average (7 a.m.-7 p.m.) (L_{max})	Nighttime Average (7 p.m.-7 a.m.) (L_{eq})	Nighttime Average (7 p.m.-7 a.m.) (L_{max})
LT-01	Up the hill, in the field across from 102 Carey Hall, Mill Valley	December 15, 2022/11:30	53.5	48.1	60.2	44.3	56.2

Notes: ST = Short-Term Measurement; LT = Long-Term Measurement; CNEL = community noise equivalent level; dBA = A-weighted decibels; L_{eq} = equivalent continuous sound level; L_{dn} = day-night level; L_{min} = minimum noise level; L_{max} = maximum sound level

Source: Data collected by Ascent Environmental in 2022.

3.11.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Construction Noise and Vibration

To assess potential short-term (construction-related) noise and vibration impacts, sensitive receivers and their relative exposure were identified. Project-generated construction source noise and vibration levels were determined based on methodologies, reference emission levels, and usage factors from FTA's *Guide on Transit Noise and Vibration Impact Assessment* methodology (FTA 2018) and FHWA's *Roadway Construction Noise Model User's Guide* (FHWA 2006). Reference levels for noise and vibration emissions for specific equipment or activity types are well documented and the usage thereof common practice in the field of acoustics.

Operational Noise and Vibration

With respect to non-transportation (e.g., stationary) noise sources associated with project implementation, the assessment of long-term (operational-related) impacts was based on reconnaissance data, reference noise emission levels, and measured noise levels for activities and equipment associated with project operation (e.g., heating, ventilation and air conditioning [HVAC] units, parking lots), and standard attenuation rates and modeling techniques.

To assess potential long-term (operation-related) noise impacts due to project-generated increases in traffic, noise levels were estimated using calculations consistent with the Federal Highway Administration's Traffic Noise Model and project specific traffic data (Appendix P). The analysis is based on the reference noise emission levels for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and ground attenuation factors. Truck usage and vehicle speeds on area roadways were estimated from field observations and the project-specific traffic report. Note that the modeling conducted does not account for any natural or human-made shielding (e.g., the presence of walls or buildings) or reflection off building surfaces.

THRESHOLDS OF SIGNIFICANCE

This analysis relies on adopted noise standards from the County of Marin, as well as other appropriate agencies (e.g., FTA) where local standards are not available. It is considered appropriate to use these standards because they were adopted to protect the community from excessive noise exposure and associated adverse effects. Impacts related to noise would be significant if implementation of the project would result in:

- Construction noise levels that exceed an adopted local or other applicable noise standard or a substantial temporary increase in noise that has the potential to cause an adverse effect to a sensitive receiver. The criterion is applied in the following manner:
  - Based on the County's adopted municipal code, construction noise that occurs outside of the allowable daytime hours (i.e., before 7:00 a.m. or after 6:00 p.m., Monday through Friday, before 9:00 a.m. or after 5:00 p.m. on Saturdays, or construction on Sundays and holidays); and
  - Based on FTA standards because the County has not adopted any numerical construction noise standards an increase by 5 dBA or more over existing ambient noise levels.
- Generation of a substantial permanent traffic noise increase in ambient levels in the vicinity of the project. Based on FTA standards, this criterion is applied in the following manner:
  - Where existing traffic noise levels are less than 60 dB L_{dn}, a 5 dB L_{dn} increase in noise levels;
  - Where existing traffic noise levels range between 60 and 65 dB L_{dn}, a 3 dB L_{dn} increase in noise levels; or
  - Where existing traffic noise levels are greater than 65 dB L_{dn}, a 1.5 dB L_{dn} increase in noise levels;
- Generation of a permanent stationary noise increase in the vicinity of the project in excess of exterior noise standards for stationary noise sources of 50 L_{eq}/70 L_{max} during the daytime hours (7:00 a.m. to 10:00 p.m.) and 45 L_{eq}/65 L_{max} during the nighttime hours (10:00 p.m. to 7:00 a.m.) at noise-sensitive land uses or result in an increase by 5 dBA or more over existing ambient noise levels;
- Construction or operational vibration levels exceeding FTA's recommended standards with respect to the prevention of structural building damage (i.e., 0.2 PPV in/sec for non-engineered timber and masonry building) or FTA's maximum-acceptable-vibration standard with respect to human response/sleep disturbance (i.e., 80 VdB for residential uses) at nearby existing vibration-sensitive land uses;
- (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) exposure of people residing or working in the project area to excessive noise levels; or
- (for a project within the vicinity of a private airstrip), exposure of people residing or working in the project area to excessive noise levels.

ISSUES NOT DISCUSSED FURTHER

Long-Term Operational Vibration

Project implementation would not introduce any major sources of long-term or permanent ground vibration (in contrast to construction vibration, which is evaluated in Impact 3.11-2). Additionally, no major stationary sources of groundborne vibration were identified in the project area that would result in the long-term exposure of proposed on-site land uses to unacceptable levels of ground vibration. Thus, long-term or permanent ground vibration levels in exceedance of the significance thresholds are not anticipated as a result of project implementation. This issue is not discussed further.

Airport/Airstrip-Related Noise Exposure

The project site is not located within an airport influence area, and no public or private airport/airstrip is located within two miles of the project site. Thus, the project would not result in noise impacts related to the exposure of people residing or working in the project area to excessive aircraft-related noise levels. This issue is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.11-1: Generate Substantial Temporary Construction Noise

Hourly noise levels during construction activities would range from approximately 77 dBA to 86 dBA L_{eq} at adjacent residential receptors. Based on available existing noise level data for the project site, hourly noise levels closest to the nearest sensitive receivers are quiet, at approximately 47 dBA L_{eq}. Considering that noise levels at the nearest receivers could reach as high as 86 dBA L_{eq}, (i.e., as much as 39 dBA over existing levels), construction noise would intermittently constitute a substantial increase (perceived more than doubling of the existing noise levels) for an extended period of construction time (estimated to be four years). With this combination of temporary noise level increase at nearby receivers and extended period of intermittent construction noise impacts would be **significant**.

Construction would occur over approximately four years during three main phases: residential development, academic uses, and landscaping and site improvements. Construction would be reasonably expected to begin in 2024 and completed by 2028. Consistent with the construction hour limits established by the Marin County Development Code Section 6.70.030, construction activities would occur between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and from 9:00 a.m. to 5:00 p.m. on Saturdays. The operation of loud noise-generating construction equipment (e.g., backhoes, generators, and jackhammers) would be limited to the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday and from 9:00 a.m. to 5:00 p.m. on Saturdays. Construction activities would be prohibited on Sundays and holidays.

The types of heavy equipment used during project construction would include dozers, backhoes, excavators, scrapers, cranes, concrete trucks, generators, compressors, and haul trucks. No pile driving or blasting would occur as part of the project. Reference noise levels of heavy equipment that would be used during project construction are summarized in Table 3.11-10.

Table 3.11-10 Noise Emission Levels from Construction Equipment

Equipment Type	Typical Noise Level (L_{max} dBA) at 50 feet
Backhoe	80
Concrete Mixer	85
Concrete Pump	82
Compactor	82
Crane/Lift, Mobile	83
Dozer	85
Dump Truck	84
Excavator	85
Flat Bed Truck	84
Loader	80
Generator	82
Grader	85
Paver	85
Roller	85
Pickup Trucks	54
Scraper	85
Tractor	84

Notes: dBA= A-weighted decibels; L_{max}= maximum instantaneous noise levels

Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture-specified noise levels for each piece of heavy construction equipment.

Source: FTA 2018: 176.

Construction noise can be characterized based on the type of activity and associated equipment needed and, in this analysis, is evaluated by considering noise levels associated with the likely combination of construction equipment required for each phase of project construction. Over the course of a construction day, construction equipment could be located as close as 30 feet to the nearest sensitive receivers to the southeast and as close as 85 feet to the furthest sensitive receivers to the south. Estimated construction noise levels represent a conservative estimate based on the assumptions that multiple pieces of equipment would operate at the same location and time affecting the same receivers. However, typically, construction equipment is located with understanding of nearby sensitive receptors and moved about a site with individual pieces of equipment operate at varying frequencies throughout the day. Thus, noise levels tend to fluctuate during the day, resulting in varying noise levels at surrounding receivers. Because noise-generating construction activities would occur at different times and at different locations around the project site during the four-year development period, substantial noise impacts would be reasonably expected to occur intermittently for any one receptor location.

For the project, construction activities would generally occur in phases and would be dispersed throughout the site. Construction would therefore be located at an average distance further away during a construction day due to the nature of construction equipment and how the equipment would move around the project site. Therefore, for the impact analysis, it is assumed that over the course of a workday construction would occur at an average of 50 feet from surrounding sensitive receivers. Using construction equipment typically associated with construction phases proposed for the project and assuming the simultaneous use of multiple pieces of equipment, conservative noise levels (i.e., avoiding the risk of understating an impact) were modeled for each phase of construction and are shown in Table 3.11-11.

The reference noise levels for construction equipment were obtained from FTA's *Transit Noise and Vibration Impact Assessment Manual* and are all referenced to a distance of 50 feet from the operation of equipment. When discussing noise levels, providing a reference distance from the source is necessary to be able to calculate perceived noise levels at various distances from the source (i.e., noise reduces as distance between the source and receiver increase). Reference distances and associated noise levels can be used to calculate perceived noise levels at nearby receivers, at distances beyond 50 feet and within 50 feet. These noise levels represent a conservative estimate (i.e., avoiding the risk of understating an impact) based on the reasonable expectation that multiple pieces of equipment would on occasion operate at the same location and time affecting the same individual receptors for a large-scale project such as this. However, typically, construction equipment most often moves about a site and individual pieces of equipment operate at varying frequencies throughout the day; thus, noise tends to fluctuate during the day, resulting in varying noise levels at surrounding receptors. In addition, this analysis is focused on the nearest receivers to the construction activities, as shown in Table 3.11-8, because these receivers would be exposed to the loudest noise levels. At receivers located at further distances, noise levels would be reduced.

Table 3.11-11 summarizes hourly noise levels (L_{eq}) and maximum noise levels (L_{max}) associated with the phases of project construction at nearby sensitive receivers. However, consistent with FTA guidance, the L_{eq} is the most appropriate metric for construction noise assessment. Construction noise was based on the average distance of 50 feet from the acoustical center of where equipment would operate throughout the project site to the nearest offsite receiver. This approach accounts for the fact that individual pieces of equipment move about a site throughout a workday, some approaching the edge of the site and likewise an offsite receiver at one point in time, while others are further away and contributing less to the overall noise exposure at that specific time. Further, the noise modeling assumes all equipment would operate at the same single location, but this is a conservative assumption, because equipment needs physical space between pieces to operate safely; thus, measuring from the acoustical center (rather than property boundary) adjusts for these variables and fluctuations in noise exposure at the offsite receivers.

Table 3.11-11 Construction Noise Estimates

Project Component/Phasing	Construction Equipment	Modeled Noise Level (dBA L_{eq}) at Nearest Receiver (50 feet)	Modeled Noise Level (dBA L_{max}) at Nearest Receiver (50 feet)
Residential Program (Chapel Hill, Mission Drive, Dormitory Hill, Hodges/Shuck, Mission Drive, Seminary Point, Reed/Storer/Shuck Planning Areas)			
Demolition	Excavator, Scraper, Dump Truck	85.5	89.5
Site Preparation (utilities, grading)	Excavator, Scraper, Dump Truck, Loader	85.9	89.9
Building Construction	Loader, Concrete Mixer, Concrete Pump, Crane	84.0	89.2
Architectural Coating	Mobile Crane, Tractor	81.8	87.5
Interior Finishes	Tractor[1]	80.0	84.0
Academic Program (Academic Campus Planning Area)			
Demolition	Excavator, Loader, Dump Truck	84.3	88.2
Site Preparation (utilities, grading)	Backhoe, Dump Truck, Loader	82.6	86.5
Construction	Loader, Concrete Mixer, Concrete Pump	83.5	87.6
Architectural Exterior Finishes	Mobile Crane, Tractor	81.8	87.5
Interior Finishes	Tractor[1]	80.0	84.0
Landscaping, Wildfire Resilience, and General Site Improvements			
Site Preparation (utilities, vegetation treatments)	Excavator, Scraper	84.0	88.0
Construction (hardscape, paving)	Concrete Mixer, Paving Equipment	84.5	88.0
Architectural Coating	Mobile Crane	77.0	85.0
Irrigation/Planting	Tractor[1]	80.0	84.0

Notes: dBA= A-weighted decibels; L_{eq}= hourly-average noise level; L_{max}= maximum instantaneous noise levels

[1] Tactor modeled to represent a forklift/telehandler as no L_{eq} information is available.

Source: Modeled by Ascent in 2022. Refer to Appendix P.

Hourly noise levels during construction activities would range from approximately 77 dBA to 86 dBA at the average distance of 50 feet from residential receivers. Appendix G of the State CEQA Guidelines includes a question asking whether a project would result in a substantial temporary 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. In addition to this Appendix G checklist question, this EIR considers whether the project would result in a substantial temporary increase in noise levels that has the potential to cause an adverse effect on a sensitive receiver. Although project construction would occur within the County's specified timeframes for construction, the County has not adopted construction-related numerical noise limits. FTA has established construction noise criteria, including magnitude and duration. The peak noise criterion is 90 dBA L_{eq} for residential receivers for daytime construction. Based on the modeling conducted, this level would not be exceeded at nearby sensitive land uses. However, when considering the duration of noise exposure, a lesser increase in noise over existing ambient levels can cause a significant impact. Regarding duration of noise exposure, FTA evaluates long-term construction noise impacts using a 30-day average noise standard and other local jurisdictions (e.g., City of San Jose) have identified extended periods of construction as a 12-month period. Project construction is proposed to occur over four years, which would be an extended period of time to be exposed to increased noise levels. Further, based on available existing noise conditions

on the project site, the lowest daytime hourly noise levels on the project site near sensitive receivers adjacent to Chapel Drive, are 47 dBA L_{eq} (Table 3.11-9). According to the FTA, noise levels around 40 dBA L_{eq} are considered quiet while noise levels around 80 dBA L_{eq} are considered loud (FTA 2018). Because noise levels at this location are predicted to intermittently reach as high as 86 dBA L_{eq}, (i.e., 39 dBA over existing daytime lowest levels) and construction would occur over approximately four years, construction noise would be intermittently loud and result in a substantial increase (perceived more than doubling of the existing noise levels) over an extended period of time. This impact would be **significant**.

Mitigation Measures

Mitigation Measure 3.11-1: Prepare and Implement a Construction Noise Control Plan

Prior to commencement of any construction activities and in consultation with an acoustic professional, the applicant shall prepare a construction noise control plan that demonstrates with substantial evidence, based on finalized project-specific information (e.g., specific equipment profiles, location of construction activities, precise construction durations), that construction noise would not exceed existing daytime noise levels at nearby residences by more than 5 dBA, if feasible. If it is determined infeasible to reduce construction noise to more than 5 dBA above existing daytime noise levels at nearby residents, based on the distance to sensitive receptors and construction site topography, the construction noise control plan shall provide substantial evidence of infeasibility and inclusion of all feasible measures to reduce construction noise. The construction noise control plan shall be provided to County Community Development Agency staff prior to the start of project construction to document achievement of the following standards and measures. The plan shall include, at a minimum, the following measures:

- All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation.
- All construction equipment with back-up alarms shall be equipped with either audible self-adjusting backup alarms or alarms that only sound when an object is detected. The self-adjusting backup alarms shall automatically adjust to 5 dBA over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels.
- All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses, and/or located to the extent feasible such that existing or constructed noise attenuating features (e.g., temporary noise wall or blankets) block line-of-site between affected noise-sensitive land uses and construction staging areas.
- The construction contractor shall use noise reducing operation measures, techniques, and equipment. This requirement shall be enforced through its inclusion on all construction bid specifications for construction contractors hired within the project site. The bid specifications shall require that construction contractors provide an equipment inventory list for all equipment within the fleet with greater than 50 horsepower engines, that includes (at a minimum), make, model, and horsepower of equipment; operating noise levels at 50 feet, available noise control device that are installed on each piece of equipment; and associated noise reduction from the installed technology. Control devices shall include, but are not limited to, high-efficiency mufflers, acoustic dampening and protected internal noise absorption layers to vibrating panels, enclosures, and electric motors. In addition, the contractor shall specify how proposed alternative construction procedures shall be employed to reduce noise at sensitive receptors compared to other more traditional methods. Examples include, but are not limited to, welding instead of riveting, mixing concrete off-site instead of on-site, and the use of thermal lance instead of drive motors and bits. In all cases, the requirement is that the best commercially available noise-reducing technology and noise-reducing alternative construction method shall be used, provided that there are no safety concerns, engineering limits, or environmental constraints preventing it from being used. If a unique circumstance does exist that prevents an alternative quieter construction method to be used, the contractor shall provide evidence to support their proposal. The noise reduction elements of construction bid submittals shall be approved by the County of Marin, in coordination with a qualified acoustical professional.

- Combine noisy operations (e.g., riveting, cutting, hammering) to occur in the same time period (e.g., day or construction phase), such that the overall duration of these activities is reduced to the extent feasible. By performing the noisiest operations together within the same time period, the overall duration that excessive noise would occur is reduced, minimizing the disturbing effects of exposure to prolonged increased noise levels.
- Stationary noise sources such as generators or pumps shall be located as far away from noise-sensitive uses as feasible.
- Based on the site-specific construction parameters and anticipated construction noise levels, temporary noise curtains or other similar barriers may also be considered to achieve further noise reduction. Should these measures be required, they must meet the following minimum requirements:
  - Install temporary noise curtains as close as possible to the boundary of the construction site within the direct line of sight path of the nearby sensitive receptor(s).
  - Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot.
- No less than 1 week prior to the start of construction activities at a particular location, the construction contractor shall provide notification to nearby noise-sensitive land uses (e.g., residential uses) that are located within 1,200 feet (0.23 mile) of the construction site (i.e., based on the construction noise modeling, distance at which noise-sensitive receivers would experience noise levels of 5 dBA over existing ambient levels).
- The contractor shall designate a disturbance coordinator and post that person's telephone number conspicuously around the construction site and provide it to nearby residences. The disturbance coordinator shall receive all public complaints and be responsible for determining the cause of the complaint and implementing any feasible measures to alleviate the problem.

Significance after Mitigation

Mitigation Measure 3.11-1 would reduce noise by locating equipment as far away from receivers as possible, requiring the proper use of available noise-reduction equipment, including use of alternatively powered equipment, exhaust mufflers, engine shrouds, equipment enclosures, and barriers for activities in the vicinity of noise-sensitive uses. Implementation of these noise-reduction features can reduce construction noise levels by approximately 10 dBA, or more (NCCHP 1999). With mitigation, construction-generated noise levels would be substantially reduced. However, due to the large scale of construction for the project it cannot be assured that construction noise levels could be reduced by up to 39 dBA at nearby residences. A reduction in noise of 10 dBA, the minimum amount of noise reduction achieved by Mitigation Measure 3.11-1, would still result in an increase in noise by 29 dBA, which would exceed 5 dBA above existing conditions and is considered distinctly perceptible by most people and therefore a substantial temporary increase in noise. Thus, even with implementation of all feasible mitigation, construction noise could still result in significant noise impacts intermittently for sensitive receptors. Therefore, this impact would remain **significant and unavoidable**.

Impact 3.11-2: Generate Substantial Temporary Construction Vibration Levels

The use of heavy-duty construction equipment can generate various levels of vibration that could result in disturbance to nearby sensitive land uses or structural damage. Based on modeling conducted, vibration levels for a vibratory roller at the nearest structure to the project site, approximately 30 feet from where the use of construction equipment could occur, would be 101 VdB and 0.160 PPV in/sec. Construction vibration would occur during daytime hours when people are less likely to be disturbed; thus, the potential for disturbance to nearby receptors is low. In addition, FTA's criteria of 0.2 PPV in/sec would not be exceeded at the nearest structure. Impacts would be **less than significant**.

Construction activities generate varying degrees of temporary ground vibration, depending on the specific construction equipment used and activities involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effects of ground vibration may be

imperceptible at the lowest levels, result in low rumbling sounds and detectable vibrations at moderate levels, and, at high levels, cause annoyance, sleep disturbance, or damage to nearby structures.

Pile driving and blasting are the types of construction activities that typically generate the highest vibration levels and are, therefore, of greatest concern when evaluating construction-related vibration impacts. However, pile driving and blasting would not occur during project construction. Table 3.11-12 presents vibration levels for typical pieces of equipment that would be used during project construction.

Table 3.11-12 Vibration Reference Levels for Construction Equipment

Equipment	PPV at 25 ft, in/sec	Approximate VdB at 25 ft
Vibratory Roller	0.210	94
Large bulldozer	0.089	87
Loaded trucks	0.076	86
Small bulldozer	0.003	58

Notes: VdB = vibration decibels; ft=feet; in/sec = inches per second.

Source: FTA 2018:184.

Based on reference vibration levels for typical construction equipment (Table 3.11-12), the piece of equipment that could generate the greatest levels of ground vibration would be a vibratory roller during paving, which generates ground vibration levels of 0.210 in/sec PPV and 94 VdB at 25 feet (FTA 2018:184). Adjusting the reference vibration levels for a vibratory roller to the nearest structure to the project site are multi-family residences located 30 feet from construction, as shown in Table 3.11-8. At a distance of 30 feet construction vibration levels would be as high as 101 VdB and 0.160 PPV in/sec. Considering FTA's criteria of 80 VdB for places where people sleep, vibration levels could exceed the recommended levels and cause annoyance or sleep disturbance. However, as required by the County Development Code Section 6.70.030, construction activities would occur between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and from 9:00 a.m. to 5:00 p.m. on Saturdays. Construction would not occur during times of day when people are more sensitive to disturbance. Although vibration may be perceptible at nearby receivers because it would occur during the daytime hours when existing ambient noise levels are higher, higher ambient noise levels can mask vibration noise, thereby reducing the potential to result in intolerable levels (Caltrans 2020). Regarding the potential for structural damage, based on the modeling conducted, vibration levels at the nearest existing residential structure would be 0.160 PPV in/sec. and below the FTA threshold for structural building damage of 0.2 PPV in/sec (for non-engineered timber and masonry buildings). Therefore, there would be a low potential for structural damage. Impacts would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Impact 3.11-3: Generate Substantial Increase in Long-Term Transportation Noise Levels

Long-term increases in traffic noise could occur as a result of increased vehicular trips on local roads near the project site. Based on modeling conducted using project-specific daily traffic volumes and applying FTA's allowable increase levels for transportation noise sources of 5 dB where existing levels are less than 60 dBA CNEL and 3 dB where existing levels range between 60 dBA CNEL and 65 dBA CNEL, based on existing noise levels of modeled roadways, these levels would not be exceeded. This impact would be **less than significant**.

Long-term increases in traffic noise could occur as a result of increased vehicular trips on local roads near the project site. Based on project-generated traffic associated with the proposed residential and academic land uses, traffic noise modeling was conducted using average daily trip volumes, which considered existing traffic volumes and associated noise levels and existing plus project anticipated traffic volumes and associated noise level increases. See Appendix P for modeling inputs and outputs. Traffic noise modeling results are summarized below in Table 3.11-13.

Table 3.11-13 Long-Term Traffic Noise Increases

Roadway Segment/Segment Description	dBA CNEL from Roadway Centerline (Existing)	dBA CNEL from Roadway Centerline (Existing + Project	Change	Appropriate Increase Threshold (dB)
Seminary Drive south of Ricardo Road[1]	60.8	62.8	+2	3
E. Strawberry Drive north of Herring Street[1]	58.3	59.0	+0.7	5
Reed Boulevard north of Storer Drive[2]	50.7	53.3	+2.6	5

Notes: dBA= A-Weighted Decibel, CNEL= Community Equivalent Noise Level

[1] Traffic noise modeled 20 feet from centerline

[2] Traffic noise modeled 10 feet from centerline

Source: Modeled by Ascent Environmental 2022 (Appendix P).

As shown above in Table 3.11-13, traffic noise increases would range from less than 1 dB (which is not perceptible) to 2.6 dBA (which is barely perceptible). Additionally, the project would not exceed FTA's allowable increase levels of 5 dB where existing levels are less than 60 dBA CNEL and 3 dB where existing levels range between 60 dBA CNEL and 65 dBA CNEL, based on existing noise levels of modeled roadways (Table 3.11-13). Therefore, the project would not generate a substantial increase in long-term noise levels and impacts would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Impact 3.11-4: Generate Substantial Long-Term Increase in Stationary Source Noise Levels

Noise generated by building mechanical equipment, parking lot activity, and the playing field would not exceed established noise standards for sensitive receivers exposed to stationary noise sources. However, the operation of new building HVAC equipment could potentially result in a substantial increase in noise during the more sensitive times of the night. Mitigation would be required to provide shielding to reduce noise from HVAC equipment and this impact would be **potentially significant**.

Noise sources commonly associated with the facilities proposed for the project would include the use of onsite building equipment such as HVAC systems; parking lot activities (e.g., opening and closing of vehicle doors, people talking); event noise, and changes to the existing sports field. Noise levels associated with these noise sources are discussed separately, below.

Building Mechanical Equipment

Implementation of the project would result in stationary source noise, primarily associated with building mechanical equipment (e.g., HVAC systems). Specific equipment type, size, and location of proposed HVAC equipment is not available at this time. This analysis conservatively assumes noise levels from larger HVAC systems that can reach levels of up to 78 dBA at 3 feet (Lennox 2019). Applying this reference noise level as an hourly average (L_{eq}) and assuming a 50 percent usage rage, would result in a 75 dBA L_{eq} at 3 feet from the source. Based on the modeling conducted (refer to Appendix P), nighttime noise standards (i.e., 45 dBA L_{eq}) would be achieved if equipment were located beyond 40 feet from residential uses. Maximum noise level nighttime standards (65 dBA L_{max}) would be achieved if equipment were located beyond 10 feet from residential uses. By achieving the lowest standards (i.e., nighttime), the project would also achieve daytime standards of 50 dBA L_{eq} and 70 dBA L_{max}. Therefore, all stationary noise standards would be achieved. As a result, project-generated equipment noise would not exceed established criteria.

The nearest sensitive receivers would be approximately 45 feet from HVAC systems that would support new residential buildings and renovated structures.[1] At 45 feet HVAC systems would be as loud as 46 dBA L_{eq}. Existing daytime noise levels on the project site are higher than 46 dBA L_{eq} (see Table 3.11-9). Therefore, HVAC systems would

[1] The nearest sensitive receivers are 30 feet from the project site and HVAC units would be located near proposed structures as close as 15 feet from the site boundary. Therefore, HVAC units would be located 45 feet from the nearest receivers.

not result in a substantial increase in daytime noise levels. Based on the 24-hour noise measurement conducted, nighttime noise levels on the project site can be as low as 36.1 dBA L_{eq}.[2] Noise from HVAC systems would exceed nighttime noise levels by 10 dBA, which would exceed the 5 dB level generally considered distinctly noticeable and would likely be perceived as a doubling in noise levels during the quietest times of the night. It should be noted that HVAC equipment would likely be located on the roofs of new residential buildings and renovated structures, located over 45 feet from any offsite nearby sensitive receiver. Nonetheless, is it possible that project HVAC equipment would result in a substantial long-term increase in stationary noise.

Parking Facilities

Buildout of the project would increase the total number of parking spaces from 608 existing spaces to 944 parking spaces. Of the existing residential parking spaces, 51 spaces would be retained, and an additional 652 residential parking spaces would be added for residential housing and the residential care facility, resulting in a total of 703 residential parking spaces on the project site. Residential parking would be provided in the form of subterranean garages within the residential structures and concealed garages in the residential duplex units. The existing tiered parking lot would remain as is and would serve the academic campus planning area and users of the playing field, fitness center, and daycare. The existing 297 parking spaces for the academic campus would be reduced to 241 parking spaces.

Parking lot noise from residential parking spaces provided in subterranean garages and concealed garages in the residential duplex units would not be perceptible to nearby noise sensitive receivers, such as residences, because parking noise would not be perceptible through the parking structures. The three-tiered parking lot would remain on the site and the total number of parking spaces for the academic campus would be reduced by 56 parking spaces. Therefore, parking noise from the existing lots would be reduced as compared to existing conditions. As a result, there would be no perceptible change associated with parking lot noise at nearby sensitive receivers.

Campus Events

There is potential for events to occur on the project site associated with the academic campus, such as conferences and other gatherings. However, events would be of similar type and scale as those that have occurred in the past on the project site. The types of events that would occur following project development would be similar to the events currently hosted by the University. Additionally, most events would likely occur indoors reducing event noise. Therefore, there would be no perceptible increase in noise from future events on the site.

Playing Field

A 2-acre recreational playing field is located in the western portion of the project site, bound by Seminary Drive to the west, Hodges Drive to the north, Shuck Drive to the east, and Gilbert Drive to the south. The field is open daily for use by the public, including local adult and youth sports leagues. The playing field would be retained as part of the project. Loud speakers and amplification devices would not be permitted on the playing field. The field would be raised approximately 25-30 feet to create a landscaped berm adjacent to Seminary Drive. The field would continue to have public use and sports leagues. The berm would reduce the line of site from the sports field to the adjacent residences west of Seminary Drive. Therefore, raising the playing field and landscaping the berm would provide reduced noise levels at the residences from activities on the field, as compared to existing conditions. As a result, there would be no perceptible increase associated with noise from the playing field at nearby sensitive receivers.

Summary

Operation of on-site uses, including HVAC equipment use, parking facilities, events, and the playing field would not result in an exceedance of appropriate noise standards (i.e., 50 dBA L_{eq} from 7:00 a.m. to 10:00 p.m., and 45 dBA L_{eq} from 10:00 p.m. to 7:00 a.m.). However, during the quietest times of the night, the operation of new HVAC equipment could result in a substantial (i.e., perceived doubling of existing noise) increase in noise as noise HVAC noise levels would exceed existing nighttime noise by as much as 10 dBA. This impact would be **potentially significant**.

[2] 36.1 dBA L_{eq} was the lowest L_{eq} recorded during nighttime hours on the project site. See Appendix O for noise monitoring results.

Mitigation Measures

Mitigation Measure 3.11-4: Reduce Operational Stationary Source Noise

For all new stationary equipment associated with newly constructed buildings (e.g., HVAC equipment, back-up generators), the applicant shall retain an acoustical professional to ensure compliance with the following standards:

- All equipment shall be located and designed such that noise generated would not exceed the County's stationary noise source criteria established in this analysis (noise standards for single family residential uses of 50 dB L_{eq} between the hours of 7:00 a.m. and 10:00 p.m. or 45 dB L_{eq} between the hours of 10:00 p.m. to 7:00 a.m.) at any nearby sensitive receptor.
- All equipment shall be located and designed such that noise generated at adjacent properties does not exceed the existing ambient noise levels (i.e., 36.1 dBA) by more than 5 dB. Examples of methods to reduce stationary source noise include the following: locating equipment as far away as possible from noise sensitive land uses, constructing noise barriers between the equipment and noise-sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. Final design, location, and orientation, as well as compliance with County Code shall be shown in a noise report prepared by the acoustic professional and submitted to the County to confirm compliance, prior to issuance of occupancy permit.

Significance after Mitigation

Mitigation Measure 3.11-4 would reduce noise by requiring compliance with the County's stationary noise source criteria and ensuring mechanical equipment noise would not exceed ambient noise by more than 5 dBA by placing equipment as far away as possible from sensitive land uses, placing noise barriers around mechanical equipment, and using buildings and topographic features for acoustic shielding. Implementation of these noise-reduction features can reduce mechanical equipment noise levels by 5 dBA, or more (FTA 2018). With mitigation, mechanical equipment noise levels would be reduced by at least 5 dBA, as required to be demonstrated in the specialized noise study for mechanical equipment. Therefore, mechanical equipment noise would be reduced to less than 5 dBA above ambient noise levels. Impacts would be **less than significant with mitigation**.

3.12 POPULATION AND HOUSING

This section identifies applicable federal and state plans, policies, and laws and local plans, policies, and regulations related to population and housing; describes the population, housing, and employment characteristics of Marin County; and analyzes the potential impacts of the project with respect to population and housing. Potential growth-inducing impacts of the project are addressed further in Chapter 6, "Other CEQA Sections."

Scoping comments related to population and housing received in response to the notice of preparation (NOP) requested that this EIR address the displacement of people currently living on the project site, as well as the displacement of affordable housing. These topics are addressed below. The comments also stated that this EIR should consider the overall increase in density of the Strawberry community associated with the potential construction of accessory dwelling units (ADUs). As outlined in the 2023–2031 Housing Element, and consistent with state law, Marin County projects that 280 ADUs will be permitted over the next 8 years (Marin County 2023: 226, 257), or approximately 35 ADUs per year countywide. Because of the limited number of ADU permits anticipated for the County, the ministerial nature of permit approval, and the fact that there is no current proposal to construct ADUs on the project site, the timing and possible number of ADUs on the project site would be speculative. If ADU construction did occur in the future, based on County projections, the number would be limited and would not substantially change the magnitude of impacts analyzed herein. Therefore, ADUs are not discussed further in this section. See Appendix A for all NOP comments received.

3.12.1 Regulatory Setting

FEDERAL

No federal plans, policies, regulations, or laws related to population and housing are applicable to the project.

STATE

The California Legislature has adopted three state laws—Housing Density Bonus Law, Housing Element Law, and the Housing Crisis Act of 2019—to ensure that new housing developments do not reduce the total number of existing dwellings or the number of dwellings housing lower-income persons. These three laws are discussed below. In most communities, a housing project must create at least as many housing units as will be demolished. Projects also must replace units rented by lower-income households with units affordable to lower-income tenants and, in most communities, must provide relocation and other benefits to lower-income tenants who are displaced by the new construction. State law does not allow local agencies to approve housing unless the proposed development complies with applicable replacement housing requirements (ABAG 2023).

Housing Density Bonus Law

State Housing Density Bonus Law (Government Code Sections 65915–65918) is a mechanism that allows housing developers to obtain more favorable development requirements from local governments in exchange for a commitment to build or donate land for affordable housing or senior housing units. It provides developers with powerful tools to encourage the development of affordable and senior housing, including up to a 50-percent increase in project densities for most projects, depending on the amount of affordable housing provided. State Housing Density Bonus Law also provides incentives intended to help make the development of affordable and senior housing more economically feasible. They include reduced parking requirements and reduced setback and minimum square footage requirements. The density bonus is a state mandate, which means any developer that meets the requirements of state Housing Density Bonus Law is entitled to receive the density bonus and other benefits. Where a density bonus project involves demolishing housing, or where rental housing existed on the site in the past 5 years, the applicant must comply with the replacement housing requirements in Government Code Section 65915(c)(3). A project is ineligible for a density bonus or any other incentives or concessions under state Housing

Density Bonus Law unless the applicant conforms with the replacement housing requirements. These requirements apply to any project requesting a density bonus regardless of the applicability of the Housing Crisis Act of 2019 (Government Code Section 66300; Senate Bill [SB] 330) (see below).

California Housing Element Law

California's Housing Element Law (Government Code Sections 65580 through 65589.8) recognizes that early attainment of decent housing and a suitable living environment for every Californian is a "priority of the highest order." The law was enacted to ensure that counties and cities recognize their proportionate responsibilities in contributing to the attainment of the state housing goal, to establish the requirement that all counties and cities prepare and implement housing elements to help meet the state goal, to recognize that each locality is best capable of determining which efforts it is required to take to contribute to attainment of the state housing goal, and to encourage and facilitate cooperation between local governments to address regional housing needs. Section 65583 states, "The housing element shall consist of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing." It also states that "the housing element shall identify adequate sites for housing, including rental housing, factory-built housing, mobile homes, and emergency shelters, and shall make adequate provision for the existing and projected needs of all economic segments of the community." A jurisdiction may opt to update its housing element every 5 years or every 8 years.

Each jurisdiction's housing element must include an inventory of land suitable and available for residential development to meet the jurisdiction's fair share of the regional housing need, known as the Regional Housing Needs Allocation (RHNA), by income level. Sites are suitable for residential development if they are zoned appropriately and are available for residential use during the planning period. The RHNA is based on a regional housing needs plan developed by councils of government. The Association of Bay Area Governments (ABAG) sets affordable-housing production goals for every San Francisco Bay Area jurisdiction, including Marin County.

The housing element must include a program and an implementing ordinance requiring the replacement of existing housing units consistent with the requirements set forth in state Housing Density Bonus Law (Government Code Section 65915[c][3]). These replacement housing requirements apply to all sites listed in the housing element, at all income levels—not just sites designated for lower-income housing—and apply regardless of the applicability of the Housing Crisis Act of 2019 (see below).

Housing Accountability Act

The California Housing Accountability Act (Government Code Section 65589.5), originally enacted in 1982, was recently amended in 2017 and 2019. The act limits the ability of a local government to deny or reduce the density of a "housing development project [that] complies with applicable, objective general plan, zoning, and subdivision standards and criteria, including design review standards, in effect at the time that the application was deemed complete." More specifically, a local government cannot deny or reduce the density of such a project unless the local agency finds, based on a preponderance of the evidence, that "[t]he housing development project would have a specific, adverse impact upon the public health or safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density" and "[t]here is no feasible method to satisfactorily mitigate or avoid the adverse impact other than the disapproval of the housing development project or the approval of the project upon the condition that it will be developed at a lower density." In this context, the phrase, "a 'specific, adverse impact' means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete."

No Net Loss Law

The purpose of the No Net Loss Law (Government Code Section 65863) is to ensure that development opportunities remain available throughout the planning period to accommodate a jurisdiction's RHNA, especially for lower- and moderate-income households. The law includes the following requirements:

- A jurisdiction must maintain adequate sites to accommodate its remaining unmet RHNA by each income category at all times throughout the planning period.
- A jurisdiction may not take any action to reduce a parcel's residential density unless it makes findings that the remaining sites identified in its housing element sites inventory can accommodate the jurisdiction's remaining unmet RHNA by each income category, or it identifies additional sites so that there is no net loss of residential unit capacity.
- If a jurisdiction approves development of a parcel identified in its housing element sites inventory but with fewer units than shown in the housing element, either it must make findings that the housing element's remaining sites have capacity sufficient to accommodate the remaining unmet RHNA by each income level or it must identify and make available sites sufficient to accommodate the remaining unmet RHNA for each income category.
- A jurisdiction may not disapprove a housing project on the basis that approval of the development would trigger the identification or zoning of additional adequate sites to accommodate the remaining RHNA.

Housing Crisis Act of 2019

The Housing Crisis Act of 2019 (SB 330) expanded and amended several state statutes, including the Permit Streamlining Act and Housing Accountability Act, with the goal of increasing production of new housing units, protecting existing housing units, and providing for an expedited review and approval process for housing development projects. SB 330 created Government Code Section 66300. Subdivision (b)(1)(A) of that statute generally prevents a city or county from changing the residential general plan, specific plan, and zoning designation to "a less intensive use" or to reduce the intensity of the designation below what was allowed on January 1, 2018. An exception to this prohibition exists, however, whereby the city or county "concurrently changes the development standards, policies, and conditions applicable to other parcels within the jurisdiction to ensure that there is no net loss in residential capacity" (Government Code Section 66300[h][2][i][1]).

SB 8, which was passed during the 2021 legislative session, made key amendments to the Housing Crisis Act of 2019, including application to both an affected city and affected county, and extending the provisions of SB 330 until January 1, 2030. Section 66300(d) requires the following, which would be applicable to the project:

(1) An affected city or an affected county shall not approve a housing development project that will require the demolition of residential dwelling units unless the project will create at least as many residential dwelling units as will be demolished.

(2) An affected city or an affected county shall not approve a housing development project that will require the demolition of occupied or vacant protected units, unless all of the following apply:

(A)(i) The project will replace all existing or demolished protected units.

(ii) Any protected units replaced pursuant to this subparagraph shall be considered in determining whether the housing development project satisfies the requirements of Section 65915 or a locally adopted requirement that requires, as a condition of the development of residential rental units, that the project provide a certain percentage of residential rental units affordable to, and occupied by, households with incomes that do not exceed the limits for moderate-income, lower income, very low income, or extremely low income households, as specified in Sections 50079.5, 50093, 50105, and 50106 of the Health and Safety Code.

(iii) Notwithstanding clause (i), in the case of a protected unit that is or was, within the five-year period preceding the application, subject to a form of rent or price control through a local government's valid exercise of its police power, and that is or was occupied by persons or families above lower income, the affected city or affected county may do either of the following:

(I) Require that the replacement units be made available at affordable rent or affordable housing cost to, and occupied by, low-income persons or families. If the replacement units will be rental

dwelling units, these units shall be subject to a recorded affordability restriction for at least 55 years.

(II) Require that the units be replaced in compliance with the jurisdiction's rent or price control ordinance, provided that each unit is replaced. Unless otherwise required by the affected city or affected county's rent or price control ordinance, these units shall not be subject to a recorded affordability restriction.

(B) The housing development project will include at least as many residential dwelling units as the greatest number of residential dwelling units that existed on the project site within the last five years.

(C) Any existing residents will be allowed to occupy their units until six months before the start of construction activities with proper notice.

(D) The developer agrees to provide both of the following to the occupants of any protected units.

(i) Relocation benefits to the occupants of those affordable residential rental units.

(ii) A right of first refusal for a comparable unit available in the new housing development affordable to the household at an affordable rent, as defined in Section 50053 of the Health and Safety Code, or an affordable housing cost, as defined in 50052.5.

LOCAL

Marin Countywide Plan

The *Marin Countywide Plan* is a comprehensive long-range general plan for the unincorporated areas of Marin County (Marin County 2023). It was last comprehensively updated in November 2007, and the most recent amendments were adopted on January 24, 2023 with the updates to the Housing and Safety Elements of the Countywide Plan. In February 2020, the Marin County Board of Supervisors approved a work plan to update the *Marin Countywide Plan*. The modest scope of amendments is being conducted in phases. Phase 1 focused on developing an Expanded Stream Conservation Area Ordinance for the San Geronimo Valley. The ordinance was adopted in 2022 (Ord. No. 3770). Phase 2 will address various state general plan mandates, state housing law, and Stream Conservation Area regulations for the remainder of unincorporated Marin County outside the San Geronimo Valley. The amendments are expected to be completed over a projected timeline of approximately 4–5 years.

The Housing Element, a required component of the *Marin Countywide Plan*, is included as Section 3.8 of the plan. Since being initially adopted in November 1991, the element has been updated and readopted multiple times. The *2023–2031 Housing Element Update (6th Cycle)* was adopted by the Marin County Board of Supervisors on January 24, 2023, and certified by the California Department of Housing and Community Development on June 19, 2023.

Built Environment Element

The following Built Environment Element policies (Marin County 2023) are applicable to the project:

- Policy CD-2.1: Provide a Mix of Housing. The range of housing types, sizes, and prices should accommodate workers employed in Marin County. This includes rental units affordable to lower-wage earners and housing that meets the needs of families, seniors, disabled persons, and homeless individuals and families.
- Policy CD-2.5: Locate Housing Near Activity Centers. Provide housing near jobs, transit routes, schools, shopping areas, and recreation to discourage long commutes and lessen traffic congestion.
- Policy CD-2.8: Limit Development in Resource or Hazard Areas. Discourage development in areas with high natural resource value or threats to life or property, and restrict development in such areas to minimize adverse impacts.

The following Built Environment Element implementing programs (Marin County 2023) are applicable to the project:

- Program CD-2.a: Increase the Affordable Housing Supply. Utilize all available methods to create affordable housing, including redevelopment of commercial areas for mixed use, air rights over parking areas for housing, residential duets on corner lots, upper-story housing over one-story commercial buildings, and Transfer of Development Rights (TDR) programs.
- Program CD-2.b: Provide a Variety of Housing Types and Prices. Employ the County inclusionary zoning provisions and master plan review process to facilitate new projects that provide a variety of housing types affordable to special needs, very low, low, and moderate income households.

Housing Element

The following Housing Element policies (Marin County 2023) are applicable to the project:

- Policy 1.2: Regional Housing Needs Assessment. Maintain an adequate inventory of residential and mixed-use sites to fully accommodate the County's RHNA by income category throughout the planning period.
- Policy 1.3: Housing Sites. Recognize developable land as a scarce community resource. Protect and expand the supply and residential capacity of housing sites, particularly for lower income households.
- Policy 1.5: Design, Sustainability, and Flexibility. Enact programs that facilitate well designed, energy efficient development and flexibility of standards to encourage outstanding projects.
- Policy 2.1: Special Needs Groups. Expand housing opportunities for special needs groups, including seniors, people living with disabilities (including mental, physical, and developmental disabilities), agricultural workers and their families, individuals and families experiencing homelessness, single-parent families, large households, lower income (including extremely low-income) households, and other persons identified as having special housing needs in Marin County.
- Policy 2.2: Supportive Services. Link housing to Department of Health and Human Services programs in order to coordinate assistance to people with special needs.
- Policy 2.3: Workforce Housing. Implement policies that facilitate housing opportunities to meet the needs of Marin County's workforce, especially those earning lower incomes.
- Policy 2.4: Incentives for Affordable Housing. Continue to provide a range of incentives and tools to ensure development certainty and cost savings for affordable housing providers.
- Policy 2.5: Preserve Existing Housing. Protect and enhance the housing we have and ensure that existing affordable housing remains affordable and residents are not displaced.
- Policy 4.1: Tenant Protection. Implement policies and actions to protect tenants from unlawful evictions as well as direct and indirect (economic) displacement, and to promote greater education around tenants' rights.

The following Housing Element implementing programs (Marin County 2023) are applicable to the project:

- Program 1: Adequate Sites for RHNA and Monitoring of No Net Loss. The County of Marin has been allocated a need of 3,569 units (1,100 very low income, 634 low income, 512 moderate income, and 1,323 above moderate income units). Based on projected ADUs [accessory dwelling units] and entitled projects, the County has met 705 of its RHNA, with a remaining RHNA of 2,864 units (1,343 lower income, 313 moderate income, and 1,208 above moderate income units).

  To accommodate this remaining RHNA, the County has identified an inventory of sites with potential for redevelopment over the eight-year planning period. The inventory includes sites that are not identified for rezone and can accommodate 25 additional units under current Countywide Plan (CWP) and Development Code. The inventory also includes sites that will be rezoned/upzoned concurrent with this Housing Element update. Sites identified for rezoning/upzoning can accommodate 3,210 units (see Table H-5.1 [of the Housing Element, presented below as Table 3.12-1]). The Housing Element stated that the County was committed to redesignating and rezoning accordingly by January 31, 2023. The County has completed the redesignation and rezoning

process. Figure 4-1 in the Built Environment Element of the *Marin Countywide Plan* presents one of the results of the process: a list of Housing Overlay Designation sites that the County requires to satisfy its RHNA obligations. At least 20 percent of the housing developed on these sites must have rent or sale prices affordable to low- and very low–income households. Appendix C [of the Housing Element] contains a detailed parcel listing of properties in the inventory, including those that will be redesignated/rezoned concurrent with the Housing Element update.

Five sites in the inventory are over 10 acres in size. In Marin County, development of lower income affordable housing on large sites is achievable and there is interest in redeveloping larger sites. Zoning amendments, including the designation of a HOD [housing overlay designation] combining district zoning have been applied to each larger property, allowing higher density development on the most developable areas of the properties, selecting out natural constraints or other factors. In many cases, the limited developable area for higher density is under 10 acres.

To facilitate the development of these large sites, the County will:

- Incentivize multi-unit development through ministerial review.
- Provide site planning tools such as clustered development within the Form Based Code.
- Meet with property owners and developers to encourage the development of mixed income housing with a mix of unit sizes, types, and prices.
- Allow the development in phases within the eight-year Housing Element Planning period.

Table 3.12-1 Summary of Areas to Be Rezoned

Existing Zoning	Acreage	Parcels	RHNA Units
Admin and Professional	1.7	1	13
Agriculture and Conservation	200.0	2	275
Agriculture Limited	290.8	11	904
Agriculture Residential Planned	93.3	4	140
Limited Roadside Business	3.3	5	76
Open Area	31.4	1	50
Planned Commercial	30.9	9	365
Public Facilities	45.6	7	224
Residential Agriculture	11.2	3	31
Residential Commercial Multiple Planned	19.4	19	237
Residential Multiple Planned	564.4	13	221
Residential Single Family	12.1	15	175
Residential Single Family Planned	24.1	16	255
Resort and Commercial Recreation	2.2	1	36
Retail Business	1.6	2	36
Village Commercial Residential	17.3	20	172
Total	**1,349.3**	**129**	**3,210**

Source: Marin County 2023: Table H-5-1.

To ensure that the County complies with Government Code Section 65863 (No Net Loss), the County will monitor the use of residential and mixed-use acreage included in the sites inventory to ensure an adequate inventory is available to meet the County's RHNA obligations throughout the planning period. To ensure sufficient residential capacity is maintained to accommodate the RHNA, the County will develop and implement a formal, ongoing,

project-by-project evaluation procedure pursuant to Government Code Section 65863. Should an approval of development result in a reduction of residential capacity below what is needed to accommodate the remaining need for households at an income level, the County will identify replacement sites as part of the findings for project approval, or if necessary, rezone sufficient sites to accommodate the shortfall and ensure "no net loss" in capacity to accommodate the RHNA within six months.

- Program 3: Replacement Housing. Development on all nonvacant sites designated in the Housing Element, at all income levels, that contain existing residential units, or units that were rented in the past five years, is subject to the replacement housing requirements specified in Government Code sections 65583.2 [under the California Housing Element Law] and 65915 [Housing Density Bonus Law].
- Program 17: Housing for Seniors. The County has a high proportion of aging residents. Many have expressed the need for additional senior housing options, specifically allowing seniors to trade their current homes for other housing that requires less maintenance, is designed to accommodate the mobility needs of seniors, and is more affordable. The County will pursue a variety of housing options for seniors.
- Program 24: Inclusionary Housing. The County implements an Inclusionary Housing program requiring a 20 percent set aside of new units or lots in a development for affordable housing. Ownership developments must have inclusionary units affordable for low to moderate income households. Rental developments must provide inclusionary units for very low to moderate income households. For both rental and homeownership developments, the larger the project, the deeper the affordability requirements. All inclusionary units must be income-restricted in perpetuity. To enhance housing development feasibility while complying with the inclusionary requirements, the County plans to:
  - Modify the inclusionary housing program to expand affordability ranges based on the type and size of projects and to be in compliance with AB [Assembly Bill] 1505.
  - Work with Marin County cities and towns to achieve consistency across jurisdictions and to ensure that the policies are aligned with best practices and reflect current market conditions.

  The County has been meeting with other county jurisdictions to establish uniform policy elements and the generally agreed upon framework includes:
  - 20% set-aside goal
  - 2-unit minimum project size threshold
  - Requirements should be more stringent for larger projects
  - Alternative means of compliance when a project is infeasible:
    - in lieu fee
    - land donation in same planning jurisdiction

  Other group recommendations include:
  - Ensure compliance with AB 1505 on rental policy
  - AMI [area median income] price levels are consistent across tenures when applicable:
    - Very low income – 50 percent AMI (rental only)
    - Low income – 65 percent AMI (rental and for-sale)
    - Moderate income – 100 percent AMI (rental and for-sale)
    - Above moderate income – 135 percent AMI (for-sale only)
  - Offering developers with two options to provide very low or low income units

- Program 25: Incentives for Affordable Housing. The County will continue to facilitate the development of affordable housing, especially for lower income households (including extremely low income) and those with special housing needs (including persons with disabilities/developmental disabilities, older adults, large households, farmworkers, educators, and people experiencing homelessness). Incentives may also be offered to encourage the inclusion of amenities in affordable housing development, such as childcare facilities and universal design/visitability. Incentives available for affordable housing projects include:
  - County density bonus of 10 percent (above State density bonus)
  - Potential fee waivers, especially for special needs housing
  - Priority processing
  - Technical assistance
  - Financial participation by the County, subject to funding availability
  - Support and assistance in project developer's applications for other local, State, and federal funds
- Program 31: Tenant Protection Strategies. Throughout the region, tenants are facing rising rents and increasing risk of eviction due to the economic impact of COVID, as well as displacement from the economic pressure of new development. The County will explore a variety of strategies that strengthen tenant protection. These may include:
  - Rent stabilization: While AB 1482, the California Tenant Protection Act of 2019, imposes rent caps on some residential rental properties through 2030, it exempts most single-unit homes and condominiums for rent, and multi-unit housing units built within the previous 15 years. Additionally, AB 1482 sets an allowable rent increase in a year to 5% plus the regional cost-of-living index or 10%, whichever is less. Strategies to strengthen rent stabilization include adopting a permanent policy, expanding applicability to units not covered by AB 1482, and/or considering a lower rent increase threshold. However, at this time, compliance with the 1995 Multi-unit Housing Act (Costa Hawkins) is required.
  - Just cause for eviction: AB 1482 also establishes a specific set of reasons for which a tenancy can be terminated. These include: 1) default in rent payment; 2) breach of lease term; 3) nuisance activity or waste; 4) criminal activity; 5) subletting without permission; 6) refusal to provide access; 7) failure to vacate; 8) refusal to sign lease; and 9) unlawful purpose. [This ordinance is discussed in more detail below under "Marin County Just Cause for Eviction Ordinance."]
    - The County passed an ordinance to require a just cause for eviction that applies to properties of three or more dwelling units in January 2019, before the adoption of AB 1482. To strengthen this ordinance, the County will consider expanding "just cause" to all units, and/or including relocation assistance.
    - No-fault causes, such as substantial remodels, owner move-ins, and withdrawal from the rental market, are the leading cause of evictions and displacement. These no-fault just causes are often used by owners to remove tenants so that rents can be increased to market rate, further eroding naturally occurring affordable housing stock. Strengthening no-fault just causes for evictions through higher relocation payments, longer eviction notice periods, and a right for a tenant to return can be effective anti-displacement strategies. An expanded just cause ordinance may also include evictions due to substantial repairs and withdrawal from the rental market.
  - Local relocation assistance: Given both limited rental options and high housing costs in Marin County, many displaced residents are forced to move out of the County entirely. To address this, the County can adopt a local relocation assistance provision that would require owners to provide financial assistance to tenants if pursuing a no-fault termination. The County can also consider requiring greater relocation assistance to special needs groups (e.g., seniors, disabled, female-headed households) and reasonable accommodation for persons with disabilities.

- **Tenant commission**: Typically, most land use policies and planning decisions are made from the perspective of property owners and tenants lack a voice in the planning process. A tenant commission or advisory committee may be an avenue to bring policy discussions that highlight tenant interests to the County. While the proportion of renter-occupied units in the County is growing, there is currently no body within the County where their unique concerns can be raised.
- **Right to Purchase**: When tenants are being evicted due to condominium conversion or redevelopment, offer first right to purchase to displaced tenants to purchase the units.
- **Right to Return**: When tenants are being evicted due to rehabilitation/renovation of the property, offer first right to displaced tenants to return to the improved property.
- **Tenant Bill of Rights**: Adopt a Tenant Bill of Rights (TBR) that serves to establish the standard that all Marin residents have the right to clean, safe and secure housing. The TBR can include an extension of tenant protections to subletters and family members, and mechanisms to address severe habitability issues and market pressures, such as stronger protections for tenants from eviction if they deduct repairs from rent. This provision would also provide antiretaliation protection for tenants that assert their rights.
- **Community or Tenant Right to Purchase (COPA/TOPA)**: Pursue COPA/TOPA as a means to preserve affordability and mitigate potential displacement impacts by offering community organizations or tenants the first opportunity to purchase a residential building if the owner is selling. COPA/TOPA policies offer community organizations or tenants the right to negotiate and collectively bargain.

In addition, the Marin Housing Authority (MHA) facilitates housing mobility and anti-displacement for Housing Choice Voucher (HCV) recipients via the following policies:

- **Portability**: HCVs are portable across Public Housing Authority (PHA) boundaries, including to different counties.
- **Payment Standards**: MHA petitions for higher payment standards using market rents by ZIP Code, allowing HCV recipients to move to locations of their choices with higher levels of subsidies.

Marin County Development Code (Title 22 of the Marin County Code)

To help attain local and state housing goals, Marin County Code Chapter 22.22 (Affordable Housing Regulations) requires new developments to contribute to the County's affordable housing stock through the provision of housing units, land dedication, and/or fees. The chapter identifies procedures and requirements applicable to development proposals in the unincorporated areas of Marin County. It also requires that an affordable housing plan be submitted as part of the first application for any development project except single-family dwellings subject to the Affordable Housing Impact Fee. Section 22.22.080 includes the County's general affordable housing standards and outlines the requirements for eligible occupants; income restrictions; affordable unit cost; location of affordable housing units; design character of affordable housing units; lots dedicated to affordable housing; use and payment of affordable housing fees; and requested rental of affordable housing.

Section 22.22.090 requires that 20 percent of the total number of dwelling units or lots in a subdivision be developed as, or dedicated to, affordable housing. County Code Chapter 22.24 (Affordable Housing Incentives) identifies procedures for granting incentives for the construction of affordable housing to encourage the production of affordable housing and to achieve the following goals:

- Implement goals and policies contained in the Countywide Plan providing for incentives related to the construction of affordable housing.
- Comply with the provisions of Government Code Section 65915, which mandates the adoption of a County ordinance specifying procedures for providing density bonuses and other incentives and concessions.

In addition to the increase in units allowed on a site by a density bonus, other incentives and concessions could include a reduction in the site development standards, such as height, setback, coverage, floor area, and parking requirements, which would result in identifiable and actual cost reductions and provide for affordable housing costs.

Regional Housing Needs Allocation

As stated under "California Housing Element Law," above, ABAG sets affordable-housing production goals for every Bay Area jurisdiction, including Marin County. These production goals, called the Regional Housing Needs Allocation (RHNA), are distributed into four categories of affordability: households earning above-moderate income (120 percent of and above the AMI), households earning moderate income (80–120 percent of the AMI), households earning low income (50–80 percent of the AMI), and households earning very-low income (30–50 percent of the AMI). A jurisdiction must know its RHNA objectives before preparing or updating its housing element. Marin County must meet its RHNA production goals by the end of each 8-year cycle. Marin County's RHNA for the current 8-year cycle, beginning in 2023 and ending in 2031, is identified above, in the text of Implementing Program 1 of the Housing Element.

As described in the text of Implementing Program 1, the County has identified an inventory of sites with potential for redevelopment over the 8-year planning period to accommodate its remaining RHNA. This inventory is presented in Appendix C, "Sites Inventory," of the Housing Element. The identified sites are proposed developments, vacant sites, and underutilized sites that can realistically be redeveloped with residential units during the planning period to accommodate the RHNA. The project site, identified as North Coast Seminary, is listed in Table C-4, "Residential Sites Inventory by Community." Previously, during the fourth housing element cycle (Figure III-9 of the 2015–2023 Housing Element), it also had been identified as a site that could be redeveloped to accommodate the RHNA. The site is included because it meets three of the criteria used as evidence that existing land uses on the site do not constitute an impediment for additional residential use on the site:

- Criterion 1: Interest: Developer interest or property owner interest to redevelop site
- Criterion 5: Age: Buildings 50 years and older (>/= 1972)
- Criterion 7: Building/Land Value Ratio [Assessed Improvement Value/Assessed Land Value]: 1.54 and under

The project site is identified in Table C-4 as a credit site. Credit sites are sites with housing units either under construction or approved that are applicable to the County's RHNA target.

Marin County Just Cause for Eviction Ordinance

Marin County's Just Cause for Eviction Ordinance, which went into effect on January 17, 2019, was passed to increase certainty and fairness in the residential rental market in unincorporated Marin County. The ordinance acknowledges a range of housing-related issues in the unincorporated county that are particularly harmful to low- and moderate-income households (Marin County 2018). Fifty-six percent of renters in 2010 were estimated to be overpaying for rental housing; that is, they were paying more than 30 percent of household income as rent. The results of a study cited in the ordinance suggest that more than 400 unlawful evictions occur in unincorporated Marin County each year. In addition, the combination of increasing rental prices and the constrained supply of rental housing in the county can result in displacement of residents beyond the county and region, with impacts particularly affecting low- and moderate-income households.

The ordinance generally applies to properties located in the unincorporated area of the county with at least three units. It requires that tenants be given a reason for a lease termination and that landlords wishing to terminate a tenancy demonstrate compliance with the prerequisites of the ordinance to register their units with the Landlord Registry. Included among the causes for no-fault evictions is the landlord's intent to imminently demolish the dwelling unit or otherwise permanently remove the dwelling unit from any residential rental use or purpose, in accordance with California Government Code Sections 7060 through 7060.7.

3.12.2 Environmental Setting

POPULATION AND POPULATION GROWTH

In January 2023, the California Department of Finance (DOF) estimated the total population of Marin County to be 252,959 and the population of the unincorporated county to be 66,032 (DOF 2023a). Although the population in the county overall has increased since 2010 and is expected to increase in the near future (Table 3.12-2), between 2019 and 2023, the population in the county overall declined from 261,478 to 252,959, and the population in unincorporated Marin County declined from 68,863 to 66,032 (DOF 2019, 2023a). In 2040, the total population in the county is expected to be 253,549, a total slightly greater than the current estimate for the county (DOF 2021).

Growth in the county overall has been considerably slower than predicted. As discussed in the Marin Countywide Plan Update Final EIR, the 2005 Marin Countywide Plan Update, relying on then-recent projections from ABAG, anticipated a 2030 population of 283,100 in the county overall, whereas the Final EIR itself anticipated a larger 2030 population of 286,340 (Marin County 2007: 4.1-49). Similarly, the 2022 Housing & Safety Element Update to the Marin Countywide Plan Draft EIR, relying on 2018 projections from ABAG, anticipates a 2030 population of 274,530 in the county overall (Marin County 2022: 16-2). These figures assume thousands more residents in the county than DOF projected for 2030 in 2021 (Table 3.12-2).

Table 3.12-2 DOF Historic and Projected Population for Marin County

Year	Marin County (total)	Percent Change	Unincorporated Marin County	Percent Change
2010	252,409[a]	—	67,427[a]	—
2020	262,321[b]	3.9%	69,226[b]	2.7%
2030	257,024[c]	-2.0%	NA	NA
2035	256,131[c]	-0.3%	NA	NA
2040	253,549[c]	-1.0%	NA	NA

Notes: NA = not available.

[a] Source: DOF 2010.

[b] Source: DOF 2020.

[c] Source: DOF 2021.

Population information for Strawberry, a census designated place (CDP), is more limited than that available for the county. DOF presents US Census data for 2010 and 2020 but no projections of future population in the CDP. In 2010, the estimated population of Strawberry was 5,393 (DOF 2015a). By 2020, the estimated population in Strawberry was 5,447, representing an increase of 1 percent since 2010 (DOF 2023b). Between 2010 and 2020, Strawberry experienced less than half the growth seen in the unincorporated county in general.

HOUSING UNITS AND VACANCY

The number of housing units in Marin County overall was estimated (January 2023) to be 112,183, with nearly three-quarters of those units single attached or single detached homes (DOF 2023a). The remainder are multifamily units and mobile homes. The vacancy rate for the county overall was estimated (January 2023) to be 6.8 percent (DOF 2023a). In the unincorporated portion of the county, 24,447 of the 29,341 units, or 83 percent, are single attached or single detached homes, and the vacancy rate is 10.5 percent (DOF 2023a). More detail regarding existing housing in the unincorporated portion of the county, Marin County overall, and the state is presented in Table 3-12-3.

Table 3.12-3 Number of Housing Units and Vacancy Rate (January 2023)

Number of Housing Units:	Total	Single Detached	Single Attached	Two to Four	Five Plus	Mobile Homes	Occupied	Vacancy Rate
Unincorporated Marin County	29,341	22,498	1,949	1,408	2,931	555	26,248	10.5%
Marin County overall	112,183	68,166	11,792	8,355	21,979	1,891	104,595	6.8%
State	14,707,698	8,420,792	1,056,780	1,146,148	3,545,018	538,960	13,739,470	6.6%

Source: DOF 2023a.

From 2020 to 2023, the number of housing units in unincorporated Marin County increased by 85, for a growth rate of 0.003 percent, and the number of housing units in Marin County overall increased by 619, for a growth rate of 0.006 percent (DOF 2020, 2023a). From 2015 to 2050, ABAG forecasts a growth of 37,000 households in Marin County, for a growth rate of 34 percent (ABAG 2021).

Housing-related data, like population data, are more limited for Strawberry than for the county. The most current US Census data presented for Strawberry by DOF is for 2020, and unlike for the unincorporated county and the county overall, the data do not include details regarding types of housing units. From 2010 to 2020, the number of housing units in Strawberry was estimated to decline from 2,729 (DOF 2015b) to 2,714 (DOF 2023c), for a growth rate of -0.005. In 2020, the homeowner vacancy rate was estimated to be 1.3 percent, the rental vacancy rate was estimated to be 5.4 percent, and the overall vacancy rate was estimated to be 7.7 percent (DOF 2023c). The most recent (2020) overall vacancy rate for Strawberry (7.7 percent) is lower than the most recent (2023) overall vacancy rate for unincorporated Marin County (10.5 percent).

ABAG's final RHNA for 2015–2023 identifies an affordable housing need of 2,298 housing units in Marin County: 618 for very low–income households, 367 for low-income households, 423 for moderate-income households, and 890 for above moderate–income households. Of this total, 185 of the units are identified for unincorporated Marin County: 55 for very low–income households, 32 for low-income households, 37 for moderate-income households, and 61 for above moderate–income households (ABAG 2013: 23). Marin County has reached all four affordable-housing goals identified for the 2015–2023 RHNA cycle. It has produced housing to meet 100 percent of the housing goal for very low–income households, 194 percent of the goal for low-income households, 108 percent of the goal for moderate-income households, and 369 percent of the goal for above moderate–income households (Marin County n.d.).

As described in the text of Housing Element Program 1, "Adequate Sites for RHNA and Monitoring of No Net Loss," presented in Section 3.12.1, "Regulatory Setting," above, the RHNA for 2023–2031 identifies an affordable housing need of 3,569 housing units in Marin County unincorporated areas: 1,100 for very low–income households, 634 for low-income households, 512 for moderate-income households, and 1,323 for above moderate–income households. When projected ADUs and entitled projects are considered, the County has developed 705 units of its RHNA, with a remaining RHNA to accomplish of 2,864 units (1,343 for lower-income households, 313 for moderate-income households, and 1,208 for above moderate–income households) (Marin County 2023: 221).

AFFORDABLE HOUSING

As described in the Housing Element of the *Marin Countywide Plan*, the median rental rates for a one-bedroom apartment and a two-bedroom apartment in the county are $2,450 and $3,151, respectively (Marin County 2023: 47 of Chapter 1). Units rented at these rates would be affordable for moderate-income households in the county. Except for the units in the two-building dormitory, all the units on the project site would be considered affordable for moderate-income households; however, most of the units on-site are more than 60 years old and are beyond their serviceable life. Except for the units not proposed for demolition, which have been renovated, the housing on-site is in substandard condition. A summary of the housing units on the project site, including rental rates, has been provided by the project applicant and is presented in Table 3.12-4.

Although the project site does contain 66 dormitory rooms, these units are excluded from consideration as affordable housing. For RHNA purposes, these units would be counted as one residential unit because they provide separate

living and sleeping quarters for students; however, they have shared bathrooms and kitchens and thus individually would not qualify as affordable housing. In addition, the rental rate for one residential unit under this scenario would be $3,270 and thus would exceed the price for moderate-income households. Moreover, student housing is considered a type of temporary housing and therefore does not meet the criteria for affordable housing. For these reasons, the dormitory rooms are not included.

Table 3.12-4 Summary of Housing Units On-Site, Including Rental Rates

Existing Development Planning Area	Unit Count	Number of Bedrooms	Unit Type	Rental Rates for Existing Units
Chapel Drive				
Seminary Point-Tichenor (Gray/Lawrence/Redford)	24	24	1-bedroom	$1,575–$1,675
Hodges/Shuck				
Bagby	16	16	1-studio	$1,275–$1,375
Carey/Wallace/Maddox	22	22	1-bedroom	$1,575–$1,675
Mahon/Gill	8	8	1-bedroom	$1,700–$1,900
Foreman/Judson/Oliver/Rice	47	94	2-bedroom	$1,875–$2,075
Reed/Storer/Shuck				
Lockett	7	14	2-bedroom	$1,875–$2,075
Green	8	24	3-bedroom	$2,475–$2,575
Total/Average	**139**	**202**		**$1,945–$2,070**

Note: NA = not applicable.

Source: Compiled by North Coast Land Holdings in 2023.

EMPLOYMENT

According to the California Employment Development Department, Marin County had a labor force of 131,400 in May 2023. Of this total, 127,500 were employed, for an unemployment rate of 3.0 (EDD 2023). According to Data USA, which presents economic data based on data drawn from the US Census Bureau, the largest employment sectors for those living in Marin County in 2020 were professional, scientific, and technical services (16.6 percent); health care and social assistance (12.8 percent); and retail trade (9.7 percent) (Data USA n.d.). Employment opportunities (i.e., the number of total jobs) in Marin County have been declining and are expected to continue to decline per ABAG job growth projections. ABAG estimates that there were 135,000 jobs in Marin County in 2015 and forecasts a decline of 19,000 jobs, or 14 percent, to 116,000 jobs in the county by 2050 (ABAG 2021).

3.12.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

The examination of population and housing conditions presented in this section is based on review of the following information and data sources:

- applicable policies and programs from the *Marin Countywide Plan*,
- historic and projected population figures available from ABAG and DOF,
- current information on the number of housing units and vacancy rates available from DOF, and
- details from the project description (see Chapter 2) regarding proposed development on the project site.

THRESHOLDS OF SIGNIFICANCE

A population and housing impact would be significant if implementation of the project would do any of the following:

- 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), or
- displace substantial numbers of existing people or homes, necessitating the construction of replacement housing elsewhere.

ISSUES NOT DISCUSSED FURTHER

All the issues identified in the preceding list of thresholds are addressed in the following impact analysis.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.12-1: Induce Substantial Unplanned Population Growth in an Area, Either Directly (for Example, by Proposing New Homes and Businesses) or Indirectly (for Example, through Extension of Roads or Other Infrastructure)

Implementing the project would increase the number of housing units on the project site by 185 new units and increase the population on the site by approximately 530 residents. A portion of the residents on-site would include students, faculty, staff, and families affiliated with the academic campus. Most of the students and university employees would live off-site, and most of them are expected to be already living in the area. A substantial number of students and other individuals are not expected to relocate to the area in response to implementation of the project. In addition, the population in the unincorporated county has declined in recent years, the County has long identified the project site as a housing opportunity site to assist with meeting its RHNA requirement, as it was included in the recent Housing Element adopted in 2023, and the anticipated increase in population under the project would not be substantial compared to the growth anticipated and analyzed in the 2007 Marin Countywide Plan Update Final EIR and the 2022 Housing & Safety Element Update to the Marin Countywide Plan Final EIR. Therefore, the growth anticipated on the site under the project would be neither substantial nor unplanned. This impact would be **less than significant**.

As described in Chapter 2, "Project Description," 145 residential units are located on the project site (16 market-rate studios, 54 one-bedroom housing units, 54 two-bedroom housing units, 18 three-bedroom housing units, and three single-family residences). Sixty-six dormitory rooms, which are counted as seven residential units, are also located on the site. Under the project, 13 of the residential units on the site would be retained; the remaining 139 residential units on the site, including the dormitory rooms, would be replaced; and 184 new units consisting of single-family and multifamily residences, as well as a residential care facility (counted as one residential unit), would be constructed. (The project does not involve the replacement of the dormitory rooms with new dormitory rooms, but it does involve the replacement of the seven residential units that represent the dormitory rooms in the count of on-site units.) Overall, the number of residential units on the site would increase by 185, from 152 (including the dormitory rooms) to 337 units.

The existing housing on the project site is occupied by approximately 320 residents made up of students, faculty, staff, families affiliated with the academic campus, and members of the general public. Increasing the number of housing units on-site, including constructing a residential care facility, would increase the population on-site to approximately 850 (680 residents of the 336 single-family and multifamily units and 170 residents of the residential care facility)—an increase of approximately 530 residents.

As described in Chapter 2, "Project Description," student enrollment capacity on-site under the project would remain at 1,000 students, which is the capacity allowed in the 1953 conditional use permit. Student enrollment on campus

when the NOP was released was approximately 100 students; in 2015, it was approximately 600 students. The project anticipates enrollment of up to 1,000 students. The project also would generate up to approximately 253 jobs with full enrollment of the university (216 new campus jobs, 34 jobs for the new residential care facility, and three jobs for the new fitness center).

As further described in Chapter 2, preference for project housing would be given to the student and faculty population, 30 percent of which is expected to live on campus. Thus, some of these individuals are already counted among the 530 residents who would live on the project site. The remainder would live off-site and commute.

In the southern portion of Marin County, within approximately 10 miles of Strawberry, are San Rafael, Mill Valley, Larkspur, San Anselmo, Tamalpais-Homestead Valley, Corte Madera, Tiburon, and several other cities and CDPs, which together with Strawberry have a combined population of more than 140,000. It is reasonably anticipated that most of the students living off-site would already live in this area. Similarly, because of the size of the population within this commute distance, most of the jobs would likely be filled by people already living in the area. For this reason, a substantial number of students and other individuals would not be expected to relocate to the area in response to implementation of the project.

An approximately 10-mile distance was selected for this analysis because the Plan Bay Area 2050 Draft EIR states that the average one-way commute distance by car in the Bay Area in 2015 was 10.3 miles and that the commute distance using transit was 11.0 miles (MTC and ABAG 2021: Table 3.15-5). However, longer commutes for students and workers living in the Bay Area are common. Extending the commute distance to approximately 15 miles would expand the region considered in the analysis to include portions of the East Bay and San Francisco, which would substantially expand the population under consideration, and reinforce the reasonable expectation that a substantial number of students and employees would not relocate to the project area.

Construction of the project would occur over approximately 4 years. The size of the on-site construction labor force would fluctuate depending on the phase of work, ranging from approximately 10 to 160 people, depending on the project component and phase under construction. Because most of the labor force would likely be drawn from the large pool of construction workers already living in the region, a substantial number of construction workers would not be reasonably expected to relocate to the area to construct the project.

The project does not involve the extension of roads or other infrastructure that would induce substantial unplanned population growth. Vehicular access to the project site from US 101 and State Route 131/Tiburon Boulevard and from various local roadways would not be altered for the project. The project site includes existing infrastructure for potable water, sanitary sewer, gas, electricity, and stormwater. Buildout of the project would include retention of this infrastructure, as well as installation of new utility lines and infrastructure to serve development proposed in the various planning areas on-site. All the utility and infrastructure improvements would be installed within the boundaries of the project site and would be scaled to support the growth proposed under the project.

As discussed in Section 3.15, "Utilities and Service Systems," the growth anticipated on the project site under the project is not unplanned. To meet its RHNA requirement, the County identified the project site as a housing opportunity site in multiple cycles of the Housing Element and again in the current Housing Element, adopted in January 2023.

As described in Section 3.12.2, "Environmental Setting," current projections assume that the population in overall Marin County (both incorporated cities and unincorporated territory) will decline by 2030 and continue to decline through 2040 (see Table 3.12-2). ABAG projections are not available for unincorporated Marin County for that period; however, DOF data show a pattern of overall county and unincorporated county populations rising and declining together. The population in both the county overall and unincorporated Marin County grew between 2010 and 2020 (see Table 3.12-2), but as stated previously, between 2019 and 2023, the population in the county overall declined from 261,478 to 252,959, and the population in unincorporated Marin County declined from 68,863 to 66,032 (DOF 2019, 2023a). It would be reasonable to expect, based on this pattern, that the projected decline in overall county population through 2040 would be reflected in a decline in the population of the unincorporated county during the same period. Even without a likely further decline, the current population of 66,032 in the unincorporated portion of the county is substantially less than the 2030 population projections of 76,400 identified in the 2007 Marin

Countywide Plan Update Final EIR (Marin County 2007: 4.1-49) and 73,490 identified in the 2022 Housing & Safety Element Update to the Marin Countywide Plan Final EIR (Marin County 2022: 16-2). For these reasons, the population increase of 530 on the site associated with the project would be neither substantial nor unplanned.

Because the population growth in the area is planned and the anticipated increase of 530 residents would fall well below the projection identified in the Marin Countywide Plan Update Final EIR, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.12-2: Displace Substantial Numbers of Existing People or Homes, Necessitating the Construction of Replacement Housing Elsewhere

Implementation of the project involves demolition of 139 residential units, which would result in the displacement of approximately 320 people. A recent estimate indicates that more than 3,000 housing units are available in unincorporated Marin County (DOF 2023a). Substantially more housing is available if portions of the East Bay and San Francisco are also considered in light of typical regional commute distances. In addition, the County anticipates construction of 5,214 housing units with implementation of the updated Housing Element (Marin County 2023). A portion of this new housing would become available during the 4-year project construction period. Further, various benefits would be available to displaced residents. Lower-income residents, for example, would be entitled to payment of moving expenses; relocation assistance; and payment of the difference, if any, between affordable rent and rent for a "comparable" unit for up to 42 months. Although 139 residential units would be demolished under the project, the number of units lost would be replaced, and another 185 units would be added. Therefore, the number of residential units on the site, including the 13 housing units that were retained, would increase to 337 units. The expanded number of units would be sufficient to house up to approximately 850 residents—an increase of approximately 530 residents. In addition, Program 3 of the Housing Element and Housing Density Bonus Law requires that any project that involves demolition of affordable housing on a project site replace the number of affordable units lost with new affordable units; otherwise, the project is not eligible for the density bonus. Moreover, the County would require as a condition of project approval that all demolished affordable units be replaced with the same number of affordable units at the same affordability and that 20 percent of the total number of units be affordable. Approximately 30 percent of proposed project housing units would be occupied by the student, staff, and faculty population, so a portion of the students and faculty members displaced during construction would be expected to move back onto the project site following construction. Existing housing supply in the county and in neighboring regions of the Bay Area and housing anticipated in the Housing Element are much larger than the number of displaced residents, so it is expected to be sufficient to house the remaining displaced residents. Because existing housing in the region would be sufficient to house residents displaced during construction, additional housing will become available as the County proceeds with construction of 5,214 housing units anticipated under the updated Housing Element, the project site would be able to house up to approximately 850 residents (an increase of approximately 530 residents) following buildout of the project, and the County would require that all the demolished affordable units be replaced with the same number of affordable units at the same affordability and that 20 percent of the total number of units be affordable, construction of replacement housing elsewhere would not be required to address the displacement of residents from the project site. This impact would be **less than significant**.

Under the proposed project, 139 of the 152 residential units on the project site (145 residential units plus the 66 dormitory rooms, which are counted as seven units) would be demolished and replaced, and the remaining 13 residential units would be retained. The 66 dormitory rooms are included among the 139 units that would be demolished. (As mentioned above, the project does not involve the replacement of the dormitory rooms with new dormitory rooms, but it does involve the replacement of the seven residential units that represent the dormitory rooms in the count of on-site units.) In addition to the 139 units that would be replaced, 184 new units consisting of single-family and multifamily residences, as well as a residential care facility, would be constructed on-site.

Demolition of the 139 housing units would result in the displacement of approximately 320 people. Construction would be phased and is anticipated to last 4 years; however, specific phasing details, such as the exact timing of existing resident displacement, are not yet available.

As described under "Housing Units and Vacancy," above, the vacancy rate in unincorporated Marin County is 10.5 percent, which is considerably higher than the vacancy rates for Marin County overall (6.8 percent) and the state (6.6 percent). A recent estimate indicates that more than 3,000 housing units are available in unincorporated Marin County (DOF 2023a). Substantially more housing is available if, as discussed for Impact 3.12-1, portions of the East Bay and San Francisco are also considered in light of typical regional commute distances. In addition, as detailed in Table 3.12-1, above, during the current 8-year Housing Element planning period, nearly 1,400 acres in the county will be rezoned and the acreage used to construct more than 3,200 units to help the County meet its RHNA requirement. A portion of this new housing would become available during the 4-year project construction period. These units are included among the 5,214 housing units that would be added to the county with implementation of the updated Housing Element. The 5,214 housing units include (1) the Housing Element "Proposed Sites Inventory" total of 3,928 units to meet the RHNA, (2) the California Department of Housing and Community Development–recommended buffer to ensure an adequate number of sites, and (3) additional units that could be proposed under state Housing Density Bonus law (Marin County 2022: 16-11).

In accordance with the Countywide Plan Housing Element, the project would be considered development on a nonvacant site containing existing residential units and therefore would be subject to the replacement requirements of Housing Element Implementing Program 3, the State Housing Density Bonus Law, and the Housing Crisis Act of 2019, which would reduce potential impacts related to displaced residents. As described in Section 3.12.1, "Regulatory Setting," Implementing Program 3 of the Housing Element and State Housing Density Bonus Law require that any project that involves demolition of affordable housing on a project site replace the number of affordable units lost with new affordable units; otherwise, the project is not eligible for the density bonus. Moreover, the County would require as a condition of project approval that all demolished affordable units be replaced with the same number of affordable units at the same affordability or that 20 percent of the total number of units be affordable, whichever is greater. Therefore, no affordable housing would be displaced with implementation of the project.

Under the project, the number of residential units on the site would increase by 185, from 152 (including the dormitory rooms) to 337 units. The expanded number of housing units would be sufficient to house up to approximately 850 residents (i.e., 680 residents of the 336 single-family and multifamily units and 170 residents of the residential care facility)—an increase of approximately 530 residents. Approximately 30 percent of the student and faculty population would reasonably be anticipated to reside on-site, so a portion of the students and faculty displaced during construction would be expected to move back onto the project site following construction. Remaining units would be available for lease to the broader community. In conformance with Marin County Development Code Section 22.22.020 and California's Housing Density Bonus Law, 50 of the proposed 324 new residential units (one one-bedroom, 19 two-bedroom, and 30 three-bedroom) would be available to low-income households. These units, which would be dispersed throughout the project site and would be comparable in location, size, and exterior design to the remaining units in the development, would be offered at rates in accordance with Section 22.22.080(C) of the Marin County Development Code.

The residents on the project site who would be displaced occupy what ABAG, in its *Guide to California State Replacement Housing Requirements* (ABAG 2023), refers to as SB 330 Protected Units. As long as they are lawful occupants and have been occupants for more than 30 days, these residents would be entitled to relocation benefits and a right of first return under SB 330.

The following benefits would apply to all qualified residents who would be displaced from SB 330 Protected Units:

- All existing residents must be allowed to remain in their units until 6 months "before the start of construction activities."
- All existing occupants who are displaced must be allowed to return at their prior rental rate if the demolition does not proceed and the property is returned to the rental market.

Qualified lower-income residents of SB 330 Protected Units also would be entitled to the following additional benefits:

- **State Relocation Benefits**. The developer must provide state relocation benefits to lower-income occupants of any protected units. These include payment of moving expenses; relocation assistance; and payment of the difference, if any, between affordable rent and rent for a "comparable" unit for up to 42 months.
- **Right of First Refusal for New Unit**. Even after being paid relocation benefits, the lower-income occupants of any protected units are entitled to a right of first refusal for a "comparable" unit in the development at affordable rent or affordable housing cost, with the exceptions listed below. A "comparable" unit must have the same number of bedrooms, have the same number of total rooms (including both permitted and unpermitted rooms), and be the same size as the unit being vacated.
  - **Exception #1:** This requirement does not apply where the development project consists of a single residential unit located on a site where a single SB 330 Protected Unit is being demolished.
  - **Exception #2:** This requirement also does not apply to units in a housing development in which 100 percent of the units, exclusive of a manager's unit or units, are reserved for lower-income household, except that a right of first refusal must be offered to any occupant of an SB 330 Protected Unit who qualifies for residence in the new development and for whom providing a comparable unit would not be precluded due to unit size limitations or other requirements of one or more funding source of the housing development.

  Single-Family Comparable Unit. If one or more single-family homes that qualify as SB 330 Protected Units are being replaced in a development project that consists of two or more units, "comparable unit" means either of the following: (1) a unit containing the same number of bedrooms if the single-family home contains three or fewer bedrooms or (2) a unit containing three bedrooms if the single-family home contains four or more bedrooms. A "comparable unit" in this instance is not required to have the same or similar square footage or the same number of total rooms.

Although 139 residential units would be demolished under the project, the number of residences on the project site at project buildout would increase by 185 units, and population on-site would increase by approximately 530. A relatively high vacancy rate in unincorporated Marin County suggests that existing housing in the area would be sufficient to house the temporarily displaced residents. In addition, the County is planning to construct 5,214 housing units, including more than 3,200 units to help meet its RHNA requirement, during the current 8-year Housing Element planning period. A portion of this new housing would become available during the 4-year project construction period. Also, qualified residents on the project site who would be displaced would be entitled to relocation benefits and a right of first return under SB 330, as described above. Further, the County would require that all the demolished affordable units be replaced with the same number of affordable units at the same affordability and that 20 percent of the total number of units be affordable. For these reasons, implementing the project would not necessitate the construction of replacement housing elsewhere to address displaced people or homes. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

3.13 PUBLIC SERVICES AND RECREATION

This section provides an overview of public services and recreation in Marin County and evaluates the potential for implementation of the project to affect the availability, service level, and capacity of fire protection services, police protection services, public schools, and parks and recreation. Where the evaluation determines that an effect on a public service would occur, this section discusses whether new or expanded facilities would be required that could result in a potentially significant impact on the environment. Publicly provided utility services, such as water and wastewater treatment, stormwater management, electricity, and natural gas services, are addressed in Section 3.15, "Utilities and Service Systems."

No comments relating to public services were received in response to the notice of preparation (NOP); however, comments relating to recreation requested that the EIR (1) consider impacts on existing public access spaces, including a water access point in Brickyard Park designated by the San Francisco Bay Conservation and Development Commission and a segment of the San Francisco Bay Trail, and whether recreation facilities would invite or discourage the public from venturing toward the shoreline and (2) evaluate the increased use of public access areas. The project's impact on public access areas is addressed in the discussion for Impact 3.13-6.

The comments also requested that the EIR consider whether public spaces would be accessible to elderly residents in the assisted care facility. The purpose of the CEQA process is to identify potentially feasible ways to substantially lessen or avoid any physical impacts on the environment that would be caused by implementing a project. The recreation-related thresholds identified in the Appendix G checklist of the State CEQA Guidelines (presented below in the "Thresholds of Significance" section) therefore do not address access to public spaces but to the substantial deterioration of recreational facilities associated with increased use and to adverse physical impacts associated with constructing or expanding recreational facilities. As described in Chapter 2, "Project Description," the residents of the assisted care facility would have access to other facilities on the project site, including the proposed fitness center for wellness classes and the academic campus for classes and events. They also would have access to the outdoor public spaces on the project site. With attention to their safety, these residents would visit in accordance with operating rules and procedures of the assisted care facility.

See Appendix A for all NOP comments received.

3.13.1 Regulatory Setting

FEDERAL

Code of Federal Regulations

The project involves construction and operation of a new residential care facility on the project site. Under 29 CFR 1910.38, when required by an Occupational Safety and Health Administration standard, an employer must have an emergency action plan in writing, kept in the workplace, and available to employees for review. The plan must include, at a minimum, procedures for reporting a fire or other emergency; procedures for emergency evacuation, including type of evacuation and exit route assignments; procedures to be followed by employees who remain to operate critical plant operations before they evacuate; procedures to account for all employees after evacuation; and procedures to be followed by employees performing rescue or medical duties. The emergency action plan also must include the name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan. The standards also include the following additional requirements:

- The employer must have and maintain an employee alarm system.
- The employer must designate and train employees to assist in a safe and orderly evacuation of other employees.

- The employer must review the emergency action plan with each employee covered by the plan when the plan is developed or the employee is assigned initially to a job, when the employee's responsibilities under the plan change, and when the plan is changed.

Under 29 CFR 1910.39, an employer must have a fire prevention plan. The fire prevention plan must be in writing, be kept in the workplace, and be made available to employees for review. The plan must include, at a minimum, a list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard; procedures to control accumulations of flammable and combustible waste materials; procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials; the name or job title of employees responsible for maintaining equipment to prevent or control sources of ignition or fires; and the name or job title of employees responsible for the control of fuel source hazards.

Under 29 CFR 1910.155, employers are required to place and keep in proper working order fire safety equipment in facilities.

Disaster Mitigation Act of 2000

The project involves an expansion of residential development, which would potentially increase the risk of hazards on the project site and in the project area. The Disaster Mitigation Act of 2000 authorizes the Federal Emergency Management Agency (FEMA) to set mitigation planning requirements for state, local, and Indian tribal governments as a condition of mitigation grant and disaster assistance, and it requires close coordination of mitigation planning and implementation efforts between FEMA and jurisdictions. The act also requires the preparation of local hazard mitigation plans (LHMPs) that address emergency response and planning for the environmental hazards found in a community. LHMPs must be updated every 5 years.

Higher Education Opportunity Act

The most substantial element of the project is the replacement of 139 residential units on-site and construction of 184 new units consisting of single-family and multi-family residences. It is anticipated that approximately 30 percent of the student and faculty population would reside on campus. The Campus Fire Safety Right-to-Know Act of 2007 amended the Higher Education Act of 1965. It requires institutions that maintain on-campus student housing facilities to provide to all current students and employees, and to any applicant for enrollment or employment upon request, an annual fire safety report containing specified information about the campus fire safety practices and standards of that institution. It requires the institutions to record all on-campus fires, including the nature, date, time, and general location of each fire and all unwanted and false fire alarms, and to open such information to public inspection. It also requires the institutions to report on such information annually to the campus community in a manner that will aid the prevention of similar occurrences. It also directs each institution to require the national organizing bodies of the fraternities, sororities, and other student groups they recognize to collect specified fire safety information for each student housing facility they own, control, or occupy and report such information to the Secretary of Education, all current members, and any interested party upon request.

STATE

California Governor's Office of Emergency Services

The California Governor's Office of Emergency Services (Cal OES) serves as the lead state agency for emergency management in California. Cal OES coordinates the state response to major emergencies in support of local government. It is also responsible for collecting, verifying, and evaluating information about the emergency, facilitating communication with local government, and providing affected jurisdictions with additional resources when necessary. Cal OES may require state agencies to perform work outside their day-to-day and statutory responsibilities. Local jurisdictions first use their own resources and, as they are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the state through the Statewide Mutual Aid System.

California Fire Code

The California Fire Code is based on the International Fire Code, with necessary California amendments. It prescribes regulations consistent with nationally recognized good practices for the safeguarding, to a reasonable degree, of life and property from the hazards of fire and explosion. It also addresses (1) dangerous conditions arising from the storage, handling, and use of hazardous materials and devices; (2) conditions hazardous to life or property in the use or occupancy of buildings or premises; and (3) provisions to assist emergency response personnel.

California Building Standards Code

The 2022 California Building Standards Code, including Part 9 of Title 24, the California Fire Code, became effective January 1, 2023.

California Code of Regulations, Title 19

Title 19, Division 2, Chapters 1–6, of the CCR establishes regulations related to emergency response and preparedness.

California Health and Safety Code

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which includes regulations for building standards (as set forth in the California Building Standards Code); fire protection and notification systems; fire protection devices, such as extinguishers; smoke alarms; high-rise building and childcare facility standards; and fire suppression training.

California Occupational Safety and Health Administration

In accordance with CCR Title 8 Section 6773 (Fire Protection and Fire Fighting Equipment), the California Occupational Safety and Health Administration has established minimum standards regarding fire protection and fire-fighting equipment. The standards include the following requirements: Fire-fighting equipment shall be available to locations where fires are likely to occur; the equipment shall be inspected, tested, and maintained in serviceable condition; a record shall be kept showing the date when fire extinguishers and hose lines were last inspected, tested, repaired, or renewed; the equipment after any use shall promptly be made serviceable and restored to its proper location; before employees are required or permitted to use the equipment, they shall be trained in the proper use, care, and limitations of the equipment; access road(s) shall be provided to accommodate available mobile fire-fighting equipment; and a written plan shall be established and implemented to ensure the safe and orderly evacuation of employees.

State School Funding

California Education Code Section 17620 authorizes the governing board of any school district to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the school district, for the purpose of funding the construction or reconstruction of school facilities, provided that the district can show justification for levying of fees.

California Education Code Section 17070.10 et seq., the Leroy F. Greene School Facilities Act (commonly known as Senate Bill 50 [Statutes 1998, Chapter 407, Section 19]), instituted a school facility program by which school districts can apply for state construction and modernization funds. This legislation imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development.

California Government Code Section 65995 provides for school facility financing and the mitigation of impacts on the need for school facilities from land use approvals by establishing statutory fees that may be levied or imposed in connection with, or made a condition of, any land use approval, to be used for the construction or reconstruction of school facilities. It limits the fee to be collected to the statutory fee unless a school district conducts a school facility needs analysis (Section 65995.6) and meets certain conditions. Section 65995(h) states that the payment or satisfaction of a fee, charge, or other requirement levied or imposed under Section 17620 of the Education Code is deemed to be full and complete mitigation of the impact for the planning, use, development, or provision of adequate school facilities. Section 65996 prohibits public agencies from using CEQA or "any other provision of state

or local law" to deny approval of "a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property or any change in governmental organization or reorganization" on the basis of the project's impacts on school facilities.

Quimby Act

The goal of the Quimby Act (California Government Code Section 66477) is to require developers to help mitigate the impacts of property improvements by requiring them to set aside land or pay fees for park or recreational purposes as a condition of the approval of a tentative or parcel subdivision map if specified requirements are met. The Quimby Act gave authority for passage of land dedication ordinances only to cities and counties, thus requiring special districts to work with cities and/or counties to receive parkland dedication and/or in-lieu fees. The fees must be paid and land conveyed directly to the local public agency that provides park and recreational services community-wide. The land, fees, or combination of the two are to be used only for the purpose of developing new or rehabilitating existing neighborhood or community park or recreational facilities. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities.

The amount and location of land to be dedicated or the fees to be paid must bear a reasonable relationship to the use of the park and recreational facilities by the future inhabitants of the development. The amount of land dedicated or fees paid is based on residential density, which is determined based on the approved or conditionally approved tentative map or parcel map and the average number of persons per household, which is generally assumed to be the same as that disclosed by the most recent available federal census. However, the dedication of land, or the payment of fees, or both, must not exceed the proportionate amount necessary to provide 3 acres of park area per 1,000 persons residing in the subdivision unless the amount of existing neighborhood and community park area, as calculated pursuant to this subdivision, exceeds that limit, in which case the city or county may adopt the calculated amount at a higher standard not to exceed 5 acres per 1,000 persons residing in the subdivision.

Mitigation Fee Act

In 1989, the California Legislature passed AB 1600, adding Section 66000 et seq. to the California Government Code (the "Mitigation Fee Act"), which sets forth requirements for local agencies to follow if they collect fees from developers to defray the cost of the construction of public facilities related to development projects. These legal requirements are frequently referred to as "AB 1600 requirements." Each local agency imposing such development impact fees must prepare an annual report providing specific information about these fees (i.e., a "nexus study") that shows the proper connection of the fees to the project and how accounting and reporting for the fees collected are regulated.

LOCAL

Marin Countywide General Plan

The *Marin Countywide Plan* is a comprehensive long-range general plan for the unincorporated areas of Marin County (Marin County 2023). It was last amended in 2023 to incorporate the 2023–2031 Housing Element and updated Safety Element but has not been comprehensively updated since 2007. In February 2020, the Marin County Board of Supervisors approved a work plan to update the plan. The process will be conducted in phases and will be completed over a projected timeline of approximately 4–5 years. The first phase was completed in 2022 with the adoption of the Expanded Stream Conservation Area Ordinance for the San Geronimo Valley (Ord. No. 3770).

Fire Protection and Emergency Services

The following goals, policies, and implementing programs related to fire protection and emergency services from the Natural Systems & Agriculture Element and Socioeconomic Element of the *Marin Countywide Plan* are relevant to the project:

GOAL EH-4: Safety from Fires. Protect people and property from hazards associated with wildland and structural fires.

- **Policy EH-4.1: Limit Risks to Structures**. Ensure that adequate fire protection is provided in new development and when modifications are made to existing structures.

- Policy EH-4.4: Ensure Adequate Emergency Response. Ensure that there is an adequate number of trained and certified emergency medical technicians to address the increase in medical demand.
- Implementing Program EH-4.c: Require Compliance with Fire Department Conditions. Continue to refer land development and building permit applications to the County Fire Department or local fire district for review, and incorporate their recommendations as conditions of approval as necessary to ensure public safety. Continue to require compliance with all provisions of the most recently adopted version of the California Fire Code (with local amendments).
- Implementing Program EH-4.d: Review Applications for Fire Safety. Require applicants to identify defensible space and compliance with fire safety standards, and continue to work with local and State fire agencies to ensure that California Fire Code (with local amendments), County Development Code, and State standards for construction are applied uniformly countywide.
- Implementing Program EH-4.e: Require Sprinkler Systems. Continue to require installation of automatic fire sprinkler systems in all new structures and existing structures undergoing substantial remodeling, and provide incentives for sprinkler installation in all other habitable structures, especially those in high fire hazard areas.
- Implementing Program EH-4.f: Require Fire-Resistant Roofing and Building Materials. Continue to require and provide incentives for Class A fire-resistant roofing for any new roof or replacement of more than 50% of an existing roof. Work with Marin County fire departments to prepare and adopt an ordinance requiring fire-resistant building materials in extreme and high fire hazard areas.

GOAL PS-3: Effective Emergency and Disaster Preparedness. Provide proper emergency and disaster preparedness services through effective and coordinated emergency management plans and procedures.

- Policy PS-3.1: Plan Thoroughly for Emergencies. Ensure that the County, its citizens, businesses, and services are prepared for effective response and recovery in the event of emergencies or disasters.
- Policy PS-3.2: Safe Public Structures. Protect public health and safety through appropriate siting and rehabilitation of public facilities.
- Implementing Program PS-3.b: Maintain Adequate Response Resources. Identify the need for and maintain adequate staffing levels, equipment, and resources, and undertake disaster preparedness training as necessary to provide essential emergency public services.

Police Protection Services

The following goal, policies, and implementing program related to police protection services from the Socioeconomic Element of the *Marin Countywide Plan* are relevant to the project:

GOAL PS-1: Safe Neighborhoods. Ensure that county neighborhoods remain safe places to live.

- Policy PS-1.1: Encourage Community Involvement in Crime Control. Promote community policing and restorative justice programs, such as the County Adolescent and Adult Drug Courts; other problem-solving courts, such as domestic violence, mental health, and teen courts; the Victim Offender Reconciliation Program (VORP); Neighborhood Accountability Boards; and other restorative programs. Support and encourage reporting of child and adult abuse and neglect.
- Policy PS-1.2: Improve Infrastructure to Discourage Crime. Remedy any public facilities with problems that might encourage criminal activity, such as low lighting and blind spots that result from landscape features or fences.
- Implementing Program PS-1.e: Review Structure Designs. Involve law enforcement agencies in review of the design of new and rehabilitated buildings, including lighting and landscaping, to identify ways to increase resident safety.
- Policy PS-2.1: Counteract Domestic Violence and Juvenile Crime. Decrease the incidence of domestic violence, including child abuse and neglect, elder and dependent adult abuse and neglect, and crimes by or against youth.

- Policy PS-2.2: Support Services for Mentally Ill Criminal Offenders. Reduce the incidence of crimes by the mentally ill by continuing to support the Support and Treatment After Release (STAR) and mental health court programs.

Schools

The following school-related goals, policies, and implementing program from the Socioeconomic Element and the Built Environment Element of the *Marin Countywide Plan* are relevant to the project:

GOAL EDU-1: Adequate School Facilities. Ensure that adequate school facilities are available to meet the needs of current and future Marin County residents.

- Implementing Program EDU-1.a: Share Data. Provide demographic data that schools and colleges can use in projecting facility needs.

GOAL CD-2: Balanced Communities. Maintain balanced communities that house and employ persons from all income groups and provide the full range of needed facilities and services.

- Policy CD-2.5: Locate Housing Near Activity Centers. Provide housing near jobs, transit routes, schools, shopping areas, and recreation to discourage long commutes and lessen traffic congestion.

GOAL CD-5: Effective Growth Management. Manage growth so that transportation, water, sewer, wastewater facilities, fire protection, and other infrastructure components remain adequate.

- Policy CD-5.1: Assign Financial Responsibility for Growth. Require new development to pay its fair share of the cost of public facilities, services, and infrastructure, including but not limited to transportation, incremental water supply, sewer and wastewater treatment, solid waste, flood control and drainage, schools, fire and police protection, and parks and recreation. Allow for individual affordable housing projects to be exempted from the full cost of impact fees, subject to meeting specified criteria.

Parks and Recreation

The following goal, policies, and implementing program related to parks and recreation from the Socioeconomics Element of the *Marin Countywide Plan* are relevant to the project:

GOAL PK-1: A High-Quality Parks and Recreation System. Provide park and recreation facilities and programs to meet the various needs of all county residents.

- Policy PK-1.1: Conduct and Coordinate Park Planning. Develop park and recreation facilities and programs to provide for active recreation, passive enjoyment, and protection of natural resources as a complement to local, state, and national parks and open space in Marin.
- Policy PK-1.2: Consider User Needs, Impacts, and Costs. Plan and develop any needed new park and recreation facilities and programs to meet the desires of the community and protect environmental resources.
- Implementing Program PK-1.d: Explore Options with Local Agencies. Work with cities and towns and schools to determine how their facilities contribute to meeting park and recreation needs in Marin, and to determine which school fields and other recreation facilities may remain available to county residents for use during non-school hours.

Marin County Code

Title 16 of the Marin County Code describes the County's regulations related to fire. In Chapter 16.16, the Marin County Board of Supervisors adopts, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion, the 2022 California Fire Code and 2021 International Fire Code.

As stated in Title 19, Marin County Building Code, the County has adopted the 2022 editions of the California Building Code and the California Residential Code. Chapter 19.04 sets forth regulations related to fire prevention, building code standards (including fire flow), permits, fire access standards, and fire protection systems in buildings (e.g., automatic fire extinguishing/sprinkler systems, fire alarms).

As described in Title 22, Marin County Development Code (Section 22.98.040), new residential developments may be required to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication, pursuant to the Quimby Act, to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. In compliance with the Subdivision Map Act, specifically Government Code Section 66477(a)(2), 3 acres of land for each 1,000 persons residing in a subdivision subject to the act shall be devoted to neighborhood and community park and recreational purposes. Section 22.84.070(b) further states that the dedication of land or payment of fees in lieu thereof, or a combination of both, for park or recreation purposes as provided by Section 22.98.040 and the Subdivision Map Act may be required as a condition of project approval.

Southern Marin Emergency Medical-Paramedic System Revised Joint Powers Agreement

On February 2, 2000, the City of Belvedere, the City of Mill Valley, the City of Sausalito, Marin County, the Southern Marin Fire Protection District (SMFD), and the Tiburon Fire Protection District (Member Agencies) entered into the *Southern Marin Emergency Medical-Paramedic System Revised Joint Powers Agreement to Establish, Operate and Maintain in Southern Marin County an Emergency Medical Care-Paramedic System* (City of Belvedere et al. 2000). The Member Agencies first entered into the agreement on December 4, 1979, and the agreement and Plan of Operations attached to it have been amended and approved several times during the intervening years. Through the agreement, the Member Agencies created a public entity separate from them known as the Southern Marin Emergency Medical-Paramedic System (SMEMPS). The purpose of SMEMPS is the operation and maintenance of an emergency care-paramedic system in southern Marin County.

2023 Marin County Unit Strategic Fire Plan & Community Wildfire Protection Plan

The *2023 Marin County Unit Strategic Fire Plan & Community Wildfire Protection Plan* (MCFD 2023) identifies and prioritizes prefire and postfire management strategies and tactics to reduce loss related to fire in the county. The plan, collaboratively developed by federal, state, city, and County agencies and other interested parties, is intended for use as a planning and assessment tool. It provides an overview of the county's fire environment, including weather, vegetation and fuels characteristics, topography, and climate variability; describes firefighting agencies and capabilities throughout the county; and identifies at-risk communities and natural resource assets for employment of prefire management strategies, including providing public education and outreach, reducing structural ignitibility, improving defensible space around structures, performing nonresidential vegetation management, and planning for evacuation.

Marin County Multi-Jurisdiction Local Hazard Mitigation Plan

The *Marin County Multi-Jurisdiction Local Hazard Mitigation Plan* (Marin County 2018) presents an overall strategy to assess risks posed by natural hazards and to develop a mitigation strategy for reducing risks in the county. The plan's participating jurisdictions and special districts are the County, the 11 incorporated towns and cities in the county, the North Marin Water District, and the Marin County Flood Control and Water Conservation District. The plan focuses on mitigation before rather than after disasters by (1) identifying natural hazards faced by the communities, the districts, and the County (e.g., earthquakes, flooding, wildfire); (2) assessing the vulnerability of the communities, the districts, and the County to these hazards; and (3) identifying specific preventive actions that can be taken to reduce the risk from the hazards. The plan, which was approved by the 11 incorporated towns and cities, the districts, and the Marin County Board of Supervisors, fulfills the requirements of the federal Disaster Mitigation Act of 2000. Marin County is working with various communities and service providers in the county, as well as the public, to update the plan.

Marin Operational Area Emergency Operations Plan

The *Marin Operational Area Emergency Operations Plan* (EOP) (Marin County Sheriff's Office of Emergency Services 2014) addresses the County's planned response to emergency situations associated with disasters affecting Marin County. The Marin Operational Area consists of the cities and towns, special districts, and unincorporated areas in the county. The EOP establishes the organization and management of the County's Emergency Operations Center (EOC), which administers mutual aid requests for fire support (e.g., firefighting resources and personnel) to combat wildland/urban interface fire and requests for statewide resources via the state's Master Mutual Aid Agreement (administered by Cal OES). During an emergency, the EOC engages in situation analysis, public information, response coordination, and resource coordination to direct Marin County operational resources.

Marin County Parks and Open Space Strategic Plan

The *Marin County Parks and Open Space Strategic Plan* (Marin County Parks 2008) addresses park and recreational needs, as well as the objectives necessary for achieving countywide needs. The following plan goals are applicable to the project:

- Goal 1: Protect and Restore Our Lands. Protect, restore, and preserve the natural systems of the lands held in trust for current and future generations.
- Goal 2: Grow and Link the County's Systems of Parks, Trails, and Protected Lands. Complete the County's system of parks, open space, and trails. Support the efforts of other agencies, organizations, and communities to fulfill their land preservation and system goals.
- Goal 4: Connect Communities with the Land for Recreation and Health. Offer all people opportunities to be active and healthy while enjoying safe and well-maintained lands and facilities.

3.13.2 Environmental Setting

FIRE PROTECTION

As discussed in the Housing & Safety Element Update to the Marin Countywide Plan Draft EIR (Marin County 2022), because much of Marin County, particularly in West Marin, is undeveloped and owned by the federal government or the state as wildland or open space parks, fire protection in the unincorporated county is provided by multiple agencies and involves multiple agreements for fire protection services. The Marin County Fire Department (MCFD) staffs an Emergency Command Center that dispatches for MCFD and local volunteer fire departments and districts, coordinates wildland incidents in state responsibility areas and federal responsibility areas, and acts as the Cal OES coordination center for fire dispatching in the county. In local responsibility areas in the county, which include incorporated cities and cultivated agricultural lands, fire protection is provided by city fire departments, fire protection districts, the County, and the California Department of Forestry and Fire Protection (CAL FIRE) under contract to local government. Local fire departments and districts are responsible for enforcing the Fire Code, setting fire safety standards, and providing community safety education and services.

Nineteen local fire agencies, including seven fire protection districts, provide fire protection services in Marin County. Each fire department/district in Marin County partners and works closely with FIRESafe MARIN, which is a nonprofit organization with the dual mission of reducing wildland fire hazards and improving fire safety awareness in Marin County (Sonoma Technology 2020: 5). Marin County's mutual aid system is based on the principles of resource sharing and cooperation with a goal of providing the public with the highest level of service that no one agency is equipped to provide. Mutual aid agreements are agreements among emergency responders to lend assistance across jurisdictional boundaries to supplement the resources of any fire agency during a period of actual or potential need. These agreements include resources from all fire agencies, law enforcement, volunteer fire departments, Cal OES, the National Park Service, CAL FIRE, and local landowners (Sonoma Technology 2020: 19).

SMFD is the first provider of fire protection and emergency services to the project area. SMFD is an independent special district that was established by the Marin County Board of Supervisors in July 1999. It provides an all-risk emergency response capability, responding to fire suppression, emergency medical service (EMS), technical rescue, hazardous materials, and maritime emergency incidents.

SMFD's service area covers more than 25 square miles, encompassing the communities of Sausalito, Tamalpais Valley, Almonte, Homestead Valley, Alto, Strawberry, approximately one-quarter of Tiburon, Mill Valley, Fort Baker, and the Marin Headlands—an area with a population of approximately 39,900 and more than 20,500 homes and commercial properties. Each of the five zones (Zones 1, 4, 6, 7, and 9) in the service area is protected by one Type I engine with each of the zones cross-staffing at least one specialty piece of equipment, such as a ladder truck, rescue unit, fire boat, inflatable rescue boat, and Type 3 engine (SMFD n.d.a).

SMFD has 63.5 full-time employees, including a fire chief, a deputy fire chief, a fire marshal, two battalion chiefs, nine fire captains, 13 paramedic engineers, five firefighter paramedics, 16 firefighter engineers, four firefighters, three (two full-time and two part-time) fire inspectors, and one fire prevention specialist (SMFD n.d.a).

In January 2020, SMFD and the Mill Valley Fire Department entered into a shared services agreement that leverages existing staff from both agencies to create a single management team for both agencies. The combined agencies have a total staff of 93 employees (SMFD n.d.b). The two agencies are analyzing the feasibility of consolidation (SMFD n.d.c).

SMFD operates out of an administrative office and three stations and responds to approximately 4,100 incidents per year (SMFD n.d.c). Station 9, located at 308 Reed Boulevard, in Mill Valley, serves the project site, which is less than 1 mile south of the station. It houses two Type 1 engines (one reserve), a medium-duty rescue unit, a command unit, and two Marin County Fire rescue watercraft (SMFD n.d.d).

SMFD's standard for total response time (combined alarm handling, turnout time, and travel time) for fire and EMS calls is 15 minutes. In June 2022, the average total response time was 15 minutes and 22 seconds for fire incidents and 12 minutes and 12 seconds for EMS incidents (Southern Marin Fire District n.d.).

POLICE PROTECTION

California Highway Patrol

The Golden Gate Division of the California Highway Patrol (CHP) patrols all highways and state roadways in unincorporated Marin County, providing traffic enforcement and investigating traffic accidents. It serves the area from its office at 53 San Clemente Drive, Corte Madera, located approximately 3 miles northwest of the project site. In addition, the CHP provides child restraint seat checks and offers programs and classes, such as Smart Start and Age Well, Drive Smart classes, to keep residents safe on highways and other roadways.

Marin County Sheriff's Office

The Marin County Sheriff's Office (Sheriff's Office) is the primary provider of law enforcement services in the unincorporated areas of Marin County. It is divided into three major bureaus: Administrative and Support Services, Detention Services, and Field Services. The Administration and Support Services Bureau oversees several of the department's divisions, including the Communications Division, which is a dispatch and 911 call center for many of the County's police and fire departments, and most of the department's civilian staff. The Detention Services Bureau is responsible for maintaining and staffing the County jail. The Field Service Bureau is composed of the Patrol Division; Office of Emergency Services; Investigations Division; and specialty units, including the Air Patrol, Dive Team, Mounted Posse, and Search and Rescue Team.

The Patrol Division provides general law enforcement services in the unincorporated communities of Marin County. Each station's area is divided into patrol beats served by uniformed deputies in marked patrol units. Additional patrol units are assigned during high-activity periods as needed. Additional patrol personnel may be assigned to the Patrol Division to address specific crime problems without decreasing the basic patrol staffing level. Additional deputies are also available from the Jail, Civil, and Court Divisions in the event of a major emergency. The Patrol Division is decentralized, operating out of the Main Station, located at 1600 Los Gamos Drive #200, in San Rafael, and three substations. The project site is served by the Southern Substation, located at 850 Drake Avenue, Marin City (Schneider, pers. comm., 2022). The Southern Substation serves the communities of Marin City, Muir Beach, The Gates Co-op, Tamalpais Valley, Almonte, Homestead Valley, Mount Tamalpais, Strawberry, and Paradise Drive.

In 2023, the Sheriff's Office had a staff of 197 sworn employees (Schermerhorn, pers. comm., 2023) and 112 other law enforcement professionals (Marin County Sheriff's Office 2023a), for a ratio of 3.0 sworn officers per 1,000 residents and 1.7 other law enforcement professionals per 1,000 residents in unincorporated Marin County (population 66,032, based on California Department of Finance population data [DOF 2023]). In 2022, the Sheriff's Office responded to 61,235 911 calls and 18,457 10-digit line emergency calls, and 99.97 percent of the 911 calls were answered within 10 seconds (Marin County Sheriff's Office 2023b).

SCHOOLS

Marin County has 18 school districts, which are coordinated by the Marin County Office of Education. The project area is served by the Mill Valley School District, which has five elementary schools and one middle school, and the Tamalpais Union High School District, which has three comprehensive high schools and two alternative high schools.

In 2022, the Mill Valley School District had an enrollment of approximately 2,400 students in grades K–8. Four of the schools are located in the city of Mill Valley, and two are located in the adjacent unincorporated areas of Strawberry and Tamalpais Valley. The six schools in the Mill Valley School District are Edna Maguire Elementary (K–5), Old Mill Elementary (K–5), Park Elementary (K–5), Strawberry Point Elementary (K–5), Tamalpais Valley Elementary (K–5), and Mill Valley Middle (6–8) (Mill Valley School District 2022).

In 2022, the Tamalpais Union High School District had an enrollment of 4,868 students in grades 9–12 (Tamalpais Union High School District 2022). The three comprehensive high schools in the school district are Archie Williams (9–12), Redwood (9–12), and Tamalpais High Schools (9–12), and the two alternative high schools are San Andreas (10–12) and Tamiscal High Schools (9–12).

The *Mill Valley School District Facility Master Plan* presents yearly student enrollment projections through the 2030-2031 school year and identifies target and maximum student capacity for each of the schools in the district. As shown in Table 3.13-1, the highest projected enrollment through the 2030-2031 school year is less than the target capacity for all the schools except Edna Maguire Elementary School, and in that case, the projection still falls well below the maximum capacity identified for the school (Mill Valley School District 2021).

Table 3.13-1 Capacities Compared to 2020-2021 and Projected Enrollments for Mill Valley School District

School	2020-2021 Enrollment	Target Capacity	Maximum Capacity	Highest Projected Enrollment	Lowest Projected Enrollment
Edna Maguire Elementary School	477	585	679	617	503
Old Mill Elementary School	278	312	363	309	277
Park Elementary School	259	345	403	304	260
Strawberry Point Elementary School	260	345	403	289	247
Tamalpais Valley Elementary School	419	489	571	459	415
Elementary school totals	1,693	2,076	2,419	1,952	1,701
Mill Valley Middle School	941	1,146	1,404	833	736

Note: Enrollments are projected through the 2030-2031 school year.

Source: Mill Valley School District 2021: Table 4.

Student enrollment in the Tamalpais Union High School District is projected to decline between the 2020-2021 and the 2025-2026 school years. Student enrollment in each of the five high schools in the 2020-2021 school year was below the capacity of each school, and the utilization of each of the schools is expected to decline with the anticipated decline in student enrollment by the 2025-2026 school year (Table 3.13-2) (Tamalpais Union High School District 2021).

School districts use student generation rates to determine school facility needs in their service area. Student generation rates in Marin County are based on a calculation of the number of students per residential unit at a particular moment in time, so these rates can vary over time, as reflected in the number of enrolled students and their respective grade levels, along with the number of residential units in the county (Marin County 2022). Current student generation rates for the Mill Valley and Tamalpais Union High School Districts are 0.5 and 0.2, respectively (Jones, pers. comm., 2023).

Table 3.13-2 Capacities Compared to 2020-2021 and Projected Enrollments for Tamalpais Union High School District

School	Capacity	2020-2021 Enrollment	2020-2021 Utilization	2025-2026 Enrollment (Projected)	2025-2026 Utilization (Projected)
Archie Williams High School	2,914	1,331	46%	952	33%
Redwood High School	3,243	1,975	61%	1,872	58%
Tamalpais High School	2,569	1,593	62%	1,428	56%
San Andreas High School	252	69	27%	50	20%
Tamiscal High School	364	116	32%	90	25%
Total or percent	**9,342**	**5,084**	**54%**	**4,392**	**47%**

Source: Tamalpais Union High School District 2021: Figure 2.

Marin County schools are responsible for levying impact fees on new development. These fees and the annual increases are established in collaboration with the state. Each school district in the state analyzes the relationships between enrollment projections and facility needs to formulate school impact fees. New residential and commercial development in the county is required to pay the state-authorized school impact fees approved by Marin County (Marin County 2022).

PARKS AND RECREATION

Marin County is noted for its abundant park and recreation areas, with the Pacific coast on the west, San Pablo Bay on the east, tens of thousands of acres of open space, hundreds of acres of parks, and miles of scenic trails. Federal park and recreation facilities include Point Reyes National Seashore and a portion of the Golden Gate National Recreation Area. State parks in the county include Mount Tamalpais and China Camp State Parks. Numerous city parks are located throughout the county. Marin County Parks manages 39 parks and 34 open space preserves encompassing 17,900 acres (Marin County Parks 2021a, 2021b). These facilities include open space parks and beaches, developed parks with pools, playgrounds, picnic facilities, a skate park, walking and bicycle pathways, and boat launch facilities. Park and recreation facilities located in the project area include Bothin Marsh Preserve, which provides hiking and kayaking opportunities, and the 385-acre Ring Mountain Preserve, which offers views of the entire Bay Area and hiking and horseback riding opportunities.

The *Marin County Parks and Open Space Strategic Plan* presents a vision for the County's park and open space system. It projects how park and recreation needs will evolve as the county's population ages and becomes more diverse, examines the strengths and challenges of the park and open space system, describes the improvements to be made and facilities to be built so that the system remains responsive to the needs of the community, identifies recommended investments, and identifies tools to gage success. Additional documents prepared to guide the County's park planning and management efforts are the *Road and Trail Management Plan*, the *Vegetation and Biodiversity Management Plan*, the *Inclusive Access Plan*, and three regional park master plans (Marin County Parks 2021c).

In accordance with Marin County Development Code Section 22.98.040, Parkland Dedication and Fees, new residential developments are required to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication, pursuant to the Quimby Act, to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. In compliance with the Subdivision Map Act, specifically Government Code Section 66477(a)(2), 3 acres of land for each 1,000 persons residing in a subdivision subject to the act shall be devoted to neighborhood and community park and recreational purposes.

As described in more detail in Chapter 2, "Project Description," a substantial portion of the project site is open space, and although the property is privately owned, it is accessible to the public for passive outdoor recreation uses, such as walking, picnicking, sightseeing, and outdoor relaxing, and for outdoor sport use on the playing field. Project site roads, campus sidewalks, and paths/trails are also available for active recreation, such as walking, jogging, and bicycling. The Shuck Drive Knoll Planning Area, in the northern portion of the project site, consists of an open grassy

hillside surrounded by forested areas. In the southern portion of the site, the Chapel Hill Planning Area consists of a leveled hilltop partially surrounded by a stand of Monterey pines. A walking path traverses this planning area. The 2-acre Seminary Playing Field, in the western portion of the project site, is open for use by the public, including local adult and youth sports leagues. The Forested Knoll, a prominent hilltop open space in the Seminary Point Planning Area, is densely forested with Monterey pines. The Woodland Buffer, located in the northern portion of the project site, includes dense brush and trees.

Existing public access spaces near the project site include a water access point in Brickyard Park designated by the San Francisco Bay Conservation and Development Commission and segments of the San Francisco Bay Trail. Brickyard Park is located approximately 500 feet south of the southern boundary of the project site and provides a play structure, picnic tables, benches, and waterfront views. An on-street portion of the San Francisco Bay Trail extends from the intersection with Vista del Sol, northeast of the project site, running south and then east along Seminary Drive until it ends at East Strawberry Drive. For approximately one-half mile of this distance, the trail is located along the boundary of the project site. Paved, but not on-street, portions of the trail extend (with occasional gaps) west from the intersection with Vista del Sol and then south, toward De Silva Drive, then around the western arm of Richardson Bay and further south, along a paved or on-street route (with occasional gaps) that extends into San Francisco and beyond. Another portion of the paved trail is located approximately a quarter-mile east of the eastern boundary of the project site and is separated from the site by Strawberry Lagoon. That portion of the trail runs roughly parallel with Egret Way south to Strawberry Point, along the eastern arm of Richardson Bay. When constructed, planned segments of the bay trail in the vicinity of the project site would link existing paved and on-street sections of the trail.

OTHER PUBLIC FACILITIES

The Marin County Free Library has 10 branch libraries, a mobile library service, and the Anne T. Kent California Room (available by reservation). It also has an online library that provides free access to eBooks, movies, magazines, newspapers, online learning, and other resources. The branch libraries have group study rooms, community rooms, public computers and computer training facilities, open Wi-Fi services, a local history collection, and many children's services to encourage community engagement (Marin County Free Library 2023). The two fully accessible library branches nearest the project site are the Marin City Branch, located at 164 Donahue Street, Marin City, approximately 3 miles south of the project site, and the Corte Madera Branch, located at 707 Meadowsweet Drive, Corte Madera, approximately 4 miles north of the project site.

The County also has numerous theaters, performance centers, and museums, where the County's recreation programs and activities are often held, including 18 museums, 32 theaters, and six performance centers (Marin County 2022).

3.13.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Evaluation of potential impacts on public services and recreation was based on a review of documents pertaining to the proposed project, including descriptions of the project, the *Marin Countywide Plan* (Marin County 2023), and documents prepared by the local service providers and Marin County Parks, as well as consultation with appropriate public service providers and Marin County Parks. Impacts on public services and recreation that would result from the project were identified by comparing existing service capacity and facilities against future demand associated with project implementation.

THRESHOLDS OF SIGNIFICANCE

An impact on public services or recreation would be significant if implementation of the project would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
  - fire,
  - police protection,
  - schools,
  - parks, and
  - other public facilities;
- increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

As these significance thresholds suggest, the appropriate focus in addressing public service demand issues under CEQA is on the environmental effects of whatever physical steps might be necessary to achieve or maintain adequate service. For example, if proposed new development would create an increased demand for law enforcement or fire protection services, an EIR should inquire as to whether new or expanded physical facilities may be required to provide such service. The "impacts" addressed under CEQA are the physical effects of providing additional facilities or other physical changes, not any possible shortcoming in provision of adequate service under applicable standards. (See *City of Hayward v. Board of Trustees of the California State University* [2015] 242 Cal.App.4th 833, 843 ["[t]he need for additional fire protection services is not an environmental impact that CEQA requires a project proponent to mitigate"]; *Goleta Union School District V. Regents of University Of California* [1995] 37 Cal.App.4th 1025, 1031–1034 [school overcrowding attributable to new development is not an environmental effect subject to CEQA, although the physical effects of new facility construction to serve new students would be]; and State CEQA Guidelines Section 15131[a] ["[e]conomic or social effects of a project shall not be treated as significant effects on the environment"].)

This does not mean, however, that a city or county is powerless to require new development to take the steps needed to provide adequate public services, such as law enforcement service. Such steps are simply beyond the scope of CEQA and definition of environmental impacts. They should instead be applied under some other statutory law (e.g., the Planning and Zoning Law [Government Code Section 65300 et seq.] or the Subdivision Map Act [Government Code Section 66410 et seq.]) or under a local government's broad police power under the California Constitution. (See California Constitution, Article XI, Section 7; *Candid Enterprises, Inc. v. Grossmont Union High School District* [1985] 39 Cal.3d 878, 885.)

Special legal principles apply to impacts on school facilities. According to Government Code Section 65995, as explained earlier, the development fees authorized by Senate Bill 50 (1998) (described earlier) are deemed to be "full and complete" school facilities mitigation for impacts caused by new development. The legislation also recognized the need for the fee to be adjusted periodically to keep pace with inflation. The legislation indicated that in January 2000, and every 2 years thereafter, the State Allocation Board would increase the maximum fees according to the adjustment for inflation in the statewide index for school construction. As stated earlier, Section 65996 prohibits public agencies from using CEQA or "any other provision of state or local law" to deny approval of "a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property or any change in governmental organization or reorganization" on the basis of the project's impacts on school facilities.

ISSUES NOT DISCUSSED FURTHER

All the issues identified in the preceding list of thresholds are addressed in the following impact analysis.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.13-1: Result in Increased Demand for Fire Protection Facilities and Services

Implementation of the proposed project would increase the number of housing units on the project site by 185 (including the residential care facility) and increase the population on-site by approximately 530 residents, increasing demand for fire protection and emergency services on-site. Operation of the residential care facility is expected to increase the demand for emergency services on the project site. The project would adhere to all applicable standards and fire codes, the project applicant would be required to pay a fire prevention fee to offset the impact of the project on the provision of fire protection services, and implementation of the project would not necessitate the construction of new or expanded fire service facilities. However, SMFD has expressed concern that traffic associated with the increase in population under the project may cause delays in emergency response in the area. Therefore, this impact would be **potentially significant**.

As discussed above in Section 3.13.2, "Environmental Setting," SMFD is the primary provider of fire protection services at the project site, and development of the project has the potential to adversely affect the ability of SMFD to adequately respond to emergencies because it would increase the number of structures and the number of residents on the property. Operation of the residential care facility would also increase the demand for emergency services on-site. The facility would house up to 170 people 55 and older in 100 independent living apartments and 50 assisted living and memory care residences.

Implementation of the proposed project would involve renovation of the existing academic campus, relocation of the existing daycare center, construction of a new fitness center, construction of a new residential care facility, upgrades to existing housing, and construction of new housing. As described in Chapter 2, "Project Description," 145 residential units are located on the project site. Sixty-six dormitory rooms, which are counted as seven residential units, are also located on the site. Under the project, 13 of the residential units would be retained, the remaining 139 residential units would be replaced, and 184 new units consisting of single-family and multifamily residences, as well as the residential care facility (counted as one residential unit), would be constructed. Overall, the number of residential units on the site would increase by 185, from 152 (including the dormitory rooms) to 337 units, and the population on-site would increase by approximately 530 residents.

The project also would generate up to approximately 253 jobs with full enrollment of the university (216 new campus jobs, 34 jobs for the new residential care facility, and three jobs for the new fitness center). It is anticipated that most of these jobs would be filled by people already living in the area and that a substantial number of individuals would not need to relocate to the area. Furthermore, as described in Chapter 2, "Project Description," preference for project housing would be given to on-site workers, students, faculty, and staff; thus, some of these individuals are already counted among the 530 residents who would live on the project site. Therefore, an increase in 253 employees would not have a substantial impact on the demand for fire protection facilities and services.

As further described in Chapter 2, "Project Description," the design of residential development primarily includes low-rise buildings: clustered one- to three-story multifamily residential buildings and homes. In general, building heights for proposed residences and structures would be limited to 30 feet. Three six-story residential buildings that would be approximately 112 feet tall also are proposed, at the northwestern corner of Hodges and Shuck Drives. Trees replanted on-site would be sited accordingly in conformance with SMFD's fire protection standards related to vegetation management (e.g., defensible space). The project would implement a long-term landscaping plan to replace dead or dying trees, maintain the forested nature of the project site, and comply with Marin County fire codes.

SMFD Station 9 is located directly north of the project site, less than 1 mile away, and additional emergency response to the project site could be provided by other agencies that joined SMFD in entering the *Southern Marin Emergency*

Medical-Paramedic System Revised Joint Powers Agreement to Establish, Operate and Maintain in Southern Marin County an Emergency Medical Care-Paramedic System. During consultations with SMFD, it was affirmed that SMFD would not need to add additional stations or purchase new equipment in response to the project; however, additional staff may be required depending on the number of increased EMS calls (Hilliard, pers. comms., 2022, 2023). Operation of the residential care facility would require approximately 34 employees at varying shifts and two 24/7 staffed positions, and medical staff in the facility would be available to assist with nonemergency incidents. One of the medical staff at the facility would be a certified emergency medical technician, who would be able to address most of the incidents that typically would otherwise result in calls to the fire department. Therefore, although additional emergency response staff may be needed, it would not be to the level that new or physically altered fire protection facilities would be required the construction of which could cause significant environmental impacts.

SMFD also expressed concern that traffic associated with the increase in population under the project might cause delays in emergency response in the area (Hilliard, pers. comm., 2022). The potential for the project to generate additional trips in the vicinity of the project site resulting in potential delays to vehicles, including emergency response, and potentially impacting emergency access is discussed further in Section 3.14, "Transportation." The project would be designed and operated according to applicable federal, state, and local requirements, which include provisions for smoke detectors; sprinklers; building and emergency access; and hydrant sizing, pressure, and siting. As part of the County's development review process, SMFD would ensure that existing fire protection services and facilities are adequate to serve the project, and the project would adhere to all applicable requirements related to fire protection. In addition, the project applicant would be required to pay a fire prevention fee to offset the impact of the development on the provision of fire services. However, because of concerns that traffic associated with the increase in population under the project may cause emergency response in the area to be delayed, the impact related to increased demand for fire protection facilities and emergency services would be **potentially significant**.

Mitigation Measures

Implement Mitigation Measure 3.14-4 (Construct a Roundabout at the Intersection of Seminary Drive/Ricardo Road/Vista Del Sol), as described in Section 3.14, "Transportation."

Significance after Mitigation

Mitigation Measure 3.14-4 would require the project applicant to either construct a roundabout or construct a traffic signal at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol to facilitate the movement of vehicles if and when emergency response is needed in the area. If a roundabout is constructed, the design of the roundabout would include a potential advance warning devices to stop traffic entering the roundabout when fire trucks are traveling through the intersection. Should a traffic signal be constructed, the signal would interconnect to the traffic signal at the Redwood Highway Frontage Road/Seminary Drive intersection, and emergency vehicle pre-emption devices would be implemented at both intersection traffic signals. Implementing Mitigation Measure 3.15-4 would reduce the impact on increased demand for fire protection services. Therefore, the impact would be **less than significant with mitigation incorporated**.

Impact 3.13-2: Result in Increased Demand for Police Protection Facilities and Services

Implementation of the proposed project would increase the population on the site by approximately 530 residents, increasing demand for police protection services. According to the Marin County Sheriff's Office, existing staffing levels would be sufficient to address the increase in population on-site, and no reduction in service to the unincorporated county in general would be expected. In addition, no additional facilities or equipment would be required. Further, as part of the standard development review process, the project would be subject to formal Sheriff's Office review and approval. Therefore, the impact related to police protection facilities and services would be **less than significant**.

The Marin County Sheriff's Office is the primary provider of police protection services in the area, and the expected increase in demand associated with the project could adversely affect the ability of the Sheriff's Office to provide these services. As described above, implementing the project would involve renovation and new construction on the

project site, including construction of new residential units. Population on the site is anticipated to increase by approximately 530 residents. The project also would generate up to approximately 253 jobs with full enrollment of the university (216 new campus jobs, 34 jobs for the new residential care facility, and three jobs for the new fitness center). It is anticipated that most of these jobs would be filled by people already living in the area and that a substantial number of these individuals would not need to relocate to the area. Moreover, as described in Chapter 2, "Project Description," preference for project housing would be given to on-site workers, students, faculty, and staff; thus, some of these individuals are already counted among the 530 residents who would live on the project site. Therefore, an increase in 253 employees would not have a substantial impact on the demand for police protection facilities and services.

As described in Section 3.13.2, "Environmental Setting," in 2023, the Sheriff's Office had a staff of 197 sworn employees and 112 other law enforcement professionals, for a ratio of 3.0 sworn officers per 1,000 residents and 1.7 other law enforcement professionals per 1,000 residents in unincorporated Marin County (population 66,032). According to the Sheriff's Office, existing staffing levels would be sufficient to address the increase in population on-site, and no reduction in service to the unincorporated county in general would be expected. In addition, no additional facilities or equipment would be required (Schneider, pers. comm., 2022; Schermerhorn, pers. comm., 2023).

The project would be subject to review and approval by the Sheriff's Office, based on uniformly applied standards and regulations. As part of the standard development review process, the Sheriff's Office would determine its ability to provide services and would make project-specific recommendations to maintain an acceptable level of service. Without County approval, the project would not receive a building permit or occupancy permit, depending on the specific issue identified by the Sheriff's Office. For these reasons, the impact related to police protection facilities and services would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.13-3: Result in Increased Demand for Public School Facilities and Services

Implementation of the project would increase the number of housing units on the project site by 185 (including the residential care facility), generating an estimated 93 students in the Mill Valley School District and 37 students in the Tamalpais Union High School District. This increase in school district populations would not be substantial, and both the Mill Valley School District and the Tamalpais Union High School District could accommodate this increase in student population. In addition, the project applicant would be required to pay school impact fees to assist the school districts with meeting the increased demand for school services. Government Code Section 65995(h) states that the payment or satisfaction of a fee, charge, or other requirement levied or imposed under Section 17620 of the Education Code is deemed to be full and complete mitigation of the impact for the planning, use, development, or provision of adequate school facilities. This impact would be **less than significant**.

As described above, implementation of the proposed project would involve upgrades to existing housing and construction of new housing. Under the project, 13 of the residential units on-site would be retained, the remaining 139 residential units would be replaced, and 184 new units consisting of single-family and multifamily residences, as well as the residential care facility (counted as one residential unit), would be constructed. Overall, the number of residential units on the site would increase by 185, from 152 (including the dormitory rooms) to 337 units, and the population on-site would increase by approximately 530 residents.

The project also would generate up to approximately 253 jobs with full enrollment of the university (216 new campus jobs, 34 jobs for the new residential care facility, and three jobs for the new fitness center). It is anticipated that most of these jobs would be filled by people already living in the area and that a substantial number of individuals would not need to relocate to the area. Moreover, as described in Chapter 2, "Project Description," preference for project housing would be given to on-site workers, students, faculty, and staff; thus, some of these individuals are already

counted among the 530 residents who would live on the project site. Therefore, an increase in 253 employees would not have a substantial impact on the demand for public school facilities and services.

The student generation anticipated under the project, determined by multiplying the student generation rates of 0.5 (for the Mill Valley School District) and 0.2 (for the Tamalpais Union High School District) by 184 units, would be 93 new students in the Mill Valley School District and 37 new students in the Tamalpais Union High School District. The student generation rates are multiplied by 184 units rather than 185, the total number of anticipated new dwelling units, because construction and operation of the residential care facility are not expected to contribute to local student populations.

As described above, both the Mill Valley School District and the Tamalpais Union High School District, the two school districts that would serve the project site, have current and projected enrollments well below their capacity and therefore could accommodate the students associated with project development in existing school facilities. Because implementing the project would not result in substantial student population growth and existing schools have available capacity, the increase in student population associated with implementing the project would not result in a substantial increase in the demand for public school services or require the construction or expansion of educational facilities.

In addition, the project applicant would be required to pay school impact fees to assist the school districts with meeting the increased demand for school services. Government Code Section 65995(h) states that the payment or satisfaction of a fee, charge, or other requirement levied or imposed under Section 17620 of the Education Code is deemed to be full and complete mitigation of the impact for the planning, use, development, or provision of adequate school facilities. For these reasons, the impact related to increased demand for public school facilities and services would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.13-4: Result in Increased Demand for Park Facilities and Services

Implementation of the proposed project would increase the population on the site by approximately 530 residents, which could result in an increased demand for park facilities and services in the area. The Marin County Development Code requires new residential developments to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. In compliance with the Subdivision Map Act, 3 acres of land for each 1,000 persons residing in a subdivision subject to the act must be devoted to neighborhood and community park and recreational purposes. The details regarding the project applicant's implementation of its obligation under the Marin County Development Code would be determined following project approval. Because the project applicant would comply with this Marin County Development Code requirement, this impact would be **less than significant**.

As described above, implementing the project would increase the population on the site by approximately 530 residents, which could result in an increased demand for park facilities and services in the area. Nearly a third of this total (170) would be residents of the residential care facility, who would not be expected to make substantial use of park facilities and services. The project also would generate approximately 253 jobs (216 new campus jobs, 34 jobs for the new residential care facility, and three jobs for the new fitness center). It is anticipated that most of these jobs would be filled by people already living in the region and that a substantial number of individuals would not need to relocate to the area. Moreover, as described in Chapter 2, "Project Description," preference for project housing would be given to on-site workers, students, faculty, and staff; thus, some of these individuals are already counted among the 530 residents who would live on the project site. Therefore, the anticipated increase in the number of employees would not have a substantial impact on the demand for park facilities and services.

Marin County is noted for the extent of its federal, state, County, and city recreation and park facilities, and an element of the project objectives involves maintaining or improving the recreation and open space areas on the project site. Approximately 70 percent of the project site is proposed to be maintained as open space, athletic fields,

paths, and plazas, and the project involves making improvements to existing trails on the site and establishing new trails and pathways (see Figure 2-7, "Pedestrian and Bus Access Diagram"). The existing 2-acre Seminary Playing Field would be retained in the central portion of the project site. The field would be raised approximately 25–30 feet to create a landscaped berm adjacent to Seminary Drive. The playing field would continue to be open to the community for daily use and sporting events. A walking path approximately 4 feet wide would be constructed on the berm, which would connect the playing field to the proposed trail system throughout the project site. Trees would be planted along Gilbert Drive at the main entry to the academic campus, and existing open space would be maintained on each side of the roadway. In addition, the Forested Knoll in the Seminary Point Planning Area would be protected as open space. A pedestrian trail in the knoll would be established with views of the San Francisco Bay, San Francisco, and Mount Tamalpais. The existing hilltop in the Chapel Hill Planning Area would be preserved as a park and wildlife corridor. The park, which would be open to the public, would include an arbor and landscaping and would offer views of the San Francisco Bay and San Francisco skyline. The slopes adjacent to the academic campus, located between Storer Drive and Mission Drive, would be planted with native fire- and drought-resistant plants. The project also would include maintenance of the existing woodland buffer located in the northern portion of the project site along Ricardo Road and Richardson Drive.

In addition to these improvements, the project would involve making improvements to existing trails and establishing new trails and pathways, all of which would be available for use by the public. The 4-foot-wide trail that begins at the main entrance to the project site at Seminary Drive and wraps around Seminary Point would be improved, and any dense brush along the trail would be cleared. This trail includes scenic vista points that overlook Richardson Bay and provide views of the San Francisco skyline. The portion of Storer Drive parallel to East Strawberry Road would be repaved and improved as a pedestrian pathway. Trees and landscaping would be planted adjacent to the path.

The recreation opportunities already available in the county are extensive, and the project, while reducing the overall extent of open space on the project site, also involves making recreation-related improvements on the site. Despite the extent of recreation opportunities available in the project area, the demand for a wide range of facilities for active recreation in the county continues to grow.

The Marin County Development Code requires new residential developments to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication, pursuant to the Quimby Act, to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. In compliance with the Subdivision Map Act, specifically Government Code Section 66477(a)(2), 3 acres of land for each 1,000 persons residing in a subdivision subject to the act must be devoted to neighborhood and community park and recreational purposes. As described above, approximately 70 percent of the project site is proposed to be maintained as open space, athletic fields, paths, and plazas, and the project involves making improvements to existing trails on the site and establishing new trails and pathways. Per Marin County Code 22.84.070, these uses may be dedicated for park or recreation purposes as part of the project permitting process, or payment of in lieu fees (or a combination of both) may be required pursuant to Marin County Code 22.98.040. The details regarding the project applicant's implementation of its obligation under the Marin County Development Code would be determined following project approval.

Because the project applicant would comply with the Marin County Development Code requirement that new residential developments provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.13-5: Result in Increased Demand for Other Public Facilities and Services

Implementation of the project would increase the population on the site by approximately 530 residents, which could result in an increase in the demand for other public facilities and services, including local libraries. Any anticipated increase in demand for local libraries or other public facilities and services would be expected to be minimal. In addition, the library system and other public facilities and services are funded primarily by their share of the revenue generated by property taxes, and the amount of property tax generated would increase with the increase in population anticipated under the project. Therefore, this impact would be **less than significant**.

As described above, implementing the project would increase the population on the site by approximately 530. The project also would generate approximately 253 jobs (216 new campus jobs, 34 jobs for the new residential care facility, and three jobs for the new fitness center). It is anticipated that most of these jobs would be filled by people already living in the area and that a substantial number of individuals would not need to relocate to the area. Moreover, as described in Chapter 2, "Project Description," preference for project housing would be given to on-site workers, students, faculty, and staff; thus, some of these individuals are already counted among the 530 residents who would live on the project site. Therefore, the anticipated increase in the number of employees would not have a substantial impact on the demand for other public facilities and services.

This increase in population on-site could result in an increase in the demand for other public facilities and services, including local libraries. The Marin City and Corte Madera Branches of the Marin County Free Library system, the two fully accessible library branches nearest the project site, would be expected to experience the greatest increase in use. Any anticipated increase in demand for local libraries or other public facilities and services would be expected to be minimal. In addition, the library system and other public facilities and services are funded primarily by their share of the revenue generated by property taxes, and the amount of property tax generated would increase with the increase in population anticipated under the project. For these reasons, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.13-6: 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

Population on-site would increase by approximately 530 under the project, which could result in increased use of neighborhood and regional parks and other recreational facilities in the area. However, because the recreational opportunities available in federal, state, County, and city recreation and park facilities in the project area and in the county overall are extensive and the project applicant would be required by the Marin County Development Code to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities, implementing the project would not result in the substantial physical deterioration (or acceleration of deterioration) of recreational facilities in the region. This impact would be **less than significant**.

As described for Impact 3.13-4, development under the project is anticipated to increase the population on-site by approximately 530 residents, which could result in increased use of neighborhood and regional parks and other recreational facilities in the area. Nearly a third of this total (170) would be residents of the residential care facility, who would not be expected to make substantial use of park facilities.

Seventy percent of the project site is proposed to be maintained as open space, athletic fields, paths, and plazas, and the project involves making improvements to existing trails on the site and establishing new trails and pathways. These facilities would be available for use by residents of the project site and would also be open to general community use. Other recreational opportunities available in Marin County include the Pacific coast on the west, San Pablo Bay on the east, tens of thousands of acres of open space, hundreds of acres of parks, and miles of scenic trails.

Existing public access spaces near the project site include a water access point in Brickyard Park designated by the San Francisco Bay Conservation and Development Commission and segments of the San Francisco Bay Trail. Brickyard Park is located approximately 500 feet south of the southern boundary of the project site. As described in the "Parks and Recreation" section, above, on-street and paved portions of the San Francisco Bay Trail are located near or in the vicinity of the project site. For approximately one-half mile, the trail runs in portions of Seminary Drive that serve as a boundary of the project site.

Given the abundant number of parklands, open space, trails, and other recreational opportunities available in the region and county, implementation of the project would not be expected to result in the substantial physical deterioration (or acceleration of deterioration) of these facilities.

Moreover, as discussed above under Impact 3.13-4, the project applicant would be required by the Marin County Development Code to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication, pursuant to the Quimby Act, to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. Approximately 70 percent of the project site is proposed to be maintained as open space, athletic fields, paths, and plazas, and the project involves making improvements to existing trails on the site and establishing new trails and pathways. Per Marin County Code 22.84.070, these uses may be dedicated for park or recreation purposes as part of the project permitting process or payment of in lieu fees (or a combination of both) may be required pursuant to Marin County Code 22.98.040. The details regarding the project applicant's implementation of its obligation under the Marin County Development Code would be determined following project approval.

Given the relatively small population associated with the project (a third of whom likely would not make substantial use of park facilities), the abundance of recreational opportunities available throughout the county, and the fact that the project applicant would meet the parkland dedication requirement of the Marin County Development Code, implementing the project would not result in the substantial physical deterioration (or acceleration of deterioration) of neighborhood and regional parks or other recreational facilities in the area. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.13-7: Include Recreational Facilities or Require the Construction or Expansion of Recreational Facilities That Might Have an Adverse Physical Effect on the Environment

The modification of recreation and open space features on the site that would occur as part of the project, including raising the Seminary Playing Field and improving and establishing trails and pathways, would not have a substantial adverse physical effect on the environment. Because the population increase of approximately 530 residents anticipated for the project could increase the demand for neighborhood and regional parks and other recreational facilities in the area, the project applicant would be required by the Marin County Development Code to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new demand on existing parkland and recreational facilities. Any parkland developed to meet this requirement would be created in coordination with the County and in accordance with County standards. This impact would be **less than significant**.

As described for Impact 3.13-4, implementing the project involves modifying recreation and open space features on the site, making improvements to existing trails, and establishing new trails and pathways. The modification would involve raising the 2-acre Seminary Playing Field approximately 25–30 feet to assist with balancing grading onsite, resulting in a landscaped berm adjacent to Seminary Drive. The elevated field would remain available for use as a playing field. Although raising the playing field 25–30 feet would require the movement of fill onto the project site, the current playing field is a managed turf landscape and the raised playing field would occupy essentially the same footprint as the current field, so this modification would not have a significant adverse physical effect on the environment. Improvement of the 4-foot-wide trail that begins at the main entrance to the project site at Seminary

Drive and wraps around Seminary Point and construction of new trails on the new berm, in the Forested Knoll in the Seminary Point Planning Area, and in the portion of Storer Drive parallel to East Strawberry Road would not have a substantial adverse impact on the environment. Removal of existing vegetation would be minimal, and trees would be planted adjacent to the new trail on Storer Drive after the trail is constructed.

As described for Impacts 3.13-4 and 3.13-6, the increase in population on-site associated with project development could increase the demand for neighborhood and regional parks and other recreational facilities in the area. The project applicant would be required by the Marin County Development Code to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication, pursuant to the Quimby Act, to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. Any parkland developed to meet this requirement would be created in coordination with the County and in accordance with County standards.

Because the recreation-related improvements under the project would have a minor adverse impact on the environment and parkland developed to meet the Marin County Development Code requirement would be created in coordination with the County and in accordance with County standards, implementing the project would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

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3.14 TRANSPORTATION

This section describes the applicable state laws and regulations and regional and local transportation policies; discusses the existing roadway network and transportation facilities in the vicinity of the project; and analyzes the potential impacts from implementation of the project on transportation. Mitigation measures that would reduce impacts, where applicable, are also discussed. Information contained within this section was primarily provided in the *North Coast Land Holdings Transportation Impact Study* (TIS) prepared for the project (Fehr & Peers 2024). Reports submitted by the applicant have been subject to independent review and analysis and the TIS is included as Appendix Q of this EIR and incorporated herein.

Pursuant to PRC Section 21099, enacted as part of SB 743 (Stats. 2013, ch. 386, Section 5), and Section 15064.3(a) of the State CEQA Guidelines, vehicle miles traveled (VMT) is generally the most appropriate measure of transportation impacts; and a project's effect on automobile delay shall no longer constitute a significant impact under CEQA. Therefore, the transportation analysis herein evaluates impacts using VMT and does not include level of service (LOS) analysis for the purpose of determining significant impact. However, for informational purposes, the LOS analysis of the project is included in Appendix R.

Comments received regarding transportation in response to the NOP included concerns related to bicycle and pedestrian safety and access, increased traffic, and transportation hazards during construction and operations. Because a project's effect on automobile delay no longer constitutes a significant impact under CEQA, comments related to automobile delay (e.g., LOS, congestion) are not addressed here-in. See Appendix A for all NOP comments received.

3.14.1 Regulatory Setting

FEDERAL

Americans with Disabilities Act

The Americans with Disabilities Act (ADA) of 1990 prohibits discrimination against people with disabilities in several areas including employment, transportation, public accommodations, and access to state and local government programs and services. The ADA applies to both public and private ground transportation providers. Key requirements include providing accessible access routes and paths of travel, accessible transit service and vehicles, accessible transit stops, accessible parking spaces, and accessible transport communication systems.

The U.S. Access Board publishes guidelines under ADA that address access to sidewalks and streets, crosswalks, curb ramps, pedestrian signals, on-street parking, and other components of public right-of-way. The guidelines also review shared use paths, which are designed primarily for use by bicyclists and pedestrians for transportation and recreation purposes.

Public Right-of-Way Accessibility Guidelines

Public Right-of-Way Accessibility Guidelines (PROWAG) are minimum guidelines issued under Title II of the ADA by the U.S. Access Board in September 2023 for the accessibility of pedestrian facilities in the public right-of-way. These guidelines ensure that facilities used by pedestrians, such as sidewalks and crosswalks, constructed or altered in the public right-of-way are readily accessible to and usable by pedestrians with disabilities.

STATE

The California Department of Transportation (Caltrans) is the state agency responsible for the design, construction, maintenance, and operation of the California State Highway System, as well as the segments of the Interstate Highway System that lie within California. Caltrans District 4 is responsible for the operation and maintenance of State

Route (SR) 131 and U.S. Highway (U.S.) 101 in the vicinity of the project site. Caltrans requires a transportation permit for any transport of heavy construction equipment or materials that necessitates the use of oversized vehicles on state highways.

California Manual on Uniform Traffic Control Devices, Part 6: Temporary Traffic Control

The California Manual on Uniform Traffic Control Devices (CA-MUTCD), Part 6: Temporary Traffic Control provides principles and guidance for the implementation of temporary traffic control (TTC) to ensure the provision of reasonably safe and effective movement of all roadway users (e.g., motorists, bicyclists, pedestrians) through or around TTC zones while reasonably protecting road users, workers, responders to traffic incidents, and equipment. Additionally, this document notes that TTC plans and devices shall be the responsibility of the authority of a public body or official having jurisdiction for guiding road users (i.e., County of Marin Public Works for this project).

Vehicle Miles Traveled-Focused Transportation Impact Study Guide

The Caltrans *Vehicle Miles Traveled-Focused Transportation Impact Study Guide* (TISG) was prepared to provide guidance to Caltrans Districts, lead agencies, tribal governments, developers, and consultants regarding Caltrans review of a land use project or plan's transportation analysis using a VMT metric. This guidance is not binding on public agencies, and it is intended to be a reference and informational document. The TISG replaces the former Guide for the Preparation of Traffic Impact Studies and is for use with local land use projects, not for transportation projects on the State Highway System (Caltrans 2020).

Senate Bill 743

SB 743, passed in 2013, required the California Governor's Office of Planning and Research (OPR) to develop a new guideline that addresses transportation metrics under CEQA. Enacted as part of SB 743 (2013), PRC section 21099, subdivision (b)(1), directed OPR to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, [OPR] shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

Subdivision (b)(2) of PRC section 21099 further provides that "[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion *shall not be considered a significant impact on the environment* pursuant to [CEQA], except in locations specifically identified in the guidelines, if any." (*emphasis* added)

In November 2017, OPR published its proposal for the comprehensive updates to the CEQA Guidelines, which included proposed updates related to analyzing transportation impacts pursuant to SB 743. The updated CEQA Guidelines were adopted on December 28, 2018; and according to the new CEQA Guidelines Section 15064.3, VMT replaced congestion as the metric for determining transportation impacts. The guidelines state that "lead agencies may elect to be governed by these provisions of this section immediately. Beginning July 1, 2020, the provisions of this section shall apply statewide."

To provide guidance to agencies implementing the new CEQA requirements, OPR published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR Technical Advisory) in December 2018. The OPR Technical Advisory describes considerations agencies may use in selecting VMT metrics, calculation methodologies, and significance thresholds (OPR 2018). The OPR Technical Advisory suggests the following as CEQA significance thresholds for residential and office projects:

> Recommended threshold for residential projects: A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per

> capita) should not cumulatively exceed the number of units specified in the SCS for that city, and should be consistent with the SCS.
>
> Recommended threshold for office projects: A proposed project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact.

The OPR Technical Advisory also provides guidance on impacts to transit. Specifically, the OPR Technical Advisory suggests that lead agencies generally should not treat the addition of new transit users as an adverse impact. As an example, the OPR Technical Advisory states the following:

> [An] infill development may add riders to transit systems and the additional boarding and alighting may slow transit vehicles, but it also adds destinations, improving proximity and accessibility. Such development also improves regional vehicle flow by adding less vehicle travel onto the regional network.

In response to requests for further guidance on the subject of VMT, OPR subsequently published online a document entitled, *SB 743 Frequently Asked Questions*, which was intended to supplement the guidance previously set forth in the 2018 Technical Advisory. The following question and answer are relevant to the two significance thresholds quoted above: "In the VMT Technical Advisory, does the term 'regional' refer to the MPO/RTPA? The answer is Yes. As used in the VMT Technical Advisory, 'regional' refers to the full geography within the jurisdictional borders of a metropolitan planning organization (MPO) or a regional transportation planning agency (RTPA)."

Scoping Plan

The California Air Resources Board (CARB) adopted the most recent update of the Scoping Plan in December 2022 (CARB 2022). The 2022 Scoping Plan for Achieving Carbon Neutrality (Scoping Plan) lays out a path to achieve targets for carbon neutrality and reduce anthropogenic greenhouse gas emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279. The actions and outcomes in the Scoping Plan are intended to achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon. The Scoping Plan calls for a VMT per Capita reduction of 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045 (CARB 2022: 72).

REGIONAL

Plan Bay Area 2050

The Association of Bay Area Governments and Metropolitan Transportation Commission (MTC) jointly adopted Plan Bay Area 2050 on October 21, 2021 (ABAG 2021). Plan Bay Area is the Bay Area's Regional Transportation Plan (RTP)/Sustainable Community Strategy (SCS), a long-range plan covering the four interrelated elements of housing, the economy, transportation and the environment. Plan Bay Area 2050 contains 35 strategies, which are public policies or investments that can be implemented in the Bay Area at the city, county, regional, or state level over the next 30 years. Plan Bay Area 2050 is an update to previous RTP/SCS with updated planning assumptions that incorporate key economic, demographic, and financial trends from the last several years and describes how the San Francisco Bay Area will develop over the next three decades and the SCS integrates transportation, land use, and housing to meet greenhouse gas reduction targets set by the California Air Resources Board.

Bay Area Commuter Benefits Plan

Under Air District Regulation 14, Model Source Emissions Reduction Measures, Rule 1, Bay Area Commuter Benefits Program, employers with 50 or more full-time employees within the Bay Area Air Quality Management District (BAAQMD) are required to register and offer commuter benefits to employees. In partnership with the BAAQMD and MTC, the rule's purpose is to improve air quality, reduce greenhouse gas emissions, and decrease the Bay Area's traffic congestion by encouraging employees to use alternative commute modes, such as transit, vanpool, carpool, bicycling, and walking. The benefits program allows employees to choose from one of four commuter benefit options including a pre-tax benefit, employer-provided subsidy, employer-provided transit, and alternative commute benefit.

LOCAL

Marin Countywide Plan

The Marin Countywide Plan, the County's General Plan, serves as a blueprint for development within the unincorporated County and sets forth overarching goals and objectives related to transportation and circulation in the context of planned land use (Marin County 2023). Relevant transportation goals and policy statements from the Transportation and Circulation Element of the Countywide Plan are provided below.

- TR-1.1: Manage Travel Demand. Improve the operating efficiency of the transportation system by reducing vehicle travel demand and provide opportunities for other modes of travel. Before funding transportation improvements consider alternatives—such as Transportation Demand Management (TDM)—and prioritize projects that will reduce fossil fuel use and reduce single occupancy vehicle trips.
- TR-1.4: Share the Costs for Improvements. Require new development to pay for or otherwise improve its fair share of the transportation system impacts.
- TR-1.5: Require Necessary Transportation Improvements. Require necessary transportation improvements to be in place, or otherwise guaranteed to result in their timely installation, before or concurrent with new developments. In evaluating whether a transportation improvement is necessary, the county shall consider alternatives to the improvement consistent with Policy TR-1.1, Manage Travel Demand, and the extent to which the improvement will offset the traffic impacts generated by proposed and expected development and restore acceptable traffic levels of service.
- TR-1.8: Reduce Vehicle Miles Traveled. Reduce the rate of increase for total vehicle miles traveled by single-occupant automobile to not exceed the population growth rate.
- TR-2.1: Improve the Bicycle and Pedestrian Network. Promote adequate bicycle and pedestrian links, to the extent feasible, throughout the county, including streetscape improvements and standards that are safe and pedestrian and bicycle friendly.
- TR-2.2: Provide New Bicycle and Pedestrian Facilities. Where appropriate, require new development to provide trails or roadways and paths for use by bicycles and/or on-street bicycle and pedestrian facilities. In-lieu fees may be accepted if warranted in certain cases.
- TR-3.1: Encourage and Support the Expansion of Local Bus and Ferry Services. Encourage expansion and improvement of local bus and ferry services to all areas of the county.

The Countywide Plan contains the following Implementation Program regarding VMT.

- TR-1.s: VMT Reduction Monitoring and Implementation and Transportation Demand Management Program. Develop and implement a countywide program for monitoring and reducing VMT consistent with state and regional efforts and based on information from state and regional planning agencies. Identify and require in new developments specific transportation demand management (TDM) strategies for reducing the VMT below levels that would otherwise occur. Consider the following types of strategies for inclusion in the VMT Reduction Monitoring and Implementation and TDM Program:
  - Increased transit.
  - All new residential projects consisting of 25 units or more should be located within 1/2 mile of a transit node, shuttle service, or bus route with regularly scheduled, daily service.
  - New multi-family projects consisting of 25 units or more should include TDM measures, such as reduced parking for affordable or senior projects, subsidized public transportation passes, or ride-matching programs, based on site-specific review. For market-rate projects, consider TDM programs such as charging parking fees separate from rent.
  - Safe, convenient connections should be provided to existing pedestrian and bicycle facilities, and secure bicycle parking should be provided in new non-residential developments.

- TDM should be required for new or expanded projects with 50 employees or more, including programs such as parking cash out, subsidized transit passes, ride-sharing incentives, and bicycle storage facilities.

County of Marin Uniform Construction Standards

The Uniform Construction Standards were adopted by the County Board of Supervisors in 2018. The Uniform Construction Standards were developed by the Marin Public Works Association, an organization of engineers representing the County of Marin and the towns/cities across the County, to ensure consistency for construction and other improvements in the roadway for all cities/towns and the County of Marin (Marin County 2018a).

Marin County Code

The ordinances of the County of Marin are codified in the Marin County Code. Chapter 19.05, Street Improvements Required Abutting Building Sites, requires the construction of any building, dwelling or other structure for which a building permit is required be obligated to construct or have constructed or repaired street frontage improvements and driveways as specified within Title 24 of the Marin County Code, along all the street frontages abutting the building site upon which the building, dwelling or structure is to be constructed, unless adequate street frontage improvements already exist and are in good condition.

Title 24 of the Marin County Code establishes standards of improvement and construction for the development of land within the unincorporated area of Marin County. Section 24.04.110 sets forth minimum widths and Section 24.04.120 sets forth maximum grades for streets. The minimum paved width for a limited residential road is 20 feet with shoulders or 24 feet with curbs; for a minor residential road it is 28 feet; for a residential road it is 36 feet; and for a collector road it is 40 feet. Maximum grades are 6 percent for arterial and collector roads, 12 percent for residential roads, and 18 percent for minor and limited residential roads.

Marin County Code Section 6.70.030 limits construction activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and 9:00 a.m. and 5:00 p.m. on Saturday. Construction is not permitted on Sundays and federal holidays.

County of Marin Bicycle and Pedestrian Master Plan

The Marin County Unincorporated Area Bicycle and Pedestrian Plan was adopted on February 27, 2018 (Marin County 2018b). The update to the Bicycle and Pedestrian Plan was completed as part of a countywide effort to update all local bicycle and pedestrian master plans and focuses on specific recommendations for the unincorporated areas of Marin County. Relevant transportation goals and policy statements from the Bicycle and Pedestrian Plan are listed below.

GOAL 1 Increased Bicyclist and Pedestrian Access – Expand bicycle and pedestrian facilities and access in and between neighborhoods, employment centers, shopping areas, schools, and recreational sites, in pursuit of the Marin Countywide Plan goal of having 20% of all trips made by walking or biking by 2020 and add a 2030 goal of 25% bicycling and walking mode share. Provide facilities that are accessible to the greatest number of users.

GOAL 2 Bicycle Transportation – Make the bicycle an integral part of daily life in Marin County, particularly for trips of less than five miles, by implementing and maintaining a bikeway network, providing end-of-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer and more convenient for people of all ages and abilities.

GOAL 3 Pedestrian Transportation – Encourage walking as a daily form of transportation in Marin County by completing a pedestrian network that services short trips and transit, improving the quality of the pedestrian environment, improving the health of all citizens, and increasing safety, convenience, and access opportunities for all users.

Relevant proposed bicycle improvements from the Bicycle and Pedestrian Plan in the vicinity of the project site are listed below.

- Class II bike lane on Tiburon Boulevard from U.S. 101 to Trestle Glen Boulevard

- Class II bike lane on the Redwood Highway Frontage Road on the east side of U.S. 101 from Tiburon Boulevard to just south of the signalized intersection of U.S. 101 northbound ramps/De Silva Island Drive
- Class II bike lane on Seminary Drive from the Redwood Highway Frontage Road to Gilbert Drive

3.14.2 Environmental Setting

This section describes the existing environmental setting, which is the baseline scenario upon which project-specific impacts are evaluated. The environmental setting for transportation includes baseline descriptions for roadway, transit, bicycle, and pedestrian facilities.

ROADWAY SYSTEM

The following roadways provide access to project site:

- **U.S. 101** runs through the states of California, Oregon, and Washington connecting the City of Los Angeles in the south to the City of Tumwater in the north. In the vicinity of the project site, U.S. 101 is a bidirectional north/south freeway with five northbound lane and four southbound lanes. The posted speed limit is 65 miles per hour (mph).
- **SR 131**, also known as Tiburon Boulevard in the vicinity of the project site, is a bidirectional northwest/southeast arterial roadway that runs from U.S. 101 in the north to the tip of the Tiburon Peninsula in the south at Paradise Drive. Tiburon Boulevard provides two travel lanes in each direction west of Trestle Glen Road and one lane in each direction eastward to downtown Tiburon.
- **Redwood Highway Frontage Road (east)** is a bidirectional north/south collector roadway that runs adjacent to U.S. 101 to the east of the freeway. Redwood Highway Frontage Road (east) provides one travel lane in each direction with street parking on the east side of the roadway.
- **Redwood Highway Frontage Road (west)** is a bidirectional north/south collector roadway that runs adjacent to U.S. 101 to the west of the freeway. Redwood Highway Frontage Road (west) provides one travel lane in each direction with street parking on the east side of the roadway.
- **Seminary Drive** is a bidirectional generally northwest/southeast collector roadway that runs southwest of the project site. Seminary Drive has one lane in each direction of travel. The posted speed limit is 25 mph. On-street parking is available on both sides for some portions of the roadway.
- **East Strawberry Drive** is a bidirectional north/south collector roadway with one lane provided for each direction of travel. East Strawberry Drive is located north of the project site. The posted speed limit is 25 mph. On-street parking is available on both sides of the roadway.
- **Belvedere Drive** is a bidirectional east/west collector roadway with one travel lane provided for each direction of travel. Belvedere Drive is located west of the project site. The posted speed limit is 25 mph. On-street parking is available on both sides of the roadway.
- **Reed Boulevard** is a bidirectional north/south local roadway with no marked lanes. On-street parking is available along one side of the curb.
- **Ricardo Road** is a bidirectional southwest/northeast local roadway with one lane provided for each direction of travel. On-street parking is available on both sides of the roadway. The posted speed limit is 25 mph.
- **Vista del Sol** is a bidirectional southwest/northeast local roadway with no lane markings. The speed limit is 25 mph.
- **Chapel Drive** is a bidirectional east/west local roadway with no marked lanes. The posted speed limit is 25 mph.
- **Mission Drive** is a bidirectional north/south local roadway with no marked lanes.
- **Gilbert Drive** is a bidirectional east/west local roadway with no marked lanes.

- **Herring Drive** is a bidirectional east/west local roadway with no marked lanes. Herring Drive is not maintained by the County.
- **Hodges Drive** is a bidirectional east/west local roadway with no marked lanes. Hodges Drive is not maintained by the County.
- **Storer Drive** is a bidirectional generally north/south local roadway with no marked lanes. Storer Drive is not maintained by the County.
- **Shuck Drive** is a bidirectional north/south local roadway with no marked lanes. Shuck Drive is not maintained by the County. The posted speed limit is 20 mph.

Emergency Vehicle Access

The Southern Marin Fire Protection District (SMFD) Station 9 Strawberry is the fire station that serves the project site and the surrounding Strawberry community. The station is located at 308 Reed Boulevard, roughly in the center of the Strawberry community and a few hundred feet north of the intersection of Reed Boulevard/Storer Drive and the northern boundary of the project site. In addition to the Strawberry community, Station 9 Strawberry serves from Mill Valley to Tiburon to the Golden Gate Bridge. The station serves portions of the Golden Gate National Recreational Area and US 101 north to the Paradise Drive interchange in Corte Madera.

Based on consultation with SMFD, the following are the primary egress routes from the station based on the call destination.

- **Project Site:** south on Reed Boulevard.
- **Redwood Highway Frontage Road/US 101 South/US 101 North:** north on Reed Boulevard, west on Meda Lane, and west on Ricardo Road/Seminary Drive to Redwood Highway Frontage Road.
- **Tiburon:** north of Reed Boulevard, east on Ricardo Road/Ricardo Lane, and north on East Strawberry Drive to Tiburon Boulevard (SR 131).
- **Seminary Drive:** south on Reed Boulevard, west on Storer Drive, south on Shuck Drive, and west on Hodges Drive.
- **South Strawberry Area:** south on Reed Boulevard, east on Storer Drive, and east on Herring Drive to East Strawberry Drive.

TRANSIT SYSTEM

Regional transit service is provided by two fixed-route transit services, Golden Gate Transit (GGT) regional bus service and Golden Gate Ferry, operated by the Golden Gate Bridge and Highway Transportation District.

GGT regional bus service is currently provided on eight fixed routes, which have been reduced from a prior, pre-pandemic peak of 28 routes. GGT bus routes are categorized as regional or commute routes. Regional routes provide daily service throughout the day and evening between San Francisco, Marin, Sonoma, and Contra Costa Counties and include bus routes 101, 130, 150, and 580. Commute routes provide service primarily during weekday morning and afternoon peak periods between San Francisco, Marin, and Sonoma Counties and include bus routes 114, 132, 154, and 172.

GGT serves the vicinity of the project primarily via three routes that make stops at two bus pad stations along U.S. 101 at the Seminary Drive and Tiburon Wye located approximately one mile and 1.2 miles from the project site boundary, respectively. The Seminary Drive bus pad includes a park-and-ride station with a small, attached no-fee parking lot and is the nearest bus stop located approximately 0.9 miles from the center of the project site.

The following three bus routes stop at the Seminary Drive and Tiburon Wye bus pads:

- **Route 130 (Regional):** San Rafael – Marin City – Sausalito – San Francisco

- Route 130 operates every day of the week from approximately 5:30 a.m. to 12:30 a.m. with one-hour headways.

- **Route 132 (Commute):** San Anselmo – San Rafael – San Francisco
  - Route 132 operates Monday through Friday southbound from approximately 4:45 a.m. to 9:30 a.m. and northbound from approximately 3:00 p.m. to 7:00 p.m. with 30-minute headways in each direction.
- **Route 150 (Regional):** San Rafael – Marin City – San Francisco
  - Route 150 operates Monday through Friday from approximately 5:00 a.m. to 10:00 p.m. with one-hour headways and on weekends from approximately 7:30 a.m. to 8:00 p.m. with one-hour headways daily.

The Pohono Street Park & Ride and the Manzanita Park & Ride are located south of the project site and act as stops for bus route 132, 150, and 114— the latter of which traverses through Mill Valley with a terminus at East Blithedale Avenue and Tower Drive / Kipling Drive, near the Tiburon Wye bus pad.

Additionally, Marin Transit provides a total of 19 fixed routes including nine local routes, six community shuttle routes, two rural fixed routes (West Marin Stagecoach), and one Muir Woods shuttle service within Marin County. Marin Transit also offers Connect, an on-demand service available approximately 2.5 miles around each SMART station in Marin County.

Local transit routes that serve the vicinity of the project site include:

- **Route 17 (Local):** San Rafael – Strawberry – Mill Valley – Marin City – Sausalito
  - Route 17 operates Monday through Friday from approximately 6:30 a.m. to 11:30 p.m. Route 17 only stops at the Tiburon Wye bus pad between 3:05 p.m. and 4:35 p.m. with 30-minute headways in the northbound direction. Route 17 operates on the weekends from approximately 7:30 a.m. to 11:30 p.m. but does not stop at the Tiburon Wye bus pad.
- **Route 22 (Local):** San Rafael – San Anselmo – Ross – College of Marin – Larkspur – Corte Madera – Strawberry – Marin City
  - Route 22 operates Monday through Friday from approximately 7:00 a.m. to 11:00 p.m. only stopping at the Seminary Drive and Tiburon Wye bus pads in the northbound direction. Route 22 operates on the weekends from approximately 7:00 a.m. to 10:00 p.m. and stops at the Seminary Drive and Tiburon Wye bus pads only in the northbound direction. Route 22 has one-hour headways daily.
- **Route 36 (Local):** Canal – San Rafael – Hwy 101 – Marin City
  - Route 36 operates Monday through Friday from approximately 6:00 a.m. to 8:15 p.m. only stopping at the Seminary Drive and Tiburon Wye bus pads in the northbound direction. Route 36 operates on the weekends from approximately 7:15 a.m. to 6:30 p.m. and stops at the Seminary Drive and Tiburon Wye bus pads only in the northbound direction. Route 36 has 30-minute headways daily.
- **Route 71 (Local):** Sausalito – Marin City – San Rafael – Ignacio – Novato
  - Route 71 operates Monday through Friday from approximately 5:15 a.m. to 1:00 a.m. and on weekends from approximately 5:30 a.m. to 12:45 a.m. Route 71 does not stop at the Seminary Drive or Tiburon Wye bus pads. Route 71 has 30-minute headways daily.
- **Route 219 (Community Shuttle):** Tiburon – Strawberry – Seminary
  - Route 219 operates Monday through Friday from approximately 6:15 a.m. to 9:00 p.m. and on weekends from approximately 7:45 a.m. to 8:00 p.m. Route 219 does not stop at the Seminary Drive or Tiburon Wye bus pads. Route 219 has approximately 30- to 40-minute headways daily.

Bus routes 17, 22, 36, and 219 make stops around the Strawberry Village Shopping Center and also have stops that are within walking distance of the Seminary Drive and Tiburon Wye bus pads where riders can transfer to Route 71 or

GGT regional bus routes. The West Marin Stagecoach bus route 61 also makes a stop at the Pohono Street Park & Ride and the Manzanita Park & Ride south of the project site.

BICYCLE SYSTEM

Bicycle facilities in Marin County are categorized using the Caltrans recognized classifications described below. The Marin County Unincorporated Area Bicycle and Pedestrian Master Plan supplements Caltrans classification with the Class II – rural (Class IIr) category which is included below.

- **Class I (bike paths)**: Class I bike paths are separated from automobile traffic for the exclusive use of bicyclists.
- **Class II (bike lanes)**: Class II bike lanes are dedicated facilities for bicyclists immediately adjacent to automobile traffic.
- **Class II – rural (Class IIr):** Class IIr designation is used in areas where the pavement section meets Class II standards but "Bike Lane" signage and pavement stencils are not used (Marin County 2018b: 3-1).
- **Class III (bike routes):** Class III bike routes are on-street routes where bicyclists and automobiles share the road.
- **Class IV (cycle tracks):** Class IV cycle tracks, or protected bike lanes, are facilities that combine elements of Class I and Class II facilities to offer an exclusive bicycle route immediately adjacent to a roadway similar to a Class II facility, while providing a physical separation from traffic with raised curb, plastic delineators, or parked automobiles.

As of the latest composite data in 2018, the existing bikeway system in Marin County's unincorporated area consists of approximately 135.37 miles of bikeways, including 11.3 miles of Class I bikeways or multi-use pathways, 31 miles of Class II on-street bicycle lanes, and 93.8 miles of Class III bicycle routes. There were no Class IV protected bikeways in unincorporated Marin County (Marin County 2018b: 3-1).

There are no documented Class I or Class IV bicycle facilities in the vicinity of the project site, with most roads having no facilities present. The following roadways provide bicycle facilities in the vicinity of the project site: Seminary Drive (Class II), East Strawberry Drive (Class III), Belvedere Drive (Class III), Redwood Highway Frontage Road (Class III). Roadway signage and pavement markings (i.e., "sharrows") to suggest the roadways are meant to be shared between automobiles and bicyclists are lacking along most of the Class III routes.

PEDESTRIAN SYSTEM

Most of the roadways surrounding the vicinity of the project site, outside of the immediate project site, do not have dedicated walkways for pedestrians in the form of sidewalks. Pedestrian facilities are present along the following primary pedestrian routes serving the project site:

- Seminary Drive,
- East Strawberry Drive,
- Chapel Drive,
- Mission Drive,
- Belvedere Drive and Reed Boulevard adjacent to the Strawberry Village Shopping Center,
- Knoll Lane, and
- Redwood Highway Frontage Road (east side).

Many of the sidewalks along these roadways have gaps requiring pedestrians to temporarily enter vehicle travel lanes to proceed or are replaced with dirt trails at geographically challenging points. Additionally, some of these roadways only provide pedestrian facilities on one side of the road for long stretches.

3.14.3 Environmental Impacts and Mitigation Measures

This section describes the analysis techniques, assumptions, thresholds, and results used to identify potential significant impacts of the project on the transportation system. Transportation impacts are described and assessed, and mitigation measures are recommended for impacts identified as significant or potentially significant.

VMT METHODOLOGY

State CEQA Guidelines Section 15064.3 was added December 28, 2018, to address the determination of significance for transportation impacts. The new guideline requires that the analysis is based on VMT instead of congestion (such as LOS). Therefore, VMT is included in the analysis of this EIR. The change in the focus of transportation analysis is the result of legislation (SB 743) and is intended to shift the emphasis from congestion to, among other things, reducing greenhouse gas emissions, promoting a diversity of land uses, and developing multimodal transportation networks.

State CEQA Guidelines Section 15064.3(b) identifies four criteria for analyzing the transportation impacts of a project. To determine how the project should be considered, each of the criteria is discussed below.

Section 15064.3(b)(1) addresses land use projects. The project would include renovation of an existing academic campus, relocation of an existing daycare center, construction of a new fitness center, construction of a new residential care facility, upgrades to existing housing, and construction of new housing. Therefore, the project would generally be considered a "land use project." Section 15064.3(b)(1) describes that projects within one half mile of either an existing "major transit stop" or an existing "high quality transit corridor" should be presumed to cause a less than significant transportation impact. As defined in PRC Section 21064.3, a "major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. PRC Section 21155(b) defines a high-quality transit corridor as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. Additionally, Section 15064.3(b)(1) also describes that projects resulting in a decrease VMT in the project area as compared to existing conditions should also be presumed to have a less than significant effect.

Section 15064.3(b)(2) addresses transportation projects. As described above, the project would generally be considered a land use project. However, the project would include transportation improvements (e.g., new bicycle and pedestrian paths, potential roadway and intersection improvements) which would be required to be analyzed as they relate to their impact on VMT. Section 15064.3(b)(2) describes that transportation projects that reduce or have no impact on VMT should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152.

Section 15064.3(b)(3), Qualitative Analysis, states that if existing models or methods are not available to estimate the VMT for the particular project being considered, a lead agency may analyze the project's VMT qualitatively. Additionally, this section notes that for many projects, a qualitative analysis of construction traffic may be appropriate.

Section 15064.3(b)(4), Methodology, explains that the lead agency, (in this case, County of Marin) has discretion to choose the most appropriate methodology to evaluate VMT subject to other applicable standards, such as CEQA Guidelines Section 15151 (standards of adequacy for EIR analyses).

As previously described, Fehr & Peers prepared the project TIS analyzing potential impacts to the transportation system. See Appendix Q for a detailed description of the methodology used in the TIS. The County of Marin has not yet adopted VMT guidelines and/or thresholds to meet the State requirements set by SB 743 and to address CEQA Guidelines Section 15064.3. As such, the VMT thresholds applied for the project are ad hoc VMT thresholds

developed in consultation with Marin County staff based on goals and policies in the Marin Countywide Plan and informed by state and regional efforts, including CEQA Guidelines Section 15064.3 and the CARB Scoping Plan.

The policies and programs identified in the Countywide Plan (i.e., TR-1.8 and TR-1.s) call for reducing the rate of VMT increase and implementation of a countywide program for monitoring and reducing VMT consistent with state and regional efforts and based on information from state and regional planning agencies. OPR's Technical Advisory threshold of 15 percent below existing regionwide VMT per capita and VMT per employee was originally tied to the 2017 Scoping Plan prepared by CARB. The Scoping Plan was subsequently updated in 2022 and now contains a 30 percent below 2019 level recommendation for statewide VMT to achieve the State's goal of carbon neutrality by 2045. Therefore, the ad hoc VMT threshold applied for this project is 30 percent below 2019 VMT levels and evaluates the project's change in VMT on a per capita basis.

Neither the Countywide Plan nor the OPR Technical Advisory provide guidance on developing a VMT significance threshold for academic campuses. Development of a VMT threshold for the academic campus considered the intent of the Countywide Plan, CEQA Guidelines Section 15064.3, and OPR Technical Advisory. The VMT significance threshold also considered thresholds applied for previous CEQA VMT assessments of land use projects by University of California (UC) and California State University (CSU) campuses. While the methodology and thresholds varied depending on the context of the land use project being evaluated, a common approach for UC and CSU campuses has been that the proposed project VMT per service population (i.e., total students, faculty, and staff) rate was compared to a value of 15 percent below baseline conditions, which was often the existing campus VMT per service population rate but in a few cases was the overall regional or citywide VMT per service population rate. The 15 percent below baseline threshold was based on the OPR Technical Advisory; however, as detailed above, the Scoping Plan has been updated to include threshold guidance that establishes a goal of 30 percent below 2019 levels. Therefore, the VMT threshold applied for the proposed academic campus uses involves comparing the total VMT per service population for build-out of the proposed campus uses to the VMT per service population of existing campus uses and updating the threshold value to be consistent with the most current CARB Scoping Plan VMT reduction recommendations.

The methodology for VMT analysis uses the following thresholds, that are consistent with guidance provided by the CARB Scoping Plan, to determine significance of project generated VMT:

- **Residential Uses:** Home VMT per resident exceeds 30 percent below average 2019 baseline rate for full nine -county Bay Area
- **Campus Uses:** Total Planned Campus VMT per service population (i.e., students, faculty, and staff) exceeds 30 percent below the 2019 Campus VMT per service population

The VMT forecasts generated for the project were produced using big data provider StreetLight and the Transportation Authority of Marin Demand Model (TAMDM). A description of each and how they were utilized to determine the VMT impacts for the residential and campus uses of the project is described below:

The 2015 baseline version and 2019 forecast year of the TAMDM were not applied to estimate existing plus project VMT for residential uses because travel conditions for residential uses have changed since 2015 due to a number of factors, most notably the effects of the Covid Pandemic and shifts in travel patterns including a significant increase in work from home levels, reduced commuting, and increased local travel. A "post-Covid" version of the TAMDM model is not currently available.

In recent years, big data companies have expanded their capabilities and are able to estimate vehicle trip rates and vehicle trip lengths for residents that can be used to estimate VMT per capita for discrete areas. Recent post-Covid data from these big data companies more accurately represents actual travel activity occurring today than the 2015 horizon year of the TAMDM model as it is based on contemporary data collected from a large database of mobile devices over the course of a year and the VMT rates are calculated based on trips from start to finish with no boundaries. Fehr & Peers developed specifications and obtained data from big data provider StreetLight, and subsequently developed VMT per capita estimates for the residential uses by Census Block Group. StreetLight uses a

large database of location-based service (LBS) data from GPS enabled devices and connected vehicle data to provide anonymized vehicle trip rate and vehicle trip length data by census block group for designated time periods by trip purpose and type of traveler. This data is available for 2019 and 2022.

The TAMDM was, however, used to calculate project generated VMT from the campus component of the project. Given the small size of the existing campus and the remote nature of classes in recent years, as well as the fact that mobile device travel data from providers such as Streetlight is aggregated to zones and not available at the parcel level for privacy reasons, StreetLight data could not be used to estimate VMT for this portion of the project. The 2015 base year for TAMDM was updated and validated for a new 2019 base year based on the City of San Rafael General Plan Update. A key reason for applying the updated 2019 base year is that it includes the SMART rail system that was not in place in 2015. The analysis includes a 2040 No Project scenario that is based on the TAMDM horizon year and reflects land use changes and transportation improvements consistent with the San Rafael General Plan 2040 adopted in 2021. The 2019 base year model developed for the San Rafael General Plan Update was validated based on model confidence thresholds defined in the California Transportation Commission 2017 RTP guidelines. Additionally, the 2019 TAMDM base year is consistent with the conditions that existed at the time the NOP was published, which typically constitutes the baseline conditions per CEQA Guidelines section 15125(a)(1)).

THRESHOLDS OF SIGNIFICANCE

The significance criteria used to evaluate the project impacts to transportation under CEQA are based on Appendix G of the CEQA Guidelines, the CARB Scoping Plan, and the OPR Technical Advisory. As detailed in the Methodology section above, VMT thresholds were determined ad hoc based on these State guidance documents and in coordination with County of Marin staff. An impact on the transportation system would be significant if implementation of the project would:

- conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), such that the following thresholds would be exceeded:
  - Residential Uses: Home VMT per resident exceeding 30 percent below 2019 average baseline rate for full nine county Bay Area;
  - Campus Uses: Total Planned Campus VMT per service population (i.e., students, faculty, and staff) exceeding 30 percent below the 2019 Campus VMT per service population;
- substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); and/or
- result in inadequate emergency access.

ISSUES NOT DISCUSSED FURTHER

All the issues identified in the preceding list of thresholds are addressed in the following impact analysis.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.14-1: Conflict with a Program, Plan, Ordinance or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle and Pedestrian Facilities

The project would provide sidewalks, trails, and Class III bicycle routes throughout the project site and to transit stops along U.S. 101. Additionally, the project would not degrade any existing pedestrian or bicycle facilities in the vicinity of the project site. Therefore, the project would not conflict with the County's goals and policies identified in the Countywide Plan or Bicycle and Pedestrian Master Plan related to increasing the use of active transportation in the county. There are no planned or programmed transit stops in the vicinity of the project site and the project would not alter any existing transit stops along U.S. 101. Although the project would likely generate transit ridership, it would not result in a substantial increase that could not be accommodated by existing service. Furthermore, OPR's Technical Advisory suggests that lead agencies generally should not treat the addition of new transit users as an adverse impact. For these reasons, the project would not conflict with a program, plan, ordinance, or policy addressing the transit, bicycle, or pedestrian facilities. This impact would be **less than significant**.

Bicycle and Pedestrian Facilities

The Marin Countywide Plan establishes the County's commitment to increasing active transportation as a form of travel within its jurisdiction. Marin Countywide Plan Policies TR-2.1 and TR-2.2, detailed above in Section 3.14.1, Regulatory Setting, inform the County's direction in providing bicycle and pedestrian improvements throughout the transportation network. Generally, these policies promote the implementation of bicycle and pedestrian infrastructure and supportive facilities from new development to create a fully integrated active transportation system that increases safety and comfort for pedestrians and bicyclists.

Additionally, Goal 1 of the Marin County Bicycle and Pedestrian Master Plan is to expand bicycle and pedestrian facilities and access in and between neighborhoods, employment centers, shopping areas, schools, and recreational sites, in pursuit of the Marin Countywide Plan goal of having 20 percent of all trips made by walking or biking by 2020 and add a 2030 goal of 25 percent bicycling and walking mode share. Goal 2 and 3 of the Marin County Bicycle and Pedestrian Master Plan are to encourage bicycling and walking as daily forms of transportation in Marin County by completing a bicycle and pedestrian network that services short trips and connections to transit.

As detailed in Chapter 2, "Project Description," the project involves renovation of an existing academic campus, relocation of an existing daycare center, construction of a new fitness center and new residential care facility, upgrades to existing housing and construction of new housing, retention and access improvements to existing open space and recreation areas, and the provision of new bicycle and pedestrian paths within the project site.

The project would include the construction of new trails and sidewalks throughout the project site's academic campus and residential areas. As presented in Chapter 2, "Project Description," in Figure 2-7, "Pedestrian and Bus Access Diagram," the project proposes new pedestrian facilities along several roadways in the project site, thus providing connections between the project's land uses and the Seminary Drive Bus Pad and bus stops at the US 101/Seminary Drive interchange. There are currently pedestrian facilities between these bus stops along US 101 and the entrance to the project site. The new trails and walkways within the project site and described above would provide continuous pedestrian facilities between the US 101 bus hub and the academic campus area as well as the new residential units. Additionally, the project would not degrade any existing pedestrian facilities and general internal circulation patterns would not change.

As discussed in Section 3.14.2, "Environmental Setting," Class II bicycle lanes exist along Seminary Drive and Class III bicycle routes are provided along Strawberry Lane. The project would develop new Class III bicycle routes throughout the internal roadway network as presented in Chapter 2, "Project Description," in Figure 2-8, "Regional Bicycle Access Diagram." Additionally, the project would not degrade any existing bicycle facilities and internal circulation would not change, as previously discussed.

Therefore, the project would expand bicycle routes and pedestrian facilities, thus improving access and encouraging bicycling and walking as daily forms of transportation in Marin County. Furthermore, the project's addition of pedestrian and bicycle improvements would enhance safety for residents, staff, students, and visitors navigating the project site by foot, bike, or other nonmotorized mode of transportation. For these reasons, the project would not conflict with a program, plan, ordinance or policy addressing pedestrian or bicycle facilities.

Transit Services

As discussed above in Section 3.14.2, "Environmental Setting," GGT and Marin Transit provide fixed route bus service in the vicinity of the project site. The Seminary Drive bus pad, located approximately one mile from the western project site boundary, is served by GGT bus routes 17, 22, 36, 71, and 219, and GGT bus routes 130, 132, and 150. Local and regional plans do not identify any future planned or programmed transit improvements in the vicinity of the project site. Although the project would be expected to generate an increase in demand for transit ridership in the area, it is anticipated that the existing transit services would adequately accommodate any increase in demand. Additionally, as detailed in the Section 3.14.1, "Regulatory Setting," the OPR Technical Advisory suggests that lead agencies generally should not treat the addition of new transit users to an existing service as an adverse impact because infill development improves proximity and accessibility as well as improves regional vehicle flow by adding less vehicle travel onto the regional network. Furthermore, the project would not conflict with existing transit stops along U.S. 101.

Local and regional plans do not include transit improvements in the vicinity of the project site, and the project would not alter any existing transit stops in the vicinity of the project site. The Marin Countywide Plan includes Implementation Program TR-1.s with the goal of reducing VMT through the implementation of TDM strategies. This implementation program directs the County to develop and implement countywide VMT Reduction Monitoring and Implementation as well as a TDM Program; however, the development of a countywide TDM program has not yet occurred. Therefore, the project is not subject to the potential strategies identified in Implementation Program TR-1.s including those related to transit oriented development and/or TDM programs for new multifamily residential uses at this time. If the County of Marin adopts a countywide TDM program before all project components are approved, the project may be subject to applicable strategies. For these reasons, the project would not conflict with a program, plan, ordinance, or policy addressing transit services.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.14-2: Conflict or be Inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) Regarding Vehicle Miles Traveled

Construction activities would be short-term and temporary in nature and thus are not expected to result in a significant increase in VMT. Based on the modeling of operational VMT, the project would exceed the threshold of significance for residential projects as established in the TIS. Therefore, the project's impact related to VMT would be **significant**.

Construction

Construction of the project would be reasonably expected to begin in 2024 and is anticipated to be completed by 2028. The number of construction workers would fluctuate based on the phase and intensity of construction. Construction activities would be temporary and intermittent in nature and thus would not result in long-term increases in vehicular trips. For these reasons, construction activities would not result in a significant permanent increase in daily VMT.

Operations

As detailed in Chapter 2, "Project Description," the project involves renovation of an existing academic campus, relocation of an existing daycare center, construction of a new fitness center and new residential care facility, upgrades to existing housing and construction of new housing, retention, and access improvements to existing open

space and recreation areas, and creation of new bicycle and pedestrian paths within the project site. Implementation of the proposed project by 2040 would result in a total of up to approximately 850 residents (i.e., 680 residents for the 336 single family and multi-family units, 170 new residents for the residential care facility), 1,000 students, and 310 employees (240 campus employees, 36 new employees for the residential care facility, and 34 new employees for the fitness center).

The TIS evaluated VMT impacts associated with the residential and academic campus components of the project separately. For the residential portion of the project, a significant impact would occur if the project VMT per capita exceeded a level of 30 percent below existing regional VMT per capita. The 2019 VMT per capita estimates were used to identify the baseline and applicable threshold (i.e., 30 percent below the 2019 regional average VMT per capita). The 2022 VMT per capita estimates were evaluated for four census block groups that surround and include the project site to identify estimates of project Home-Based VMT per capita, as future residents of the project are anticipated to have similar VMT per capita rates as existing residents in the surrounding neighborhoods.

Although it is stated in Chapter 2, "Project Description," that preference for housing would be given to on-site workers, students, faculty, and staff, and that an estimated 30 percent of the student and faculty population would reside on campus, the TIS did not use this assumption to calculate project generated VMT. Because the dedication of housing is not guaranteed at this time, the conservative approach (i.e., assuming none of the residential units would be occupied by campus affiliates) was used to avoid underestimating VMT impacts from the residential component of the project.

As shown in Table 3.14-1, the home-based VMT per capita for the project under Existing plus Project conditions would be approximately 3 percent below the regional average of 19.6 miles, and therefore would not meet the 30 percent below existing average regional VMT per capita threshold.

Table 3.14-1 Daily Home-Based Vehicle Miles Traveled (VMT) for Residential Uses

Scenario	Home-Based VMT Per Resident
Bay Area Regional Baseline (2019)	19.6
Existing Plus Project	19.1
Percent Change Between Existing Plus Project and Bay Area Regional Baseline VMT/Capita	-3%

Notes: The VMT shown in the table above is home-based VMT for all residential uses in the project including single family residential, multi-family residential, affordable housing, and the residential care facility.

Data for the Bay Area Region is for the full nine-county area.

Source: Appendix Q, Fehr & Peers 2024.

The OPR Technical Advisory does not provide a VMT threshold for university campuses. For the purposes of this assessment, the academic campus uses would be considered to result in a significant VMT impact if the Existing plus Project campus VMT per capita exceeds a level of 30 percent below the existing campus VMT per capita. As shown in Table 3.14-2, the VMT forecasts indicate that the proposed campus uses would result in an Existing plus Project VMT per service population that is 30 percent below the VMT per service population for existing campus uses.

Table 3.14-2 Daily Vehicle Miles Traveled (VMT) for Campus Uses

Scenario	Total Campus VMT Per Service Population
Project Baseline (2019)	13.61
Existing Plus Project	9.58
Percent Change Between Existing Plus Project and Project Baseline VMT/Service Population	-30%

Notes: Service population = campus students, faculty, and staff. The current estimated service population for campus uses is 124 and the proposed population for campus uses would be 1,240 at build-out.

Source: Fehr & Peers 2024 (Appendix Q).

Although the project VMT for campus uses would not exceed the threshold identified, the VMT per capita for the residential uses would be approximately 3 percent below the regional average of 19.6 miles, and therefore would not meet the 30 percent below existing average regional VMT per capita threshold. Therefore, the residential component of the project would conflict and be inconsistent with CEQA Guidelines Section 15064.3. Accordingly, operation of the project would result in a significant impact related to VMT.

Mitigation Measures

Mitigation Measure 3.14-2a: Develop and Implement a Transportation Demand Management Program for Market Rate Residential Uses

Prior to the issuance of the first building permit in the first phase of development, the project applicant shall develop a Transportation Demand Management (TDM) program for the proposed market rate residential units, including any anticipated phasing, and shall submit the draft TDM program to the County of Marin Public Works for review and approval. The TDM program shall attempt to achieve a 39 percent reduction in weekday home-based VMT per capita generated by the proposed market rate single family and multi-family residential uses to reduce impacts to a less-than-significant level.

The project applicant shall be responsible for preparing and implementing the TDM Program. The project applicant shall be responsible for funding and overseeing the delivery of trip reduction/TDM proposed programs and strategies to achieve the maximum feasible trip reduction as determined in collaboration with County of Marin Public Works staff, which may include, but are not limited to, the following:

- Dedicated shuttle for residents of market units and/or academic campus employees and/or students;
- Establishment of carpool, buspool, or vanpool programs;
- Vanpool purchase incentives;
- Cash allowances, passes or other public transit subsidies and purchase incentives;
- Parking fees set at levels sufficient to incentivize alternative modes;
- Full or partial parking subsidies for ride-sharing vehicles;
- Bicycle programs including bike purchase incentives, storage, maintenance program, and on-site education program;
- On-site bike share program;
- Dedicated employee or student housing for adjacent campus;
- Designation of an on-site transportation coordinator for the project.

Mitigation Measure 3.14-2b: Dedicate a Portion of Residential Units to Campus-Affiliated Residents

The County of Marin Board of Supervisors shall require a permanent dedication of a portion of the project's market rate residential units, within the limits of feasibility, to campus-affiliated residents (i.e., students, staff, and/or faculty) as a condition of approval.

Significance after Mitigation

Absent a countywide VMT reduction program, it likely would be infeasible for any individual residential project in high VMT generating areas, such as the Strawberry community, to achieve the VMT reduction target of more than 30 percent through typical levels of investment in transit, bike, or walk strategies, especially considering the uncertainty about still evolving patterns of remote work from home (which data indicates is resulting in increased VMT because of more frequent non-work vehicle trips) will play out over time.

Recognizing the high incomes necessary for residents of the market rate units with the attendant pattern of reliance on private vehicles and the distance to transit stops, traditional TDM measures to encourage increased use of transit, bicycle

or pedestrian travel to the campus could reduce VMT to a degree, but would not likely be feasibly in reducing VMT to the 30 percent decrease in per capita VMT target. The establishment of a dedicated level of remote/virtual course work and office hours may also reduce VMT depending on how schedules are structured. The most likely to be effective VMT reduction measure would be a firm dedication of a substantial share of the housing units to campus faculty and staff, which would reliably reduce the number and shorten the length of trips between home and the university.

Although implementation of Mitigation Measure 3.14-2a and Mitigation Measure 3.14-2b would require the development of a TDM program and the dedication of housing to campus-affiliated residents, respectively, to reduce vehicle trips and, therefore, VMT associated with the residential uses of the project, the effectiveness of potential VMT reduction strategies cannot be reliably quantified nor assured at this time. Traditional TDM measures could reasonably reduce VMT by 5 percent, based on typical performance; however, a significant number of housing units would need to be dedicated to campus employee or student housing for the project's campus to result in more substantial VMT reductions. Thus, the proposed residential uses would likely not achieve the required VMT reduction level to meet the threshold of 30 percent below existing average regional VMT per capita. For these reasons, the project's VMT impact would be **significant and unavoidable**.

Impact 3.14-3: Substantially Increase Hazards due to a Geometric Design Feature (e.g., Sharp Curves or Dangerous Intersections) or Incompatible Uses (e.g., farm equipment)

Construction activities may temporarily degrade the surrounding transportation network, inconveniencing pedestrians, bicyclists, and drivers and potentially increasing the risk of safety hazards. Additionally, the streets within the project site do not meet County design standards regarding roadway widths. As planned, the project would not provide adequate parking supply for the academic campus, which could result in parking spill over on surrounding streets where sidewalks and crosswalks do not exist, thus, resulting in potential conflicts between pedestrians and vehicles. For these reasons, the project could substantially increase hazards due to a geometric design feature or incompatible uses. Therefore, this impact would be **potentially significant**.

Construction

As detailed in Chapter 2, "Project Description," construction activities would occur over four years and reasonably expected to begin in 2024. In conformance with Marin County Development Code Section 6.70.030, construction activities would occur between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and from 9:00 a.m. to 5:00 p.m. on Saturdays. Construction transportation impacts would be localized and temporary; however, during construction of the project, traffic operations could be degraded.

Construction of the project, including the movement of construction vehicles and construction material delivery, could disrupt the transportation network in the vicinity of the project site, potentially requiring temporary lane closures, street closures, sidewalk closures, and bikeway closures. Thus, construction activities could result in degraded roadway conditions and safety impacts for all modes of transportation.

An encroachment permit would be required for project-related work that may encroach within County right-of-way. If traffic control is required, a CA-MUTCD compliant traffic control plan must be submitted with the encroachment permit application. However, not all internal roadways within the project site are maintained by the County of Marin. Therefore, if construction activities and the movement of heavy vehicles are not properly planned for and managed for these internal roadways, the project could substantially increase transportation hazards during construction.

Operations

As detailed in Chapter 2, "Project Description," the project involves renovation of an existing academic campus, relocation of an existing daycare center, construction of a new fitness center and residential care facility, upgrades to existing housing and construction of new housing, retention and access improvements to existing open space and recreation areas, and the provision of new bicycle and pedestrian paths within the project site.

The project would be subject to review by County staff, thus ensuring all federal and County standards and regulations regarding design and safety would be met. Federal accessibility standards and regulations are identified in ADA and PROWAG guidelines. Additionally, the project would be required to comply with County of Marin

roadway design standards as identified in the Uniform Construction Standards (Marin County 2018a) and Marin County Code (Marin County 2022), including those identified in Chapter 19.05, pertaining to regulations regarding streets improvements abutting building sites, and Title 24 of the Marin County Code, which includes the County's Development Standards. Section 24.04.110 sets forth minimum widths, and Section 24.04.120 sets forth minimum grades for streets. The minimum paved width for a limited residential road is 20 feet with shoulders or 24 feet with curbs. For a minor residential road, the minimum paved road width is 28 feet; for a residential road it is 36 feet; and for a collector road it is 40 feet. Maximum grades are 6 percent for arterial and collector roads, 12 percent for residential roads, and 18 percent for minor and limited residential roads.

Hodges Drive and Gilbert Drive would serve as the main access to Seminary Drive for residential and campus uses, respectively, and would each carry more than 1,000 daily vehicle trips at build-out; thus, both roadways would be classified as collector streets under the Marin County Code (Appendix Q). The streets within the project site range in width from approximately 20 feet to 28 feet without shoulders; thus, the existing roadways do not satisfy the minimum required width for collector and local streets (i.e., 40 feet and 36 feet, respectively) and may not meet ADA or PROWAG accessibility guidelines.

The project currently contains 608 parking spaces, including 311 residential parking spaces and 297 parking spaces for the academic campus. The required parking supply for development projects in the County is identified in Section 24.04.340 of the Marin County Code. The County Code specifies parking requirements for the residential component of the project but does not provide parking requirements for a college campus. The project would provide a total of 944 parking spaces in a three-tiered parking lot and in underground garages in residential structures and garages in duplexes. This includes 51 existing residential spaces, 467 new spaces for proposed residential development, 185 new spaces for the proposed residential care facility, and 241 spaces for the academic campus. The TIS found that a total of 915 parking stalls would be necessary to meet demand during a typical weekday (Appendix Q). Based on Marin County Code parking requirements as well as the estimated parking demand based on ITE parking rates, the parking provided for residential uses would be adequate. According to the County Code, the project would be required to provide a total of 539 parking spaces for the proposed residential uses, which would be exceeded by the proposed 703 parking spaces. However, the 241 parking spaces for the academic campus would not be sufficient to meet demand at build-out and with enrollment, thus resulting in potential spillover into adjacent residential areas, which could result in secondary impacts to emergency vehicle access and bicyclists using on-street bike lanes if blocked by illegally parked campus-related vehicles. An additional 144 parking spaces beyond the proposed 241 spaces would be needed to meet the estimated demand for the academic campus. Approximately 60 percent of the proposed academic campus build-out and attendant enrollment could be accommodated with the proposed parking supply.

Given the location of academic uses on the eastern end of the project site, the most likely location for spillover parking to occur would be on the west side of East Strawberry Drive, both north and south of Herring Drive. The shoulder on the west side of East Strawberry Drive along this segment is about seven feet wide, which is sufficient for a parked vehicle; however, there is no sidewalk on the west side of East Strawberry Drive in this area. Students or employees parking on this portion of East Strawberry Drive would either walk in the southbound travel lane or cross the street twice to use the sidewalk on the east side of the roadway, creating potential conflicts between pedestrians and vehicles. Therefore, because some of the internal roadways would not meet County roadway width requirements and the project would not supply the necessary number of parking spaces to avoid parking spillover, the project could potentially result in a substantial increase in transportation hazards related to operations.

Based on the peripheral location of the campus on the Strawberry Peninsula and removed from transit service and destinations other than the surrounding residential uses, it is not anticipated that TDM measures to encourage increased use of transit, bicycle, or pedestrian travel to the campus would be effective without substantial incentives and dedicated shuttle service to the campus. The establishment of a dedicated level of remote course work and office hours may reduce parking demand depending on how schedules are structured. It is anticipated that the most effective parking demand reduction measure would be a permanent dedication of a share of the market rate housing units for campus faculty and staff, which would also reduce VMT impacts for the project housing uses; however, at this time, the project description does not propose these strategies. For these reasons, it cannot be guaranteed that the project would provide the necessary parking supply to meet demand as the campus is built out.

Mitigation Measures

Mitigation Measure 3.14-3a: Develop a Construction Traffic Control Plan

Prior to construction activities for the proposed project, the applicant shall prepare a detailed Construction Traffic Control Plan (TCP) and submit it for review and approval by the County of Marin (County) Department of Public Works. The applicant and the County shall consult with the California Department of Transportation (Caltrans), Golden Gate Transit (GGT), Marin Transit, Southern Marin Fire Protection District (SMFD) Headquarters staff, and other local emergency service providers for their input prior to approval of the TCP. Additionally, the fire district shall be notified prior to any short- or long-term obstruction of fire access roads that would potentially slow response times or require alternative routes for emergencies. At a minimum, the plan shall include:

- The number of truck trips, time, and day of street closures.
- Time of day of arrival and departure of trucks.
- Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting.
- Provision of a truck circulation pattern.
- Provision of a driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick-up and drop-off areas).
- Maintain safe and efficient access routes for emergency vehicles.
- Maintain safe and efficient access routes for vehicles.
- Manual traffic control when necessary.
- Proper advance warning and posted signage concerning street closures.
- Provisions for pedestrian safety.
- Contractor parking.
- Maintaining existing parking needs.

A copy of the TCP shall be submitted to local emergency response agencies. Additionally, the local emergency response agencies shall be notified at least 14 days prior to the commencement of construction that would partially or fully obstruct roadways.

Mitigation Measure 3.14-3b: Widen Roads to Meet County of Marin Roadway Standards and ADA and PROWAG Guidelines for Transportation Accessibility

The project applicant shall provide roadway, parking, and pedestrian facilities that meet ADA and PROWAG guidelines. The project applicant shall incorporate into the project the widening of both public and private roads to meet County of Marin road design standards as identified in Marin County Code Section 24.04.110. The project shall be subject to review by County of Marin Public Works staff to ensure all federal and County requirements and regulations are met and ensure the safe movement of all modes of transportation navigating the project site. The project applicant shall submit a waiver request for any existing or planned road, pedestrian, bicycle, transit, or parking facilities or services on the site that will not meet County roadway, ADA, or PROWAG standards.

Mitigation Measure 3.14-3c: Implement Measures to Reduce Parking Demand and/or Increase Supply for the Academic Campus

The project applicant shall prioritize implementation of parking demand reduction measures for faculty, staff, and students of the academic campus to address the estimated parking deficit of 144 parking spaces. Prior to achieving 50 percent enrollment of the academic campus, the project applicant shall submit a parking report that documents academic campus parking usage and any parking overflow onto adjacent residential streets (based on surveys conducted by an independent professional transportation consultant approved by County of Marin Public Works

staff), as well as the status of all parking demand reduction measures. The report shall verify that campus parking occupancy levels do not exceed 90 percent and be submitted to County of Marin Public Works. Should there be excess parking occupancy and overflow conditions, the project applicant shall implement additional parking demand reduction measures and/or new parking supply improvements to address parking shortfalls before any additional enrollment could occur beyond 50 percent. All parking shall be located on the project site and within the vicinity of the facility that it serves. Off-site overflow parking shall not be an acceptable strategy.

Significance after Mitigation

Implementation of Mitigation Measure 3.14-3a would require the construction contractor to develop and implement a construction traffic control plan to reduce transportation safety impacts during project construction. Mitigation Measure 3.14-3b requires the project applicant to design internal roadways to meet County of Marin design standards, and Mitigation Measure 3.14-3c requires the project applicant to implement parking demand reduction and/or supply measures to meet anticipated demand of the academic campus otherwise campus enrollment could not occur beyond 50 percent. The implementation of the mitigation measures identified above would reduce safety impacts exacerbated by the project. Therefore, the impact would be **less than significant with mitigation incorporated.**

Impact 3.14-4: Result in Inadequate Emergency Access

In the event of an emergency scenario where evacuation would be necessary, it is anticipated that Seminary Drive and East Strawberry Drive would have the capacity to accommodate vehicles under both existing conditions and with implementation of the project. The project would be designed in compliance with County of Marin design standards and would be subject to review by County staff and emergency service agencies to ensure the project would provide access to emergency vehicles in regard to physical design. The project would also generate trips in the vicinity of the project site resulting in potential delays to vehicles, including emergency response, and potentially impacting emergency access. Therefore, this impact would be **potentially significant**.

Evacuation Routes

Two existing primary ingress/egress routes that could be used for emergency evacuation purposes in the vicinity of the project site include Seminary Drive and East Strawberry Drive. Seminary Drive, located west of the project site, provides direct access to U.S. 101. East Strawberry Drive, located east of the project site, provides access to SR 131. Seminary Drive and East Strawberry Drive are logical evacuation routes because they provide direct connections to U.S. 101 and SR 131, respectively. Additionally, both roadways provide greater right-of-way in comparison to many of the smaller local roadways within the project site, some of which dead-end, and thus, could accommodate higher traffic volumes in the event of an emergency. Official evacuation routes are in the process of being developed by the Marin Wildfire Prevention Authority (MWPA); however, as detailed above, Seminary Drive and East Strawberry Drive would likely serve as evacuation routes in the vicinity of the project site until an official evacuation plan is adopted.

The resilience of these informal evacuation routes (i.e., Seminary Drive and/or East Strawberry Drive), as it relates to maintaining operational integrity in the event of a natural hazard, are described below:

- Wildfire: No foreseen impact to Seminary Drive or East Strawberry Drive. The project site and surrounding area are identified as urban un-zoned and are not in an area of high fire hazard severity (Marin County 2020).
- Earthquake: No foreseen impact to Seminary Drive or East Strawberry Drive. The project site and surrounding area are not located within an earthquake fault zone (DOC 2023a). The parcels in the vicinity of the project site have not been evaluated by the California Geological Survey (CGS) for liquefaction or seismic landslide hazards meaning that portions of each parcel have been evaluated by CGS and found not to lie within either a Liquefaction or Landslide Zone, but the remaining portions of the parcels were excluded from hazard zoning analyses. Because these hazards were not evaluated, they may exist in the unevaluated area (DOC 2023a). See Section 3.7, "Geology and Mineral Resources," for a discussion of project impacts related to geologic hazards including earthquake, liquefaction, landsliding, and seismic hazards.
- Tsunami: Impacts would occur on Seminary Drive and East Strawberry Drive. The California Department of Conservation has identified that the vast majority of Seminary Drive is in a Tsunami Hazard Area as well as U.S.

101. Additionally, East Strawberry Drive north of Ricardo Lane is in a Tsunami Hazard Area (DOC 2023b). Figure 3.14-1, "Evacuation Routes," provides an alternate route to U.S. 101 via SR 131 if a tsunami were to occur affecting both primary evacuation routes. Additionally, it is reasonable to expect that only the households located within the tsunami inundation zone would need to seek higher ground because the inundation affects lower elevations, including roadways and developments along the bay perimeter of the peninsula. Higher ground could be found on the upper elevations of the Strawberry peninsula without having to leave the community.

Moreover, as discussed in detail in Section 3.8, "Hazards and Hazardous Materials," MWPA recently completed an evacuation/ingress/egress study to understand and address the risks associated with evacuation routes in Marin County. Based on the results of the study, MWPA developed a GIS map viewer that shows evacuation difficulty score maps, among other things. According to MWPA's evacuation difficulty maps, the roadways that would likely serve as primary evacuation routes for the project site have evacuation difficulty scores (roadway and aggregate) ranging from minimal to low. These roadways include Seminary Drive from Gilbert Drive to US Highway 101 (minimal), Seminary Drive from Gilbert Drive to Strawberry Lane (low), and East Strawberry Drive from Strawberry Lane to approximately Island Drive (low). Other potential evacuation routes in the project area have evacuation difficulty scores ranging from moderate to high, including portions of East Strawberry Drive (moderate and high), Belvedere Drive (high), and S. Knoll Road (high).

Additionally, for the purpose of this analysis, the project would result in a significant impact on evacuation route access if the project would increase the number of vehicles in such a manner that it would impede the ability of the existing community to vacate the Strawberry Peninsula, if an emergency evacuation event were to occur.

An analysis was conducted to determine whether Seminary Drive and East Strawberry Drive would have the capacity to accommodate the number of vehicles that would need to evacuate at any given time. An approach was developed to estimate the maximum number of vehicles on the Strawberry Peninsula that would evacuate. Although it is likely that fewer vehicles than the maximum number of vehicles on the peninsula would vacate the area, a conservative estimate was established to avoid the risk of understating an impact. The number of housing units in the Strawberry Census Designated Place is 2,714 (US Census Bureau 2020). Therefore, assuming an average of 1.5 vehicles per household, 4,071 vehicles associated with residences would need to vacate the area. Additionally, to account for visitors and Olivet University's 24 campus staff, and up to 12 daycare facility staff who work on site on any given day, a conservative estimate of up to 4,500 vehicles would need to be accommodated in an event where evacuation is necessary.

The saturation flow rate for a lane group is the maximum number of vehicles from that lane group that can pass through an intersection during one hour of continuous green under the prevailing traffic and roadway conditions. A saturation flow rate of 1,900 vehicles per hour per lane, which corresponds to a saturation headway of about 1.9 seconds, is a common nominal value (University of Idaho n.d.). Both Seminary Drive and East Strawberry Drive are bidirectional two-way roadways. Under a scenario where evacuation is necessary, it is reasonable to expect that both lanes for each roadway would be used for egress out of the peninsula to reach the highway system. Therefore, on average, Seminary Drive and East Strawberry Drive have the capacity to each carry 3,800 vehicles per hour per lane or 7,600 vehicles per hour per lane in total.

The project proposes an increase of 324 residential units including the residential care facility. Thus, assuming an average of 1.5 vehicles per household, the single- and multi-family residences (i.e., 323 housing units) could add 485 vehicles to the roadway network if an emergency event necessitating evacuation were to occur.

The residential care facility would accommodate up to 170 people. California Health and Safety Code, Chapter 9.5, *Multipurpose Senior Centers and Senior Centers Emergency Operations Plans*, states that each multipurpose senior center and each senior center "shall develop and maintain a written emergency operations plan." This emergency operations plan shall include "evacuation procedures, including procedures to accommodate those who will need assistance in evacuating the center." It is likely that the residential care facility would have access to on-site shuttles or vans for transportation. Additionally, some residents and the residential care facility's 34 employees are assumed to have access to their own personal vehicles. Thus, it is reasonable to expect that residents would be helped into passage cars with an average of 3 people per vehicle. Therefore, at most 204 people (170 residents and 34 employees) could be onsite, and 68 vehicles would be added to the roadway network because of the residential care facility proposed by the project.

Sources: Adapted by Ascent in 2023.

Figure 3.14-1 Evacuation Routes

At maximum capacity, campus staff could increase by 216 people and the fitness center would be staffed by approximately 3 full-time employees. Additionally, at most up to 1,000 students could be enrolled in the university. Of the 1,000 students total that could be enrolled, 30 percent are expected to live onsite and have already been accounted for in the residential units proposed by the project, leaving 700 remaining students. Subtracting an additional 100 students already accounted for under existing conditions results in potentially 600 remaining students that would be onsite. Therefore, 819 people including campus and fitness center staff and students may need to vacate. With an average of 3 people per vehicle, 273 more vehicles could be added to the roadway.

It is likely that not all students, residents, or employees would be present on the Strawberry Peninsula if an emergency scenario were to occur necessitating evacuation. However, to remain conservative, it is assumed that an additional 826 vehicles (i.e., 485 vehicles associated with additional residential units + 68 additional vehicles associated with residential care facility + 273 associated with campus and fitness center staff and students = 826 total vehicles) could be added to the roadway network as a result of the project during the event of an evacuation. Therefore, a total of 5,326 vehicles (i.e., 4,500 vehicles under existing conditions + 826 additional vehicles resulting from project = 5,326 total vehicles) would need to be accommodated along the surrounding roadway network at any given time in an emergency evacuation. As detailed above, on average, Seminary Drive and East Strawberry Drive have the capacity to accommodate up to a total of 7,600 vehicles per hour per lane.

Furthermore, Seminary Drive, which would likely serve as the primary evacuation route within the project area due to its direct access to US Highway 101, has been assessed by MWPA as having a minimal to low difficulty score for evacuation. Although other potential evacuation routes in the project area have evacuation difficulty scores ranging from moderate to high, specifically portions of East Strawberry Drive (moderate and high), Belvedere Drive (high), and S. Knoll Road (high), these roadways are anticipated to serve as secondary options for evacuation. The combination of potential evacuation routes, which includes a roadway with minimal to low evacuation difficulty score as the anticipated primary evacuation route, would provide first responders with the opportunity to identify the best route based on conditions at the time of evacuation as well as provide substantial evacuation capacity. Therefore, the project would not result in an adverse effect related to evacuation.

Emergency Vehicle Access

As detailed in Impact 3.14-3 above, the project would be designed in accordance with County design standards. Additionally, the project would be subject to review by County of Marin staff and relevant emergency agencies to ensure the design of the project meets applicable safety standards to provide physical access for emergency vehicles. The project would be required to comply with International and California Fire Code standards as adopted by the County in Chapter 16.16 of the County Code. Section 3310.1 of the 2019 California Fire Code identifies minimum requirements to provide required emergency access during construction activities. Additionally, the 2019 California Fire Code establishes minimum width dimensions to maintain adequate access for fire apparatus roads at no less than 24 feet which is consistent with County road width standards. As detailed above in Impact 3.14-3, not all internal roadways within the project site meet County standards. If any residential roadways do not measure 24 feet wide, the project may not provide sufficient right of way for emergency vehicles.

Emergency vehicle access to the project site is provided via multiple connections to Seminary Drive on the west and south, Reed Avenue to the north, and Herring Drive to the east. Fire Station 9 Strawberry is located approximately 400 feet north of the campus on Reed Avenue, providing a high level of emergency vehicle access to the site. Other first responders would likely access the campus via US 101, the ramps onto the Redwood Highway Frontage Road, and Seminary Drive. The existing connections to the project site provide adequate access for emergency vehicles.

The primary egress routes for fire trucks from Station 9 Strawberry through the Strawberry community based on the call destination and streets where the project would add vehicle trips are listed below (Fehr & Peers 2024).

- Redwood Highway Frontage Road/U.S. 101 South/U.S. 101 North: north on Reed Boulevard, west on Meda Lane, and west on Ricardo Road/Seminary Drive to Redwood Highway Frontage Road.
- Tiburon: north on Reed Boulevard, east on Ricardo Road/Ricardo Lane, and north on East Strawberry Drive to Tiburon Boulevard (SR 131).

As detailed in the TIS (Appendix Q), the project would result in a net addition of about 180 vehicle trips during the weekday a.m. peak hour and 230 vehicle trips during the weekday p.m. peak hour. The project would add the following number of net new trips to the following key fire egress routes.

- TO WEST (segment of Seminary Drive just east of Redwood Highway Frontage Road)
  - a.m. peak hour – adds 145 net peak trips
  - p.m. peak hour – adds 185 net peak trips
- TO NORTH (segment of Reed Boulevard just north of Storer Drive)
  - a.m. peak hour – adds 5 net peak trips
  - p.m. peak hour – adds 5 net peak trips
- TO NORTH (segment of East Strawberry Drive just south of Tiburon Boulevard)
  - a.m. peak hour – adds 30 net peak trips
  - p.m. peak hour – adds 40 net peak trips

The project would add the greatest level of net new peak hour trips to the segment of Seminary Drive just east of Redwood Highway Frontage Road, with approximately 145 net new peak hour trips during the a.m. peak hour and 185 net new trips during the p.m. peak hour. This equates to an increase in existing volumes of approximately 28 percent during the a.m. peak hour and 35 percent during the p.m. peak hour. This level of added traffic could potentially degrade response times for fire trucks along this segment of Seminary Drive from Station 9 Strawberry. For this reason, and because the internal roadways may not meet County and 2019 California Fire Code roadway width requirements, the project could result in inadequate emergency access. Therefore, the impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.14-3b: Widen the Roadways Within the Project Site to Meet County of Marin Roadway Standards and ADA and PROWAG Guidelines for Transportation Accessibility

Mitigation Measure 3.14-3b shall be implemented, as described above.

Mitigation Measure 3.14-4: Construct a Roundabout at the Intersection of Seminary Drive/Ricardo Road/Vista Del Sol

The project applicant shall construct a roundabout at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol. The design of the roundabout, and potential advance warning devices to stop traffic entering the roundabout when fire trucks are traveling through the intersection, shall be reviewed and approved by the Southern Marin Fire Protection District.

An alternative mitigation measure to the addition of a roundabout would be a traffic signal at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol with interconnect to the traffic signal at the Redwood Highway Frontage Road/Seminary Drive intersection. Emergency vehicle pre-emption devices shall be implemented at both intersection traffic signals. If the alternative traffic signal is implemented, design of the improvements shall be reviewed and approved by the Southern Marin Fire Protection District.

Significance after Mitigation

Mitigation Measure 3.14-3b would require the project applicant to widen any internal roadways that do not currently meet County roadway width standards. Implementation of Mitigation Measure 3.14-4 would require the project applicant to either construct a traffic signal or build a roundabout at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol to facilitate the movement of vehicles if and when emergency response is needed in the area. Mitigation Measures 3.14-3b and 3.14-4 would reduce impacts to emergency access. Therefore, the impact would be **less than significant with mitigation incorporated**.

3.15 UTILITIES AND SERVICE SYSTEMS

This section describes the applicable regulations that govern utilities and service systems, describes the existing utility and service systems (water, wastewater, stormwater, electricity, and natural gas) that serve the project site, and evaluates the potential impacts of the proposed project on these systems. The analysis is based on documents obtained from the County of Marin and the applicant (North Coast Land Holdings), as well as the *Seminary Utility Usage Summary Memorandum* prepared by CSWIST2 (included as Appendix S of this EIR). Reports submitted by the applicant have been subject to independent review and analysis. Scoping comments received regarding utilities and service systems in response to the NOP requested that the EIR address water supply; wastewater; solid waste; need for new utilities including drainage to Richardson Bay; and water pressure for firefighting services. See Appendix A for all NOP comments received.

3.15.1 Regulatory Setting

FEDERAL

Clean Water Act

The Clean Water Act (CWA) employs a variety of regulatory and nonregulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The U.S. Environmental Protection Agency (EPA) established primary drinking water standards in Section 304 of the CWA. States are required to ensure that the public's potable water meets these standards.

The National Pollutant Discharge Elimination System (NPDES) permit program was established under the CWA to regulate municipal and industrial discharges to surface waters of the US. NPDES permit regulations have been established for broad categories of discharges including point source waste discharges and nonpoint sources. Each NPDES permit identifies limits on allowable concentrations and mass loadings of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that EPA must consider in setting effluent limits for priority pollutants.

NPDES permits cover various industrial and municipal discharges, including discharges from storm sewer systems in larger cities, stormwater generated by industrial activity, runoff from construction sites disturbing more than 1 acre, and mining operations. Point source dischargers must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). So-called "indirect" point source dischargers are not required to obtain NPDES permits. "Indirect" dischargers send their wastewater into a public sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering any surface water.

The CWA was amended in 1987 with Section 402(p) requiring NPDES permits for nonpoint source (i.e., stormwater) pollutants in discharges. Stormwater sources are diffuse and originate over a wide area rather than from a definable point. The goal of the NPDES stormwater regulations is to improve the water quality of stormwater discharged to receiving waters to the "maximum extent practicable" using structural and nonstructural best management practices (BMPs). BMPs can include educational measures (e.g., workshops informing the public of what impacts can result when household chemicals are dumped into storm drains), regulatory measures (e.g., local authority of drainage-facility design), public-policy measures (e.g., labeling storm-drain inlets as to impacts of dumping on receiving waters) and structural measures (e.g., filter strips, grass swales, and detention ponds).

Safe Drinking Water Act

As mandated by the Safe Drinking Water Act (SDWA) (Public Law 93-523), passed in 1974, EPA regulates contaminants of concern to domestic water supply. Such contaminants are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA primary and secondary maximum contaminant levels (MCLs). MCLs and the process for setting these standards are reviewed every three years.

Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting drinking water MCLs. EPA has delegated responsibility for California's drinking water program to the State Water Resources Control Board (SWRCB) Division of Drinking Water. This division is accountable to EPA for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by EPA.

STATE

California Green Building Standards Code

The State of California historically establishes progressive standards that serve as models for other states and even the federal government. With the adoption of the 2010 California Green Building Standards Code (CALGreen Code), California became the first state to incorporate green building strategies into its building code. The CalGreen Code comprises Part 11 of the California Buildings Standards Code in Title 24 of the California Code of Regulations. CALGreen Code outlines mandatory and voluntary requirements for new residential and nonresidential buildings (e.g., retail, office, public schools, hospitals) throughout the state beginning on January 1, 2011.

The development and implementation of the CALGreen Code aims to (1) reduce greenhouse gas (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 directives by the Governor. Pursuant to the California Global Warming Solutions Act of 2006 (AB 32), CALGreen Code provides strategies to reduce building-related sources of GHG to attain California's 2020 and 2050 goals.

In implementing a statewide baseline for green building strategies, California recognized the adverse effects of anthropogenic climate change. CALGreen Code serves as a tool for California to reduce GHG emissions and physical waste, increase energy efficiency, and achieve water conservation and water efficiency.

Updated every 3 years, the CALGreen Code was last updated in 2022 and became effective in January 2023. The CALGreen Code was developed to enhance the design and construction of buildings, and the use of sustainable construction practices, through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental air quality.

Chapter 4 (Division 4.3) of the 2022 CALGreen Code describes measures to reduce indoor demand for potable water and to reduce landscape water usage. Divisions 4.4 and 5.4 require a minimum of 65 percent of all non-hazardous construction and demolition waste for residential and non-residential development, respectively, to be recycled and/or salvaged for reuse. Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials will be sorted on-site or mixed; and identifying diversion facilities where the materials collected will be taken. In addition, CALGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal State law governing water quality regulation in California, and applies to surface waters, wetlands, and groundwater, as well as regulation of both point and nonpoint sources of pollution. The Porter-Cologne Act implements provisions of the CWA, such as the NPDES permitting program, through the SWRCB and nine regional water quality control boards (RWQCBs), which issue permits for point source discharges. Other State agencies with jurisdiction over water quality regulation in California include the California Department of Health Services (DHS) (for drinking water regulations), the California Department of Pesticide Regulation, and the Office of Environmental Health and Hazard Assessment.

California Department of Water Resources

The California Department of Water Resources (DWR) is responsible, in cooperation with other agencies, for managing the water resources of the state. Most important is the operation of the State Water Project, which supplies water to public water systems that serve the majority of state residents (approximately 27 million people). DWR is also responsible for developing the California Water Plan, which serves as a guide to the development and management of the state's water resources.

State Water Resources Control Board

The SWRCB oversees public water systems, and has oversight of water recycling projects, issuance of water treatment permits, and certification of drinking water treatment and distribution operators. In addition, through the Drinking Water Programs, the SWRCB regulates public water systems and enforces the federal and State Safe Drinking Water Acts, including performing field inspections, reviewing plans and specifications for new facilities, taking enforcement actions for noncompliance with laws and regulations, reviewing water quality monitoring results, and supporting and promoting water system security.

California Fire Code

The 2016 California Fire Code, which is codified in Part 9 of Title 24 of the California Code of Regulations (CCR), incorporates by adoption the 2015 International Fire Code and contains regulations related to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The California Fire Code contains specialized technical regulations related to fire and life safety. The California Building Standards Code, including the California Fire Code, is revised and published every 3 years by the California Building Standards Commission.

California Safe Drinking Water Act

The SWRCB Division of Drinking Water is responsible for implementing the federal SDWA and its updates, as well as California statutes and regulations related to drinking water. State primary and secondary drinking-water standards are promulgated in CCR Title 22, Sections 64431–64501 (described in greater detail below).

The California Safe Drinking Water Act (CA SDWA) was passed in 1976 to build on and strengthen the federal SDWA. The CA SDWA authorizes DHS to protect the public from contaminants in drinking water by establishing MCLs that are at least as stringent as those developed by EPA, as required by the federal SDWA.

Title 22 Water Recycling Criteria

The California Department of Public Health (formerly the Department of Health Services) is responsible for establishing criteria to protect public health in association with recycled water use. The criteria issued by this department are found in the California Code of Regulations, Title 22, Division 4, Chapter 3, entitled Water Recycling Criteria. Commonly referred to as Title 22 Criteria, the criteria contain treatment and effluent quality requirements that vary based on the proposed type of water reuse. Title 22 sets bacteriological water quality standards on the basis of the expected degree of public contact with recycled water. For water reuse applications with a high potential for the public to come into contact with the reclaimed water, Title 22 requires disinfected tertiary treatment. For applications with a lower potential for public contact, Title 22 requires three levels of secondary treatment, basically differing by the amount of disinfectant required.

Title 22 also specifies the reliability and redundancy for each recycled water treatment and use operation. Treatment plant design must allow for efficiency and convenience in operation and maintenance and provide the highest possible degree of treatment under varying circumstances. For recycled water piping, the department has requirements for preventing backflow of recycled water into the public water system and for avoiding cross-connection between the recycled and potable water systems. The Department of Public Health does not have enforcement authority for the Title 22 criteria; instead, the RWQCBs enforce the criteria through enforcement of their permits containing the applicable criteria.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act of 2014 (SGMA)[1] became law on January 1, 2015, and applies to all groundwater basins in the state (Water Code Section 10720.3). By enacting the SGMA, the Legislature intended to provide local or regional agencies with the authority and the technical and financial assistance necessary to sustainably

[1] The SGMA is comprised of three separate bills: Senate Bill 1168, Senate Bill 1319, and Assembly Bill 1739. All three were signed into law by the Governor on September 16, 2014.

manage groundwater within their jurisdiction (CWC Section 10720.1). The SGMA is a follow up to SB X7-6, adopted in November 2009, which mandated a statewide groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevations in California's groundwater basins. In accordance with this amendment to the CWC, DWR developed the California Statewide Groundwater Elevation Monitoring (CASGEM) program.

Pursuant to the SGMA, any local agency that has water supply, water management or land use responsibilities within a groundwater basin may elect to be a "groundwater sustainability agency" for that basin (CWC Section 10723). Local agencies were given until January 1, 2017 to elect to become or form a groundwater sustainability agency. In the event a basin is not within the management area of a groundwater sustainability agency, the county within which the basin is located is to be presumed to be the groundwater sustainability agency for the basin. However, the county may decline to serve in this capacity (CWC Section 19724).

The SGMA also requires DWR to categorize each groundwater basin in the state as high-, medium-, low-, or very low priority (CWC Sections 10720.7, 10722.4). All basins designated as high- or medium-priority basins must be managed by a groundwater sustainability agency under a groundwater sustainability plan that complies with Water Code Section 10727 et seq. If required to be prepared, groundwater sustainability plans were required to be prepared by January 31, 2020 for all high- and medium-priority basins that are subject to critical conditions of overdraft, as determined by DWR, or by January 31, 2022 for all other high- and medium-priority basins.

On December 15, 2014, DWR announced its official "initial prioritization" of the state's groundwater basins for purposes of complying with the SGMA, and this priority list became effective on January 1, 2015.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (UWMPA) (California Water Code Sections 10610–10656). The UWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that provides more than 3,000 acre-feet (AF) of water annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. This effort includes the adoption of an urban water management plan (UWMP) by every urban-water supplier and an update of the plan every 5 years on or before December 31, of every year ending in a five or zero. The UWMPA has been amended several times since 1983 with the most recent amendment occurring with the enactment of SB 318 in 2004. The UWMPA and SB 610, described below, are interrelated; the UWMP is typically relied upon to meet the requirements for SB 610.

Senate Bill 610

SB 610 (Stats. 2001, ch. 643) made changes both to the UWMPA and to the rules governing the preparation of "water supply assessments" (WSAs), as originally enacted in 1995 via SB 901 (Stats.1995, c. 881). The rules governing WSA preparation are set forth in Water Code sections 10910 through 10915, which are referenced in CEQA Guidelines Section 15155, promulgated in 2007 and amended in 2018. Pursuant to SB 610 and Section 15155, cities and counties acting as lead agencies are required to identify the public water system that would serve a defined "project" and to request that such public water system prepare a WSA addressing whether the public water system has a water supply is sufficient to provide for projected water demand associated with a project when existing and future uses are also considered (CWC Section 10910 [c] [3]). Where a city or county acts as its own public water system, the obligation to prepare the WSA falls onto the city or county. The definition of a water-demand project is the same as CEQA Guidelines Section 15155. Residential projects proposing more than 500 dwelling units come under the definition, as do office projects employing more than 1,000 persons or having more than 250,000 square feet of floor space.

Senate Bill 221

SB 221 (Stats. 2001, ch. 642), codified in the State's Business and Professions and Government Codes, applies to any proposed development of a residential subdivision that will have either:

- More than 500 units.
- Account for an increase of 10 percent or more of the number of the public water system's existing service connections if the public water system has fewer than 5,000 service connections.

If SB 221 applies to the proposed subdivision, then written verification that sufficient water supply is available for the project is required as part of the subdivision approvals.

SB 1262 (Stats. 2016, ch. 594) amended SB 221 to require water supply verifications to also include an evaluation of additional factors related to the SGMA if water supplies for a proposed project include groundwater.

Water Conservation Act of 2009

Requirements regarding per capita water use targets are defined in the Water Conservation Act of 2009, which was signed into law in November 2009 as part of a comprehensive water legislation package. Known as SB X7-7, the legislation sets a goal of achieving a 20 percent reduction in urban per capita water use statewide by 2020. SB X7-7 required that retail water suppliers define in their 2010 urban water management plans the gallons-per-capita-per-day targets for 2020, with an interim 2015 target. Water purveyors are required to select one of the four methods that the legislation defines for establishing a gallons-per-capita-per-day target.

California Code of Regulations, Title 17, Section 8007

CCR Title 17, Section 8007 requires the contents of chemical tanks to be disposed of by draining or pumping into a sanitary sewer, an approved septic tank of sufficient capacity to handle the wastes, a suitably sized and constructed holding tank, approved by the local health department, or by any other method approved by the local health department.

California's Integrated Waste Management Act of 1989

The California Integrated Waste Management Act (CIWMA) of 1989 created the California Integrated Waste Management Board, which was subsequently abolished, with its duties now carried out by the California Department of Resources Recycling and Recovery (CalRecycle). CalRecycle is the agency designated to oversee, manage, and track California's 92 million tons of waste generated each year. CalRecycle provides grants and loans to help cities, counties, businesses, and organizations meet the state's waste reduction, reuse, and recycling goals. CalRecycle promotes a sustainable environment in which these resources are not wasted but can be reused or recycled. In addition to many programs and incentives, CalRecycle promotes the use of new technologies to divert resources away from landfills. CalRecycle is responsible for ensuring that waste management programs are carried out primarily through local enforcement agencies.

The CIWMA is the result of two pieces of legislation: AB 939 and SB 1322. The CIWMA was intended to minimize the amount of solid waste that must be disposed of through transformation and land disposal by requiring all cities and counties to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000.

The 50 percent diversion requirement is measured in terms of per capita disposal expressed as pounds per day per resident and per employee. The per capita disposal and goal measurement system uses an actual disposal measurement based on population and disposal rates reported by disposal facilities, and it evaluates program implementation efforts.

Assembly Bill 341 (Mandatory Recycling Requirements)

AB 341 requires CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the state to recycle 75 percent of the solid waste generated in the state by January 1, 2020, requires businesses that meet specified thresholds in the bill to arrange for recycling services by July 1, 2012, and streamlines various regulatory processes.

Assembly Bill 827

AB 827, as approved in October 2019, requires businesses that either generates 4 cubic yards or more of commercial solid waste or 8 cubic yards or more of organic waste per week to provide accessible easily visible recycling receptacles clearly marked with educational signage next to all trash bins, except in restrooms.

Assembly Bill 1826 (Mandatory Commercial Organics Recycling Requirements)

AB 1826 requires a business that generates 4 cubic yards or more of organic waste per week to arrange for recycling services for that organic waste in a specified manner. The bill would also require a business that generates 4 cubic yards or more of commercial solid waste per week, on and after January 1, 2019, to arrange for organic waste recycling services and, if CalRecycle makes a specified determination, would decrease that amount to 2 cubic yards, on or after January 1, 2020. The bill would require each jurisdiction to report to CalRecycle on its progress in implementing the organic waste recycling program, and CalRecycle would be required to review whether a jurisdiction is in compliance with this act.

AB 1826 would require CalRecycle to identify and recommend actions to address permitting and siting challenges and to encourage the continued viability of the state's organic waste processing and recycling infrastructure, in partnership with the California Environmental Protection Agency and /other specified State and regional agencies. The bill also would require the department to cooperate with local jurisdictions and industry to provide assistance for increasing the feasibility of organic waste recycling and to identify certain State financing mechanisms and State funding incentives and post this information on its website.

Senate Bill 1374

SB 1374, Construction and Demolition Waste Materials Diversion Requirements, requires that jurisdictions summarize their progress realized in diverting construction and demolition waste from the waste stream in their annual AB 939 reports. SB 1374 required CalRecycle to adopt a model construction and demolition ordinance for voluntary implementation by local jurisdictions.

Senate Bill 1383 (Short-Lived Climate Pollutant Reduction Strategy)

The California Global Warming Solutions Act of 2006 designates the California Air Resources Board (CARB) as the State agency charged with monitoring and regulating sources of emissions of greenhouse gases. SB 1383 required CARB, no later than January 1, 2018, to approve and begin implementing that comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030, as specified. The bill also establishes specified targets for reducing organic waste in landfills.

SB 1383 requires CalRecycle, in consultation with CARB, to adopt regulations that achieve the specified targets for reducing organic waste in landfills. The bill authorizes local jurisdictions to charge and collect fees to recover the local jurisdiction's costs incurred in complying with the regulations. SB 1383 requires, no later than July 1, 2020, for CalRecycle, in consultation with CARB, to analyze the progress that the waste sector, state government, and local governments have made in achieving the specified targets for reducing organic waste in landfills. The bill authorizes CalRecycle, depending on the outcome of that analysis, to amend the regulations to include incentives or additional requirements, as specified. By adding to the duties of local governments related to organic waste in landfills, SB 1383 imposes a State-mandated local program.

Senate Bill 350 (Clean Energy and Pollution Reduction Act)

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

REGIONAL

Marin Municipal Water District Water Urban Water Management Plan

The Marin Municipal Water District (Marin Water or District) adopted its 2020 UWMP in June 2021 (Marin Water 2021). On January 9, 2024, Marin Water adopted a limited update to its 2020 UWMP (Marin Water 2024a) to account for increased water demand from updated population projections and housing allocations identified in the Association of Bay Area Governments' (ABAG) 2023-2031 Final Regional Housing Needs Allocation (RHNA) Plan. The updated UWMP is intended to address the impacts on water demand due to the increase in the numbers of dwelling units identified in the RHNA and is not a comprehensive update, which occurs every five years as required by the

UWMPA. The next full UWMP update is anticipated by June 2026 and would include additional changes that have occurred since the 2020 UWMP. Marin Water's UWMP provides information related to its historical and projected water demands, water supplies, supply reliability and potential vulnerabilities, water shortage contingency planning, and demand management programs.

LOCAL

Marin Countywide Plan

The *Marin Countywide Plan* (Marin County 2023) is a comprehensive long-range general plan for the unincorporated areas of Marin County. The following goals and policies from the Countywide Plan related to utilities and service systems are applicable to the project:

GOAL CD-5: Effective Growth Management. Manage growth so that transportation, water, sewer, wastewater facilities, fire protection, and other infrastructure components remain adequate.

- **Policy CD-5.1: Assign Financial Responsibility for Growth.** Require new development to pay its fair share of the cost of public facilities, services, and infrastructure, including but not limited to transportation, incremental water supply, sewer and wastewater treatment, solid waste, flood control and drainage, schools, fire and police protection, and parks and recreation. Allow for individual affordable housing projects to be exempted from the full cost of impact fees, subject to meeting specified criteria.

GOAL PFS-1: Adequate Public Facilities and Services. Provide basic public facilities to accommodate the level of development planned by cities and towns and the County.

- **Policy PFS-1.1: Require Cost-Sharing.** Require new development to pay for the infrastructure it requires and the public services it receives.
- **Policy PFS-1.2: Plan Effectively to Minimize Costs.** Plan public facilities in cooperation with service providers to minimize short- and long-term construction, operation, and maintenance costs.
- **Policy PFS-1.3: Discourage Privatization and Commercialization.** Encourage public ownership of utilities and public service facilities by not authorizing privatization of water, sewer, law enforcement, emergency service, school, and other essential services. Consider prohibiting corporate sponsorship and commercially driven naming rights of public facilities and lands as a means to fund maintenance and improvements.
- **Policy PFS-1.4: Reduce Demand on Public Facilities.** Reduce per capita and total demand for water and wastewater treatment, and enhance storm water management through integrated and cost-effective design, technology, and demand reduction standards for new development and redevelopment.

GOAL PFS-2: Sustainable Water Resources. Assure a reliable, sustainable water supply for existing and future development while protecting the natural environment.

- **Policy PFS-2.1: Conserve Water and Utilize Sustainable Sources**. Promote conservation to increase the responsible use and reliability of water supplies. Reduce the waste of potable water through efficient technologies, design, and management practices, and through better matching of the source and quality of water to the user's needs.
- **Policy PFS-2.2: Mitigate Increased Water Demand in New Development.** Work with local water agencies to mitigate increases in water demand due to new development by supporting water efficiency programs that decrease demand by a similar amount.
- **Policy PFS-2.3: Manage Water Resources Sustainably.** Manage water resources to ensure equitable amounts of clean water for all users, to support wildlife habitat, and to preserve natural resources within the sustainable limits of water supplies.

GOAL PFS-3: Reduction, Safe Processing, and Reuse of Wastewater. Continue to enhance the Alternative Onsite Wastewater Monitoring Program. This program ensures the proper operation of alternative and innovative wastewater system designs. Continue to work with manufacturers, designers, installers, end users, and the Regional Water Quality

Control Board to evaluate the effectiveness and capabilities of these alternatives to traditional septic system designs. Work with stakeholders to periodically update design guidelines and regulations in the light of evolving best practices.

- **Policy PFS-3.1: Reduce Toxics in Wastewater.** Minimize the potential for pollution to water and other resources from sewage treatment.
- **Policy PFS-3.3: Reduce Storm Water Volume.** Implement appropriate upstream water-saving technologies to reduce storm water volumes and increase percolation. Increase permeable surfaces and encourage on-site percolation to reduce storm water volume and potential overflow of wastewater treatment facilities.

GOAL PFS-4: Efficient Processing and Reduced Landfill Disposal of Solid Waste. Minimize, treat, and safely process solid waste materials in a manner that protects natural resources from pollution while planning for the eventual reuse or recycling of discarded material to achieve zero waste.

- **Policy PFS-4.1: Reduce the Solid Waste Stream.** Promote the highest and best use of discarded materials through redesign, reuse, composting, and shared producer responsibility. Emphasize a closed-loop system of production and consumption.
- **Policy PFS-4.2: Protect Environmental Health.** Require the use of waste processing and disposal techniques that prevent the contamination or other impairment of natural resources.
- **Policy PFS-4.3 Plan for Waste Transformation or Disposal.** Plan for the transformation or elimination of waste materials that cannot be reduced, recycled, or composted.
- **Policy PFS-4.4: Promote Regulatory Efforts**. Support State legislative or regulatory efforts that will aid in achieving zero waste.

Marin County Solid Waste Program

In November 1992, Environmental Health Services was re-designated as the solid waste Local Enforcement Agency (LEA) for Marin County by the eleven cities and County of Marin and subsequently certified by the California Integrated Waste Management Board (CIWMB). Prior to that date, and since 1977, Environmental Health Services was designated as the enforcement agency for solid waste provisions applicable during that period. The current certification enables Environmental Health Services staff to permit, inspect and enforce regulations at solid waste disposal sites, solid waste transformation facilities, transfer and processing stations, and materials recovery facilities.

The purpose of this program is to protect the public health and the environment from the effects of improper storage, collection, transportation, and disposal of solid waste including flies, rodents, scenic blight, public nuisance, and water pollution. The goal of this program is accomplished through a program of inspection, permitting, complaint investigation, public education, and assistance to industry (Marin County 2021).

Zero Waste Marin

Zero Waste Marin is the informal name for the Marin County Hazardous and Solid Waste Program and is a joint-powers authority (JPA) established under the Integrated Waste Management Act of 1989. The JPA was formed to help residents and businesses meet the County's Zero Waste goal by reducing and recycling their solid waste and safely disposing of hazardous materials. Zero Waste Marin consists of city and town managers of Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato, Ross, San Anselmo, San Rafael, Sausalito and Tiburon and the County of Marin. In addition to addressing the statutory requirements of the Integrated Waste Management Act, Zero Waste Marin also provides hazardous waste collection to citizens and businesses in almost all areas of Marin (Zero Waste Marin 2023).

Marin County Code

Chapter 20.20.060 (Water Supply) of the Marin County Code discusses County requirements pertaining to providing adequate water for development projects. Chapter 23.10 (Water Efficiency in Landscaping) includes minimum criteria for water efficiency standards to protect Marin County water resources.

The Marin County Code also includes requirements for both construction and operation-related solid waste. Chapter 19 of the Marin County Code adopts the 2022 edition of CALGreen (CCR, Part 11 of Title 24) as part of its building

code (Chapter 19.04), which requires a minimum of 65 percent of all non-hazardous construction and demolition waste for residential and non-residential development to be recycled and/or salvaged for reuse. CALGreen is described in greater detail in the "State" regulations discussion above. Chapter 7 of the Marin County Code includes solid waste collection, diversion, and disposal requirements for both residential generators (Section 7.00.060) and commercial generators, including multi-family dwellings (Section 7.00.070).

Marin County Community Development Agency, Building and Safety Division

Prior to issuance of a Building Permit, the Building and Safety Division requires project applicants to provide a letter from the appropriate water district regarding availability of water service, including district certification that a water meter exists or is available and that arrangements have been completed for water service, or, if a well or other water supply is proposed as the water supply, then a letter of approval from the Environmental Health Division is required.

The Building and Safety Division also requires project applicants to provide a letter from the appropriate sanitary district regarding availability of sewer service, including district certification that a legal connection is available.

Marin County Uniform Construction Standards

The Marin County Uniform Construction Standards (UCS) were developed by the Marin Public Works Association, an organization of engineers representing the County of Marin and the towns/cities across the county, to ensure consistency of construction and other improvements in the roadway, including storm drain facilities. The UCS apply to all cities/towns and the unincorporated county. The UCS are periodically updated, with the latest version being adopted in July 2018.

3.15.2 Environmental Setting

Public utilities in the project area are provided by various entities, as identified in Table 3.15-1 and discussed in detail below.

Table 3.15-1 Utilities Providers for the Project Area

Utility	Agency/Provider
Water Supply	Marin Municipal Water District (Marin Water or District)
Wastewater Collection and Conveyance	Richardson Bay Sanitary District
Wastewater Treatment	Sewerage Agency of Southern Marin
Stormwater Conveyance	Marin County Public Works Department
Solid Waste Collection	Mill Valley Refuse Service
Solid Waste Disposal Facility	Redwood Landfill and Recycling Center
Electrical Service	Pacific Gas & Electric
Natural Gas	Pacific Gas & Electric
Telecommunications	Various providers, such as AT&T, T-Mobile, Verizon, Sprint, etc.

Source: Data compiled by Ascent Environmental in 2023.

WATER SUPPLY

Marin County's water supplies include surface water, groundwater, recycled water, and imported water. Surface water is the main source of supply for urban areas in the central and southeastern portion of the County, while both groundwater and surface water are the primary sources for rural areas. The majority of water supply in the northeastern portion of the County (Novato and surrounding areas) is imported water from Sonoma County Water Agency (SCWA). There are six water districts and independent water systems supplying water to Marin residents. The project site is within the service area of Marin Water.

Unless noted otherwise, the following information is summarized from Marin Water's Updated 2020 UWMP (Marin Water 2024a). Marin Water has a service area of approximately 147 square miles that includes the eastern corridor of Marin County, extending from the Golden Gate Bridge northward up to, but excluding, the City of Novato. The service area is bounded by the San Francisco Bay on the east and stretches through the San Geronimo Valley in the west. The incorporated cities and towns of San Rafael, Mill Valley, Fairfax, San Anselmo, Ross, Larkspur, Corte Madera, Tiburon, Belvedere, and Sausalito are all within Marin Water's service area, as well as several unincorporated communities including Strawberry, in which the project site is located. In total, Marin Water serves approximately 191,000 customers within its service area.

Marin Water's water supplies are derived from a combination of local surface water supplies, imported water from SCWA, and recycled water. Marin Water does not currently pump groundwater, nor does it plan to use groundwater as a water supply source in the future. Approximately 75 percent of the District's water supply is from local surface waters (Marin Water 2023a), including seven reservoirs that have a combined storage capacity of 25.9 billion gallons (79,566 AF). Five of the seven reservoirs (Alpine, Bon Tempe, Kent, Lagunitas, and Phoenix Lake) maintained by Marin Water are located on the north slope of Mt. Tamalpais. The remaining two reservoirs (Nicasio and Soulajule) are outside Marin Water's service area in western Marin County.

Additionally, Marin Water receives purchased water via SCWA's transmission system, which provides treated water from SCWA's Russian River Project. The Russian River flows are augmented by Pacific Gas and Electric's (PG&E's) Potter Valley Project, which diverts a portion of the Eel River flows to the East Fork of the Russian River. Water is diverted and extracted from the stretch of the Russian River located just upstream of Wohler Bridge via six radial wells known as "Ranney collectors." The diverted river water percolates through sand and gravel and includes the addition of chlorine to meet drinking water quality standards. Although the water extracted via Ranney collectors percolates through the ground, due to the connection to the surface water source, this diversion is considered and is permitted as a surface water supply under existing surface water rights to the Russian River and Dry Creek water. The SCWA supply also includes a relatively small amount of groundwater from groundwater supply wells located in the central Santa Rosa Plain subbasin.

According to SWCA's 2020 UWMP, four water rights permits (Permits 12947A, 12949, 12950, and 16596) are currently issued by the SWRCB that authorize SWCA to store up to 122,500 acre-feet per year (AFY) of water in Lake Mendocino and up to 245,000 AFY of water in Lake Sonoma, and to divert or redivert up to 180 cubic feet per second (cfs) of water from the Russian River with a limit of 75,000 AFY. The permits also establish minimum instream flow requirements for fish and wildlife protection and recreation. These minimum instream flow requirements vary based on the hydrologic classifications of normal, dry, and critical water supply conditions as defined by SCWA's water rights permits and SWRCB Decision 1610, adopted in 1986. SCWA meets the various instream flow requirements by making releases from Coyote Valley Dam and Warm Springs Dam (SCWA 2021). Marin Water's Supplemental Water Supply Agreement with SCWA allows deliveries of up to 14,300 AFY of water from SCWA. However, the District's ability to accept this volume is currently limited by infrastructure constraints that restrict conveyance capacity to about 10,000 AFY. The agreement between Marin Water and SCWA was last renewed on June 16, 2015 and extends through June 30, 2025, with a renewal provision that would further extend the agreement through June 30, 2040.

Lastly, Marin Water relies on recycled water derived from treated wastewater to meet a portion of its water demands. Recycled water within the District's service area is drawn from a Recycled Water Facility at Las Gallinas Valley Sanitary District where it is treated to tertiary levels and is primarily used for irrigation purposes (approximately 95 percent). It is also used for flushing toilets, car washes, heating, ventilation, and air conditioning cooling towers, and commercial laundries. Marin Water's recycled water system consists of nearly 25 miles of pipeline, which delivered about 748 AFY through approximately 300 service connections in 2020.

Marin Water currently distributes an average of 22 million gallons of water per day (mgd) and has a 55 mgd daily water production potential (Marin Water 2020). Marin Water's potable and raw water distribution system includes approximately 886 miles of water mains, 94 pump stations, and 121 treated water storage tanks with a total storage capacity of 74.9 million gallons. Water is treated at Marin Water's three treatment plants: the Bon Tempe Treatment Plant near Ross, the San Geronimo Treatment Plant in Woodacre, and the Ignacio treatment facility in Novato. In total, these facilities have a combined design treatment capacity of 71 mgd. Observed high flows reached 45 mgd in

July 2006; however, the average daily maximum flow was approximately 22.4 mgd over the last 10 years. In 2019, the total production of the three plants averaged 22.8 mgd.

Marin Water's potable water system includes pipelines ranging in size from 3/4-inch pipes connecting customers' water meters to the District's mains, to the 42-inch transmission mains that carry source water to the treatment plants. In addition to the District's potable water system, it also owns and operates a recycled water system.

As discussed in Section 3.15.1, "Regulatory Setting," Marin Water adopted a limited update to its 2020 UWMP on January 9, 2024, to account for increased water demand from updated population projections and housing allocations identified in ABAG's 2023-2031 Final RHNA Plan. Marin Water's Updated 2020 UWMP provides existing and projected water demand and estimated supply between 2025 and 2045 under normal and dry year weather conditions (single and multiple), as shown in Table 3.15-2.

Table 3.15-2 Marin Water Normal, Single-, and Multiple-Dry Year Water Supply and Demand (2025–2045) (AFY)

	2025	2030	2035	2040	2045
Normal Year					
Supply	84,761	85,017	84,751	84,784	84,852
Demand	38,632	40,211	40,369	40,434	40,608
Difference	46,129	44,806	44,381	44,350	44,244
Single-Year Dry					
Supply	52,132	52,137	52,135	52,139	52,149
Demand	38,632	40,211	40,369	40,434	40,608
Difference	13,500	11,926	11,766	11,705	11,541
Multiple-Year Dry (First Year)					
Supply	79,556	79,560	79,560	79,562	79,567
Demand	38,632	40,211	40,369	40,434	40,608
Difference	40,924	39,349	39,191	39,128	38,959
Multiple-Year Dry (Second Year)					
Supply	84,321	84,313	84,342	84,314	84,262
Demand	38,632	40,211	40,369	40,434	40,608
Difference	45,689	44,102	43,973	43,880	43,654
Multiple-Year Dry (Third Year)					
Supply	86,430	86,448	86,419	86,453	86,530
Demand	38,632	40,211	40,369	40,434	40,608
Difference	47,798	46,237	46,050	46,019	45,922
Multiple-Year Dry (Fourth Year)					
Supply	72,700	72,695	72,728	72,696	72,627
Demand	38,632	40,211	40,369	40,434	40,608
Difference	34,068	32,484	32,359	32,262	32,019
Multiple-Year Dry (Fifth Year)					
Supply	69,441	69,432	69,471	69,432	69,328
Demand	38,632	40,211	40,369	40,434	40,608
Difference	30,809	29,221	29,102	28,998	28,720

Source: Marin Water 2024a, Tables 7-7 through 7-9.

As shown in Table 3.15-2, future demand would be met (and exceeded) by the supply in each 5-year increment through 2045, including in normal, single dry year, and multiple dry years. The water demand and supply projections in Table 3.15-2 account for the additional demand from updated population projections and housing allocations identified in ABAG's 2023-2031 Final RHNA Plan. As concluded in the staff report for the Updated 2020 UWMP, Marin Water would be able to support the additional demand without additional water supplies or triggering special measures (Marin Water 2024b). These water supply and demand projections are reevaluated for the reasonably foreseeable future (i.e., 20-year planning period) as part of the UWMP update process, which occurs every 5 years as required by the UWMPA. However, in some instances, water demand projections are updated outside of the 5-year cycle.

Severe conditions brought on by the drought in more recent years have intensified Marin Water's focus on strengthening the reliability of its water supply. In 2022 and 2023, Marin Water conducted a Strategic Water Supply Assessment to evaluate its current baseline water supply in the context of climate change-driven drought and to evaluate the potential effects of future water management alternatives that could improve the District's long term water supply resiliency. As a result of this effort, Marin Water was able to develop a Strategic Water Supply Roadmap, which combines a mix of short-term water supply strategies with pre-design work to support medium- and longer-term options. The Strategic Water Supply Roadmap was approved by the Marin Water Board of Directors on February 28, 2023 (Marin Water 2023b).

Marin Water also maintains a Water Shortage Contingency Plan (WSCP), as required by California Water Code Sections 10640 and 10632. The current version of the WSCP was adopted in February 2023, and builds on and supersedes the WSCP presented in the 2020 UWMP. Additionally, as part of the limited update to the 2020 UWMP, Marin Water adopted accompanying amendments to portions of the WSCP on January 9, 2024. The WSCP serves as a framework of planned response measures to mitigate future water supply shortages caused by drought or supply interruptions caused by infrastructure failure, regulatory mandate, or catastrophic human-caused or natural events. The primary objective of the WSCP is to ensure that Marin Water has the necessary resources and management responses in place needed to protect human health and safety, minimize economic disruption, and preserve environmental and community assets during water supply shortages and interruptions. The WSCP also includes procedures to conduct an annual assessment of water supply and demand to determine whether water shortage conditions are likely to exist in the forthcoming year, and to proactively begin the process of implementing WSCP stages of action, as appropriate (Marin Water 2024c).

WASTEWATER

There are thirteen sanitary sewer districts and service areas and six sewage treatment plants in the City-Centered Corridor of Marin County. Various sewage treatment plants in the county have either completed, or are in the process of completing, improvement projects to address potential growth, wet weather capacity issues, and more stringent state and federal regulations.

The project site is within the service area of the Richardson Bay Sanitary District, which collects wastewater from over 4,140 households on the Tiburon Peninsula and in the unincorporated community of Strawberry. The Richardson Bay Sanitary District conveys wastewater within its service area to the Sewerage Agency of Southern Marin (SASM) Wastewater Treatment Plant for processing and treatment. The SASM is a Joint Powers Agency formed in 1979 to consolidate the wastewater collection, treatment, water reclamation and disposal needs of about 29,500 residents in Southern Marin County. The Richardson Bay Sanitary District is a member agency of SASM. At the SASM Wastewater Treatment Plant, wastewater flows through several treatment units that reduce and remove a variety of pollutants and organic materials. The processed wastewater is disinfected and pumped 6 miles to Racoon Straits in Tiburon for deep water discharge into the San Francisco Bay (SASM 2023a). The SASM Wastewater Treatment Plant has a total daily dry-weather treatment capacity of 3.6 mgd, with a remaining dry-weather treatment capacity of 1.38 mgd as of 2022 (Marin County 2022).

The SASM Wastewater Treatment Plant Master Plan (WWTP) is a comprehensive 30-year roadmap for SASM's efforts to rehabilitate and replace existing infrastructure, plan for expected new legal requirements, protect the plant from flooding due to 100-year flood events and sea level rise, prepare for its future growth needs, incorporate

sustainability initiatives and reduce the impact of the plant's odor on its neighbors (SASM 2023b). The plan outlines the recommended improvements that would be implemented in the near term (i.e., within 5 years) and long-term (i.e., within 25 years), with recommended improvements categorized into the following 8 groups:

- Group 1 – Rehabilitation and Replacement Improvements,
- Group 2 – Capacity Improvements to Treat Existing and Future Flows/Loads,
- Group 3 – Flood Mitigation Projects,
- Group 4 – Improvements Required if Ammonia Removal is Required,
- Group 5 – Improvements Required if Nitrogen Removal is Required,
- Group 6 – Improvements Required if Blending is Prohibited,
- Group 7 – Recycled Water Expansion Project, and
- Group 8 – Collection and Conveyance Systems Improvements.

As noted above, Group 2 projects within the WWTP Master Plan include capacity improvement projects that are necessary to treat existing and future flows and loads. Specifically, these improvements are intended to provide enough effluent discharge capacity to allow the WWTP to operate at its rated secondary treatment capacity of 24.7 mgd under all conditions. The WWTP Master Plan identifies the following two capacity improvement projects (SASM 2014).

- **Replace Outfall Diffusers.** The diffusers in the shared outfall with Sanitary District No. 5 of Marin County would be replaced with new lower head loss, higher flow diffusers.
- **Add Second Effluent Magnetic Flow Meter.** A second flow meter would be installed in parallel to the existing effluent flow meter to resolve a hydraulic bottleneck at this location. Automated valves would allow one flow meter to be taken offline during dry weather periods.

As part of the WWTP Master Plan, SASM recently implemented the WWTP Rehabilitation Project. Phase 1 of the WWTP Rehabilitation Project began in April 2018 and was completed in 2020. Phase 2 started in 2020 and was completed by the end of 2021. The primary goal of the program is to help ensure reliable treatment of wastewater, as well as compliance with regional, State, and Federal regulations, including the NPDES permits that enhance water quality. Numerous upgrades of major equipment and rehabilitation of existing infrastructure were key components of these two phases of this SASM construction program (SASM 2023c). The following improvements were completed as part of the WWTP Rehabilitation Project:

- Headwork Building Belt-press Room Ventilation Modifications,
- Rehabilitation of Secondary Clarifier Number 1,
- Rehabilitation of Secondary Clarifier Number 2,
- Hypochlorite Storage and Transfer System,
- Rest Area Improvements,
- Digester Tank Number 1 Floating Cover Replacement,
- Cathodic Protection System (CP-1) Replacement,
- Trickling Filter #1 & #2 Media Replacement, and
- Main Plant Switchgear Replacement.

STORMWATER DRAINAGE SYSTEMS

Stormwater in Marin County is collected by storm drain inlets and transported through conveyance structures before discharging into downstream receiving waters. Storm drains located along County-maintained roadways are maintained by Marin County DPW. The project site contains 18.9 acres of existing impervious area (roofs, roads,

parking areas, etc.) that are drained by an existing storm drain system. The existing storm drain system includes 14 outlets that ultimately drain to Richardson Bay (Appendix N) (see Figure 3.9-2, "Existing Stormwater infrastructure" in Section 3.9). Most of the outlets are on the west side of the peninsula but a small area flows east into Richardson Bay through two outlets (Appendix N). The County maintains the County-owned storm drains and inlets both within and outside of the project site.

SOLID WASTE

The Marin County Hazardous and Solid Waste JPA, known as Zero Waste Marin, contracts with the County of Marin to provide staffing, administer zero-waste programs, and ensure compliance with the States recycling mandates. The County of Marin administers the collection franchises for the unincorporated areas of the County. Zero Waste Marin is a State-approved regional agency that works to reduce disposal in landfills and promotes recycling and the proper handling of household hazardous wastes. It develops and implements the County's Regional Integrated Waste Management Plan and administers the Marin Countywide Hazardous Waste Management Plan. Solid waste collection in the County is managed by 22 franchising agencies including 10 of the 11 cities, 11 special districts, and the County. Each agency franchises with one of four private haulers, except for one special district that provides its own service. Solid waste services within the project area are provided by Mill Valley Refuse Service, which provides residential, apartment, and commercial garbage, recycling, and compost service in Mill Valley and several southern unincorporated areas of Marin County (Mill Valley Refuse Service 2021).

Redwood Landfill and Recycling Center, located north of Novato, is the only permitted landfill operating in the county since the closure of the West Marin Landfill in 1998. The landfill is a Class III disposal facility that is privately owned and operated by Waste Management, and received its most current Solid Waste Facilities Permit (SWFP) on October 13, 2014 from CalRecycle. The landfill occupies a total of approximately 385 acres with a disposal area of approximately 223 acres. The landfill has a current permitted maximum daily disposal capacity of 2,310 tons per day, which includes 1,390 tons of municipal source waste. Additionally, the landfill's total daily permitted traffic volume is 662 vehicles, of which 50 trips are for employees (Marin County 2022).

The landfill's current design capacity is 26.08 million cubic yards (CY) and has an estimated closure date of 2036, but increased recycling and resource recovery activities in the county may extend its life span. In addition, Waste Management is currently working with the County to extend operation of the landfill beyond the current estimated closure date of 2036. At the time of this EIR, the potential extension of the landfill's closure date is in the preliminary planning stages (McCutcheon, pers. comm., 2024). In 2021, the landfill received a total of approximately 300,000 tons of waste from the County. In addition to municipal solid waste, the landfill also receives construction waste and non-hazardous sewage sludge. The landfill also has the largest composting facility in the county. Collection of separated recyclables is available to all single-family residences, multi-family complexes, and businesses throughout the county. Most of the collected materials are processed at the Marin Recycling Center in San Rafael, which serves as the primary material recover facility for residential curbside recyclable materials in the central portion of the county. Additional resource recovery services are provided at the Marin Resource Recovery Center (MRRC) in San Rafael. These facilities are both privately owned and operated by Marin Sanitary Service. Additionally, the County operates a waste transfer station at the MRRC. The non-recycled wastes from the transfer station and MRCC are disposed of at the Redwood Landfill (Marin County 2022).

In 2021, the MRRC received a total of 243,707 tons of waste, while the County transfer station handled 56,310 tons of waste. Combined, these facilities received a total of 300,017 tons waste. In 2021, these facilities produced 167,831 tons of recycled materials, which represents 56 percent of the total wastes received for 2021 (Marin County 2022).

ELECTRICITY AND NATURAL GAS

Pacific Gas and Electric (PG&E) provides electricity and natural gas services to the residents and businesses of Marin County. The unincorporated County is also serviced by the Community Choice Aggregate (CCA) Marin Clean Energy (MCE) Community Choice Energy, which provides decarbonized energy options to its customers in partnership with PG&E. Customers may elect to enroll in MCE with options for either 60 or 100 percent electricity sourced from

renewable sources depending on the package purchased. CCAs in the San Francisco Bay Area, including MCE, utilize PG&E infrastructure to deliver low-carbon electricity to their customers. The project site is not currently enrolled in MCE.

PG&E serves a total of 5.5 million electric customers and 4.5 million natural gas customers within a service area extending from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to Sierra Nevada in the east. The PG&E electricity distribution system consists of 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines. The natural gas system consists of 42,141 miles of natural gas distribution pipelines and 6,438 miles of transmission pipelines (PG&E 2023a). In 2021 PG&E provided its customers with 30 percent eligible renewable energy (i.e., biomass combustion, geothermal, small scale hydroelectric solar, and wind) and 18 percent and 52 percent from large scale hydroelectric and natural gas, respectively (PG&E 2023b).

According to PG&E and the California Energy Commission (CEC), county-wide residential electrical consumption increased from 619 million kilowatt hours (kWH) in 1995 to 734 million kWH in 2000 and leveled off to 700.3 million kWH by 2020. Non-residential energy consumption also increased from 646 million kWH in 1995 to 834 million kWH in 2000 but then decreased back to 629.7 million kWH by 2020. PG&E has been making continual improvements to the delivery system and expects to be able to provide energy resources to meet anticipated demand as growth occurs in the future. In addition to maintaining adequate capacity, PG&E is continuing its program to underground existing electrical lines as funds become available (Marin County 2022).

For natural gas, the CEC estimates county-wide natural gas consumption in 2020 was 5,040 million cubic feet (Mcf) for residential uses and 1,680 Mcf for non-residential uses. The California Legislature changed the distribution and supply of energy in 1996 when it enacted laws that deregulated the energy industry. This resulted in a significant increase in electricity and gas bills to Marin residents when the law went into effect in northern California in late 2000. Depending on state or regional supply constraints or periods of high demand, the California Independent System Operator decides when rotating outages are necessary to reduce demand on the electric power grid (Marin County 2022).

TELECOMMUNICATIONS

Telecommunication services involve the transmission of information and include phone services (landlines and/or wireless services), internet (dial-up, fiber optics, broadband), television (cable, etc.), AM/FM radio, and computer networking. As defined by Federal Standard 1037C, telecommunication facilities include the following:

- Any fixed, mobile, or transportable structure, including all installed electrical and electronic wiring, cabling, and equipment and all supporting structures, such as utility, ground network, and electrical supporting structures.
- A network-provided service to users or the network operating administration; a transmission pathway and associated equipment.
- A real property entity consisting of one or more of the following: a building, a structure, a utility system, pavement, and underlying land.

Basic hardline telephone services in Marin County are provided by SBC and Verizon. Verizon serves the Novato area and SBC serves the remainder of Marin County. Residents have the option of choosing between various long distance telephone service providers due to deregulation of the telephone industry in California in 1996 (Marin County 2003).

Wireless telecommunication services in the county are provided by various private companies. Additionally, Comcast/Xfinity is the primary provider of cable television in the county. Some companies also provide cable television services either separately or bundled with telecommunication services.

3.15.3 Environmental Impacts and Mitigation Measures

ANALYSIS METHODOLOGY

The analysis of impacts associated with utilities (wastewater, water, stormwater, solid waste, natural gas, electricity, and telecommunications) as a result of implementation of the proposed project generally includes a comparison of

the demand generated by the project and the existing supply and storage capacities. In the case of water supply, this comparison also considers future water supply conditions. A significant impact could occur if new or expanded facilities would be required to meet the utility demand of the proposed project, and the construction of these utilities would result in significant environmental impacts. Utility use estimates for the proposed project are based on CalEEMod default generation rates for utilities, including water, wastewater, solid waste, natural gas, and electricity. Potential impacts on telecommunication facilities are analyzed qualitatively.

Water Demand

The impact analysis of existing water systems and water supply focuses on a comparison of the project-related water demand as it relates to available supply and the sufficiency of the existing water infrastructure to support that demand. California Water Code Section 10910 requires city and county lead agencies to request that water purveyors prepare water supply assessments for certain projects subject to CEQA. The project does not meet the definition of a water demand project under the Water Code; therefore, California Water Code Section 10910 does not apply to the proposed project, and a Section 10910 water supply assessment is not required. This EIR evaluates water supply impacts based on the significance thresholds noted below.

The entitlement/historic and existing water use at the project site is based on the *Seminary Utility Usage Summary Memorandum* prepared by CSW|ST2 (included as Appendix S of this EIR). Existing water use at the project site is based on a review of meter readings from three onsite water meters from 2020. Estimated water demand for the proposed project is based on CalEEMod default generation rates. Table 3.15-3 shows the entitlement/historic usage, existing usage, and projected water demand for the proposed project.

Table 3.15-3 Entitlement/Historic Use, Existing Use, and Projected Water Demand

	Historic[1]	Existing[1]	Projected[2]	Net Change Over Existing
Daily (gallons)	94,858	61,712	115,900	+54,188
Annual (million gallons)	34.6	22.5	42.3	+19.8
Annual (acre-feet)	106.2	69.1	129.8	+60.7

Source: [1] Appendix S; [2] Appendix C.

Wastewater

Impacts related to wastewater conveyance and treatment capacity were evaluated by estimating the project-generated increase in wastewater resulting from the project, and determining whether the existing wastewater treatment and conveyance infrastructure has adequate capacity to accommodate the increase.

The historic and existing wastewater generation at the project site is based on the *Seminary Utility Usage Summary Memorandum* prepared by CSW|ST2 (included as Appendix S of this EIR). Estimated wastewater generation for the proposed project is based on CalEEMod default generation rates. Table 3.15-4 shows the historic, existing, and projected wastewater generation for the proposed project.

Table 3.15-4 Historic Use, Existing Use, and Projected Wastewater Generation

	Historic[1]	Existing[1]	Projected[2]	Net Change Over Existing
Daily (gallons)	66,679	37,012	70,778	+33,766
Annual (million gallons)	24.3	13.5	25.8	+12.3

Source: [1] Appendix S; [2] Appendix C.

Storm Drainage

Impacts associated with storm drainage could occur if the proposed project would require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. As part of the Hydrology and Hydraulic Study (Appendix N) existing drainage issues on the project site were evaluated and necessary improvements to accommodate project-related stormwater

runoff were identified. The environmental effects associated with the construction of any new or expanded facilities needed to serve the project were then analyzed in the impact analysis below.

Solid Waste

Impacts associated with solid waste would generally involve an estimation of construction- and operation-related solid waste generation compared to the capacity of the landfills serving the project site. The projected solid waste generation for the proposed project is based on CalEEMod default generation rates (Appendix C). Based on these generation rates, it is estimated that the proposed project would generate approximately 278 tons of solid waste per year, or 0.76 tons per day. To be consistent with the analyses in Sections 3.6, "Energy" and 3.8 "Greenhouse Gas Emissions and Climate Change Vulnerability," this analysis assumes that all solid waste generated at project buildout would be new, which is a conservative approach (i.e., avoiding the risk of understating an impact).

Electricity and Natural Gas

Impacts associated with electricity and natural gas could occur if the proposed project would require or result in the construction of new or expanded electricity and natural gas facilities, the construction of which could cause significant environmental effects.

The entitlement/historic and existing electricity usage at the project site is based on the *Seminary Utility Usage Summary Memorandum* prepared by CSW|ST2 (included as Appendix S of this EIR). Existing electricity usage at the project site is based on consumption data (i.e., kilowatt-hours) from the project proponent, which was determined based on electric meter readings from 2020 to 2021. Forecasted electricity and natural gas usage for the proposed project is based on CalEEMod default generation rates. Historic and existing data of natural gas consumption at the project site were not available. Applying a conservative analysis approach to avoid the risk of understating an impact, the analysis in this section reports that all forecasted project-related natural gas usage would be new. Because there are existing buildings on the site that currently use natural gas, this likely overstates the project's natural gas usage. Nonetheless, this method provides a reasonable estimate for impact analysis absent historic and existing data. Table 3.15-5 shows the historic, existing, and projected electricity usage for the proposed project.

Table 3.15-5 Historic Use, Existing Use, and Projected Electricity and Natural Gas Usage

	Historic[1] (Daily)	Existing[1] (Daily)	Projected[2] (Daily)	Net Change Over Existing (Daily)
Electricity (kWh)	7,370	2,762	4,599	+1,837
Natural Gas (kBTU)	--	--	10,761	+10,761

Source: [1] Appendix S; [2] Appendix C.

THRESHOLDS OF SIGNIFICANCE

Impacts related to utilities and service systems would be significant if the proposed project would:

- 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;
- have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand, in addition to the provider's existing commitments;
- 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;
- not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

ISSUES NOT DISCUSSED FURTHER

All the issues identified in the preceding list of thresholds are addressed in the following impact analysis.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.15-1: Construction Impacts of New or Expanded Water, Wastewater Treatment, or Storm Water Drainage, Electric Power, Natural Gas, or Telecommunications Facilities

Implementation of the proposed project would require the construction of utility extensions and expansions to serve the proposed new development. Development of the site would include retention of existing infrastructure as well as installation of new utility lines and infrastructure. Because these improvements are needed to accommodate project-related water demand, wastewater generation, stormwater runoff, and electricity and natural gas demand, they are included as part of the proposed project. The potential impacts associated with construction of the proposed project, including utilities, have been analyzed throughout this EIR. The proposed project would not require the construction of new or expanded offsite utilities to serve the project's demand, and no additional utilities beyond those described in Chapter 2, "Project Description" would be required. The installation of these utilities would not result in any additional impacts beyond those disclosed in this EIR. Therefore, this impact would be **less than significant**.

The project site includes existing utility infrastructure for potable water, sanitary sewer, gas, electricity, and stormwater. Although the proposed project would increase demand for communications services, including cable, voice, and data services, the project site is in an urbanized area currently served by telecommunication facilities and would not increase the demand such that new or expanded telecommunication facilities would be required to serve the project. Implementation of the proposed project would require the extension of various onsite utility lines to the proposed new structures to accommodate the increased utility demands of the project. Development of the site would include retention of existing infrastructure as well as installation of new utility lines and infrastructure. Proposed infrastructure is described below for each of the planning areas. All of the following improvements would be installed within the boundaries of the project site.

- **Academic Campus Planning Area:** No utility improvements would be implemented in this planning area.
- **Chapel Hill Planning Area:** Installation of a new storm drain and stormwater treatment area, new water line, five (5) new fire hydrants, new 6-inch sewer line.
- **Dormitory Hill Planning Area:** Installation of a new storm drain and stormwater treatment area, eight (8) new fire hydrants, and replacement of existing 6-inch sewer line with new 8-inch sewer line along Storer Drive.
- **Hodges/Shuck Planning Area:** Installation of a new storm drain and stormwater treatment area, new water line on Shuck Lane, ten (10) new fire hydrants, new 8-inch sewer line on Shuck Drive, and a replacement of an existing sewer line within Hodges Drive with a new 8-inch sewer line.
- **Mission Drive Planning Area:** Installation of a new storm drain, relocation of an existing storm drain along Mission Drive, and stormwater treatment area.
- **Reed/Storer/Shuck Planning Area:** Installation of a new water line and 6-inch sewer line on Green Lane, four (4) new fire hydrants, and replacement of existing 6-inch sewer line with new 8-inch sewer line along Storer Drive (shared with Dormitory Hill Planning Area).
- **Seminary Point Planning Area:** Installation of a new storm drain and stormwater treatment area, new 6-inch sewer line, new water line on Chapel Drive, and two (2) new fire hydrants.
- **Shuck Drive Knoll Planning Area:** Installation of a new storm drain and stormwater treatment area, a new water line on Shuck Knoll, one (1) new fire hydrant, and a new 6-inch sewer line.

The installation of new utility lines to serve the project would require ground disturbing construction activities. All newly installed utility lines would be constructed within joint trenches, existing roadways, or within the footprint of existing utility infrastructure and would not require construction across undisturbed ground. No offsite utility improvements are needed to serve the proposed project, and no additional utilities beyond those described above and in Chapter 2, "Project Description" would be required. Regarding storm drainage facilities, as discussed in Section 3.9, "Hydrology," the proposed project would result in a net increase of impervious surface area within the project site of approximately 5.3 acres. This impervious area would result in an overall increase between pre-development and post-development peak runoff in the 100-year storm for most subwatersheds in the project site (Appendix N). Bioretention and detention facilities are proposed and would be installed to increase detention time of runoff, such that the 100-year post-development peak discharge flow rates would not exceed pre-development peak discharge rates. Buildout of the project would include retention of existing storm drain infrastructure as well as installation of new drainage inlets, storm drain pipes, and stormwater best management practices (e.g., bioretention and detention facilities). All storm drain facilities would be designed in accordance with the Marin County UCS, which includes specific requirements to ensure consistent design of storm drains throughout the county. Additionally, as shown in Table 3.15-4 above, operation of the proposed project would increase the demand for electricity and natural gas compared to existing conditions and would require connections to existing PG&E electricity and natural gas lines on and adjacent to the project site.

The installation of all utilities would comply with applicable requirements of the County Code. Furthermore, the proposed project would be required to be consistent with all applicable Countywide Plan policies related to utilities and infrastructure. Applicable Countywide Plan policies include Policy CD-5.1, which requires new development to pay its fair share of costs associated with public facilities, services, and infrastructure; Policy PFS-1.1, which requires new development to pay for the infrastructure it requires and the public services it receives; Policy PFS-1.4, which aims to reduce per capita and total demand for water and wastewater treatment, and enhance storm water management through integrated and cost-effective design, technology, and demand reduction standards for new development and redevelopment; Policy PFS-2.1, which aims to reduce the waste of potable water through efficient technologies, design, and management practices, and through better matching of the source and quality of water to the user's needs; Policy PFS-2.2, which aims to mitigate increases in water demand due to new development by supporting water efficiency programs that decrease demand; Policy PFS-2.3, which aims to manage water resources sustainably; and PFS-3.3, which requires implementing appropriate upstream water-saving technologies to reduce storm water volumes and increase percolation, increasing in permeable surfaces, and encouraging on-site percolation to reduce storm water volume and potential overflow of wastewater treatment facilities.

Because these improvements are needed to accommodate project-related water demand, wastewater generation, stormwater runoff, and electricity demand, they are included as part of the proposed project. As such, the potential impacts associated with construction of the proposed project, including the proposed utility lines, are analyzed throughout this EIR. For example, Section 3.2, "Air Quality," Section 3.7, "Greenhouse Gas Emissions and Climate Change Vulnerability," and Section 3.11, "Noise and Vibration," evaluate increases in air pollutant and greenhouse gas emissions and noise levels associated with constructing, operating, and maintaining utility improvements. Section 3.3, "Archaeological, Historical, and Tribal Cultural Resources," evaluates the potential impacts that trenching and excavation for utility installation may have on buried resources. Section 3.6, "Geology and Soils," Section 3.8, "Hazards, Hazardous Materials, and Wildfire," and Section 3.9, "Hydrology and Water Quality," evaluate the potential impacts that trenching and excavation for utility installation may have related to erosion and siltation, degradation of water quality, and the release of contamination into the environment. As required by law, utility connections would be constructed in accordance with all applicable building codes and standards to ensure that new transmission and conveyance systems are adequately sized and properly constructed. All necessary connections would be constructed prior to building occupancy and in a manner that would minimize the potential for utility service disruption of existing uses. The installation of these utilities would not result in any additional impacts beyond those analyzed and disclosed in this EIR. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.15-2: Have Sufficient Water Supplies Available to Serve the Project and Reasonably Foreseeable Future Development

Construction and operation of the proposed project would increase water demand compared to existing conditions. The primary source of construction-related water demand would be from dust suppression during earth moving activities. Construction water is assumed to originate from municipal sources. This additional demand would be temporary and would be minimal compared to Marin Water's annual water demand. In addition, some existing uses on the project site would be temporarily and/or permanently displaced during project construction, such as the existing playing field. As such, the additional water demand for project construction would be offset because water would no longer be needed for the displaced uses on the project site, and water currently used for irrigating the field could be used for construction. Once operational, the project would be connected to the Marin Water distribution system. Based on information in the County's 2023 – 2031 Housing Element and Marin Water's Updated 2020 UWMP, there is sufficient water supply to serve the project in normal, single dry year, and multiple dry years. Additionally, the project includes several sustainability features as well as water efficient landscaping that would help reduce operational water consumption. Furthermore, the project would be required to be consistent with all applicable Countywide Plan policies related to water supply and conservation. Lastly, the County Building and Safety Division requires project applicants to provide a letter from the appropriate water district regarding availability of water service prior to issuance of a Building Permit, including district certification that a water meter exists or is available and that arrangements have been completed for water service. Therefore, this impact would be **less than significant**.

Construction Water Demand

Water would be required during project construction for dust suppression during grading and demolition, mixing of concrete and other construction materials, cleaning equipment and tools, and for drinking water for construction workers. The primary source of construction-related water demand would be from dust suppression during earth moving activities. Water demand for dust suppression would range between 0 gallons per day (gpd) and 7,000 gpd, depending on the weather and residual moisture in the soil, and would occur throughout earth moving activities over an approximately 90-day period. Although water use for dust suppression may not be required for each day of earth movement (i.e., because of residual moisture in the soil), it is conservatively estimated that water would be required throughout the 90-day period, which would result in a total water demand of approximately 630,000 gallons, or 1.93 acre-feet. Construction water is assumed to originate from municipal sources.

The proposed project's total construction-related water demand of 1.93 acre-feet would represent approximately 0.005 percent of Marin Water's total water demand in 2025 (see Table 3.15-2). This additional demand would be temporary and would be minimal compared to Marin Water's annual water demand. In addition, some existing uses on the project site would be temporarily and/or permanently displaced during project construction, such as the existing playing field. As such, the additional water demand for project construction would be offset because water would no longer be needed for the displaced uses on the project site, and water currently used for irrigating the field could be used for construction. Therefore, sufficient water supplies would be available to serve the project during construction, and potential water supply impacts from construction water usage would be **less than significant**.

Operational Water Demand

Existing uses on the project site include the academic campus and associated facilities, including a daycare facility and recreational facilities, as well as 145 residential units. The proposed project would retain 13 existing residential units within the project site and replace the remaining residential units with new housing. The project would result in the replacement of 139 residential units and construction of 184 new units consisting of single-family and multi-family residences, as well as a residential care facility (counted as one residential unit but supporting up to 170 residents). Implementation of the project would result in a total of up to approximately 850 residents (i.e., 680 residents of the 336 single family and multi-family units, and 170 new residents for the residential care facility described below). This would be an increase of approximately 530 residents compared to existing conditions. In addition to residential uses, the proposed project includes improvements to the existing academic campus on the site, relocation of the existing daycare facility, and construction of a new fitness center. As such, operation of the proposed project would increase water demand compared to existing conditions.

As identified above in Table 3.15-3, the current water demand from the existing uses on the project site is 61,712 gallons per day (gpd), or 22.5 million gallons per year (mgy). Converted to acre-feet, the existing annual water demand on the project site is approximately 69.0 AFY. Using CalEEMod default rates for water demand, operation of the proposed project would result in a total water demand of approximately 115,900 gpd, or 42.3 mgy. Converted to acre-feet, the annual total water demand for the proposed project is approximately 129.8 AFY. When accounting for existing uses on the site, the project would result in a net increase in annual water demand of 19.8 mgy, or 60.8 AFY, compared to existing conditions.

State law requires jurisdictions to demonstrate in their Housing Elements that the identified land inventory is adequate to accommodate that jurisdiction's share of the region's projected growth, as determined in the respective RHNA. The project site was listed in the sites inventory in the County's 2007-2014 Housing Element (see Figure IV-5 of the 2015-2023 Housing Element). Although the project site was not listed in the sites inventory in the 2015-2023 Housing Element, it was identified as an eligible affordable housing combining district site (Figure III-9 of the of the 2015-2023 Housing Element). In January 2023, the County adopted the 2023-2031 Housing Element, which is the 6th cycle update and implements the latest RHNA allocations from ABAG for the region. The 2023-2031 Housing Element listed the project site as a housing opportunity site in the sites inventory (Table C-4, Appendix C, of the Housing Element).

As described above, water service for the proposed project would be provided by Marin Water. Marin Water's water supplies are derived from a combination of local surface water supplies, imported water from SCWA (via its Russian River Project), and recycled water. Marin Water does not currently pump groundwater, nor does it plan to use groundwater as a water supply source in the future. Certain water suppliers such as Marin Water are required to prepare UWMPs under the California Water Code. Water demand projections in UWMPs are typically developed based on input from stakeholders, including any cities and counties that are supplied water by that particular water supply agency, and take into account any growth projected in existing land use planning documents. As noted above, the project site has been identified as a potential housing site in several cycles of the County's Housing Element, beginning with the 2007-2014 Housing Element and most recently in the adopted 2023-2031 Housing Element. As discussed in Section 3.15.2, Marin Water adopted a limited update to its 2020 UWMP on January 9, 2024, to account for increased water demand from updated population projections and housing allocations identified in ABAG's 2023-2031 Final RHNA Plan. Marin Water's Updated 2020 UWMP determined that future demand would be met (and exceeded) by the supply in each 5-year increment through 2045, including in normal, single dry year, and multiple dry years. As concluded in the staff report for the Updated 2020 UWMP, Marin Water would have the capacity to support the additional demand from the updated population projections and housing allocations identified in ABAG's 2023-2031 Final RHNA Plan without additional water supplies or triggering special measures (Marin Water 2024b). Because the project site was identified as a housing development site in the County's 2023-2031 Housing Element, which implements the latest RHNA allocations used to inform the water demand and supply projections in the Updated 2020 UWMP, the water demand for the project was accounted for in the Updated 2020 UWMP. Accordingly, the Updated 2020 UWMP confirms that adequate water supply would be available to serve the project under the water supply scenarios required by the State for the UWMP (Pollard, pers. comm., 2024). Even under the 2045 single dry year scenario, which is when Marin Water is projected to have the smallest surplus of water (11,541 AFY) in its Updated 2020 UWMP, the additional annual water demand for the proposed project would represent 0.4% of the total water demand in Marin Water's service area. Moreover, because the Updated 2020 UWMP determined that Marin Water would be able to meet future water demand with its existing water entitlements, it is not reasonably foreseeable at this time that Marin Water would need to procure additional water resources that could result in significant environmental impacts.

Additionally, the County's adopted 2023-2031 Housing Element included an analysis of the availability of infrastructure needed to serve the projected demands from additional housing and associated growth. The analysis addressed transportation, water, and sewer infrastructure. The results of the water infrastructure capacity analysis are provided in Table H-3.2, "Water Capacity for New Development," in the County's 2023-2031 Housing Element, which indicates that that there would be no water supply deficit for inventory sites within Marin Water's service area.

The proposed project also includes several sustainability features that would help reduce operational water consumption. Landscape design would reduce water consumption by including a plant palette of native and drought-tolerant species and mulched shrub and groundcover areas. Additionally, on-site landscaping would reduce potable water consumption using water control systems that apply water based on planting hydro zones and soil moisture levels. All permanent irrigation for new landscape areas near walkways, building foundations, planters, and campus grounds would be drip irrigated. All shrub and groundcover areas would be mulched to retain soil moisture. All landscaping would comply with Chapter 23.10 (Water Efficiency in Landscaping) of the County Code, which includes minimum criteria for water efficiency standards to protect Marin County water resources. Also, individual yards in residential areas would be eliminated to reduce waste of potable water through efficient technologies, conservation efforts, design and management practices, and by better matching the source and quality of water to the user's needs. The proposed project would also incorporate all water efficiency and conservation measures required by CALGreen, including water efficient plumbing fixtures and fittings and submeters for multifamily buildings to measure individual water usage. All project-related landscaping would also be required to comply with the criteria for water efficiency in landscape and irrigation design outlined in Chapter 23.10 of the County Code. Furthermore, the County Building and Safety Division requires project applicants to provide a letter from the appropriate water district regarding availability of water service prior to issuance of a Building Permit, including district certification that a water meter exists or is available and that arrangements have been completed for water service.

The proposed project would be required to be consistent with all applicable Countywide Plan policies related to water supply and conservation. Applicable Countywide Plan policies include Policy CD-5.1, which requires new development to pay its fair share of costs associated with public facilities, services, and infrastructure, including incremental water supply; Policy PFS-1.1, which requires new development to pay for the infrastructure it requires and the public services it receives; Policy PFS-1.4, which aims to reduce per capita and total demand for water from new development and redevelopment; Policy PFS-2.1, which aims to reduce the waste of potable water through efficient technologies, design, and management practices, and through better matching of the source and quality of water to the user's needs; Policy PFS-2.2, which aims to mitigate increases in water demand due to new development by supporting water efficiency programs that decrease demand; and Policy PFS-2.3, which aims to manage water resources sustainably.

Therefore, for the reasons described above, there would be sufficient water to serve the proposed project during normal and dry year scenarios. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.15-3: Have Adequate Wastewater Treatment Capacity

Project construction would result in the temporary generation of wastewater through the use of temporary restroom facilities. However, any wastewater generated in temporary restroom facilities would be hauled away from the project site, and the waste would be disposed of at an approved facility in accordance with 17 CCR 8007. Once operational, the project would result in an increase in wastewater generation compared to existing conditions. However, the increase in daily wastewater generated by the proposed project would represent a minimal contribution (i.e., approximately 2 percent) to the SASM Wastewater Treatment Plant's remaining daily treatment capacity. Additionally, the County Building and Safety Division also requires project applicants to provide a letter from the appropriate sanitary district regarding availability of sewer service, including district certification that a legal connection is available. Furthermore, the proposed project would be required to be consistent with all applicable Countywide Plan policies related to wastewater. Therefore, this impact would be **less than significant**.

Construction Wastewater Demand

During construction, it is anticipated that portable temporary restroom facilities would be brought to the site for construction workers. Wastewater generated at the portable restroom facilities would not be disposed of at the project site. Rather, it would be hauled away from the project site, and the waste would be disposed at an approved

facility in accordance with 17 CCR 8007. This regulation requires the contents of portable toilets to be disposed of by draining or pumping into a sanitary sewer, an approved septic tank of sufficient capacity to handle the wastes, a suitably sized and constructed holding tank approved by the local health department, or by any other method approved by the local health department. Therefore, project construction would not result in an inadequate capacity to serve the project's construction-related wastewater demand, and impacts would be **less than significant**.

Operational Wastewater Demand

As discussed under Impact 3.15-2, the proposed project would result in the replacement of existing residential units, construction of new residential units and a residential care facility, improvements to the existing academic campus, relocation of the existing daycare facility, and construction of a new fitness center. Implementation of the project would result in a total of up to approximately 850 residents, which would be an increase of approximately 530 residents compared to existing conditions. As such, operation of the proposed project would increase wastewater generation at the project site compared to existing conditions.

As identified above in Table 3.15-4, the project site currently generates approximately 37,012 gpd, or 13.5 mgy, of wastewater. Using CalEEMod default rates for wastewater generation, operation of the proposed project would generate a total of approximately 70,778 gpd, or 25.8 mgy, of wastewater at the project site. When accounting for existing uses on the site, the project would generate a net increase of 33,766 gpd, or 12.3 mgy, of wastewater compared to existing conditions.

As described above, the project site is within the service area of the Richardson Bay Sanitary District, which conveys wastewater to the SASM Wastewater Treatment Plant for processing and treatment. As of 2022, the SASM Wastewater Treatment Plant had a remaining daily dry-weather treatment capacity of 1.38 mgd. Compared to the SASM Wastewater Treatment Plant's remaining daily treatment capacity, the increase in daily wastewater generated by the proposed project would represent a minimal contribution (i.e., approximately 2 percent). Therefore, there would be sufficient existing wastewater treatment capacity to accommodate the wastewater generated by the proposed project, and the project would not result in the need to expand the capacity of the SASM Wastewater Treatment Plant. Additionally, the County Building and Safety Division also requires project applicants to provide a letter from the appropriate sanitary district regarding availability of sewer service, including district certification that a legal connection is available.

Furthermore, the proposed project would be required to be consistent with all applicable Countywide Plan policies related to wastewater. Applicable Countywide Plan Policies include Policy CD-5.1, which requires new development to pay its fair share of costs associated with public facilities, services and infrastructure, including sewer and wastewater treatment; Policy PFS-1.1, which requires new development to pay for the infrastructure it requires and the public services it receives; and Policy PFS-1.4, which aims to reduce per capita and total demand for wastewater treatment for new development and redevelopment.

Therefore, for the reasons described above, the proposed project would not result in a determination by the wastewater treatment provider that 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. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.15-4: Solid Waste Facilities and Compliance with Solid Waste Statutes and Regulations

Construction and demolition activities associated with the proposed project would generate solid waste, including metals, plastics, wood, concrete, and other building materials. However, construction of the proposed project would be required to comply with applicable waste diversion requirements, including CALGreen Divisions 4.4 and 5.4, which requires a minimum of 65 percent of all non-hazardous construction and demolition waste for residential and non-residential development, respectively, to be recycled and/or salvaged for reuse. Once operational, the proposed project would generate solid waste that would need to be disposed of at the Redwood Landfill and Recycling Center. However, the solid waste generated by the proposed project would represent a minimal contribution (i.e., 0.09 percent) solid waste currently disposed of daily at the Redwood Landfill and Recycling Center, and therefore would not contribute to an exceedance of the landfill's permitted daily disposal capacity. Additionally, the proposed project would be required to be consistent with all applicable Countywide Plan policies related to solid waste. Furthermore, the proposed project would be required to comply with all applicable state and local management and reduction statutes and regulations related to solid waste, including AB 939, AB 341, AB 1826, and Chapter 7 of the Marin County Code. Therefore, solid waste impacts would be **less than significant**.

Construction Solid Waste Generation

Construction is anticipated to occur over multiple phases and would take approximately 4 years to complete, with construction beginning in 2023 and being completed in 2027. Construction and demolition activities associated with the proposed project would generate solid waste, including metals, plastics, wood, concrete, and other building materials. Based on CalEEMod default generation rates, construction activities for the proposed project would generate a total of approximately 5,052 tons of demolition debris. However, construction of the proposed project would be required to comply with applicable waste diversion requirements. Although Marin County does not have a separate ordinance for construction and demolition debris recycling, the County adopted the 2022 edition of CALGreen (CCR, Part 11 of Title 24) as part of its building code (Chapter 19.04). Divisions 4.4 and 5.4 require a minimum of 65 percent of all non-hazardous construction and demolition waste for residential and non-residential development, respectively, to be recycled and/or salvaged for reuse. Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials will be sorted on-site or mixed; and identifying diversion facilities where the materials collected will be taken.

Demolition debris, including concrete, that can be recycled would be taken to the Marin Resources Recovery Facility, while non-recyclable or reusable materials would be disposed of at the Redwood Landfill and Recycling Center. Compliance with these regulatory requirements would reduce the amount of solid waste that would be disposed of in landfills from project construction activities. Additionally, although the project would require approximately 220,000 cubic yards of cut and fill, these materials would be balanced on-site, and therefore would not be disposed of at a landfill. Therefore, because a majority of the waste generated during project construction would be recycled or salvaged for reuse in compliance with existing local and state regulations, the proposed project would not substantially contribute to the remaining capacity available at the Redwood Landfill and Recycling Center, and new or expanded landfills would not be required to accommodate project construction-related solid waste. Therefore, construction-related solid waste impacts would be **less than significant**.

Operational Solid Waste Generation

State and local management and reduction statutes and regulations related to solid waste include AB 939, AB 341, AB 1826, and Chapter 7 of the Marin County Code. AB 939 requires jurisdictions to utilize "integrated waste management," and established mandatory State waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000, and, with the adoption of AB 341 in May 2012, 75 percent of solid waste from landfills by 2020. AB 341 also establishes the statewide mandatory commercial recycling program, which requires businesses that generate 4 cubic yards or more of commercial solid waste per week, or multi-family residential dwellings of five units or more, to implement recycling practices during operation to help the State achieve the statewide diversion goal of 75 percent. AB 1826 requires a business that generates 4 cubic yards or more of organic waste per week to arrange for

recycling services for that organic waste in a specified manner. The bill would also require a business that generates 4 cubic yards or more of commercial solid waste per week, on and after January 1, 2019, to arrange for organic waste recycling services and, if CalRecycle makes a specified determination, would decrease that amount to 2 cubic yards, on or after January 1, 2020.

Chapter 7 of the Marin County Code includes solid waste collection, diversion, and disposal requirements for both residential generators (Section 7.00.060) and commercial generators, including multi-family dwellings (Section 7.00.070).

As discussed above in Section 3.15.2, "Environmental Setting," solid waste services at the project site are provided by Mill Valley Refuse Service. Solid waste collected by Mill Valley Refuse Service is disposed of the Redwood Landfill and Recycling Center, which is the only remaining permitted landfill operating in the county. The landfill is a Class III disposal facility that is privately owned and operated by Waste Management. The Redwood Landfill and Recycling Center's current design capacity is 26.08 million CY and has an estimated closure date of 2036, but increased recycling and resource recovery activities in the county may extend its life span. In addition, Waste Management is currently working with the County to extend operation of the landfill beyond the current estimated closure date of 2036. At the time of this EIR, the potential extension of the landfill's closure date is in the preliminary planning stages (McCutcheon, pers. comm., 2024). The landfill has a current permitted maximum daily disposal capacity of 2,310 tons per day, which includes 1,390 tons of municipal source waste. In 2021, the landfill received a total of 300,017 tons of waste from county residents and businesses, based on an estimated population of 260,206 people, which equals 822 tons per day (Marin County 2022).

Implementation of the proposed project would result in the construction of 324 new/replacement housing units as well as other development, which would result in a total of up to approximately 850 residents. Accounting for existing residents on the project site, this would be an increase of approximately 530 residents compared to existing conditions. Based on CalEEMod default generation rates, it is estimated that the proposed project would generate approximately 278 tons of solid waste per year, or 0.76 tons per day. As discussed in the analysis methodology above, this analysis conservatively assumes that this solid waste would be new, consistent with the analyses in Sections 3.6 and 3.8 of this EIR. The generation of 0.76 tons of solid waste per day would represent a minimal contribution (i.e., 0.09 percent) to the 822 tons of solid waste per day currently disposed of at the Redwood Landfill and Recycling Center, and therefore would not contribute to an exceedance of the landfill's permitted daily disposal capacity of 2,310 tons.

Additionally, the proposed project would be required to be consistent with all applicable Countywide Plan policies related to solid waste, including Policy CD-5.1, which requires new development to pay its fair share of costs associated with public facilities, including solid waste, and Policies PFS-4.1 through PFS-4.4, which encourage the minimization of wastes from construction and occupancy of new development, preventing environmental contamination by waste management, and eliminating wastes that cannot be reduced, recycled, or composted. Furthermore, the proposed project would be required to comply with all applicable state and local management and reduction statutes and regulations related to solid waste, including AB 939, AB 341, AB 1826, and Chapter 7 of the Marin County Code, which would reduce the amount of operation-related solid waste that would be disposed of at the Redwood Landfill and Recycling Center. Therefore, operation-related solid waste impacts would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

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4 CUMULATIVE IMPACTS

4.1 INTRODUCTION TO THE CUMULATIVE ANALYSIS

This draft environmental impact report (Draft EIR) provides an analysis of cumulative impacts of the proposed North Coast Land Holdings Master Plan and Community Plan Amendment Project taken together with other past, present, and probable future projects producing related impacts, as required by Section 15130 of the California Environmental Quality Act Guidelines (State CEQA Guidelines). The goal of such an exercise is twofold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant; and second, to determine whether the incremental contribution to any such cumulatively significant impacts by the project would be "cumulatively considerable" (and thus significant). (See State CEQA Guidelines Sections 15130[a]–[b], Section 15355[b], Section 15064[h], and Section 15065[c]; and *Communities for a Better Environment v. California Resources Agency* [2002] 103 Cal. App. 4th 98, 120.) In other words, the required analysis intends first to create a broad context in which to assess cumulative impacts, viewed on a geographic scale beyond the project site itself, and then to determine whether the project's incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., "cumulatively considerable"). According to CEQA Guidelines Section 15065, subdivision (a)(3), "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Cumulative impacts are defined in State CEQA Guidelines Section 15355 as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." A cumulative impact occurs from "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 probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (State CEQA Guidelines Section 15355[b]).

Consistent with State CEQA Guidelines Section 15130, the discussion of cumulative impacts in this Draft EIR focuses on significant and potentially significant cumulative impacts. Section 15130(b) of the State CEQA Guidelines provides, in part, the following:

> [t]he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

A proposed project is considered to have a significant cumulative effect (i.e., a cumulatively considerable effect) if:

- the cumulative effects of development without the project are not significant and the project's additional impact is substantial enough, when added to the cumulative effects, to result in a significant impact; or
- the cumulative effects of development without the project are already significant and the project contributes considerably to the effect.

The standards used herein to determine a considerable contribution are that either the impact must be substantial or must exceed an established threshold of significance (defined throughout the resource sections in Chapter 3 of this Draft EIR).

According to Section 15130(b) of the State CEQA Guidelines, a cumulative impact analysis may be conducted using one of two methods: the List Method, which includes "a list of past, present, and probable future projects producing related or cumulative impacts," or the Plan Method, which uses "a summary of projections contained in an adopted local, regional, or statewide plan or related planning document," or in a prior environmental document for such a plan which has been adopted or certified, that described or evaluated regional or area wide conditions contributing to the cumulative impact. Unless where noted otherwise, the cumulative analysis of near-term conditions that follows for a majority of issue areas uses the List Method.

However, for certain issue areas that are more regional (e.g., Air Quality, Population and Housing, Transportation, and Utilities and Service Systems), the Plan Method is appropriate. For example, the cumulative vehicle miles traveled (VMT) analysis for the proposed project relies on the VMT forecasts for 2040 produced by the Transportation Authority of Marin Demand Model. This model considers factors such as population, housing, the economy, and transit options and uses land use and demographic data published by the Association of Bay Area Governments (ABAG). Accordingly, the cumulative analyses for VMT impacts as well as transportation-related impacts on air quality and greenhouse gas emissions use the Plan Method. Additionally, the cumulative analysis related to future water supply in the utilities and service systems chapter uses the Plan Method because it is based on the adopted Updated 2020 Urban Water Management Plan (UWMP) for the Marin Municipal Water District, as well as the housing projections in the 2023-2031 Housing Element of the Marin Countywide Plan. Furthermore, the cumulative analysis for population and housing relies on the projections from the County's 2023-2031 Housing Element, California Department of Finance, and ABAG. Therefore, the cumulative analysis below employs both the List Method and Plan Method.

4.2 CUMULATIVE SETTING

4.2.1 Geographic Scope

The geographic area that could be affected by the project and is appropriate for a cumulative impact analysis varies depending on the environmental resource topic, as presented in Table 4-1 and discussed in further detail in Section 4.3 below.

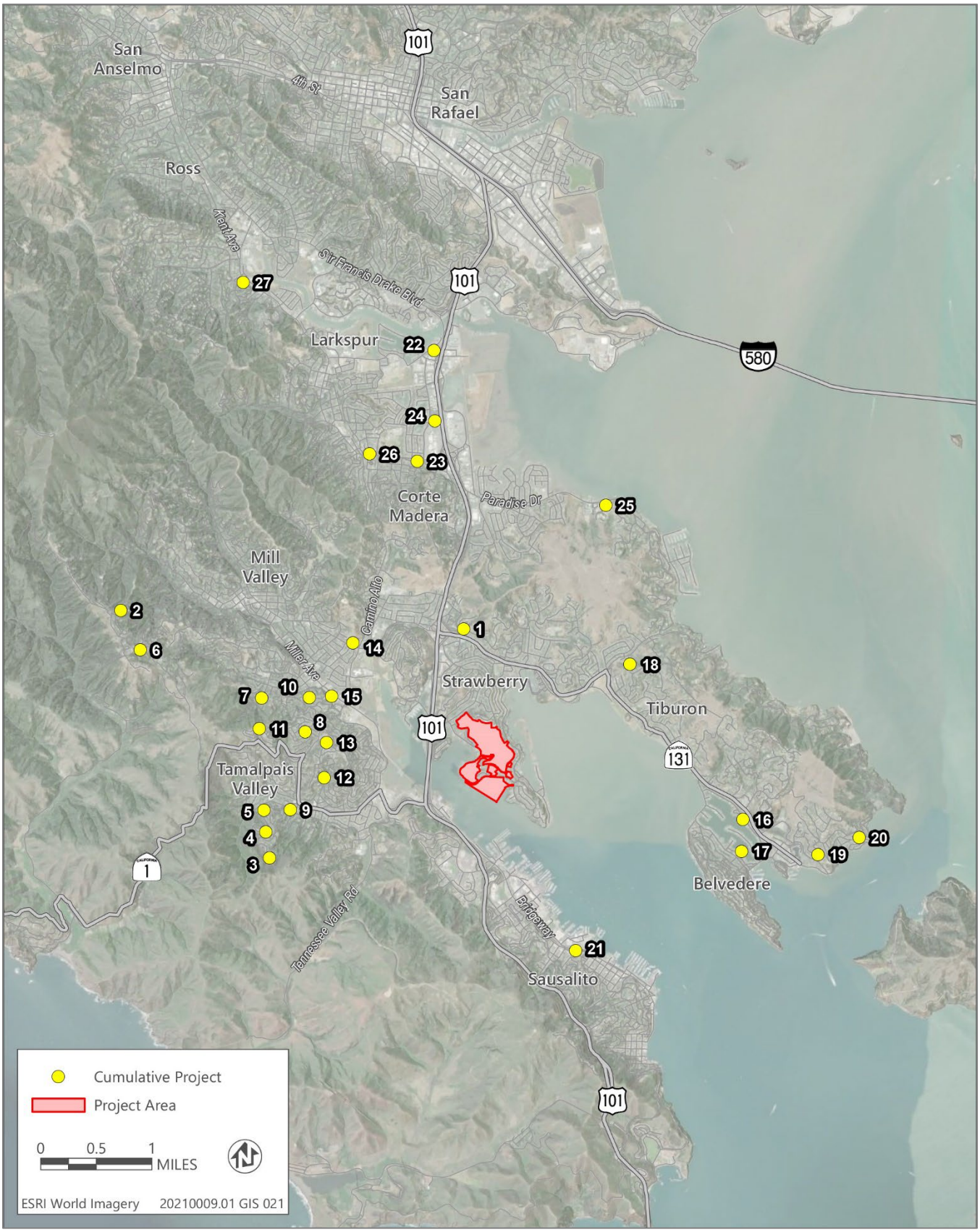
Table 4-1 Geographic Scope of Cumulative Impacts

Resource Topic	Geographic Area
Aesthetics	Local (project site and surrounding public viewpoints)
Air Quality	Regional and local
Archaeological, Historical, and Tribal Cultural Resources	Local
Biological Resources	Regional and local
Energy	Service area of PG&E within Marin County
Geology and Mineral Resources	Local
Greenhouse Gas Emissions and Climate Change Vulnerability	Global
Hazards, Hazardous Materials, and Wildfire	Local
Hydrology	The central portion of the San Francisco Bay Watershed within Marin County
Land Use and Planning	Local
Noise and Vibration	Local
Population and Housing	Regional and local
Public Services and Recreation	Local
Transportation	Regional and local
Utilities and Service Systems	Local

Source: Compiled by Ascent Environmental in 2023.

4.2.2 Related Projects

Table 4-2 (correlated with their locations shown on Figure 4-1, "Cumulative Projects") lists the past, present, and probable future projects that are considered in the cumulative analyses. This list is not intended to be an all-inclusive list of projects in the region, but rather an identification of projects constructed, approved, or under review in the vicinity of the project site (surrounding communities) that have some relation to the environmental impacts of construction and operation of the proposed project. The list of projects used in this cumulative analysis is based on information for approved and pending projects obtained from consultation with Marin County planning staff and a review of the websites of the surrounding communities and cities.



Sources: Adapted by Ascent in 2023

Figure 4-1 Cumulative Projects

Table 4-2 Cumulative Projects List

ID No.	Project Name	Location	Description	Approval Type	Status
			County of Marin - Strawberry		
1	Weingeist Shyu Family Trust et al., Design Review (P3927)	6 Eagle Rock Road, Mill Valley	Residential Addition/Accessory Structure - The applicant requests Design Review approval to remove a portion of an existing roof and to construct a new shed dormer over the area identified as the dining room within a residence located in an unincorporated area of Mill Valley. The proposed development would not result in a change to the existing floor area ratio which would remain unchanged at 30 percent on the 10,250 square-foot lot. The proposed shed dormer would be 2 feet, 8 ½ inches taller than the portion of the existing roof proposed for removal. The proposed shed dormer appears to reach a maximum height of 21 feet above the surrounding grade and would maintain the following setbacks: 46 feet from the northern front property line; 43 feet from the western side property line; 63 feet from the eastern side property line; 10 feet, 7 inches from the southern rear property line.	Design Review	Approved
			Tamalpais Valley		
2	Barton Design Review (P3512)	Vacant Lot Assessor's Parcel 045-111-10	The applicant requests Design Review approval to construct a new single-family dwelling on a vacant lot in Mill Valley. The proposed building would reach a maximum height of 25 feet, 2 inches above surrounding grade and the exterior walls would have the following setbacks: 8 inches from the northwestern front property line; 10 feet, 4 inches from the northeastern side property line; 9 feet from the southwestern side property line; 44 feet from the southeastern rear property line.	Design Review	Approved
3	David Tree Removal & Design Review (P2514)	1000 Marin Drive, Mill Valley 049-231-11	Residential Addition/Accessory Structure - Design Review approval to (1) construct a 363-square-foot on the first floor and 313-square-foot addition on the second floor, for total addition of 676-square-foot; and (2) construct a 374-square-foot deck on the first floor on a developed lot in Mill Valley. The proposed project would be attached to an existing 4,705-square-foot residence, resulting in 5,381 square feet of development and a floor area ratio (FAR) of 17 percent on the 31,783-square-foot lot. The proposed addition would reach a maximum height of 27 feet six inches above surrounding grade where a maximum of 30 feet is permissible. Exterior walls of the addition would have the following setbacks: 25 one six inches from the east front property line; 5 feet eight inches from the north side property line; 25 feet one inch from the east property line; and more than 100 feet from all south rear property line. Your application also includes a request to remove two trees classified as	Design Review & Tree Removal Permit	Withdrawn

ID No.	Project Name	Location	Description	Approval Type	Status
			"Protected" per Section 22.130.030 of the Marin County Development Code to accommodate construction of the residence and associated site improvements. Other site improvements entailed in the proposed development include a retaining wall and grading.		
4	Moeck Design Review (P3523)	Vacant Lot Assessor's Parcel 049-182-03	New single family residence - The applicant requests Design Review approval to construct a new 2,641 square foot single-family dwelling and 520 square foot attached garage on a vacant lot in Mill Valley. The 3,161 square feet of proposed development would result in a floor area ratio of 28 percent on the 9,647 square foot lot. It appears the proposed building would reach a maximum height of 32 feet, 2 inches above surrounding grade and the exterior walls would have the following setbacks: 8 feet, 6 inches from the southern front property line; 5 feet, 1 inch from the western side property line; 5 feet, 1 inch from the eastern side property line; over 90 feet from the northern rear property line. Various site improvements would also be entailed in the proposed development, including a new driveway, new retaining walls, and new fencing.	Design Review	Approved
5	Smith Minor Design Review (P3410)	744 Marin Drive, Mill Valley	Residential Addition/Accessory Structure - applicant requests Minor Design Review approval to construct a new 445 square foot garage with a 396 square foot accessory dwelling unit on a developed lot in Mill Valley. The 841 square feet of proposed development would result in a floor area ratio of 20 percent on the 6,971 square foot lot.	Design Review	Approved
6	Weissman (Dipsea Ranch) Land Division (P1589)	455 Panoramic Highway, Mill Valley	Subdivision - The applicant is requesting approval to subdivide an existing 8.29-acre lot into 3 single-family residential lots. Residential development currently exists at the property and access to the site is proposed to be provided via the existing entry driveway at 455 Panoramic Highway. The project includes a proposal to install two new on-site sewage disposal systems to serve Lots 2 and 3. Water service would be provided by the Marin Municipal Water District (MMWD). The project also includes the incorporation of a storm water management plan that utilizes a system of storm drains, cisterns and bioswales to address runoff.	*Land Division & Tentative Map *Design Review	Approved
7	Aston Design Review (P3661)	325 Melrose, Mill Valley	Residential Addition/Accessory Structure-The applicant requests Design Review approval to legalize an existing 433 square foot detached accessory structure and approval to construct a deck that would be elevated above grade and located atop the proposed carport. The proposed carport is not subject to Design Review.	Design Review	Withdrawn

ID No.	Project Name	Location	Description	Approval Type	Status
			The 433 square foot detached accessory structure would result in a floor area ratio of 35 percent on the 8,002 square foot lot. The height and setbacks of the structures are provided below. The 433 square foot detached accessory structure would reach a maximum height of 21 feet, 7 inches above the surrounding grade and the exterior walls would have the following setbacks: more than 100 feet from the western front property line; 6 feet, 9 inches from the northern side property line; 1 foot, 8 inches from the southern side property line; and 7 feet from the eastern rear property line. The proposed deck would be elevated above grade and located directly above the proposed carport. The surface level of the deck would reach a maximum height of 10 feet, 6 inches above the surrounding grade and the exterior walls would have the following setbacks: 3 feet, 5 inches from the western front property line; 8 feet, 8 inches from the northern side property line; 17 feet, 1 inch from the southern side property line; and more than 100 feet from the eastern rear property line. Various site improvements would also be entailed in the proposed development, including a small addition to the existing residence, new walkways at grade, and a new fence.		
8	Brown Design Review (P3702)	929 West California Street, Mill Valley	Residential Addition/Accessory Structure. The applicant requests Design Review approval to replace a detached accessory structure (car deck with associated storage) and construct new building area below the structure on a developed lot in Mill Valley. The 701 square feet of proposed development would result in a floor area ratio of 32-percent on the 10,000 square lot. The exterior walls would have the following setbacks: 3 from the north property line; 13.5 feet from the east property line; 4.5 feet side property line; and over 100 feet from the south property line.	Design Review	Approved
9	Copp Family Trust Design Review (P3681)	450 Marin Avenue, Mill Valley	Residential Addition/Accessory Structure. The applicant requests Design Review approval to construct a 42 square foot lower level addition and a 464 square foot upper level addition to an existing residence located in an unincorporated area of Mill Valley. The 506 square feet of the proposed development would result in a floor area ratio of 16 percent on the 23,000 square foot lot. The proposed development would reach a maximum height of 26 feet, 1 inch above the surrounding grade and the exterior walls would have the following setbacks: 34 feet, 1 inch from the southern front property line; 20 feet, 1 inch from the western side property line; 25 feet from the eastern side property line and; more than 100 feet from the northern rear property line (69 feet, 6 inches from the	Design Review	Approved

ID No.	Project Name	Location	Description	Approval Type	Status
			flood control easement). Various site improvements would also be entailed in the proposed development, including new outdoor decking and lighting.		
10	Hartman Trust Variance (P3674)	22 Ethel Lane, Mill Valley	Residential Addition/Accessory Structure. The applicant requests Variance approval to construct an addition to the first floor of an existing two-story residence located in an unincorporated area of Mill Valley. In total, the project proposes 602 square feet of additions, including a 103 square foot breakfast room addition that would conform to the setbacks established by the governing R1 zoning district, and a 499 square foot family room addition where 371.8 square feet of the family room addition would be located within the rear yard setback. The 602 square feet of proposed development would result in a floor area ratio of 13 percent on the 22,705 square foot lot. The portion of the addition subject to Variance approval would reach a maximum height of 17 feet, 4 inches above the surrounding grade and the exterior walls would have the following setbacks: 117 feet from the eastern front property line; 28 feet, 6 inches from the northern side property line; 96 feet from the southern side property line (44 feet from the mapped access easement); and 7 feet from the western rear property line. Various site improvements would also be entailed in the proposed development, including a new deck that would provide an exterior connection to the area of proposed additions.	Variance	Approved
11	Katz and Ye Minor Design Review (P3775)	1231 Waterview Drive, Mill Valley	Residential Addition/Accessory Structure. Minor Design Review approval to construct new additions totaling 355 square feet on a developed lot in Mill Valley. The 355 square feet of proposed development would result in a floor area ratio of 64 percent on the 3,500 square foot lot. It appears the proposed building would reach a maximum height of 29 feet, 7 ½ inches above surrounding grade and the exterior walls would have the following setbacks: over 60 feet from the northern front property line; 2 feet, 8 1/8 inches from the western side property line; 5 feet, 1 inch from the eastern side property line; 28 feet, 10 inches from the southern rear property line.	Design Review	Approved
12	Kauhanen Community Property Trust et al., Design Review (P3907)	342 Pinehill Road, Mill Valley	Residential Addition/Accessory Structure. The applicant requests Design Review approval to construct a 114 square-foot addition to an existing residential structure in an unincorporated area of Mill Valley. The 114 square feet of proposed construction would include a 78 square-foot addition to the third floor and a 36 square-foot addition to the second floor that would result in a floor area ratio of 34.6 percent on the 7,500 square-foot lot. The proposed addition would reach a maximum height of 29 feet, 11 ½ inches above the surrounding grade and the exterior walls would have the	Design Review	Approved

ID No.	Project Name	Location	Description	Approval Type	Status
			following setbacks: 25 feet from the eastern front property line; 48 feet, 6 inches from the northern side property line; 45 feet, 6 inches from the southern side property line; and 34 feet from the western rear property line. Various site improvements would also be entailed in the proposed development, including an expansion of the existing deck and stairs in the rear yard.		
13	Mt. Tamalpais School Use Permit and Design Review (P3700)	100 Harvard Avenue, Mill Valley	Institutional/Educational/Public Facility. The applicant requests Use Permit and Design Review Amendment approval to amend an existing Use Permit (93-028) initially approved in 1993 via Board of Supervisor Resolution No. 93-112. The proposed amendments include: Use Permit Amendment-(1) increase student enrollment from 240 students to a maximum of 295 students; (2) extend kindergarten hours of operation from half day to all day hours of operation during the hours the school is open for regular business hours; and (3) increase maximum faculty and staff from 29 up to 58. No other use related changes are proposed, including limitations related to special events, after school activities, use of school field, play structure, etc.; and Design Review Amendment-(1) remodel and construct an approximately 950 square foot addition to the existing administrative building; and (2) construct an approximately 4,300 square foot building that would accommodate classrooms, office spaces and bathrooms. The proposed 5,500 square feet of additions in combination with the existing development would result in a floor area ratio of 6.5-percent on the 229,385 square foot lot.	Use Permit/Design Review	Approved
			City of Mill Valley		
14	Richardson Terrace	575 E. Blithedale Avenue, Mill Valley	Mixed Use Development - Design Review application for a mixed-use housing development project at 575 East Blithedale Avenue. The proposal, referred to as "Richardson Terrace," includes 25 residential units and 2, 064 square feet of ground floor Commercial Office space on a 1.2-acre site. Twelve small housing units including 11 two-bedroom units and 1 one-bedroom unit are proposed above the office space. Further back from the street, the project proposes residential townhomes, including 3 two-bedroom units and 10 three-bedroom units. The project includes a Vesting Tentative Map application for the purpose of dividing the proposed development into 17 lot	▶ Tentative Tract Map ▶ Design Review	Environmental Document Preparation
15	500 Miller Avenue	500 Miller Avenue, Mill Valley	Mixed Use Development - Project includes nine attached single-family residential units and a two-story 4,948 square foot commercial building.	Subdivision & Vesting Tentative Map	Under Construction

ID No.	Project Name	Location	Description	Approval Type	Status
			City of Belvedere		
16	Permit #1380	68 Lagoon Road, Belvedere	Demo, New single-family development	Design Review	Incomplete
17	Mallard Pointe	1-22 Mallard Road	The subject parcels are currently developed with 22 residential units (duplexes). The project proposal includes demolition of the existing residential units and construction of forty-two (42) new residential units, which include single-family dwellings, accessory dwelling units, duplexes and apartments. As submitted, the project would contain sixteen (16) single-family and duplex units, three (3) ADUs and twenty-three (23) apartments	*Design Review *Vesting Tentative Map *Condominium Map	Under review
			Town of Tiburon		
18	1 Trestle Glen Circle	1 Trestle Glen Circle, Tiburon	New 4,866 sf single family residence	Design Review	June 16 Design Review Board mtg
19	1894 Centro West Drive	1894 Centro West Drive, Tiburon	New 2,910 sf single family residence	Design Review	July 21 Design Review Board Mtg
20	2359 Paradise Drive	2359 Paradise Drive, Tiburon	New 2,767 sf single family residence	Design Review	July 21 Design Review Board Mtg
			City of Sausalito		
21	Bridgeway Commons Residential Condominiums	1755 Bridgeway, Sausalito	Redevelopment of two parcels zoned R-3 (Multiple Family Residential) with 16 residential condominiums. All existing buildings and structures (buildings with addresses: 1745 Bridgeway, 1751 Bridgeway, 1757 Bridgeway, and 160 Filbert Avenue) on the property would be demolished and replaced with two multi-level buildings containing 16 condominium units (one three-bedroom and 15 two-bedroom units) and 32 on-site parking spaces contained within a parking garage	▶ Vesting Tentative Subdivision Map ▶ Design Review Permit ▶ Tree Permit ▶ Encroachment Agreement	Application Complete - going to PC in the next couple months
			Town of Corte Madera		
22	111 Lucky Drive	111 Lucky Drive	Develop 71-bedroom, two-story memory care facility on 1.73 acres. Site is currently occupied by an 8,300 square foot office building (Barcelino corporate headquarters). As part of the proposal, the existing structure would be demolished. The proposed memory care facility would be located on the north portion of the lot within the footprint of the existing developed area, facing Lucky Drive. The two-story structure would include approximately 35,984 square feet of floor area and extend to approximately 35 feet in height.	Zoning ordinance amendment	Application Pending

ID No.	Project Name	Location	Description	Approval Type	Status
			The facility would accommodate 71 bedrooms, with dining facility, lounges, and other ancillary spaces, and include a boardwalk and patio seating area located south of the structure overlooking the existing lagoon. The redevelopment of the site is intended to avoid sensitive environmental areas. The project would provide approximately 25 parking spaces. New landscaping would be introduced throughout the site. Several entitlements, including a zoning ordinance amendment, would be necessary to facilitate the proposal.		
23	645 Tamalpais Apartments	645 Tamalpais Drive	Proposal for a three unit apartment building. The property is currently developed with a one-story commercial office building and two parking areas. The first parking area is a one way drive through aisle along the northern Tamalpais frontage, the second is a dead end rectangular lot that is accessed from Meadowsweet Drive. The applicant proposes to construct a three unit apartment building over the rectangular parking lot. The number of existing parking spaces will remain the same.	Design Review and Variance	Incomplete Application
24	Corte Madera Residence Inn	56 Madera Blvd	Proposal to demolish the existing hotel and construct a new 149-room, approximately 118,000 square foot Marriott hotel. On February 15, 2022 the Town Council regarding adopted an IS/MND and applications by Reneson Hotels, Inc., including an Initial Study / Mitigated Negative Declaration to adopt the recommendations to minimize significant impacts of the project; Conditional Use Permit and Hotel FAR Bonus to allow the hotel use and the additional floor area; and Preliminary and Precise Plans (including Design Review and Sign Permit).	▶ CUP ▶ Design Review ▶ Sign Permit	Approved
25	Robin Drive - Residences at Preserve	Southeast corner of Paradise Drive and Robin Drive (APN 038-011-21)	Proposal for a new residential subdivision on vacant land on Robin Drive in eastern Corte Madera. The Project would develop the 5.93-acre lower portion of the overall 15.42-acre parcel. The upper (southern) portion of the parcel would remain undeveloped as private open space. A public access easement would be recorded to maintain a footpath that traverses the upper portion from Robin Drive in a north-south direction to Ring Mountain. The Project would construct rental housing consisting of 16 residential units, 8 accessory dwelling residential units, and accessory facilities including a private roadway, sidewalks, bridge, utilities, and landscaping as part of a Planned Development. In addition, the Project includes a Zoning Amendment to change the zoning overlay for the site.	▶ Zoning Amendment ▶ Planned Development / Tentative Map ▶ Design Review	Approved
26	Town Hall Project	300 Tamalpais Drive	Demolition of existing town hall and building a completely new town hall with a public plaza and a two-story ~7,500 sq. ft. addition consisting of a Town Council Chambers and offices.	▶ CUP ▶ Design Review ▶ Variances ▶ Lot Merger	Under Construction

ID No.	Project Name	Location	Description	Approval Type	Status
			City of Larkspur		
27	Magnolia Village	1135-1169 Magnolia Ave	Proposal to redevelop the site at the corner of Magnolia Avenue and Estelle Avenue. One 0.46-acre lot would retain the existing commercial structure and uses (including Rustic Bakery) at 1131-1141 Magnolia Ave. The applicants would redevelop the second 1.17-acre lot (former hardware store site) with 20 townhomes (16 market rate units and 4 affordable units) and 1,488 sq. ft of commercial space.	▶ Design Review ▶ Lot Line Adjustment ▶ Tentative Map ▶ CUP ▶ Grading Permit ▶ Parcel Map	Under review
			City of San Rafael		
28	Oak Hill Apartments Project	Southwest corner of East Sir Francis Drake Boulevard and Drakes Cove Road (APN 018-152-12)	Proposal to develop affordable housing on approximately 6.7 acres of the 8.3-acre project site. The 100 percent affordable housing project would include the construction of up to 250 new apartments, including 135 units available to low- to moderate-income educators working in and employees of the County of Marin, and 115 units available to extremely low to low-income residents. The apartments would consist of two buildings that are terraced up the hillside with exterior elevations ranging from 30 feet to 60 feet in height. The proposed project would incorporate approximately 35,000 square feet of landscaped open space and approximately 35,000 square feet of outdoor amenity space. The project would be accessed by a driveway from East Sir Francis Drake Boulevard and would include a 4-level garage with 350 parking spaces.	▶ Ground Lease and Regulatory Agreement ▶ Common Interest Development Approval ▶ Encroachment Permit	Under review

4.3 ANALYSIS OF CUMULATIVE IMPACTS

The following sections contain a discussion of the cumulative effects anticipated from implementation of the proposed project, together with related projects and planned development in the surrounding communities, for each of the environmental issue areas evaluated in this Draft EIR. The analysis conforms with Section 15130(b) of the State CEQA Guidelines, which specifies that the "discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact."

When considered in relation to other reasonably foreseeable projects, cumulative impacts to some resources would be significant and more severe than those caused by the proposed project alone.

For purposes of this EIR, the project would result in a significant cumulative effect if:

- the cumulative effects of related projects (past, current, and probable future projects) are not significant and the incremental impact of implementing the proposed project is substantial enough, when added to the cumulative effects of related projects, to result in a new cumulatively significant impact; or
- the cumulative effects of related projects (past, current, and probable future projects) are already significant and implementation of the proposed project makes a considerable contribution to the cumulative effect. The standards used herein to determine a considerable contribution are that either the impact must be substantial or must exceed an established threshold of significance.

This cumulative analysis assumes that all mitigation measures identified in Chapter 3 to mitigate project impacts are adopted and implemented, and all elements of the design build performance criteria that would minimize environmental effects are implemented. The analysis herein analyzes whether, after implementation of project-specific mitigation and performance criteria that minimize environmental effects, the residual impacts of the project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the project) cumulatively significant effects. Where the project would so contribute, additional mitigation is recommended where County staff considers the mitigation they find to likely be feasible. However, in exercising its duty as lead agency, only the Marin County Board of Supervisors has the authority to determine the feasibility of mitigation proposed in this EIR (see *San Diego Citizenry Group v. County of San Diego* (2013) 219 Cal.App.4th 1, 15-19).

4.3.1 Aesthetics

GEOGRAPHIC SCOPE

The geographic scope of analysis for potential cumulative aesthetics and visual resources impacts includes the set of publicly accessible viewsheds described in Section 3.1.2, Views of the Project Site and Surrounding Area, and the resultant Key Observation Points (KOPs) from which publicly accessible views of the proposed project are available, whether as part of a single view or a series of related views (e.g., a scenic route). As such, the visual impact analysis area generally encompasses public viewing sites along Richardson Bay and looking over Richardson Bay from Sausalito and Marin City. Public views of the project site from Tiburon are limited to the immediate crest of the ridgeline between Chapel Hill and Dormitory Hill.

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

Past development projects have changed the land in and around the Strawberry Peninsula and surrounding area from a natural and undeveloped setting to a more urban setting. For a cumulative aesthetic impact to occur, the construction and/or operation of cumulative projects would need to be within the same public viewshed. If the

projects are not within the same public viewshed, the viewer would not perceive them in the same scene. Concurrent construction of the cumulative projects proposed within the same viewsheds could result in visual impacts during construction. However, all cumulative projects that would be constructed concurrently with the proposed project are located at a distance from the project and are not located within the same viewshed as the proposed project. Since the projects identified for the cumulative impact analysis are outside of the viewshed of the project, the project, in conjunction with other planned or approved projects, would not have cumulatively considerable aesthetic impacts. There would be no cumulative construction or operational aesthetic impacts with projects that are located outside of the project viewshed.

PROJECT CONTRIBUTION

The proposed project would be constructed within an urbanized area on the Strawberry Peninsula. Long-term impacts on the visual character of the Strawberry area as seen by the general public would principally be related to changes in views created by the presence of new development associated with the project. The potentially significant visual impacts related to applicable zoning and other regulations governing scenic quality created by the project include key elements related to its development which include development color palette, bulk, and relationship to the project site's ridgelines as seen from lower elevations, that would affect its ability to conform to County policies. All of these project-level impacts would be reduced to less-than-significant levels with the implementation of Mitigation Measures 3.1-1a through 3.1-1d and 3.1-2.

The proposed project and all cumulative projects within the cumulative study area would be subject to the County's outdoor lighting standards. These lighting standards require that lighting sources be designed and constructed in a manner that is consistent with Marin County's Design Review Standards and Development Code, which also would ensure that all proposed lighting conforms to requirements and all facades would be designed to minimize the potential for glare. Furthermore, as discussed above, the past, present, and reasonably foreseeable future projects identified in Table 4-2 would not result in a significant cumulative aesthetic and visual resources impact and a cumulatively significant impact does not currently exist. Thus, the proposed project's contribution to cumulative aesthetics and visual resources impacts would be **less than cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

4.3.2 Air Quality

GEOGRAPHIC SCOPE

With respect to criteria air pollutants, the cumulative environment for the project is the San Francisco Bay Area Air Basin (SFBAAB), which includes all of the Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties. A description of the SFBAAB can be found in Section 3.2, "Air Quality." The cumulative setting for criteria air pollutants includes all of the projects listed in Table 4-2 of Section 4, "Cumulative Impacts," and all of the growth assumptions provided in air quality plans overseen by the Bay Area Air Quality Management District (BAAQMD).

With respect to odors and toxic air contaminants (TACs), the typical geographic context includes projects within 1,000 feet of a TAC emitting source; however, projects within 2,000 feet from an existing stationary source for which there is a receptor within 1,000 feet from both a project and the existing source could result in a cumulative TAC impact.

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

The project is in the regional vicinity of various planned, past, and present projects including the Corte Madera Residence Inn, Robin Drive, Tamalpais Apartments, and Town Hall Project, among others (for a complete list of

projects within the SFBAAB see Table 4-1). For local air quality impacts, there are no projects within 1,000 feet from the project site and no stationary sources within 2,000 feet that could combine to create a cumulative TAC impact.

PROJECT CONTRIBUTION

Short-Term Construction-Generated Emissions of Criteria Air Pollutants and Ozone Precursors

As identified in Impact 3.2-1, the project would generate exhaust NO_X emissions exceeding the Bay Area Air Quality Management District's (BAAQMD's) average annual mass emissions thresholds of significance. These numerical thresholds are tied to long-term regional air quality planning in the SFBAAB and are intended to satisfy the question of whether a project's emissions would be cumulatively considerable. Use of these thresholds are inherently cumulative and are applied at the project-level to ensure that new development within the SFBAAB would not generate significant emissions that would interfere with BAAQMD's capacity to attain the national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS). The project would generate NO_X emissions in exceedance of BAAQMD's thresholds; however, with Mitigation Measure 3.2-1, the project's emissions would be reduced to a less-than-significant level. It is foreseeable that emissions from past, present, and future projects could be individually significant and combine with the project's construction emissions; however, as stated previously, BAAQMD's thresholds are intended to be used in a cumulative context. Therefore, the project's contribution to the cumulative impacts of short-term construction emissions would be **less than cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Long-Term Operational Emissions of Criteria Air Pollutants and Ozone Precursors

As discussed in Impact 3.2-1, the project's operations would not result in emissions exceeding BAAQMD's thresholds of significance. As discussed above, these thresholds are inherently cumulative and tied to long-term regional air quality planning in the SFBAAB. Therefore, the project's contribution to the cumulative impacts of long-term operation emissions would be **less than cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Expose Receptors to Toxic Air Contaminants Affecting a Substantial Number of People

As discussed in Impact 3.2-1, the project would individually generate diesel particulate matter (diesel PM) in exceedance of BAAQMD's cancer risk threshold of significance (i.e., 10 in one million). Mitigation Measure 3.2-1 would be sufficient to reduce the project's mitigated risk to below this threshold, thus reducing the impact to a less-than-significant level. The project is not located within 1,000 feet from any project listed in Table 4-2; therefore, the project's emissions would not combine with another past, present, or future TAC emitting project. Therefore, the project's contribution to the cumulative impacts of TAC exposure would be **less than cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Exposure to Other Emissions (such as those leading to odors) Adversely Affecting a Substantial Number of People

As discussed in Impact 3.2-4, the project would introduce construction-related sources of odors; however, these sources would be intermittent, temporary, and would disperse rapidly from the source. In addition, odor-generating activities would not occur in a single location, or within proximity to off-site receptors, for an extended period. Moreover, construction-related odors would be subject to BAAQMD Regulation 7, which would reduce the potential for receptors to be exposed to odors. Therefore, the project's contribution to cumulative impacts related to other emissions, such as odors, would be **less than cumulatively considerable**.

Mitigation Measures
No additional mitigation is required.

4.3.3 Archaeological, Historical, and Tribal Cultural Resources

GEOGRAPHIC SCOPE

The cumulative context for the archaeological resources, tribal cultural resources, and human remains analysis considers a broad regional system of which the resources are a part. The geographic scope for the analysis of cumulative impacts to archaeological resources, tribal cultural resources, and human remains is the historic lands of the Coast Miwok tribe; these lands extend from Marin County to southern Sonoma County, and eastward from the coast to the Napa-Sonoma Marshes Wildlife Area.

Because all significant cultural resources are unique and nonrenewable members of finite classes, meaning there are a limited number of significant cultural resources, all adverse effects erode a dwindling resource base. The loss of any one archaeological site or tribal cultural resource could affect the scientific value of others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains in the region. As a result, a meaningful approach to preserving and managing cultural resources must focus on the likely distribution of cultural resources, rather than on a single project or parcel boundary.

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

The historic lands of the Coast Miwok people have been affected by development since the arrival of Sir Francis Drake near Point Reyes in 1579. These lands and Marin County specifically have been affected by development since the late 1700s as part of Spanish settlement and missionization and through the steady influx of nonnative people during the 1850s Gold Rush. Development of the rest of Marin County continued as an extension of and support for development in San Francisco, continued expansion of agricultural land, and the development of the cities of San Rafael, Corte Madera, and Mill Valley. Residential growth increased after World War I and then greatly intensified after World War II. These activities have resulted in an existing significant adverse effect on archaeological resources. Cumulative development continues to contribute to the disturbance and loss of cultural resources.

Proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing our understanding of the past environmental conditions and cultures by recording data about sites discovered and preserving artifacts found. Federal, state, and local laws are also in place that protect these resources in most instances. Even so, it is not always feasible to protect these resources, particularly when preservation in place would make projects infeasible, and for this reason the cumulative effects of past, present, and probable future projects in Marin County could result in a potentially significant cumulative impact on cultural resources.

PROJECT CONTRIBUTION

Built Environment Historical Resources
As discussed in Section 3.3, *Archaeology, Historical, and Tribal Cultural Resources*, the proposed project would have no impact on built environment historical resources. Therefore, the proposed project **would not contribute to any significant cumulative impact** related to built environment historical resources.

Mitigation Measures
No mitigation is required.

Unique Archaeological Resources or Historical Resources of an Archaeological Nature

As discussed in Section 3.3, project construction could encounter previously undiscovered or unrecorded archaeological sites and materials during preconstruction- or construction-related ground-disturbing activities. These activities could damage or destroy previously undiscovered unique archaeological resources or historical resources of an archaeological nature. Implementation of Mitigation Measure 3.3-2 would ensure that the proposed project's contribution to cumulatively significant impacts on unique archeological resources or historical resources of an archaeological nature would not be considerable by requiring construction work to cease in the event of an unanticipated find and the appropriate treatment of discovered resources, in accordance with pertinent laws and regulations. With implementation of this mitigation measure, the proposed project's contribution to these impacts would be reduced to less than cumulatively considerable. Therefore, although cumulative effects on archaeological resources from past, present, and probable future projects would be significant, the proposed project's contribution to cumulative archaeological resources impacts would be less than cumulatively considerable due to the low probability of additional discoveries and implementation of Mitigation Measure 3.3-2. Accordingly, the proposed project **would not have a considerable contribution to any significant cumulative impact** related to archaeological resources.

Mitigation Measures

No additional mitigation is required.

Tribal Cultural Resources

As discussed in Section 3.3, ground-disturbing activities during project construction could uncover and damage or destroy previously unknown tribal cultural resources. Mitigation Measures 3.3-2 and 3.3-3 would ensure that the proposed project's contribution to cumulatively significant tribal cultural resource impacts would not be considerable by requiring monitoring of known sensitive areas and the performance of professionally accepted and legally compliant procedures for the discovery and protection of previously undocumented significant resources. Therefore, although cumulative effects on tribal cultural resources from past, present, and probable future projects would be significant, the proposed project's contribution to cumulative tribal cultural resources impacts would be less than cumulatively considerable due to the low probability of additional discoveries and implementation of Mitigation Measures 3.3-2 and 3.3-3. Accordingly, the proposed project **would not have a considerable contribution to any significant cumulative impact** related to tribal cultural resources.

Mitigation Measures

No additional mitigation is required.

Human Remains

As discussed in Section 3.3, no evidence suggests that any precontact or historic-era marked or un-marked human interments are present within or in the immediate vicinity of the project site. However, the location of grave sites and Native American remains can occur outside of identified cemeteries or burial sites. Therefore, there is a possibility that unmarked, previously unknown Native American or other graves could be present within the project site and could be uncovered by project-related construction activities. Compliance with California Health and Safety Code Section 7050.5 and PRC Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered and would ensure that treatment and disposition of the remains occurs in a manner consistent with State guidelines and California Native American Heritage Commission guidance. Therefore, the proposed project **would not have a considerable contribution to any significant cumulative impact** related to the disturbance of human remains.

Mitigation Measures

No mitigation is required.

4.3.4 Biological Resources

GEOGRAPHIC SCOPE

The geographic scope for the biological resources cumulative analysis is regional because biological resources occurring on the project site are also typically found throughout undeveloped lands in the region and impacts to special-status species and habitat could have population-wide effects that extend beyond the project site. Thus, the analysis for all potential cumulative biological resource impacts uses the list approach (see Table 4-2, "Cumulative Projects List," above).

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

Past projects on the Strawberry Peninsula where the project site is located and within eastern Marin County have substantially altered biological resources in the vicinity of the project site. Present and probable future projects within the eastern portion of Marin County could result in a cumulative effect if they result in the loss of sensitive natural communities; disruption of local and regional movement corridors; or injury or mortality of special-status species, interruption of their reproduction, or reduction of their habitat. Most present and probable future projects within eastern Marin County (see Table 4-2) take place on parcels that are currently developed. While there are several projects that may occur on undeveloped parcels (e.g., Robin Drive - Residences at Preserve), these parcels are not located adjacent to the project site on the Strawberry Peninsula and are located within existing neighborhoods, such that they likely provide only marginal habitat for special-status species and communities and are not likely to be used as movement corridors for wildlife (Figure 4-1, "Cumulative Projects"). Present and probable future projects would be required to comply with polices protecting biological resources in the Marin Countywide Plan and the Marin County Code of Ordinances, and it is unlikely that present and probable future projects would conflict with those polices and ordinances. In addition, individual projects would be required to mitigate for significant impacts resulting from inconsistency with County polices or ordinances on a project-by-project basis. The majority of present and probable projects would not have impacts on jurisdictional wetlands and other waters; however, if present and probable projects would have an impact on jurisdictional waters, those projects would be required to mitigate any impacts to achieve a no net loss of function and values. Although, present and probable projects are not likely to result in significant cumulative effects on biological resources, the cumulative effects of past projects on the Strawberry Peninsula and in eastern Marin County would be a significant cumulative impact on biological resources.

PROJECT CONTRIBUTION

As discussed in Section 3.4.3, "Environmental Impacts and Mitigation," implementation of the project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. The project site is not located within or adjacent to the plan area of any adopted Habitat Conservation Plan, Natural Community Conservation Plan or any other approved conservation plan. Therefore, the project would not affect any established conservation plan. The project **would not contribute to cumulative impacts** related to these issues and these issues are not discussed further.

Special-Status Plant Species

As discussed in Impact 3.4-1, "Potential Disturbance or Loss of Special-Status Plants," implementation of the project could result in removal of special-status plants and loss of habitat; however, the project would implement Mitigation Measure 3.4-1a and Mitigation Measure 3.4-1b, to avoid and minimize introduction of invasive plants that may reduce habitat for special-status plants and avoid special-status plants or fully compensate for any loss through enhancing existing populations, creating new populations, and restoring or creating suitable habitat. The majority of projects within eastern Marin County take place on previously developed parcels (Table 4-2) and are not likely to affect substantial numbers of special-status plant species. The Residences at Preserve project in Corte Madera would occur in habitat for special-status plant species, but the individual species that would be affected by the Residence at

Preserve project (Town of Corte Madera 2019) are not found within the project site for the North Coast Land Holdings Project. Therefore, the project's contribution to the significant cumulative impact on special-status plant species would be less than cumulatively considerable.

Mitigation Measures

No additional mitigation is required.

Special-Status Wildlife Species

As discussed in Impacts 3.4-2through 3.4-5 the implementation of construction best management practices for water quality that would be contained in the required storm water pollution prevention plan and the new storm drainage systems proposed for the project would reduce contaminated runoff from the project to Richardson Bay and avoid substantial effects on special-status fish species. However, construction of the project could result in potentially significant impacts to monarch butterfly, special-status bats, white-tailed kite, and other nesting birds due to the potential of construction to result in loss of habitat, roost disturbance, nest disturbance, and mortality. The project would be required to implement Mitigation Measures 3.4-2a through 3.4-5 to avoid maternity roost disturbance, nest disturbance, and mortality of special-status species. Additionally, Mitigation Measure 3.4-2a requires the applicant to maintain habitat suitability for overwintering monarch butterflies if they occur on the project site. While the project may remove trees and other habitat for special-status wildlife, the existing disturbance on the project site limits the quality of this habitat and removal of this habitat would not be a substantial effect on these species. Therefore, the project is not expected to substantially affect the distribution, breeding productivity, population viability, or the regional population of any special-status species; or cause a change in species diversity locally or regionally. As described above, the majority of foreseeable future projects in eastern Marin County would take place on developed parcels (Table 4-2), and no foreseeable future projects are proposed for the Strawberry Peninsula where the project is located (Figure 4-1, "Cumulative Projects"). These projects would likely have a limited effect on the special-status wildlife that may occur on the North Coast Land Holdings Project site. Those future projects that are located within special-status species habitat are limited in area (see Table 4-2) and would be subject to the policies in the Marin Countywide Plan to protect biological resources, and legal requirements to avoid impacts to nesting birds, and to avoid or reduce impacts on other special-status wildlife. As a result, when combined with other future projects within eastern Marin County, the project would result in a less-than-cumulatively considerable contribution to the significant cumulative impact on special-status wildlife species.

Mitigation Measures

No additional mitigation is required.

Sensitive Natural Communities

As discussed in Impact 3.4-6, "Potential Degradation or Loss of Riparian Habitat or Other Sensitive Natural Communities Identified by CDFW or USFWS," the project site contains California bay forest, needle grass – melic grass grassland, and coyote brush scrub / (needle grass, blue wild rye, California brome), which are sensitive natural communities. Additionally, as discussed in Impact 3.4-7, "Potential Degradation or Loss of Oak Woodlands," the project site also contains coast live oak woodland, which is not a sensitive natural community; however, the loss of oak woodland is subject to specific mitigation requirements set forth in the Oak Woodlands Conservation Act (Public Resources Code Section 21083.4), and the Marin Countywide Plan, and therefore considered a sensitive habitat. While tree removal would occur on the project site, construction and fuels management are not likely to convert California bay forest or oak woodland to another landcover type or result in net loss of these communities. Furthermore, the project would avoid the introduction of sudden oak death into the project site through the implementation of Mitigation Measure 3.4-3.

The construction of the project would convert portions of the needle grass – melic grass grassland, and coyote brush scrub / (needle grass, blue wild rye, California brome), which are sensitive natural communities on the project site. However, these communities on the project site are regularly disturbed by mowing and other activities, are fragmented, small in size, and surrounded by existing development, which reduces the quality of these communities. Preserves (i.e., Golden Gate National Recreation Area, Ring Mountain Preserve, Old Saint Hilary's Preserve, La Cresta Open Space, Atkinson Open Space, Mt. Burdell Preserve) within a few miles of the project site contain areas where

the characteristic signature of perennial grasslands (e.g., rough, clumpy texture) can be seen from Google Earth aerial imagery; and these preserves have documented the presence of protected relic perennial grasslands on their lands. Therefore, while these vegetation communities are considered vulnerable in the context of the distribution of relic perennial grassland statewide, loss of needle grass – melic grass grassland and coyote brush scrub / (needle grass, blue wild rye, California brome) from the project site would not represent a substantial adverse effect on these resources in the region, due to the degraded existing conditions of these communities and the abundance of high-functioning examples of these communities protected in preserves surrounding the project site.

As described above, the majority of probable future projects in eastern Marin County would take place on developed parcels (see Table 4-2). Future projects that are located within needle grass – melic grass grassland and coyote brush scrub / (needle grass, blue wild rye, California brome) would be required to address impacts to these communities through compliance with Policy BIO-1.1 of the Marin Countywide Plan and would be subject to legal requirements to mitigate potentially significant impacts. In addition to the protections in the Marin Countywide Plan, oak woodland and California bay forest would be subject to the protections in the Oak Woodlands Conservation Act, and the tree removal requirements of the Marin County Code. As a result, when combined with other future projects within eastern Marin County, the project would result in a **less-than-cumulatively considerable contribution** to the significant cumulative impact on sensitive natural communities.

Mitigation Measures

No additional mitigation is required.

Federally Protected Wetlands and Waters

As discussed in Impact 3.4-8, "Potential Disturbance or Loss of State or Federally Protected Wetlands or Other Waters" the project contains a total of 0.04 acre of freshwater emergent wetland landcover type in one drainage outside of the disturbance footprint and within two roadside ditches within the disturbance footprint of the project. Wet areas within the disturbance footprint of the project are small, ephemeral, and isolated; they contain weedy species and do not provide substantial water quality benefits or important habitat for wildlife. These wet areas are not expected to qualify as waters of the US, or waters of the state. In addition, based on the size, isolation, composition, and functional impairment of wet areas within the disturbance area, project-related disturbance of these features would not constitute a substantial adverse effect on wetlands or other waters. Furthermore, any future projects within eastern Marin County would be required through the Clean Water Act, Porter-Cologne Water Quality Act, and Marin Countywide Plan policies to avoid or mitigate impacts to wetlands and waters. Therefore, the project's contribution to the significant cumulative impacts related to wetlands and waters would be **less-than-cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Potential to Impede Wildlife Movement and the Use of Native Wildlife Nursery Sites

As discussed in Impact 3.4-5, "Potential to Impede Wildlife Movement and the Use of Native Wildlife Nursery Sites," the project site is unlikely to support regional wildlife movement corridors, and no habitat connectivity corridors are documented to occur on site. Therefore, the project is not likely to have a substantial adverse effect on wildlife movement through the project site. Use of the site as nursery habitat for most species is unlikely given the existing and ongoing human disturbance on the project site; however, buildings on site may be used as maternity roosts by common bat species. The project would be required to implement Mitigation Measure 3.4-2c to avoid maternity roost disturbance of common bat species. Therefore, the project is not expected to substantially affect the distribution, breeding productivity, population viability, or the regional population of any common bat species; or cause a change in species diversity locally or regionally. As a result, the project would result in a **less-than-cumulatively considerable contribution** to the significant cumulative impacts related to wildlife movement and use of native wildlife nursery sites.

Mitigation Measures

No additional mitigation is required.

Potential to Conflict with Local Policies or Ordinances Protecting Biological Resources

The Marin Countywide Plan contains policies related to habitat for special-status species, sensitive natural communities, wildlife nursery areas and movement corridors, and woodland and forested habitats. The plan also contains policies related to invasive plants, plant pathogens, use of herbicides and insecticides, as well as restrictions on disturbance in sensitive habitat during nesting season. The project would not conflict with these policies, and where mitigation is required to reduce impacts to less than significant, the measures applied would be consistent with Policy BIO-2.1, achieving no net loss of sensitive habitat acreage, values, and function. Furthermore Policy BIO-3.1 of the Marin Countywide Plan includes buffers and other requirements for the protection of jurisdictional wetlands. Potentially jurisdictional wetlands are located within the disturbance area of the project and although a protocol delineation has not been conducted, based on conditions determined by field survey, Policy BIO-3.1 would not apply because it applies to jurisdictional wetlands. In addition, the Marin County Code contains protections for certain trees. The project would remove 89 protected trees and a tree removal permit and replacement of these trees would be required. The project would comply with all required permits and policies. Therefore, the project would result in a **less-than-cumulatively considerable contribution** to cumulative impacts related to conflicting with local polices and ordinances.

Mitigation Measures

No additional mitigation is required.

4.3.5 Energy

GEOGRAPHIC SCOPE

The geographic context for energy impacts is the service area of PG&E within Marin County.

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

The project is in the regional vicinity of various planned, past, and present projects including the Corte Madera Residence Inn, Robin Drive, Tamalpais Apartments, and Town Hall Project, among others (for a complete list of projects within Marin County see Table 4-2). The effects of energy consumption from past, present, and probable future projects are accounted for in the energy estimates of the locally serving utility, Pacific Gas & Electric (PG&E). PG&E is required to submit proposed long-term procurement applications to the California Public Utilities Commission (CPUC) with estimates of projected energy (electricity and natural gas) consumption within their service boundaries based on existing and projected energy needs which account for expansion of infrastructure to meet growth projections. Past, present, and probable future projects may be located in areas where existing infrastructure is sufficient to meet the existing and new energy demands of such projects, while, depending on location, new infrastructure may be needed to meet increased energy demand. New infrastructure would be required to comply with relevant permits and environmental review prior to the commencement of construction, during which potential environmental impacts would be identified and mitigated as appropriate. Therefore, impacts related to energy resources from past, present, and reasonably foreseeable cumulative projects are not cumulatively significant.

PROJECT CONTRIBUTION

Wasteful, Inefficient, or Unnecessary Consumption of Energy

As identified in Impact 3.6-1, the project would not result in the wasteful, inefficient, or unnecessary consumption of energy. The project would include on-site solar photovoltaic systems on the building roofs of new residential buildings to provide the project site with renewable electricity. Additionally, the project would be designed to reduce the urban heat island effect through the planting of trees throughout the project site and use of reflective pavements. This would decrease the energy needs of the project site by reducing cooling demand within buildings. Furthermore, the project would include bicycle infrastructure for visitors and employees, which would reduce gasoline and diesel

fuel consumption associated with new vehicle trips generated by the project. These conservation features would reduce the project's total energy consumption. Therefore, the project's contribution to the cumulative impacts of wasteful, inefficient, or unnecessary consumption of energy would be **less than cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency

As discussed in Impact 3.6-2, the project would not conflict with the Marin County CAP as the project includes various project design features that would reduce the project's overall energy demand and would contribute to the countywide energy reductions identified in the CAP. Other probable future projects within the cumulative energy environment would likely implement similar measures to demonstrate consistency with the CAP as well as the 2022 Scoping Plan. Therefore, the project's contribution to the cumulative impacts relating to conflicting with or obstructing of local or state plan for renewable energy or energy efficiency would be **less than cumulatively considerable**.

Mitigation Measures

No mitigation is required.

4.3.6 Geology and Mineral Resources

GEOGRAPHIC SCOPE

Geologic conditions within the San Francisco Bay Area can vary widely, even within Marin County. A project's potential impacts related to geology and soils are individual and localized, depending on the project site and underlying soils. For those reasons, the geographic context for geology and soils is site-specific and geologic impacts tend to be localized. Therefore, the geographic scope for analysis of cumulative impacts related to geology and soils is within the immediate project vicinity. However, the geographic context for paleontological resources includes Marin County. Cumulative projects considered in the analysis are listed in Table 4-2 of Section 4, "Cumulative Impacts."

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

Past projects on the Strawberry Peninsula where the project site is located and within eastern Marin County have substantially altered soil and mineral resources in the vicinity of the project site. Present and probable future projects within the eastern portion of Marin County could result in a cumulative effect if they result in impacts to geology and soils within the project area. Most present and probable future projects within eastern Marin County (Table 4-2) take place on parcels that are currently developed. While there are several projects that could occur on undeveloped parcels (e.g., Robin Drive - Residences at Preserve), these parcels are not located adjacent to the project site on the Strawberry Peninsula and are located within existing developed areas. There are also no proposed projects located within 2,000 feet of the project site. The closest project is the Weingeist Shyu Family Trust et al., Design Review located in the community of Strawberry approximately 0.75 mile (3,960 feet) north of the project site.

Present and probable projects would be required to comply with polices pertaining to geological and soil resources in the Marin Countywide Plan and the Marin County Code of Ordinances, and it is unlikely that present and probable future projects would conflict with those polices and ordinances. In addition, individual projects would be required to mitigate significant impacts resulting from inconsistency with County polices or ordinances on a project-by-project basis. Therefore, the majority of present and probable projects would not result in substantial soil erosion, directly or indirectly cause potential substantial adverse impacts to structures or people due to slope instability, or be located on unstable or expansive soils. If present and probable projects would have an impact, those projects would be required to mitigate any impacts. Past, present, and reasonably foreseeable projects within the cumulative study area have been, and would continue to be, required to comply with specific requirements set forth by the agencies responsible

for soil and geologic resources as well as County of Marin Code. Therefore, impacts related to soil and geologic resources from past, present, and reasonably foreseeable cumulative projects are not cumulatively significant.

PROJECT CONTRIBUTION

Directly or Indirectly Cause Potential Substantial Adverse Impacts to Structures or People, Including the Risk of Loss, Injury, or Death, Through Seismic Ground Shaking

Cumulative projects would be exposed to ground shaking during seismic events, but development of individual projects would not increase the potential for impacts to occur on other sites. Thus, there would be no combined or additive cumulative impacts from multiple related or reasonably proximate projects. The closest related project Is located 0.75 mile from the proposed project and would not impact the geologic conditions of the project site. As each project would be required to complete a site-specific detailed geotechnical investigation as required by the CBC, Marin Countywide Plan Policy EH-2.a, and Marin County Code 22.100.040, as applicable for individual cumulative projects, the Marin Countywide Plan, and other local jurisdiction planning documents, each project would be provided with site-specific design recommendations which would ensure each project is compliant with existing regulations concerning geologic stability and safety. Additionally, individual development proposals would be reviewed separately by the appropriate public agency depending on location and undergo environmental review if appropriate. In the event that future cumulative development would result in impacts related to geologic or seismic impacts, those potential project or site-specific impacts would be addressed in accordance with the requirements of CEQA and building code requirements or other engineering requirements. New buildings would be constructed utilizing current design and construction methodologies for earthquake resistant design as required by relevant regulations, such as the CBC. The purpose of the CBC regulations and standards is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction, and by design, it is intended to reduce the cumulative risks to the public and the environment resulting from seismic events. Seismically induced ground shaking, liquefaction and lateral spreading, and expansive and corrosive soils could cause structural damage or ruptures during construction of cumulative projects. However, compliance with CBC building regulations and standards would reduce the potential for such impacts to occur. Like the proposed project, the cumulative projects would be required to comply with the same applicable provisions of these laws and regulations. Through compliance with these requirements, the potential for impacts throughout the geographic region would be reduced. Compliance with the CBC, Marin County Code, permits, and regulations related to, but not limited to, soils and seismicity would reduce cumulative impacts associated with geology and soils to the greatest extent possible. For these reasons, the cumulative impact from seismic ground shaking **would not cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Directly or Indirectly Cause Potential Substantial Adverse Impacts to Structures or People, Including the Risk of Loss, Injury, or Death, Through Seismically-Induced Ground/Structural Failure Including Slope Instability, Liquefaction, and Lateral Spreading

As with impacts related to seismic conditions and events, there are no combined or additive cumulative impacts associated with slope instability, liquefaction, or lateral spreading from multiple related or reasonably proximate projects. Each individual project is subject to engineering and design requirements that will deal adequately with such concerns, avoiding the creation of combined or additive impacts. As indicated in Section 3.6, "Geology and Soils," the proposed project would be subject to the mandatory requirements and standards of the CBC, Title 24, which identify site preparation and construction techniques to attenuate the effects of strong ground shaking and seismic-related ground failure. The closest related project is located 0.75 mile from the proposed project and would not impact the geologic conditions of the project site. Furthermore, implementation of Mitigation Measure 3.6-2 and compliance with the CBC ensures proper site preparation and grading practices, adequate design of foundations, and guidelines for the appropriate selection and use of construction materials that would minimize any potential impacts associated with seismic-related events. The cumulative impact would be **less than cumulatively considerable**.

Mitigation Measures
No additional mitigation is required.

Result in Substantial Soil Erosion
As indicated in Sections 3.6, "Geology and Soils," and 3.9, "Hydrology," the proposed project may result in erosion that would be exacerbated by alteration of natural drainage patterns, local concentration of stormwater runoff, denudement of previously-vegetated slopes, or site grading. While the greatest risk of erosion would be during construction, requirements to comply with the Construction General Permit and Section 23.18 of the Marin County Code, which requires the development of a SWPPP and implementation of BMPs would decrease the potential for erosion. Compliance with all applicable federal, state, and local regulations described in Sections 3.6 and 3.9 would result in a project-level impact that would be less than significant. Moreover, as discussed above, past, present, and reasonably foreseeable future projects would also be required to comply with all applicable federal, state, and local regulations as well as mitigate any potentially significant impacts. For these reasons, the proposed project's contribution to cumulative impacts on soil erosion would be **less than cumulatively considerable**.

Mitigation Measures
No mitigation is required.

Directly or Indirectly Cause Potential Substantial Adverse Impacts to Structures or People, Including the Risk of Loss, Injury, or Death, Through Slope Instability/ Landsliding
As indicated in Section 3.6, "Geology and Soils," the proposed project would be subject to an NPDES permit and related Storm Water Pollution Prevention Plan (SWPPP), which would avoid significant soil erosion or loss. Practices such as fill placement near the top of a landslide/unstable area or cutting near the lower portion (toe) could all decrease slope stability and re-activate or cause new landslides, while erosion of placed fill and/or shallow sloughing of steep graded slopes can damage structures and improvements constructed near the toe or top of graded slopes. Therefore, implementation of Mitigation Measure 3.6-4 would reduce the impact of slope instability/landsliding to meet the goals and policies of the Marin Countywide Plan's Environmental Hazards Element, and requirements of the Marin County Code, which are intended to prevent structural collapse and protect life safety. Repairing or improving areas of instability to increase the factor of safety under static conditions would keep slope instability/landsliding impacts to a less than significant level. Compliance with all applicable federal, state, and local regulations described in Section 3.6 would result in a project-level impact that would be less than significant. Moreover, as discussed above, past, present, and reasonably foreseeable future projects would also be required to comply with all applicable federal, state, and local regulations as well as mitigate any potentially significant impacts. For these reasons, the proposed project's contribution to cumulative impacts on slope instability and landsliding would be **less than cumulatively considerable**.

Locate Project Facilities on Expansive Soil
As indicated in Section 3.6, "Geology and Soils," the proposed project would not exacerbate an existing environmental hazard and would adhere to CBC and Marin County Code requirements to ensure that potential impacts related to site-specific geotechnical conditions, such as unstable or expansive soils, remain at less than significant levels. As with impacts related to seismic conditions and events, there would be no combined or additive cumulative impacts from multiple related or reasonably proximate projects. Each individual project would be subject to engineering and design requirements as required by applicable federal, state, and local regulations that would adequately address site-specific geotechnical conditions, such as unstable or expansive soils, avoiding the creation of combined or additive impacts. For these reasons, the proposed project's contribution to cumulative impacts on expansive soil would be **less than cumulatively considerable**.

Mitigation Measures
No mitigation is required.

Locate Project Facilities on Unstable Soils

As with impacts related to seismic conditions and events and expansive soils, there would be no combined or additive cumulative impacts associated with locating projects on unstable soils. Each individual project would be subject to engineering and design requirements as required by applicable federal, state, and local regulations that would adequately address site-specific geotechnical conditions, such as unstable soils, avoiding the creation of combined or additive impacts.

As indicated in Section 3.6, "Geology and Soils," the proposed project would be required to complete a site-specific detailed geotechnical investigation as required by the California Building Standards Code (CBC), and, as applicable for individual cumulative projects, the Marin Countywide Plan, or other local jurisdiction planning documents, each project would be provided with site-specific design recommendations, which would confirm each project was compliant with existing regulations concerning geologic stability and safety. Compliance with and implementation of regulations and policies would ensure applicable recommendations for the proposed project are used to keep potential impacts related to site-specific geotechnical conditions, such as unstable or expansive soils, to remain at less than significant levels. As discussed above, past, present, and reasonably foreseeable future projects would also be required to comply with all applicable federal, state, and local regulations as well as mitigate any potentially significant impacts. For these reasons, the proposed project's contribution to cumulative impacts on unstable soils would be **less than cumulatively considerable**.

Potential for Disturbance of Paleontological Resources

Future development in Marin County has potential to result in cumulatively significant impacts on paleontological resources. However, the nearest cumulative project is 0.75 mile from the project site and all cumulative projects would be required to comply with County Code 22.20.040 as well as federal and State policies related to protection of paleontological resources which would reduce potential cumulative impacts to paleontological resources to less than significant. Moreover, the proposed project's incremental contribution to less than significant cumulative impacts would not be significant as the proposed project is highly unlikely to encounter or disturb significant paleontological resources. For these reasons, the proposed project's contribution to cumulative impacts on paleontological resources would be **less than cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

4.3.7 Greenhouse Gas Emissions and Climate Change Vulnerability

GEOGRAPHIC SCOPE

The geographic scope of the cumulative impact analysis for GHG emissions and climate change is global. Climate change is an inherently cumulative issue and relates to development in the region, California, and, most of all, the world. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any GHG molecule depends on multiple variables and cannot be determined with any certainty, it is understood that more carbon dioxide (CO_2) is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. The combination of GHG emissions from past, present, and future projects contribute substantially to the phenomenon of global climate change and its associated environmental impacts. Therefore, the impacts discussed in Section 3.7, "Greenhouse Gas Emissions and Climate Change Vulnerability," are also the cumulative effects of the project.

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

The project is in the regional vicinity of various planned, past, and present projects including the Corte Madera Residence Inn, Robin Drive, Tamalpais Apartments, and Town Hall Project, among others (for a complete list of

projects within the SFBAAB see Table 4-2). With respect to climate change, individual projects' contribution to climate change are inherently cumulative, as stated above. The potential GHG emissions from past, present, and probable future projects would generally generate emissions leading to adverse impacts associated with anthropogenic climate change. The need to address climate change and GHG emissions from the project, as proposed, is a result of past and present levels of emissions leading to accelerated climate change. Therefore, on a global scale, all past and present projects have and continue to contribute GHG emissions that result in the warming of global temperatures and the positive feedback loops associated with such warming such as rising sea levels, increased severity of storms and wildfires, the frequency and intensity of flooding, and loss of ecological resources, among many others. With respect to the cumulative nature of climate change, BAAQMD's thresholds are designed to demonstrate that future projects are contributing their "fair share" in assisting the state in meeting its long-term GHG reduction targets, as codified in Assembly Bill 1279 (i.e., carbon neutrality by no later than 2045). BAAQMD's GHG guidance was initially adopted in 2022 and updated in 2023, and was not applied to projects approved prior to that date. BAAQMD's guidance recommends that non-permitted sources be designed to be fully electric, introduce a level of vehicle miles traveled (VMT) consistent with the targets of OPR's targets under Senate Bill (SB) 743, and adhere to the Tier 2 requirements of the most current version of the state's California Green Building Standards Code (CalGreen) as it pertains to electric vehicle charging. Projects approved prior to BAAQMD's most recent guidance may not have been held to these design standards, and continue to produce emissions from the mobile source and energy sector that may otherwise have been mitigated had BAAQMD's guidance been applicable. There is uncertainty surrounding the degree to which existing and present projects' GHG emissions have been mitigated or treated. Therefore, impacts related to climate change from past, present, and probable future cumulative projects are cumulatively significant.

PROJECT CONTRIBUTION

As described in Section 3.7, "Greenhouse Gas Emissions and Climate Change Vulnerability," the discussion of GHG emissions in Impact 3.7-1 is inherently a cumulative impact analysis. GHG emissions from one project cannot, on their own, result in changes in climatic conditions; therefore, the emissions from one project must be considered in the context of their contribution to cumulative global emissions. Impact 3.7-1 is therefore a cumulative impact analysis and, with implementation of Mitigation Measure 3.7-1a impacts related to satisfying BAAQMD's qualitative thresholds with respect to the electrification of the mobile source sector would be reduced to a less-than-significant level. Mitigation Measure 3.7-1b would provide the applicant with the flexibility to either construct the project without natural gas infrastructure (i.e., fully electric), or at a minimum have all-electric appliances and rely on carbon offsets as a mechanism to close the gap of GHG emissions generated from natural gas combustion through a qualified offset registry. If all-electric development is infeasible and the County has adopted an offset policy and implementation program, the purchasing of sufficient GHG offsets would demonstrate that the project would be aligned with the carbon neutrality goal of AB 1279. However, it cannot be assured at this time that Mitigation Measure 3.7-1b is feasible. In addition, implementation of Mitigation Measure 3.14-2a and Mitigation Measure 3.14-2b would require the development of a TDM program and the dedication of housing to campus-affiliated residents, respectively, to reduce vehicle trips and, therefore, VMT associated with the residential uses of the project. However, even with implementation of Mitigation Measures 3.7-b, 3.14-2a, and 3.14-2b, the project would not fully satisfy BAAQMD's VMT reduction requirements or building decarbonization goals, and the project's contribution of GHGs would conflict with the 2022 Scoping Plan. Therefore, the project, in conjunction with worldwide cumulative GHG impacts from past, present, and probable future projects, would be significant, and the impacts of the project itself, even with mitigation, would be cumulatively considerable.

Mitigation Measures

No additional mitigation is available to reduce this impact.

4.3.8 Hazards, Hazardous Materials, and Wildfire

GEOGRAPHIC SCOPE

The geographic scope for hazards and hazardous materials impacts consists of the areas that could be affected by proposed project activities as well as areas affected by other projects whose activities could directly or indirectly affect the proposed activities on the project site. In general, projects occurring within 0.25 mile of the project site were considered in this analysis due to the localized nature of potential impacts from the release of hazardous materials into the environment. The geographic scope evaluating safety hazards related to airport operations includes cumulative projects within two miles of the Commodore Center Heliport and Commodore Center Seaplane Base. The geographic scope for cumulative wildfire impacts includes all of Marin County. Cumulative projects considered in the analysis are listed in Table 4-2 of Section 4, "Cumulative Impacts."

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

As discussed in Section 3.8, "Hazards, Hazardous Materials, and Wildfire," a Phase I ESA (Appendix M) was prepared for the proposed project, which included a review of online environmental databases and regulatory agency records. The database search identified sites of environmental concern within several search radii, including one-eighth of a mile and one-eighth mile to one-quarter mile. Within one-quarter mile of the project site, only one property was classified as being of environmental concern. This property is associated with San Francisco Seaplane Tours and was listed as a LUST cleanup site for potential gasoline contamination (SWRCB 2023). However, the San Francisco Bay RWQCB issued a case closure letter for the property on May 27, 1998 (SWRCB 2023), and the Phase I ESA determined that this site would not pose an environmental risk to the project site. Accordingly, the site would not have the potential to result in a cumulative hazard or hazardous materials impacts within the one-quarter mile cumulative study area. Additionally, none of the present and reasonably foreseeable future projects identified in Table 4-2 are within one-quarter mile of the project site.

Furthermore, present and reasonably foreseeable future projects within the cumulative study area could result in the release of hazardous materials into the environment during construction activities, thereby exposing construction workers and the public to hazardous materials. However, the risk for exposure to hazardous materials would be analyzed during project development. These projects, like the proposed project, are required to comply with all federal, state, and local regulations regarding hazards and hazardous materials. Therefore, hazard and hazardous materials impacts from past, present, and reasonably foreseeable cumulative projects are not cumulatively significant.

Regarding airport-related hazards, several of the cumulative projects listed in Table 4-2 are within two miles of the Commodore Center Heliport and Commodore Center Seaplane Base, including cumulative projects #1, #3, #4, #5, #8, and #12 through #15. The construction of any structures for these projects that would exceed airspace surfaces would be required to notify the FAA and incorporate any conditions set forth in FAA determinations to ensure that proposed structure would not be a hazard to air navigation. Because compliance with FAA requirements is mandatory, airport hazard impacts from cumulative projects are not cumulatively significant.

Past, present, and reasonably foreseeable projects within the cumulative study area have been, and would continue to be, required to comply with specific requirements set forth by the agencies responsible for emergency response, including adopted emergency response and emergency evacuation plans. During construction, cumulative projects would be required to maintain emergency access in compliance with Section 3310.1 of the 2019 California Fire Code, which identifies minimum requirements to provide required emergency access during construction activities. Additionally, projects would be required to be designed in accordance with County design standards. The projects would be subject to review by County of Marin staff and relevant emergency agencies to ensure the design of the projects meets applicable safety standards to provide physical access for emergency vehicles. Therefore, impacts related to adopted emergency response and emergency evacuation plans from past, present, and reasonably foreseeable cumulative projects are not cumulatively significant.

Lastly, future development within the cumulative study area for wildfire (i.e., Marin County) could increase the population and/or increase activities and ignition sources and thereby increase the chances of a wildfire and the number of people and structures exposed to risk of loss, injury, or death. However, all future development in the county would be required to comply with Marin County Code requirements related to fire. Relevant chapters of Title 16 include Chapter 16.16, which adopts the 2019 California Fire Code, 2018 International Fire Code, and Appendix A of the 2018 Wildland-Urban Interface Code, and Chapter 16.17, which establishes and incorporates the Urban-Wildland Interface Code. The purpose of the Urban-Wildland Interface Code is to regulate and govern the mitigation of hazard to life and property from the intrusion of fire from wildland exposures, fire from adjacent structures and prevention of structure fires from spreading to wildland fuels.

As stated in County Code Title 19, the County has adopted the 2019 editions of the CBC and the California Residential Code, with exceptions, additions, and deletions as provided in that County Code title. County Code Section 19.04.064 incorporates amendments to Chapter 7A of the 2019 CBC that apply to new buildings, additions and exterior remodels to buildings located in any FHSZ or any WUI fire area designated by the enforcing agency and requires use of fire-resistant materials and construction techniques for new buildings, additions, and exterior remodels to buildings located in a designated FHSZ or WUI fire area. Therefore, cumulative wildfire impacts from past, present, and probable future projects are not cumulatively significant.

PROJECT CONTRIBUTION

A significant cumulative impact on hazards and hazardous materials would result if the proposed project would make a cumulatively considerable contribution to significant cumulative impacts related to creating a significant hazardous materials impact on the public or environment; emitting hazardous materials emissions; being located on a listed hazardous materials site; resulting in airport-related safety hazards; impairing or interfering with an adopted emergency response plan; and exacerbating wildfire risk.

Routine Transport, Use, or Disposal of Hazardous Materials and Upset or Accent Conditions

As discussed in Section 3.8, "Hazards, Hazardous Materials, and Wildfire," construction and operation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through upset or accident conditions. Compliance with all applicable federal, state, and local regulations described in Section 3.8 would ensure that this project-level impact would be less than significant. Moreover, as discussed above, a cumulative hazardous materials impact from past, present, and reasonably foreseeable future projects does not exist. As such, the proposed project would have no potential to contribute to a cumulative hazardous materials impact. Therefore, the proposed project's contribution to cumulative hazardous materials impacts **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Airport Safety Hazards

As discussed in Section 3.8, there are no public use airports within two miles of the project site and the project is not within the boundaries of an ALUP. However, the privately owned and operated Commodore Center Heliport and Commodore Center Seaplane Base are both located approximately 0.4-mile southwest of the project site. The FAA website contains a noticing criteria tool to assist agencies and developers in determining whether temporary and permanent structures (e.g., new buildings, construction cranes) would exceed the Part 77 Notice Criteria, and therefore would be required to file a Notice of Proposed Construction or Alteration. Using the FAA's notice criteria tool, the new structures proposed as part of the project would not exceed the FAA noticing criteria (FAA 2023). Therefore, notification to the FAA would not be required for new individual structures associated with the proposed project, at this time. However, similar to cumulative projects, the proposed project would be required to notify the FAA should final design for the project indicate that any proposed structures would exceed airspace surfaces. FAA review and issuance of a determination that a proposed structure would not be a hazard to air navigation, which could include factors other than height, such as flight direction and trajectory, and project compliance with any

conditions set forth in such FAA determinations, would ensure that the new structures associated with the proposed project would not result in air safety hazards. Therefore, the cumulative impact from past, present, and probable future projects, together with the project, would be less than significant, and the proposed project's contribution to cumulative airport safety hazard impacts **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan

As discussed in Section 3.8, construction and operation of the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Project construction would comply with Section 3310.1 of the 2019 California Fire Code, which identifies minimum requirements to provide required emergency access during construction activities. During operations, the proposed project would not include any components that would impair or interfere with the use of existing notification systems or tools in the event of an emergency, nor would it impede the ability of first responders to implement the Operational Area EOP or MLHMP. The project would also be designed in accordance with County design standards, and would not result in any permanent roadway closures or changes in circulation patterns that could affect emergency response or impair implementation of emergency response or evacuation plans. Furthermore, as discussed above, a cumulative impact related to emergency response or evacuation plans from past, present, and reasonably foreseeable future projects does not exist, as all such projects will have to comply with these same requirements. Therefore, the proposed project's contribution to cumulative impacts related to emergency response or evacuation plans **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Wildfire Hazards

As discussed in Section 3.8, the project site and surrounding area are not in or near an SRA, but rather are within an LRA and are designated as "urban, unzoned" according to the FHSZ maps for Marin County. There are no Moderate, High, or Very High FHSZs mapped within or surrounding the project site. In addition, the project site is not located within or adjacent to the WUI. Although the project site is not within or adjacent to WUI areas or a Moderate, High, or Very High FSHZ, the project site supports fire-prone vegetation, including dead and declining tree species, scrub habitat, and grasslands. As such, the potential risk of wildfire exists at the project site. However, as part of the proposed project, several dead and declining trees would be removed from the project site, and a defensible safe zone would be established, including 30-foot and 100-foot fuel management zones. Within the 100-foot fuel zone, grasses would be mowed or grazed and all dead wood and branches within ten feet of the ground or surrounding vegetation would be removed. All invasive species of brush would be removed, and remaining shrubs native shrubs would be pruned or removed to ensure no continuity with other shrub masses or trees. Trees replanted on-site would be sited accordingly in conformance with the Southern Marin County Fire Protection District's fire protection standards related to vegetation management (e.g., defensible space). No fire-prone species would be planted in fuel management zones. The implementation of vegetation management procedures and the maintenance of defensible spaces would reduce the potential wildfire risk at the project site. Therefore, the proposed project would not exacerbate wildfire risk, but rather would reduce fire risk as compared with the risk associated with existing conditions. For these reasons, the project's contribution to cumulative impacts related to wildfire **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

4.3.9 Hydrology

GEOGRAPHIC SCOPE

The geographic scope of the cumulative analysis for hydrology and water quality is the central portion of the San Francisco Bay Watershed within Marin County (Figure 3.9-1, "Subwatersheds"). Cumulative projects considered in the analysis are listed in Table 4-2 above.

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

Past projects on the Strawberry Peninsula where the project site is located and within eastern Marin County have altered hydrology and water quality in the vicinity of the project site. Present and probable future projects within the eastern portion of Marin County could result in a cumulative effect if they result in impacts to hydrology and water quality within the project area. Most present and probable future projects within eastern Marin County (Table 4-2) take place on parcels that are currently developed. While there are several projects that could occur on undeveloped parcels, these parcels are not located adjacent to the project site on the Strawberry Peninsula and are located within existing developed areas. There are also no proposed projects located within 2,000 feet of the project site.

Present and probable projects would be required to comply with polices pertaining to hydrology and water quality in the Marin Countywide Plan and the Marin County Code, and it is unlikely that present and probable future projects would conflict with those polices and ordinances. In addition, individual projects would be required to mitigate significant impacts resulting from inconsistency with County polices or ordinances on a project-by-project basis. Therefore, the majority of present and probable projects would not result in the degradation of surface or groundwater quality; interfere with groundwater recharge; result in substantial erosion or siltation, flooding, exceedance of the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; release pollutants due to flooding, or obstruct the implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan. If present and probable projects would have an impact, those projects would be required to mitigate any impacts. Past, present, and reasonably foreseeable projects within the cumulative study area have been, and would continue to be, required to comply with specific requirements set forth by the agencies responsible for hydrology and water quality resources as well as County of Marin Code. Therefore, impacts related to hydrology and water quality from past, present, and reasonably foreseeable cumulative projects are not cumulatively significant.

PROJECT CONTRIBUTION

Degrade Surface Water or Groundwater Quality

Because all projects with over an acre of disturbance would be required to comply with the Construction General Permit, including preparation and implementation of the SWPPP and associated BMPs as well as inspection and reporting, the potential degradation of surface water quality during construction and operation of the project would be minimized. All projects would also be required to comply with Chapter 23.18, Urban Runoff Pollution Prevention of the Marin County Code. Because these controls will substantially reduce pollutants from stormwater runoff, cumulative impacts from past, present, and probable future projects, together with the project, would be less than significant, and the project's incremental impacts would be **less than cumulatively considerable.**

Mitigation Measures

No mitigation is required.

Interfere with Groundwater Recharge

The projects in the cumulative project list as well as the proposed project would increase impervious surfaces in the watershed. Impervious surfaces prevent or reduce infiltration of stormwater and impede groundwater recharge. Bioretention areas for all projects would be sized and designed according to Chapter 4 of the Bay Area Stormwater

Management Agencies Association (BASMAA) post construction manual, which requires bioretention for treatment of runoff at approximately 4% of each Drainage Management area (DMA) for all cumulative projects which would allow for groundwater recharge. Additionally, the cumulative project area would be served mostly by surface water from Marin Water, which sources its water from surface water, thus avoiding the depletion of groundwater resources. For these reasons, the cumulative impact from past, present, and probable future projects, together with the project, on ground water would be less than significant, and the project's incremental impacts would **not be cumulatively considerable**.

Mitigation Measures
No mitigation is required.

Alter Existing Drainage Patterns
All cumulative projects would be required to adhere to Marin County Code hydrologic and hydraulic design requirements which require drainage calculations for future storm events to be based on the 100-year design storm. Even through projects could alter the existing drainage pattern of the site, County Code would ensure that the projects would not result in substantial erosion or siltation, flooding, exceedance of the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The cumulative impact from past, present, and probable future projects, together with the project, would be less than significant, and the project's incremental impacts **would not be cumulatively considerable**.

Mitigation Measures
No mitigation is required.

Release of Pollutants due to Flooding
The project is not located in a mapped FEMA flood zone or dam inundation area and is located above the area that could be impacted by a tsunami or seiche, the risk of release of pollutants from flooding and would therefore **not contribute to a cumulative** risk of release of pollutants from flood, even if some other past, present, or probable future projects might not be so fortunately situated**.** Project impacts **would not be cumulatively considerable.**

Mitigation Measures
No mitigation is required.

Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan
The project and all cumulative projects would adhere to all applicable plans, permits, and regulations regarding water quality. During construction and operation, all projects would comply with the Marin County Code Chapter 23.18, the Construction General Permit, as well as SWPPP requirements, and implement any associated/necessary BMPs. Further, the implementation of stormwater bioretention areas and detention facilities would control stormwater flow and discharges and prevent contamination of surface water resources**.** Therefore, the project would not contribute to a **cumulative impact** regarding conflicting with or obstructing a water quality control plan or sustainable groundwater management plan. Project impacts **would not be cumulatively considerable**.

Mitigation Measures
No mitigation is required.

Exacerbate any Existing and/or Projected Damage to the Environment Associated with Sea Level Rise
The proposed project would not exacerbate any existing and/or projected damage to the environment, including existing structures, human health, and sensitive resources, associated with reasonably foreseeable future sea level rise and peak high tides because there are no buildings or roadways in the proposed project site vulnerable to future SLR in the long-term scenario even with 60-inches of SLR and 100-year storm event in the proposed project site (CSW|ST2

2021). Additionally, there are no significant impacts to the project site or overtopping of Seminary Drive along the project frontage (CSW|ST2 2021). Therefore, regardless of whether other past, present, or probable future projects are so fortunately situated, the project itself would **not be cumulatively** damaging to the environment due to future sea level rise. Project impacts **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

4.3.10 Land Use and Planning

GEOGRAPHIC SCOPE

The geographic scope for land use and planning impacts includes the Strawberry peninsula and the cumulative projects listed above in Table 4-2.

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

Past projects within the surrounding area have been subject to local regulations governing land use and have generally resulted in an urbanized environment. The Countywide Plan was originally adopted in 1973, and all past projects within the unincorporated county have been approved pursuant to the adopted Countywide Plan. Similarly, present and reasonably foreseeable future projects listed in Table 4-2 would be required to demonstrate consistency with all applicable land use plans, policies, and regulations, including the Countywide Plan, County Zoning Regulations, and/or General Plans and zoning regulations of the applicable city (or would be required to achieve consistency through plan or zoning amendments). As such, because present and reasonably foreseeable cumulative projects would be required to demonstrate consistency with applicable land use plans, policies, and regulations, these projects would not result in a cumulative land use inconsistency that could result in significant environmental impacts. Therefore, cumulative land use and planning impacts from past, present, and reasonably foreseeable cumulative projects are not cumulatively significant.

PROJECT CONTRIBUTION

A significant cumulative land use and planning impact would occur if the proposed project, when combined with past, present, and reasonably foreseeable projects, would make a cumulatively considerable contribution to significant physical impacts on the environment as a result of cumulative inconsistencies with applicable land use plans. As discussed in Section 3.10, "Land Use and Planning," the proposed project would result in no impact related to dividing an established community. As such, the proposed project would have no potential to result in a cumulative impact related to this issue, and therefore is not discussed further.

Conflicts with Land Use Plans, Policies, and Regulations Adopted to Avoid or Mitigate Environmental Effects

As discussed in Section 3.10, the proposed project would not result in any changes to the existing land use designations or zoning for the project site and would be consistent with the allowable density for the site identified in the Marin Countywide Plan and the County's Zoning Regulations. Additionally, the proposed project would be generally compatible with existing land uses on the project site and in the surrounding area. However, the project would result in inconsistencies with goals and policies of applicable land use plans, specifically the Marin Countywide Plan and the Strawberry Community Plan. Without mitigation, these goal and policy inconsistencies would result in significant physical impacts on the environment, including air quality, biological resources, geology and soils, and noise. However, as discussed in Sections 3.2, 3.4, 3.6, and 3.11, the implementation of mitigation measures would reduce project-level impacts on air quality, biological resources, geology and soils, and noise (operations) to less than significant. Although the project would result in a significant and unavoidable project-level construction noise impact,

the proposed project would incorporate all feasible mitigation measures to minimize and reduce construction noise, consistent with Countywide Plan Policy NO-1.3. The proposed project would be consistent with all applicable policies of the Countywide Plan and Strawberry Community Plan, as well as the overall general intent of these plans as demonstrated in Table 3.10-1 in Section 3.10. Furthermore, as noted above, a cumulatively significant land use impact from past, present, and probable future projects does not exist, and the proposed project therefore would not result in a cumulatively considerable contribution to any cumulatively significant impact from such projects.

Therefore, the proposed project's contribution to cumulative land use and planning impacts **would not be cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

4.3.11 Noise and Vibration

GEOGRAPHIC SCOPE

The geographic context for cumulative noise and vibration impacts includes projects within 2,000 feet of the proposed project. Projects located at distances greater than 2,000 feet would not generate noise levels that would be considered in combination with anticipated project noise. Vibration dissipates rapidly with distance and the geographic scope of analysis for vibration is 500 feet.

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

There are no projects located within 2,000 feet of the project site. The closest project is the Weingeist Shyu Family Trust et al., Design Review located in the community of Strawberry approximately 0.75 mile (3,960 feet) north of the project site.

PROJECT CONTRIBUTION

The nearest project is over 2,000 feet from the project site. Project noise and noise from other nearby projects would not be in close enough proximity to result in cumulative noise or vibration impacts. Additionally, with implementation of Mitigation Measure 3.12-1 and 3.12-4 no additional mitigation would be required to reduce project construction and operational noise. There would be no significant cumulative noise impacts to which the project would contribute, and project impacts would be **less than considerable**.

Mitigation Measures

No additional mitigation is required.

4.3.12 Population and Housing

GEOGRAPHIC SCOPE

The geographic scope for the cumulative analysis of population and housing is Marin County.

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

In general, population growth in Marin County overall has been considerably slower than predicted. Past projections from ABAG presented in the 2005 Marin Countywide Plan Update and in the 2023 Housing & Safety Element Update to the Marin Countywide Plan Final EIR assume thousands more residents in the county than the California Department of

Finance currently projects for 2030. In January 2023, the number of housing units in Marin County overall was estimated to be 112,183, with nearly three-quarters of those units single attached or single detached homes (DOF 2023). The remainder are multifamily units and mobile homes. The vacancy rate for the county overall was estimated (January 2023) to be 6.8 percent (DOF 2023). In the unincorporated portion of the county, 24,447 of the 29,341 units, or 83 percent, are single attached or single detached homes, and the vacancy rate is 10.5 percent (DOF 2023).

Cumulative projects considered in this analysis are listed in Table 4-2. The most substantial project in the cumulative context in terms of increased population is the Oak Hill Apartments project, in the city of San Rafael, which is under review. It involves construction of 250 apartments. The closest other residential projects of note are the Richardson Terrace project (25 residential units and two houses) and the 500 Miller Avenue project (nine single-family units), in Mill Valley, and the 71-bedroom memory care facility and the Robin Drive subdivision (16 residential units and eight accessory dwelling residential units), both in the town of Corte Madera. Overall, the growth in population and housing associated with these projects would not be cumulatively significant.

PROJECT CONTRIBUTION

Substantial Unplanned Population Growth

As discussed in Section 3.12.3, "Environmental Impacts and Mitigation Measures," implementation of the project would increase the number of housing units on the project site by 185 new units and increase the population on the site by approximately 530 residents. A portion of the residents on-site would include students, faculty, staff, and families affiliated with the academic campus. Most of the students and university employees would live off-site, and most of them are expected to be already living in the area (Marin County and neighboring regions of the Bay Area). A substantial number of students and other individuals are not expected to relocate to the area in response to implementation of the project. In addition, the population in the unincorporated county has declined in recent years, the County has identified the project site as a housing opportunity site to assist with meeting its Regional Housing Needs Allocation requirement in multiple cycles of the Housing Element, and the anticipated increase in population under the project would not be substantial compared to the growth anticipated and analyzed in the Marin Countywide Plan Update Final EIR and the Housing & Safety Element Update to the Marin Countywide Plan Draft EIR. Therefore, the growth anticipated under the project would be neither substantial nor unplanned. As a result, a cumulatively significant impact from past, present, and probable future projects, together with the project, would not occur, and implementing the proposed project **would not result in a cumulatively considerable contribution to a cumulative impact** related to unplanned population growth.

Mitigation Measures

No mitigation is required.

Displacement of Substantial Numbers of People or Homes, Necessitating the Construction of Replacement Housing

As discussed in Section 3.12.3, "Environmental Impacts and Mitigation Measures," implementation of the project involves demolition of 139 residential units and 66 dormitory rooms, which would result in the displacement of approximately 320 people. A recent estimate indicates that more than 3,000 housing units are available in unincorporated Marin County (DOF 2023). Substantially more housing is available if portions of the East Bay and San Francisco are also considered. In addition, the County anticipates construction of 5,214 housing units with implementation of the updated Housing Element. A portion of this new housing would become available during the 4-year project construction period. Further, various benefits would be available to displaced residents. Lower-income residents, for example, would be entitled to payment of moving expenses; relocation assistance; and payment of the difference, if any, between affordable rent and rent for a "comparable" unit for up to 42 months. Although 139 residential units and 66 dormitory rooms would be demolished under the project, the number of units (including the dormitory rooms) lost would be replaced, and another 185 new units would be added. Therefore, the number of residential units on the site, including the 13 housing units that were retained, would increase to 337 units. The expanded number of units would be sufficient to house up to approximately 850 residents—an increase of

approximately 530 residents. In addition, Program 3 of the Housing Element and Housing Density Bonus Law require that any project that involves demolition of affordable housing on a project site replace the number of affordable units lost with new affordable units; otherwise, the project is not eligible for the density bonus. Approximately 30 percent of the student and faculty population is anticipated to reside on-site, so a portion of the students and faculty displaced during construction would be expected to move back onto the project site following construction. Because existing housing in the county and in neighboring regions of the Bay Area would be sufficient to house residents displaced during construction, additional housing will become available as the County proceeds with construction of 5,214 housing units anticipated under the updated Housing Element, and the project site would be able to house up to approximately 850 residents (an increase of approximately 530 residents) following construction, construction of replacement housing elsewhere would not be required to address the displacement of residents from the project site. As a result, a cumulatively significant impact from past, present, and probable future projects, together with the project, would not occur, and implementation of the project **would not result in a cumulatively considerable contribution to a cumulative impact** related to the displacement of people or homes.

Mitigation Measures

No mitigation is required.

4.3.13 Public Services and Recreation

GEOGRAPHIC SCOPE

The geographic scope for the cumulative analysis of public services and recreation is regional and local, depending on the service area of the different service providers.

CUMULATIVE EFFECTS OF PAST, PRESENT AND PROBABLE FUTURE PROJECTS

Cumulative projects considered in this analysis are listed in Table 4-2. In general, impacts on public services and recreation are related to increases in population. As the population in an area increases, so, too, does demand for particular facilities and services. The most substantial project in the cumulative context in terms of increased population is the Oak Hill Apartments project, in the city of San Rafael, which is under review. It involves construction of 250 apartments. The closest other residential projects of note are the Richardson Terrace project (25 residential units and two houses) and the 500 Miller Avenue project (nine single-family units), in Mill Valley, and the 71-bedroom memory care facility and the Robin Drive subdivision (16 residential units and eight accessory dwelling residential units), both in the town of Corte Madera. Overall, the growth in population that would be associated with these projects would not be substantial.

In general, the incremental impacts of the project would not combine with those of the other development that would occur in the cumulative context to produce cumulatively significant impacts, because future development projects, like the proposed project, would be site specific; and if the evaluation of the projects indicates that physical environmental impacts associated with constructing new or expanded public services infrastructure or recreational facilities would occur, the project applicants would likely pay fair share impact fees, which would allow the service providers to oversee the expansion of their facilities, or the construction of new facilities, as needed. As appropriate, other feasible mitigation would be required to reduce the significance of potential impacts such that they would not be cumulatively considerable.

PROJECT CONTRIBUTION

Fire Protection Facilities and Services

As discussed in Section 3.13.3, "Environmental Impacts and Mitigation Measures," implementation of the project would increase the population on the site by approximately 530 residents, increasing demand for fire protection and

emergency services on-site. The Southern Marin Fire Protection District (SMFD) is the first provider of fire protection and emergency services to the project site, and additional emergency response to the project site could be provided by other agencies that joined SMFD in entering the *Southern Marin Emergency Medical-Paramedic System Revised Joint Powers Agreement to Establish, Operate and Maintain in Southern Marin County an Emergency Medical Care-Paramedic System*. The project would be designed and operated according to applicable federal, state, and local requirements; the project applicant would be required to pay a fire prevention fee to offset the impact of the project on the provision of fire protection services; and implementation of the project would not necessitate the construction of new or expanded fire service facilities. However, SMFD has expressed concern that traffic associated with the increase in population under the project might cause delays in emergency response in the area (Hilliard, pers. comms., 2022, 2023). Implementation of Mitigation Measure 3.14-4 (Implement Mitigation Measure 3.14-4 [Construct a Traffic Signal at the Intersection of Seminary Drive/Ricardo Road/Vista Del Sol]) would reduce this impact to less than significant.

Other projects proposed in the Strawberry community or other local jurisdictions that would contribute to population growth would be subject to review by the local fire department or fire district to determine whether existing fire protection services and facilities are adequate to serve them, and the projects would be required to adhere to all applicable requirements related to fire protection. The project applicants also would be required to pay a fire prevention fee to offset the impact of the development on the provision of fire services. As a result, a cumulatively significant impact from past, present, and probable future projects, together with the project, would not occur, and implementing the project **would not result in a cumulatively considerable contribution to a cumulative impact** on fire protection facilities and services.

Mitigation Measures

No additional mitigation is required.

Police Protection Facilities and Services

As discussed in Section 3.13.3, "Environmental Impacts and Mitigation Measures," implementation of the project would increase the population on the site by approximately 530 residents, increasing demand for police protection services on-site. According to the Marin County Sheriff's Office (Sheriff's Office), existing staffing levels would be sufficient to address the increase in population on-site, and no reduction in service to the unincorporated county in general would be expected. In addition, no additional facilities or equipment would be required (Schneider, pers. comm., 2022; Schermerhorn, pers. comm., 2023). The project would be subject to formal review and approval by the Sheriff's Office, based on uniformly applied standards and regulations.

Other projects proposed in the Strawberry community or other local jurisdictions that would contribute to population growth would similarly be subject to review by the Sheriff's Office to determine whether existing staffing, equipment, and facilities are adequate to serve them. Without approval, the projects would not receive a building permit or occupancy permit, depending on the specific issue identified by the Sheriff's Office. As a result, a cumulatively significant impact from past, present, and probable future projects, together with the project, would not occur, and implementing the project **would not result in a cumulatively considerable contribution to a cumulative impact** on police protection facilities and services.

Mitigation Measures

No mitigation is required.

Public School Facilities and Services

As discussed in Section 3.13.3, "Environmental Impacts and Mitigation Measures," implementation of the project would increase the number of housing units on the project site by 185 (including the residential care facility), generating an estimated 93 students in the Mill Valley School District and 37 students in the Tamalpais Union High School District. This increase in school district populations would not be substantial, and both the Mill Valley School District and the Tamalpais Union High School District could accommodate this increase in student population. In addition, the project applicant would be required to pay school impact fees to assist the school districts with meeting the increased demand for school services. Government Code Section 65995(h) states that the payment or satisfaction of a fee, charge, or other

requirement levied or imposed under Section 17620 of the Education Code is deemed to be full and complete mitigation of the impact for the planning, use, development, or provision of adequate school facilities.

Other projects proposed in the Strawberry community or other local jurisdictions that would contribute to population growth also would be required to pay school impact fees to assist with meeting the increased demand for school services, and payment would be deemed to be full and complete mitigation of the impact for the planning, use, development, or provision of adequate school facilities. As a result, a cumulatively significant impact from past, present, and probable future projects, together with the project, would not occur, and implementing the project **would not result in a cumulatively considerable contribution to a cumulative impact** on school facilities and services.

Mitigation Measures

No mitigation is required.

Park Facilities and Services

As discussed in Section 3.13.3, "Environmental Impacts and Mitigation Measures," implementation of the project would increase the population on the site by approximately 530 residents, which could increase the demand for park facilities and services in the area. The Marin County Development Code requires new residential developments to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. In compliance with the Subdivision Map Act, 3 acres of land for each 1,000 persons residing in a subdivision subject to the act must be devoted to neighborhood and community park and recreational purposes. Per Marin County Code 22.84.070, proposed project open space and recreational uses may be dedicated for park or recreation purposes as part of the project permitting process, or payment of in lieu fees (or a combination of both) may be required pursuant to Marin County Code 22.98.040. The details regarding the project applicant's implementation of its obligation under the Marin County Development Code would be determined following project approval.

Other projects proposed in the Strawberry community or other local jurisdictions that would contribute to population growth also would increase the demand for park facilities and services in the area. These projects also would be required to meet the parkland-related requirements of the Marin County Development Code. As a result, a cumulatively significant impact from past, present, and probable future projects, together with the project, would not occur, and implementing the project **would not result in a cumulatively considerable contribution to a cumulative impact** on park facilities and services.

Mitigation Measures

No mitigation is required.

Other Public Facilities and Services

As discussed in Section 3.13.3, "Environmental Impacts and Mitigation Measures," implementation of the project would increase the population on the site by approximately 530 residents, which could increase the demand for other public facilities and services, including local libraries. Any anticipated increase in demand for local libraries or other public facilities and services would be expected to be minimal. In addition, the library system and other public facilities and services are funded primarily by their share of the revenue generated by property taxes, and the amount of property tax generated would increase with the increase in population anticipated under the project.

Other projects proposed in the Strawberry community or other local jurisdictions that would contribute to population growth also could increase the demand for other public facilities and services in the area. As described for the project, these public facilities and services are funded primarily by their share of the revenue generated by property taxes, and the amount of property tax generated would increase with the increase in population anticipated under the different projects. As a result, a cumulatively significant impact from past, present, and probable future projects, together with the project, would not occur, and implementing the project **would not result in a cumulatively considerable contribution to a cumulative impact** on other public facilities and services.

Mitigation Measures
No mitigation is required.

Neighborhood and Regional Parks
As discussed in Section 3.13.3, "Environmental Impacts and Mitigation Measures," implementation of the project would increase the population on the site by approximately 530 residents, which could increase the use of neighborhood and regional parks and other recreational facilities in the area. However, because the recreational opportunities available in federal, state, County, and city recreation and park facilities in the project area and in the county overall are extensive and the project applicant would be required by the Marin County Development Code to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities, implementing the project would not result in the substantial physical deterioration of recreational facilities in the region.

Other projects proposed in the Strawberry community or other local jurisdictions that would contribute to population growth also would increase the potential to contribute to the physical deterioration of recreational facilities in the region. The potential population increase identified in the cumulative context would not be substantial, the acreage of parks and open space already available for recreationists is extensive, and the applicants for these projects would be required by the Marin County Development Code to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. As a result, a cumulatively significant impact from past, present, and probable future projects, together with the project, would not occur, and implementing the project would not result in a cumulatively considerable contribution to a cumulative impact related to the substantial physical deterioration of recreational facilities in the region.

Mitigation Measures
No mitigation is required.

Include or Construct Recreational Facilities
As discussed in Section 3.13.3, "Environmental Impacts and Mitigation Measures," the modification of recreation and open space features on the site, including raising the Seminary Playing Field and improving and establishing trails and pathways, would not have a substantial adverse physical effect on the environment. Because the population increase of approximately 530 residents anticipated under the project could increase the demand for neighborhood and regional parks and other recreational facilities in the area, the project applicant would be required by the Marin County Development Code to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. Per Marin County Code 22.84.070, proposed project open space and recreational uses may be dedicated for park or recreation purposes as part of the project permitting process or payment of in lieu fees (or a combination of both) may be required pursuant to Marin County Code 22.98.040. The details regarding the project applicant's implementation of its obligation under the Marin County Development Code would be determined following project approval. Any parkland developed to meet this requirement would be created in coordination with the County and in accordance with County standards. Therefore, implementing the project would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

None of the other projects proposed in the Strawberry community or other local jurisdictions that would contribute to population growth has a substantial recreation or open space feature. In addition, all county projects that include residential development would be required by the Marin County Development Code to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. Any parkland developed to meet this requirement would be created in coordination with the County and in accordance with County standards. As a result, a cumulatively significant impact from past, present, and probable future projects, together with the project, would not occur, and implementing the project would not result in a cumulatively considerable contribution to a cumulative impact related to the construction or expansion of recreational facilities and a possible adverse physical effect on the environment.

Mitigation Measures
No mitigation is required.

4.3.14 Transportation

GEOGRAPHIC SCOPE

The geographic scope of analysis for cumulative impacts related to VMT includes the County of Marin. This cumulative VMT analysis does not rely on a list of specific pending, reasonably foreseeable development proposals in the vicinity of the project; rather, it relies on existing and future development accommodated under the Countywide Plan, which is included in the Transportation Authority of Marin Demand Model (TAMDM) sub-regional activity-based modeling. The geographic scope for the analysis of the impacts related to a program, plan, ordinance, or policy addressing the circulation system, substantially increasing hazards due to geometric features or incompatible uses, and inadequate emergency access, would be different than the geographic scope for the VMT analysis, which would include all past, present, and probable future projects that would have the potential to affect the same transit, roadway, bicycle, and pedestrian facilities within the Strawberry Peninsula area and the interconnected circulation system of the County of Marin.

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

Conflict with a Program, Plan, Ordinance, or Policy Addressing the Circulation System
A significant cumulative impact on pedestrian, bicycle, and transit facilities would generally occur if past, present, and probable future projects, together with the proposed project, would conflict with an applicable program, plan, ordinance, or policy addressing these transportation facilities. Past projects have been required to demonstrate consistency with all applicable programs, plans, ordinances, or policies addressing the circulation system at the time of their approval. Present and probable future projects would also be required to demonstrate consistency with applicable programs, plans, ordinances, and policies addressing the transportation facilities within its project boundaries. Therefore, cumulative effects from past, present, and probable future projects would not result in a significant cumulative impact related to pedestrian, bicycle, and transit facilities.

Conflict or Be Inconsistent with State CEQA Guidelines Section 15064.3, Subdivision (b)
The VMT analysis is cumulative in nature. Past projects would have been approved prior to the passage of SB 743, and therefore would not have been required to analyze and mitigate VMT-related impacts. Cumulative present and probable future projects involving discretionary agency approvals subject to CEQA would be required to comply with CEQA Guidelines section 15064.3. Although compliance is required, it is not guaranteed that the VMT impact of each such project would be less-than-significant. Mitigation that may reduce VMT for a project may be infeasible, or may be feasible but not sufficient to reduce potential impacts to a less-than-significant level. Projects that cannot reach their respective VMT reduction goal threshold would contribute to increased VMT in the region, which would contribute to the prevention of the region reaching the established greenhouse gas reduction targets. Therefore, cumulative projects in the region could result in significant cumulative impacts related to a conflict or inconsistency with State CEQA Guidelines Section 15064.3(b).

Substantially Increase Hazards Because of a Geometric Design Feature or Incompatible Uses
Design plans for the cumulative projects would be required to undergo review and approval by the relevant city or county's traffic engineer (i.e., Unincorporated County, City of Mill Valley, City of Belvedere, Town of Tiburon, City of Sausalito, Town of Corte Madera, and City of Larkspur) to ensure the development would be consistent with the most recent design and safety standards. Additionally, impacts related to transportation hazards are localized, and no cumulative projects are located on the Strawberry Peninsula where the project site is located. Therefore, cumulative projects would not result in a significant cumulative impact related to increased hazards due to geometric features or incompatible uses.

Result in Inadequate Emergency Access

Development of the present and probable future projects may result in the closure of roadway lanes and/or whole roadways during construction, due to equipment, material delivery, or construction activities occurring within the road right-of-way. Impacts to emergency access are localized; thus, cumulative projects that are directly adjacent to the proposed project site could cumulatively have the potential to interfere with the same roadways or road systems. However, future development that would impact the public roadways and potentially interfere with emergency access would be required to implement traffic control measures in compliance with local regulations and as part of the permitting process. Additionally, no cumulative projects are located on the Strawberry Peninsula where the project site is located. As such, cumulative impacts from past, present, and probable future projects would not result in a significant cumulative impact related to emergency access.

PROJECT CONTRIBUTION

Contribute to Cumulative Impacts Related to Conflicting with a Program, Plan, Ordinance, or Policy Addressing the Circulation System

As described under Impact 3.14-1, implementation of the project would not create demand for public transit services above the capacity of the transit system and would not disrupt existing or planned transit facilities and services. Additionally, as described under Impact 3.14-1, implementation of the project would not disrupt any existing or planned bicycle or pedestrian facilities. Additionally, the project would provide an integrated pedestrian network and Class III bike routes throughout the internal roadway network. For these reasons, the proposed project's contribution to cumulative impacts on transit, bicycle, and pedestrian facilities are not cumulatively considerable and would be **less than cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Contribute to Cumulative Impacts Related to Conflicting or Being Inconsistent with State CEQA Guidelines Section 15064.3, Subdivision (b)

According to the OPR Technical Advisory, a project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project-level impact. Accordingly, a finding of a less-than-significant project-level impact would imply a less than significant cumulative impact, and vice versa (OPR 2018: 6). Thus, VMT analyses are cumulative by nature, and the significance of a potential cumulative impact is determined based on the project's individual VMT contribution to cumulative regional VMT impacts. Consequently, the project-level VMT analysis in Impact 3.14-2 in Section 3.14, "Transportation," is also a cumulative impact analysis. The VMT analysis considers whether the proposed project would either result in VMT per service population (for campus uses) or VMT per capita (for residential uses) that exceeds the efficiency-based threshold (i.e., 30 percent below the 2040 regional average). Therefore, if the VMT per capita or VMT per service population of the proposed uses (i.e., residential and/or campus) would not be 30 percent below the 2040 regional average, it would result in significant project-level and cumulative impacts.

As discussed in Impact 3.14-2, the proposed campus uses would result in an Existing plus Project VMT per service population that is 30 percent below the VMT per service population for existing campus uses, resulting in a less-than-significant project-level impact. Accordingly, the project's cumulative impacts related to VMT from campus uses would not be cumulatively considerable.

Similarly, the residential component of the project could rely on the project-level analysis found in Impact 3.14-2. However, to supplement that analysis, the Transportation Impact Study (TIS) prepared for the project found that regionwide and countywide VMT per capita is forecast to decline by approximately 5 percent between the years 2015 and 2040. Therefore, the VMT threshold under cumulative conditions would be lower than it is at the project level. As discussed in Impact 3.14-2, VMT per capita for the project under Existing plus Project conditions would not meet the 30 percent below existing regional average threshold, and would therefore result in a significant project-level impact.

Accordingly, the project's contribution to cumulative impacts related to VMT from residential uses would be **cumulatively considerable.**

Mitigation Measures

No additional mitigation is required.

Contribute to Cumulative Impacts Related to Substantially Increasing Hazards Because of a Geometric Design Feature or Incompatible Uses and Inadequate Emergency Access

Cumulative construction-related transportation impacts would result if other future planned construction activities were to take place close to the project site and cumulatively combine to exacerbate the construction-related transportation impacts of the project. There are no future projects located within close proximity to the project site that would cause construction traffic to overlap between projects in a manner that would result in increased transportation hazards. Additionally, construction would be temporary and short-term.

As discussed in Impact 3.14-3, project construction activities would occur adjacent to and within the public roadway right-of-way; thus, they would likely require temporary lane closures and may result in unexpected slowing of vehicular traffic if not properly planned and managed. Additionally, the hauling of heavy machinery (e.g., bulldozers, excavators) and operation of large trucks associated with construction-related activities may necessitate travel along roadways not designated as truck routes and may potentially cause damage to the roadbed.

Implementation of Mitigation Measure 3.14-3a would require that a temporary traffic control plan be completed and implemented to the satisfaction of the County and/or be consistent with industry standards. Under the plan, project construction-related transportation impacts would be offset through the management of construction activities in a manner that would retain partial roadway access, allow emergency vehicle access, delineates construction zones in a manner that protects vehicles, bicyclists, and pedestrians, and repairs damage to the roadway. Furthermore, as discussed above, no cumulative projects are located on the Strawberry Peninsula where the project site is located that, when combined with the proposed project, could result in cumulative impacts related to transportation hazards and emergency access. Therefore, with the implementation of Mitigation Measure 3.14-3a, the project's contribution to cumulative impacts related to transportation hazards and emergency access would be **less than cumulatively considerable**.

Mitigation Measures

No mitigation is required.

4.3.15 Utilities and Service Systems

GEOGRAPHIC SCOPE

The geographic scope for utilities and service systems impacts is based on a mix of the List Method and the Plan Method, as described above in Section 4.1, "Introduction to the Cumulative Analysis." A significant cumulative impact would result if the proposed project were to contribute to impacts that exceeded the planned use and capacity of the wastewater, water, solid waste, and/or energy service providers for the proposed project, which project future supply and demand based on current land use and development projections within their respective service areas. Therefore, the cumulative setting for utilities and service systems includes all of the projects listed in Table 4-2 of Section 4, "Cumulative Impacts," (i.e., List Method) and all of the growth assumptions provided in regional planning documents such as Marin Water's UWMP and Marin County's 2023-2031 Housing Element (i.e., Plan Method).

CUMULATIVE EFFECTS OF PAST, PRESENT, AND PROBABLE FUTURE PROJECTS

Water service in the project area is provided by Marin Water. As required by the California Water Code, Marin Water has prepared and adopted an UWMP to identify potable and non-potable water supplies for projected future growth.

As discussed in Section 3.15, "Utilities and Service Systems," Marin Water adopted a limited update to its 2020 UWMP on January 9, 2024, to account for increased water demand from updated population projections and housing allocations identified in ABAG's 2023-2031 Final RHNA Plan. The Updated 2020 UWMP provides existing and projected water demand and estimated supply between 2025 and 2045 under normal and dry year weather conditions (single and multiple), accounting for this additional demand from ABAG's 2023-2031 Final RHNA Plan (Marin Water 2024a). Wastewater services within the cumulative study area are provided by Richardson Bay Sanitation District, which conveys wastewater to SASM Wastewater Treatment Plant for processing and treatment. Stormwater drainage facilities within the cumulative study area are generally maintained by the County Department of Public Works. Solid waste within the cumulative study area is collected by various franchised waste haulers, all of which collect and dispose of solid waste at the Redwood Landfill and Recycling Center. Lastly, PG&E provides electric and natural gas services within the cumulative study area.

Marin County recently updated its Housing Element to address projected housing needs within its jurisdiction based on RHNA housing unit allocations. The updated Housing Element was adopted by the Marin County Board of Supervisors on January 24, 2023, and covers an eight-year planning period from January 31, 2023 through January 31, 2031. The 2023-2031 Housing Element implements the latest RHNA allocations from ABAG for the region and identifies the potential for development of 3,210 housing units on the properties within the plan's sites inventory. Of those potential housing units, 2,712 units associated with sites inventory properties could be developed within Marin Water's service area. Currently, there are 20,422 existing housing units within Marin Water's service area. As such, the number of new units that could be developed within Marin Water's service represents a 13 percent increase compared to existing conditions. Despite this increase, the 2023-2031 Housing Element concluded that there would not be any water supply deficits for Marin Water from the potential housing development identified in the plan (see Table H-3.2 of the 2023-2031 Housing Element). Additionally, Marin Water's Updated 2020 UWMP determined that future demand would be met (and exceeded) by the supply in each 5-year increment through 2045, including in normal, single dry year, and multiple dry years (Marin Water 2024a), which accounts for updated population projections and housing allocations identified in ABAG's 2023-2031 Final RHNA Plan and is well beyond the life of the 2023-2031 Housing Element. As concluded in the staff report for the Updated 2020 UWMP, Marin Water would be able to support the additional demand from the updated population projections and housing allocations identified in ABAG's 2023-2031 Final RHNA Plan without additional water supplies or triggering special measures (Marin Water 2024b). Because the Updated 2020 UWMP determined that Marin Water would be able to meet future water demand with its existing water entitlements, it is not reasonably foreseeable at this time that Marin Water would need to procure additional water resources that could result in significant environmental impacts. Moreover, while other approved and probable future projects identified in Table 4-2 and Figure 4-1, "Cumulative Projects," would contribute to increased utility demands, individual projects would be required to consider impacts of utility improvements during project planning and development and comply with applicable requirements of the County Code and all applicable Countywide Plan policies related to utilities and infrastructure, including water supply. Therefore, for the reasons described above, cumulative water supply impacts from cumulative development would not be significant.

Regarding wastewater, the 2023-2031 Housing Element similarly includes an analysis of the capacity of wastewater treatment facilities in the county to accommodate the projected housing development identified in the Housing Element. As demonstrated in 2023-2031 Housing Element, the housing development potential within the SASM boundaries, which serves the Richardson Bay Sanitation District, would generate an additional 0.04 mgd, which would result in a remaining treatment capacity of 1.34 mgd at the SASM Wastewater Treatment Plant (Marin County 2022). As such, cumulative wastewater capacity impacts from cumulative development would not be significant.

Regarding stormwater drainage facilities, development of the cumulative projects listed in Table 4-2 could require the construction of new or expanded stormwater drainage facilities to capture and treat stormwater runoff from their respective project sites. However, the impacts from constructing any new stormwater facilities would be localized and would not have the potential to result in impacts that, when combined with those of other past, present, and future projects, would be cumulatively significant. Rather, the cumulative impacts would be less than significant. Further, all storm drain facilities would be designed in accordance with the Marin County Uniform Construction Standards, which includes specific requirements to ensure consistent design of storm drains throughout the county.

Regarding solid waste, future development within the County would result in an increase in solid waste that would need to be disposed of at Redwood Landfill and Recycling Center, which is the only remaining permitted landfill operating in the county. The landfill is a Class III disposal facility that is privately owned and operated by Waste Management. The Redwood Landfill and Recycling Center's current design capacity is 26.08 million CY and has an estimated closure date of 2036, but increased recycling and resource recovery activities in the county may extend its life span. In addition, Waste Management is currently working with the County to extend operation of the landfill beyond the current estimated closure date of 2036. At the time of this EIR, the potential extension of the landfill's closure date is in the preliminary planning stages, and no additional information regarding the potential extension is currently available (McCutcheon, pers. comm., 2024). The projected additional solid waste generated from development under the 2023-2031 Housing Element would increase daily disposal at the Redwood Landfill by approximately 5 percent. As concluded in the Housing & Safety Element Update EIR, future potential development facilitated by the Housing Element would not result in cumulatively significant solid waste impacts (Marin County 2022).

Lastly, the Housing & Safety Element Update EIR states that PG&E is expected to be able to meet overall demand for electricity and natural gas for all its customers, including Marin County, in the future. PG&E would continue to maintain and upgrade its electrical and natural gas distribution systems as needed based on future demand trends. The Housing & Safety Element Update EIR concluded that there is no evidence that the incremental amount of new infill housing or population growth identified in the plan would require major energy improvements or new facilities, as PG&E has anticipated this level of growth in its long-range service planning process (Marin County 2022). As such, cumulative energy impacts from cumulative development would not be significant.

In summary, cumulative impacts on utilities and service systems from past, present, and probable future projects would not be cumulatively significant.

PROJECT CONTRIBUTION

Installation of New or Expanded Utilities

Although the proposed project would require the installation of utilities to serve the proposed new development, these improvements would be limited to extending existing utility lines into and throughout the project site. The potential impacts from the installation of these improvements would be limited to those associated with construction and ground-disturbing activities, and would be reduced to less than significant with the implementation of mitigation measures identified in Sections 3.3, "Air Quality," 3.4, "Archaeological, Historical, and Tribal Cultural Resources," 3.5, "Biological Resources," 3.7, "Geology and Soils," 3.8, "Greenhouse Gas Emissions and Climate Change Vulnerability," and 3.15, "Transportation" of this EIR. Although project-level construction noise impacts would be significant and unavoidable even after mitigation in areas very close to the project site, the proposed project, together with past, present, and probable future projects, would not result in cumulatively significant noise impact, as discussed above in Section 4.3.11, "Noise and Vibration." Rather, the cumulative projects resulting in increased noise are geographically isolated from each other, such that their noise impacts would not be additive. Additionally, the construction of all new utilities to serve the project would be required to comply with the County Code and Marin County Uniform Construction Standards, where applicable, and would also be required to be consistent with all applicable Countywide Plan policies related to utilities and infrastructure, as described in Section 3.15, "Utilities and Service Systems." The proposed project would not increase the demand for utilities, including water, wastewater generation, stormwater drainage, electricity, and natural gas, to an extent that would require the expansion of utility infrastructure offsite (e.g., the construction of a new substation). Moreover, as discussed above, cumulative impacts related to the capacity of water, wastewater, and stormwater, electric, and natural gas facilities from past, present, and probable future projects are not significant. Therefore, the proposed project's contribution to cumulative impacts related to the capacity of water, wastewater, and stormwater, electric, and natural gas facilities **would not be cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Water Supply and Wastewater Treatment Capacity

As described above, impacts from past, present, and probable future projects on wastewater treatment capacity and water supply are not cumulatively significant. Regarding water supply, Marin Water's Updated 2020 UWMP determined that future demand would be met (and exceeded) by the supply in each 5-year increment through 2045, including in normal, single dry year, and multiple dry years, which accounts for updated population projections and housing allocations identified in ABAG's 2023-2031 Final RHNA Plan. Because the proposed project was included in the County's 2023-2031 Housing Element, which implements the latest RHNA allocations used to inform the water demand and supply projections in the Updated 2020 UWMP, the water demand for the project was accounted for in the Updated 2020 UWMP. Accordingly, the Updated 2020 UWMP confirms that adequate water supply would be available to serve the project under the water supply scenarios required by the State for the UWMP (Pollard, pers. comm., 2024). Accordingly, the proposed project's contribution, which was determined to be less than significant at the project level, would not be cumulatively considerable because there is more than enough available wastewater treatment capacity and water supply to meet the demand of the proposed project. Further, the incorporation of water reduction measures into project design would further reduce the project's water demand. Additionally, the proposed project would be required to be consistent with all applicable Countywide Plan policies related to wastewater and water conservation. For these reasons, the proposed project's contribution to cumulative water supply and wastewater impacts **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Solid Waste

As discussed in Section 3.15, "Utilities and Service Systems," implementation of the proposed project would generate 0.76 tons of waste per day, which would represent a minimal contribution (i.e., 0.09 percent) to the 822 tons of solid waste per day currently disposed of at the Redwood Landfill and Recycling Center. Additionally, the proposed project would be required to be consistent with all applicable Countywide Plan policies related to solid waste (e.g., Policy CD-5.1, PFS-4.1) and comply with all applicable state and local management and reduction statutes and regulations related to solid waste, including AB 939, AB 341, AB 1826, and Chapter 7 of the Marin County Code. As such, project level impacts were determined to be less than significant. Moreover, as discussed above, cumulative solid waste impacts from past, present, and probable future projects are not significant. Therefore, the proposed project's contribution to cumulative solid waste impacts **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

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5 ALTERNATIVES

5.1 INTRODUCTION

Section 15126.6(a) of the State CEQA Guidelines requires an EIR to describe "… a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a range of potentially feasible alternatives that will avoid or substantially lessen the significant adverse impacts of a project as well as foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason." This section of the State CEQA Guidelines also provides guidance regarding what the alternatives analysis should consider. Subsection (b) further states the purpose of the alternatives analysis is as follows:

> Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code [PRC] Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

The State CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (14 CCR Section 15126.6[d]).

The State CEQA Guidelines further require that the "no project" alternative be considered (CCR Section 15126.6[e]). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed project. If the no project alternative is the environmentally superior alternative, CEQA requires that the EIR "…shall also identify an environmentally superior alternative among the other alternatives." (14 CCR Section 15126[e][2]).

In defining "feasibility" (e.g., "… feasibly attain most of the basic objectives of the project …"), 14 CCR Section 15126.6(f)(1) states, in part:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In determining what alternatives should be evaluated in the EIR, it is important to consider the objectives of the project, the project's significant effects, and unique project characteristics. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body, here the Marin County Board of Supervisors. (See PRC Sections 21081.5, 21081[a] [3]; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 981.)

5.2 CONSIDERATIONS FOR SELECTION OF ALTERNATIVES

5.2.1 Attainment of Project Objectives

The purpose of the project is to redevelop the property under a new Master Plan focused on supporting an academic institution, providing amenities to the surrounding community, and developing a diversity of housing types. The basic objectives of the proposed project are to:

- Create an intergenerational community for residents to live, work, and learn;
- Support a thriving campus use that offers amenities to the surrounding community and academic value for the region;
- Continue to provide undisturbed views and visual access to the Bay through retainment of undeveloped open space areas within the project site and preservation of existing viewsheds and local ridgelines;
- Support a housing balance in the Strawberry community while creating a unique space with the potential to improve and transform the social fabric of the site and local community;
- Support implementation of Countywide Plan Housing Element goals and policies (including Housing Goal 1 and supporting policies 1.1 through 1.3 as well as Housing Goal 2 and supporting policies 2.1, 2.4 and 2.5) to provide housing units, including affordable units, that contribute to meeting the housing goals outlined in the Countywide Plan Housing Element and consistent with the Association of Bay Area Governments' Regional Housing Needs Allocation for Marin County;
- Develop the project site sensitive to and compatible with the scale and form of the surrounding area; and
- Provide improvements to circulation systems serving the Strawberry community in the form of enhanced trails, bicycle facilities, and pedestrian enhancements on the project site.

As noted above, an EIR need only consider alternatives that would feasibly attain most of the project's basic objectives.

5.2.2 Environmental Impacts of the North Coast Land Holdings Project

Sections 3.1 through 3.15 of this Draft EIR address the environmental impacts of implementation of the proposed project. Potentially feasible alternatives were developed with consideration of avoiding or lessening the significant, and potentially significant, adverse impacts of the project, as identified in Chapter 3 of this Draft EIR and summarized below. Also, an environmental topic may be addressed in the alternatives analysis because it has been raised as an important issue by the County and/or the affected community. If an environmental issue area analyzed in this Draft EIR is not addressed below, it is because no significant impacts were identified for that issue area, even in the absence of mitigation.

Five significant and unavoidable environmental impacts resulting from the project were identified. Implementation of the project would result in significant and unavoidable environmental impacts related to project-level and cumulatively considerable GHG emissions, temporary construction noise, and project-level and cumulatively considerable vehicle miles traveled (VMT) impacts. The EIR also identified impacts that, absent mitigation, would be potentially significant. With mitigation, these impacts could be rendered less than significant. Some of these same significant but mitigable impacts could also be reduced in severity by project alternatives. As the California Supreme Court has explained, "alternatives and mitigation measures have the same function—diminishing or avoiding adverse environmental effects." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 403.) The significant but mitigable impacts are described immediately below.

- **Aesthetics:** Key elements of project development would affect its ability to conform to County policies involving color palette, bulk, and relationship to the project site's local ridgelines as seen from lower elevations. Project implementation would also result in an incremental increase in the amount of light and glare on the project site which would affect nighttime views in the area. Implementation of Mitigation Measures 3.1-1a through 3.1-1d and 3.1-2, as well as compliance with to the County's outdoor lighting standards, would reduce potentially significant impacts to less than significant.
- **Air Quality**: The project would not generate construction or operational emissions of ROG, PM_{10} exhaust, and $PM_{2.5}$ exhaust, or criteria air pollutants and ozone precursors, exceeding BAAQMD's average daily mass emissions thresholds of significance. Construction of the project would, however, emit NO_X emissions exceeding BAAQMD's mass emissions thresholds. The project would also produce significant diesel PM or other TACs such that BAAQMD's thresholds for TAC cancer risk exposure of 10 in 1 million or an acute or chronic Hazard Index of 1 for the MEI for non-carcinogens would be exceeded. Implementation of Mitigation Measure 3.2-1 would reduce the project's emissions of NO_X exhaust by requiring the use of Tier 4 engines for construction equipment exceeding 50 hp would reduce potentially significant impacts to less than significant. This same measure would reduce the cancer risk from TAC emissions to less than significant levels.
- **Archaeological, Historical, and Tribal Cultural Resources**: One unique archaeological site is located in the project site. Although project activities would avoid this site, it is possible that ground-disturbing activities could result in discovery or damage of yet undiscovered unique archaeological resources and historical resources of an archaeological nature as defined in PRC Section 21083.2(g) and State CEQA Guidelines Section 15064.5, subdivisions (a) and (c). In addition, while Tribal consultation under AB 52 has not resulted in the identification of tribal cultural resources on the project site, precontact archaeological resources are located on the project site. Additionally, excavation activities associated with project construction may disturb or destroy previously undiscovered significant subsurface tribal cultural resources. Implementation of Mitigation Measures 3.4-2 and 3.4-3 would reduce potentially significant impacts to less than significant.
- **Biological Resources:** The project would involve ground disturbing activities in habitat potentially suitable for special-status plants as well as cause the introduction and spread of invasive plants that could result in adverse effects on special-status plants. Construction of the project and related activities may also result in the injury, mortality, or disruption of reproduction of monarch butterfly and special-status bats, and loss of nests of white-tailed kite, common raptors, and other nesting birds. In addition, project activities could spread sudden oak death into the project site and result in substantial loss of oak woodland. Implementation of Mitigation Measures 3.5-1a and 3.5-1b, 3.5-2a through 3.5-2c, and 3.5-3 would reduce potentially significant impacts to less than significant.
- **Geology and Mineral Resources:** Due to the location of and past development activities on the site, existing environmental conditions related to seismically-induced ground failure, slope instability and landsliding are present on the project site. Construction of the new playfield and bioretention and stormwater dissipation facilities would be located within or proximal to previously-mapped areas of instability, and thus could exacerbate potential impacts related to seismically-induced ground failure. Additionally, new cut and fill slopes, as well as the discharge of additional storm water can reduce slope stability which would increase the potential for seismically induced instability and lateral displacements. Application of new fill soil or building loads, grading and alteration of slopes, and redirection or alteration of existing drainage patterns, could also exacerbate/re-activate existing areas of instability or generate new instability. Thus, the proposed project could exacerbate existing environmental hazards related to seismically-induced ground failure, slope instability and landsliding. Implementation of Mitigation Measures 3.6-2 and 3.6-4 would reduce potentially significant impacts to less than significant.
- **Land Use and Planning:** Potentially significant land use impacts would result when inconsistencies with goals and policies intended to avoid or mitigate environmental effects would occur, where such inconsistencies would result in potentially a significant physical impact on the environment. The proposed project would not result in any changes to the existing land use designations or zoning for the project site and would be consistent with the allowable density for the site identified in the Marin Countywide Plan and the County's Zoning Regulations.

Consistent with the Countywide Plan and state Density Bonus Law, the project proposes a density of 3.3 units per acre. Although the proposed project would not involve changes to the existing land use or zoning designations, the project includes a proposed amendment to the Strawberry Community Plan to revise the residential unit count for additional housing on the site and to remove the restriction that requires residential and other site uses be dedicated to students, faculty, and staff of the academic campus. Inconsistencies with land use goals and policies resulting in a potentially significant environmental impact are identified in relation to air quality, biological resources, geological hazards, and noise. Implementation of Mitigation Measures 3.2-1 3.4-1a, 3.4-1b, 3.4-2a, 3.4-2b, 3.4-4, 3.4-5, 3.4-7, 3.6-2, 3.6-4, 3.6-7, 3.11-1, and 3.11-4, would reduce potentially significant impacts to less than significant.

- Noise and Vibration: As noted above, the project would result in significant and unavoidable impacts related to temporary construction noise. But Mitigation Measure 3.12-1 would substantially reduce noise by locating equipment as far away from receivers as possible, requiring the proper use of available noise-reduction equipment, including use of alternatively powered equipment, exhaust mufflers, engine shrouds, equipment enclosures, and barriers for activities in the vicinity of noise-sensitive uses, and require on-site monitoring to ensure noise levels do not exceed allowable limits. Implementation of these noise-reduction features can reduce construction noise levels by approximately 10 dBA, or more (NCCHP 1999). Even with this mitigation, which would substantially reduce construction-generated noise levels, construction noise levels would still exceed ambient levels by up to 39 dBA and a reduction in noise of 10 dBA would still result in an increase in noise by 29 dBA, which would exceed 5 dBA above existing conditions and is considered distinctly perceptible by most people. Thus, even with implementation of all feasible mitigation, construction noise could still result in potential construction noise impacts that would be significant and unavoidable. In contrast, operational noise generated by building mechanical equipment, parking lot activity, and the playing field would not exceed established noise standards for sensitive receivers exposed to stationary noise sources. During more sensitive nighttime hours, however, the operation of new building HVAC equipment could potentially result in a substantial increase in noise levels. Mitigation Measure 3.12-4 would provide shielding to reduce noise from HVAC equipment, thus reducing impacts to less than significant.
- Public Services and Recreation: Implementation of the proposed project would increase the number of housing units on the project site by 185 units (including the residential care facility) and increase the population on-site by approximately 530 residents, thereby increasing demand for fire protection and emergency services on-site. Operation of the residential care facility is expected to increase the demand for emergency services on the project site. The project would adhere to all applicable standards and fire codes, the project applicant would be required to pay a fire prevention fee to offset the impact of the project on the provision of fire protection services, and implementation of the project would not necessitate the construction of new or expanded fire service facilities. However, the Southern Marin Fire Protection District (SMFD) has expressed concern that traffic associated with the increase in population under the project might cause delays in emergency response in the area. Mitigation Measures 3.15-4 would require the project applicant to either construct a traffic signal or build a roundabout at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol to facilitate the movement of vehicles if and when emergency response is needed in the area. Implementation of Mitigation Measure 3.15-4 would reduce the impact on increased demand for fire protection services to a less than significant impact.
- Transportation: The project would provide sidewalks, trails, and Class III bicycle facilities throughout the project site, thus providing connections within the project and to nearby transit stops along U.S. 101, and is consistent with the County's goals and policies identified in the Countywide Plan and Bicycle and Pedestrian Master Plan in regard to increasing the use of active transportation in the county. Construction activities may temporarily degrade the surrounding transportation network inconveniencing pedestrians, bicyclists, and drivers and potentially increasing the risk of safety hazards. Additionally, the streets within the project site do not meet County design standards regarding roadway widths. As currently planned, the project would not provide adequate parking supply for the academic campus, which could result in parking spillover on surrounding streets where sidewalks and crosswalks do not exist, thus resulting in potential conflicts between pedestrians and vehicles. Implementation of Mitigation Measures 3.14-3a, 3.14-3b, 3.14-3c, and 3.14-4 would reduce these potentially significant impacts exacerbated by the project to less than significant.

5.3 ALTERNATIVES CONSIDERED BUT NOT EVALUATED IN DETAIL

As described above, State CEQA Guidelines Section 15126.6(c) provides that the range of potential alternatives for the project shall include those that could feasibly accomplish most of the basic objectives of the project, and could avoid or substantially lessen one or more of the significant effects. Alternatives that fail to meet the fundamental project purpose need not be addressed in detail in an EIR.

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by lead agency decision-maker(s). (See Pub. Resources Code, § 21081(a)(3).) At the time of action on the project, the decision-maker(s) may consider evidence beyond that found in this EIR in addressing such determinations. The decision-maker(s), for example, may conclude that a particular alternative is infeasible (i.e., undesirable) from a policy standpoint, and may reject an alternative on that basis provided that the decision-maker(s) adopts a finding, supported by substantial evidence, to that effect, and provided that such a finding reflects a reasonable balancing of the relevant economic, environmental, social, and other considerations supported by substantial evidence.

The EIR should also identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination.

The following alternatives were considered by the County but are not evaluated in detail in this Draft EIR.

5.3.1 No Project/No Build (Conservation) Alternative

An appellate court decision in *Save the Hill Group v. City of Livermore*, 76 Cal. App. 5th 1092 (2022) confirmed that an EIR's discussion of project alternatives, specifically the No Project Alternative, may sometimes need to consider the potential that public funds could be used to acquire an undeveloped project site for open space. The project at the subject of this case was a residential development on a hilly, undeveloped 31.7-acre site, referred to as the Garaventa Hills Project. The site, along with the nearby publicly owned Garaventa Wetlands Preserve, provides habitat for several special-status species. To address the project's impacts on biological resources, the EIR for the project included a mitigation measure requiring acquisition of 85 acres of habitat for compensatory mitigation. Following City Council approval of the project, Save the Hill filed a petition for writ of mandate challenging the City of Livermore's approval of the project and certification of the EIR. The trial court upheld the City's EIR; however, the Court of Appeal reversed that decision. The Court held that the City's evaluation of the no project alternative was deficient because it had not considered the potential to purchase the site for preservation and conservation purposes, as requested by Save the Hill during the hearing process for the project. Additionally, the EIR's discussion of the no project alternative did not consider the conservation funds that were already available from two unrelated settlement agreements to finance such purchases. Lastly, even though the project site was zoned for residential uses, the Court held that zoning changes are within the City's police power and that the EIR should have therefore discussed the feasibility of rezoning the site as permanent open space. For these reasons, the Court held that the City's evaluation of the no project alternative was inadequate. In consideration of this appellate court decision, the No Project/No Build (Conservation) Alternative considers the feasibility of acquiring the campus and undeveloped portions of the project site by the public for conservation purposes. Under this hypothetical alternative, no development or redevelopment of the project site would occur, and the remaining undeveloped portions of the site would be conserved as open space. The use and disposition of the existing university facilities under this alternative would need to be decided. Their continued existence would preclude the conversion of the entire project site to an open space preserve, but their destruction and elimination would represent the loss of valuable economic and social resources that currently benefit the community.

There are several facts that distinguish the Garaventa Hills Project from the proposed project. In that case, the biological sensitivity of the subject site, which provided habitat for several special-status species, is greater than the proposed project site. Additionally, the site was fully undeveloped and adjacent to another biologically sensitive area,

the publicly owned Garaventa Wetlands Preserve. Another difference is the existing availability of public conservation funds for the Garaventa Hills Project. The City in that case had access to an existing program to purchase land for preservation purposes. Given the biological sensitivity of the Livermore site, its proximity to the publicly owned Garaventa Wetlands Preserve, and the availability of public conservation funds, a no project alternative aimed at preservation was found to be potentially feasible in that scenario. No such funding is available here.

While the site for the proposed project provides habitat for special-status species, other facts applicable to the Livermore case are different from the proposed project. Unlike the site in the Garaventa Hills Project, which is entirely undeveloped, the proposed project site is partially developed with an existing university, housing, roadways, and other development ancillary to the university. Additionally, the proposed project site is in a primarily residential area with privately-owned condominiums and single- and multi-family homes surrounding the site, not abutting a publicly owned preserve. Also, there is not a program for acquisition of conservation lands applicable to the Strawberry peninsula. For the reasons described above, the County has determined that the No Project/No Build (Conservation) Alternative is clearly infeasible and therefore is not discussed in detail in this EIR.

5.3.2 Reduced Development Alternative (Seminary Tomorrow Process Outcome)

In 2019, the applicant and a group of Strawberry community representatives formed a working group, collectively called "Seminary Tomorrow," and entered into professionally facilitated discussions regarding the redevelopment of the project site. The stated goal of Seminary Tomorrow was to collaborate on alterations to the redevelopment plan for the site and to reach a consensus or qualified consensus on a new, reimagined plan. The Reduced Development Alternative reflects the outcome of the Seminary Tomorrow process that occurred with the Strawberry community. Through the Seminary Tomorrow process, this alternative would reduce the base zoning of the site (RMP-2.47) from 2.47 dwelling units/acre to 2.31 dwelling units/acre, thereby reducing the number of dwelling units that could be developed on the site. As such, this alternative would allow for up to 234 total units to be developed. This would include 233 housing units, of which 47 would be affordable units (i.e., 20 percent), as well as a Residential Care Facility (counting as one unit). The Residential Care Facility would include:

- 50 memory and assisted living residences
- 100 independent living residences
- Meeting and other activity rooms, dining facilities, and administrative offices

In addition, this alternative would include preservation of several open space areas and viewsheds, a long-term landscaping plan, as well as new public trails and pedestrian pathways. This alternative also includes an elevated playfield moved away from Seminary Drive, a fitness center for onsite residents and the Strawberry community, and daycare with a maximum enrollment of 60 students. Lastly, this alternative assumes that the university enrollment would increase up to 1,000 students consistent with the 1953 CUP, but no physical improvements to the existing academic facilities would occur.

Recent changes in State housing law limit the discretion of local governments to reduce the amount of housing that can be developed within their jurisdictions. Senate Bill (SB) 330 prohibits local jurisdictions from limiting housing development through downzoning (unless an equivalent amount is upzoned elsewhere within their boundaries) or by delaying new housing via administrative or other regulatory barriers. Additionally, the State Density Bonus Law (Cal. Gov. Code §§ 65915 – 65918) prescribes that a developer who meets the requirements of the state law is entitled to receive the density bonus and other benefits as a matter of right. Therefore, in light of these state housing laws, the County has determined that the Reduced Development Alternative is legally infeasible. Accordingly, this alternative is not evaluated in detail in this EIR.

5.3.3 Maximum Countywide Plan Density Alternative

The Maximum Countywide Plan Density Alternative involves denial of the proposed Community Plan Amendment and approval of a new Master Plan. This assumes that development of the site could occur consistent with the currently approved Strawberry Community Plan, as outlined below. However, for qualifying density bonus projects, State density bonus law requires the County to apply the Countywide Plan land use designation density for the site rather than the zoning or Community Plan density. As such, applying the 2.1 dwelling units/acre density from the Community Plan would be inconsistent with State density bonus law. Per the Countywide Plan, the project site has a land use designation density range of 2-4 dwelling units/acre. Therefore, as required by State density bonus law and consistent with the Countywide Plan, this alternative assumes development of the site at a maximum density of 4 dwelling units per acre, which would allow for development of 393 new/replacement residential units on the project site. Under this alternative, the applicant would retain 13 existing residential units within the project site, which, when combined with the new/replacement units, would result in a total of 406 residential units on the site. Because the 1984 Master Plan for the Seminary property expired in 2018, a new Master Plan would be required under this alternative that reflects development according to the currently approved Strawberry Community Plan. This alternative assumes that Olivet University (or an equivalent college) would remain on the site because the existing facilities are suitable for this use, the facilities could be upgraded consistent with existing plans and zoning and the new Master Plan, and lease renewal would be reasonably foreseeable. In addition, Alternative 3 also assumes that the university enrollment would increase up to 1,000 students consistent with the 1953 CUP. This alternative would allow for the following development, consistent with the Strawberry Community Plan.

- Up to an additional 393 residential units consisting of new and replacement units, according to a new Master Plan, including a minimum of 90 and maximum of 100 student housing units and a Residential Care Facility (counting as one unit). Similar to the proposed project, 13 existing housing units would be retained on site.
- Some additional development related to the educational use of the university. The only new development specifically discussed as part of the 1982 Community Plan Amendment was a chapel. Other potential development includes a student union building and additional classrooms (shown in the 1955 Use Permit) and a gymnasium (new use). Any such development should be located within or adjacent to the existing campus development and would be exclusively available for use by university students and faculty, as required by the existing Community Plan. The extent of additions to the campus should be determined in a new Master Plan.

The existing Strawberry Community Plan also allows for up to 24 detached single-family residences and 36 attached residential units to be developed on the project site. However, these residential units have already been developed on the Seminary property and therefore are considered to be part of the existing conditions on the site.

CEQA requires an EIR's discussion of alternatives to focus on those alternatives that are capable of avoiding or substantially lessening significant effects of the project. As part of the reasonable range of potential alternatives to the project, the selection must include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR include the inability to avoid significant environmental impacts. The Maximum Countywide Plan Density Alternative would allow for a total of 393 new/replacement residential units to be developed on the site, which is an increase of 69 units compared to the proposed project. Because of the increased development potential under this alternative, it would likely result in greater air pollutant and GHG emissions, energy consumption, noise, and vehicle trips than the proposed project. However, it is not anticipated that these increases would result in a noticeable change in the significance of impacts compared to the proposed project such that a less than significant impact would become significant, or a significant impact would be substantially more severe. Therefore, this alternative has not been included in the range of reasonable alternatives selected for detailed analysis pursuant to CEQA legal principles.

5.4 REASONABLE RANGE OF ALTERNATIVES FOR DETAILED ANALYSIS

The following reasonable range of alternatives has been evaluated in this Draft EIR.

- Alternative 1: No Project/No Build Alternative assumes the continuation of baseline conditions with no development or redevelopment of the project site. The project site would remain in its current condition and existing uses would continue.
- Alternative 2: Potential Alternative Locations have been evaluated based on a search for sites of comparable size, plan designation/zoning, access, public services/utilities, and feasible availability.
- Alternative 3: Community Plan Consistent Alternative involves denial of the proposed Community Plan Amendment and approval of a new Master Plan and assumes that development of the site could occur consistent with the currently adopted Strawberry Community Plan and the same number of units would be developed as the proposed project.
- Alternative 4: Mitigated Plan Alternative involves modifications to the development plan (e.g., reconfiguration of uses) from the project application to reduce environmental impacts, based on analysis and recommended mitigation in the EIR.

Further details on these alternatives, and an evaluation of environmental effects relative to the proposed project, are provided below.

5.4.1 Alternative 1: No Project/No Build Alternative

The No Project/No Build Alternative is required by CEQA to discuss and analyze the reasonably foreseeable impacts that would occur if the proposed project was not implemented. The No Project/No Build Alternative assumes the continuation of baseline conditions with no development or redevelopment of the project site, recognizing the NCLH property is currently developed to the extent allowed under existing plans, zoning, and entitlements. Thus, under this scenario, there would be no renovation of the existing academic campus, relocation of the existing daycare center, construction of a new fitness center, construction of a new residential care facility, upgrades to existing housing or construction of new housing, retention and access improvements to existing open space and recreation areas, or creation of new bicycle and pedestrian paths under the No Project/No Build Alternative. Under this alternative, it is assumed that Olivet University (or an equivalent college) would remain on the project site because the existing facilities are suitable. In addition, this alternative assumes that the university enrollment would increase to up to 1,000 students consistent with the 1953 Conditional Use Permit (CUP). However, substantial physical improvements to the campus would not occur, if they would require additional entitlements.

Although it is acknowledged that with the No Project/No Build Alternative, there would be no discretionary action by the County, and thus no substantial physical changes, for purposes of comparison with the other action alternatives, conclusions for each resource topic are characterized as "impacts" that are greater than, similar to, or less than those of the proposed project.

AESTHETICS

Implementation of the No Project/No Build Alternative would not affect the visual character of the project area because it would remain in its current condition. Also, no conflicts would occur related to compliance with County policies involving color palette, bulk, and ridgelines or as a result of light and glare. The No Project/No Build Alternative would avoid the project's potentially significant impacts on aesthetics and no impact would occur.

AIR QUALITY

Under this alternative, no construction would take place and all construction-related emissions would be avoided. Therefore, construction-related impacts associated with Alternative 1 would not occur and no mitigation would be required.

For long-term operational-related emissions, the No Project/No Build Alternative would not generate any new emissions beyond what is already generated on the existing campus and would be allowed under plans, zoning, and entitlements. Therefore, similar to the proposed project, this alternative assumes enrollment at the university would increase to 1,000 students. However, under this alternative, no additional housing opportunities would be provided in close proximity to existing facilities and students would be resigned to find housing elsewhere in the County or the larger East Bay/San Francisco region. The proposed project would have increased construction and operational emissions compared to existing conditions due to the development of new housing and facilities and increased vehicle trips. See Appendix C for air quality emissions associated with the operation of existing uses. On the other hand, the long-term emissions generated by Alternative 1 would be incrementally lower than those of the proposed project because it would not generate long-term operational emissions associated with additional residential uses on the project site. Thus, air quality impacts under the No Project/No Build Alternative would be less than under the proposed project and no mitigation would be required to reduce any potentially significant impacts.

ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

The No Project/No Build Alternative would not involve ground-disturbing activities and thus no impacts would occur on archeological, historical, or tribal cultural resources. The No Project/No Build Alternative would avoid the project's potentially significant impacts on archaeological and tribal cultural resources.

BIOLOGICAL RESOURCES

The No Project/No Build Alternative would not involve ground-disturbing activities and thus no impacts would occur on biological resources. The No Project/No Build Alternative would avoid the project's potentially significant impacts on special-status plants, special-status wildlife, sensitive natural communities, and native wildlife nursery sites.

ENERGY

Under the No Project/No Build Alternative, no demolition or construction activities would occur. This alternative would not include any renovations to the existing academic campus but assumes that university enrollment would increase to 1,000 students, which would be the same as the proposed project. However, as discussed in Section 3.5, "Energy," the proposed project would increase energy use but would include various sustainability features including on-site photovoltaic solar systems to supply electricity to the project site that would be installed on the building roofs of new residential units. Additionally, the proposed project would apply Marin County CAP recommended project-level measures as components of the project's inherent design. While Alternative 1 would generate less energy demand as a result of no new development or construction activities, the energy consumed for increased student enrollment would be less efficient than the proposed project. Thus, while the proposed project would implement sustainability features and Marin County CAP measures, energy impacts under the No Project/No Build Alternative would be less than would occur under the proposed project.

GEOLOGY AND MINERAL RESOURCES

This alternative would result in no impacts related to geology as no development would occur and no ground-disturbing activities would take place. Therefore, this alternative would result in impacts that would be less than the proposed project and no impact would occur.

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE VULNERABILITY

Alternative 1 would not generate construction-related GHG emissions or conflict with adopted plans or policies related to GHG emissions reduction. In addition, Alternative 1 would not generate additional operational GHG emissions related new development including residential uses on the project site. However, the No Project/No Build Alternative would result in similar operational GHG emissions in relation to the potential of student enrollment increasing to 1,000 students and student vehicle trips from off-site housing. As discussed in Section 3.8, "Greenhouse Gas Emissions and Climate Change Vulnerability," the proposed project would generate construction-related GHG emissions. Additionally, while this alternative assumes university enrollment would increase to 1,000 students (similar to the proposed project), the proposed project would result in greater operational GHG emissions as a result of construction of a new fitness center, construction of a new residential care facility, upgrades to existing housing and construction of new housing, and retention and access improvements to existing open space and recreation areas, as well as operational GHG emissions from new natural gas infrastructure and increased VMT associated with residential uses. As discussed in Section 3.8, the project's GHG impacts would be significant and unavoidable after mitigation. Therefore, although the No Project/No Build Alternative would result in similar operational GHG emissions related to student enrollment, overall GHG emissions under this alternative would not be significant and would be less than the proposed project.

HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE

No significant hazard impact would occur under the project because it would be required to comply with federal, State, and local regulations regarding the handling of hazardous materials. As discussed in Section 3.9, "Hazards, Hazardous Materials, and Wildfire," all hazardous materials would be transported, used, stored, handled, and disposed of according to the manufacturers' recommendations and in accordance with local, State, and federal regulations and plans. Under this alternative, no new buildings or facilities associated with the project would be constructed. Therefore, impacts on public health and safety related to hazardous materials or hazards would be less under the No Project/No Build Alternative than under the project and no impact would occur.

HYDROLOGY

Under the No Project/No Build Alternative, there would be no potential for operation- or construction-related releases of sediment and contaminants into surface waters or groundwater, and no changes in stormwater generation, drainage patterns, or new flood risk. Because Alternative 1 involves a continuation of baseline conditions with no changes to the existing uses or development or redevelopment of the project site, there would be no potential impacts on hydrology. Implementing the No Project/No Build Alternative would result in impacts on hydrology and water quality that would be less than those under the project and no impact would occur.

LAND USE AND PLANNING

The No Project/No Build Alternative would not result in any new construction or redevelopment of the project site. This alternative would not divide an established community, nor would it conflict with plans adopted for the purpose of avoiding or mitigating a significant effect. As described in Section 3.11, "Land Use and Planning," construction and operation of the proposed project would result in potentially significant environmental impacts, and therefore would have the potential to conflict with specific land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. However, because the No Project/No Build Alternative would be a continuation of baseline conditions and would not involve development or redevelop of campus facilities and housing, Alternative 1 would not conflict with applicable land use plans, goals or policies. Therefore, impacts associated with land use and planning would be less than under the project and no impact would occur.

NOISE AND VIBRATION

As described above, Alternative 1 assumes the continuation of existing conditions with no development or redevelopment of the project site because the property is currently developed to the extent allowed under existing plans, zoning, and entitlements. However, similar to the proposed project, this alternative assumes that university enrollment would increase to up to 1,000 students consistent with the 1953 CUP. Because no construction activities or physical improvements to the campus would take place under this alternative, temporary construction impacts would not occur and Alternative 1 would avoid the significant and unavoidable construction noise impacts of the proposed project. For long-term operational and traffic noise, although Alternative 1 assumes university enrollment would increase to up to 1,000 students (similar to the proposed project), this alternative would not involve physical improvements to the campus or construction of additional residential dwelling units to accommodate the increase in enrollment. Thus, implementation of Alternative 1 would result in impacts on noise and vibration that would be less than those that would occur under the proposed project.

POPULATION AND HOUSING

Under the No Project/No Build Alternative, no upgrades to existing housing or construction of new housing would occur. Under the proposed project, the number of residential units on the project site, including the 13 housing units proposed to be retained, would increase to 337 units because the 139 residential units and 66 dormitory rooms would be replaced, and another 185 units would be constructed. While this alternative assumes enrollment at the university would increase to 1,000 students, which would be the same under the proposed project, Alternative 1 would not involve physical improvements to the campus to accommodate this growth and thus would have potentially greater long-term impacts on population and housing as a result of the need for housing elsewhere in the County. In addition, as discussed in Section 3.12, "Population and Housing," the County has long identified the project site as a housing opportunity site to assist with meeting the County's RHNA requirement. However, because no physical improvements, including the construction of new housing, would occur to help the County meet its RHNA requirement on the project site, impacts on population and housing are uncertain and could be potentially greater because students would be resigned to find housing elsewhere in the County or in the larger East Bay/San Francisco region. Therefore, implementing the No Project–No Development Alternative could result in impacts on population and housing that would be potentially greater than those that would occur under the project because of the absence of additional housing supply on this designated RHNA site.

PUBLIC SERVICES AND RECREATION

The No Project/No Build Alternative assumes the continuation of baseline conditions with no development or redevelopment of the project site because the NCLH property is currently developed to the extent allowed under existing plans, zoning, and entitlements. This alternative also assumes student enrollment at the university would increase to 1,000 students, which would be the same under the proposed project. However, no physical improvements to the campus would occur to accommodate this enrollment increase since it would require an application for additional entitlements. As discussed in Section 3.14, "Public Services and Recreation," implementation of the proposed project would not necessitate the construction of new or expanded public service facilities but would require mitigation for potentially significant impacts on emergency response for fire protection services and would provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. However, because Alternative 1 would not construct additional housing units or the residential care facility which would increase the population on-site, the No Project/No Build Alternative would result in less impacts compared to the proposed project with regard to public services and no mitigation would be required.

TRANSPORTATION

Under the No Project/No Build Alternative, no development or redevelopment of the project site including transportation and circulation improvements would occur; however, university enrollment would still be assumed to increase up to 1,000 students and student vehicle trips and VMT would increase as a result of commuting from off-site housing. Thus, increases in enrollment could occur under this alternative without any upgrades or improvements to the existing circulation system, resulting in similar potentially significant, parking-related traffic hazard impacts as the proposed project. In addition, the existing roadways within the project site would continue to be inconsistent with County of Marin roadway design standards and possibly inconsistent with federal ADA and PROWAG guidelines. As discussed in Section 3.14, "Transportation," Mitigation Measures 3.14-3b, 3.14-3c and 3.14-4 would reduce the proposed project's potentially significant traffic hazards and emergency access impacts to less than significant. Additionally, the proposed project's residential uses would result in a VMT per capita that would be approximately 3 percent below the regional average of 19.6 miles, and therefore, would not meet the 30 percent below existing average regional VMT per capita threshold with implementation of Mitigation Measure 3.14-2; however, the proposed campus uses under the proposed project would result in a VMT per service population that would be 30 percent below the VMT per service population for existing campus uses. Thus, transportation impacts under this alternative would be less for emergency access, and significant unavoidable VMT impacts would be avoided. However, potentially significant impacts would be similar to the proposed project without mitigation for traffic hazards and inconsistency with County of Marin roadway design standards. Therefore, while the severity of impacts would be reduced overall, potentially significant impacts would remain related to traffic hazards and inconsistency with County of Marin roadway design standards.

UTILITIES AND SERVICE SYSTEMS

As discussed above, Alternative 1 assumes that enrollment at the University would increase to 1,000 students, which would be the same as the proposed project, but no physical improvements to the campus would occur to accommodate this enrollment increase. Thus, this alternative would have similar utilities and service systems as the proposed project related to campus uses as a result of the increase in student enrollment; however, would not construct additional housing units or the residential care facility. Therefore, the No Project/No Build Alternative would result in fewer impacts than the project since this alternative would not incorporate any new housing or require the construction of utility extensions and expansions to serve the project site.

RELATIONSHIP TO PROJECT OBJECTIVES

The No Project/No Build Alternative would only fully meet one project objective and would not meet the remaining project objectives. The No Project/No Build Alternative assumes the continuation of baseline conditions with no development or redevelopment of the project site. Therefore, the No Project/No Build Alternative would not meet the project objectives related to creating an intergenerational community for residents; supporting a thriving campus use; supporting a housing balance in the Strawberry community; supporting implementation of the Countywide Plan Housing Element goals and policies to provide a mix of housing units, including affordable units; developing the project site sensitive and compatible with the scale and form of the surrounding area; and providing improvements to circulation systems serving the Strawberry community. The No Project/No Build Alternative would fully meet the project objective related to continuing to provide undisturbed views and visual access to the Bay through retainment of undeveloped open space areas within the project site and preservation of existing viewsheds and local ridgelines.

5.4.2 Alternative 2: Potential Alternative Locations

CEQA sometimes requires that a legally adequate range of alternatives include an alternative location, but such alternatives are not always required. The facts surrounding particular projects should be considered in determining whether to include offsite alternatives. Relevant factors to consider are set forth in State CEQA Guidelines Section 15126.6(f)(2):

(A) Key question. The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.

(B) None feasible. If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location.

(C) Limited new analysis required. Where a previous document has sufficiently analyzed a range of reasonable alternative locations and environmental impacts for projects with the same basic purpose, the lead agency should review the previous document. The EIR may rely on the previous document to help it assess the feasibility of potential project alternatives to the extent the circumstances remain substantially the same as they relate to the alternative. (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 573).

Section 15126.6(f) further explains, more generally that, "[a]mong the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives. (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553; see *Save Our Residential Environment v. City of West Hollywood* (1992) 9 Cal.App.4th 1745, 1753, fn. 1)."

In the *Citizens of Goleta Valley* decision, twice mentioned in section 15126.6, the California Supreme Court focused on the factor of whether, for a private project, the proponent can reasonably acquire, control or otherwise have access to an alternative site where development could occur with fewer or diminished significant environmental impacts:

> Finally, [Appellant] argues that the Board improperly considered that Hyatt did not own any of the alternative sites, and that one of the sites, Carpinteria Bluffs, lay outside of the County's jurisdiction. We disagree. As earlier noted, a project alternative which cannot be feasibly accomplished need not be extensively considered. A feasible alternative is one which can be "accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Pub. Resources Code, § 21061.1; Guidelines, § 15364.) Surely whether a property is owned or can reasonably be acquired by the project proponent has a strong bearing on the likelihood of a project's ultimate cost and the chances for an expeditious and "successful accomplishment."
>
> This is not to suggest that private projects are categorically exempt from alternative-site review. Understandably, the government's power of eminent domain and access to public lands suggest that alternative sites may be more feasible, more often, when the developer is a public rather than a private agency. [Case Citations.]
>
> Nevertheless, there may be cases involving proposed development by a private entity in which the consideration of alternative sites is necessary and proper. The private developer may own or control feasible alternative sites, may have the ability to purchase or lease such properties, or may otherwise have access to suitable alternatives. [Case Citations.] Other circumstances may necessitate review of alternative properties, as well.
>
> (52 Cal.3d at pp. 574-575.)

With all of these considerations and factors in mind, the County conducted a review of all potential alternative sites within the unincorporated County for developing the proposed project. The review of potential alternative sites included consideration of several criteria related to the project's characteristics and objectives that would be necessary to develop comparable components to the proposed project, including an academic campus, daycare

center, fitness center, residential care facility, market-rate and affordable housing, stormwater retention, similar proportion of open space and recreation areas, and new bicycle and pedestrian paths within the property. The criteria considered for this alternative includes sites with similar size, zoning, Countywide Plan land use designations, roadway/highway access, availability of utilities, and market availability (i.e., whether the site can be reasonably acquired by the project applicant). Based on these criteria, the County identified the following three potential alternative sites:

- Site 1 – Buck Center for Research in Aging Vacant Property. This property is located in north Novato off Redwood Highway and encompasses approximately 234 acres on APNs 125-180-79 and -85 of which 36.5 acres could be developed with 249 above moderate-income dwelling units per the County Housing Element's Sites Inventory (County of Marin 2023). The site is currently vacant property with an existing Countywide Plan land use designation of AG1 – Agriculture and zoned as A60 – Agriculture and Conservation. While the site provides the opportunity to develop 249 dwelling units, it is vacant land with no existing roadway access, utilities, or infrastructure. Thus, this site would not meet the development criteria for this alternative. It would also not meet some of the project's basic objectives, such as supporting a thriving campus use that offers amenities to the surrounding community and academic value for the region. Due to the undeveloped nature of the project site, potential to cause potentially greater environmental impacts, and the inability to meet development criteria and basic project objectives, this alternative site location has been eliminated from further review.
- Site 2 – St. Vincent's School for Boys. This property is located in Santa Venetia off U.S. Highway 101 (U.S. 101) and St. Vincent Drive and encompasses approximately 315 acres on APNs 155-011-28, -29, and -30. Based on an evaluation of site conditions, the County has estimated that approximately 34 acres could be developed with up to 680 units (440 lower income units and 240 above moderate-income units) per the County Housing Element's Sites Inventory (County of Marin 2023).

  The site is currently developed with a Catholic school campus and also includes vacant and unimproved areas. Owned by the human services agency Catholic Charities, the school operates as a 52-bed licensed short-term residential therapeutic program for boys who are referred from in-patient psychiatric facilities and county agencies throughout Northern California (Catholic Charities 2023). In addition, Winston Preparatory School began operating a private day school in August 2020 for students through twelfth grade with learning differences such as dyslexia, nonverbal learning disabilities, and executive functioning difficulties. Winston Preparatory School is also in the early stages of planning a separate transitions program for young adults 18-21 years old who are college capable but may benefit from additional growth in skills and confidence (Wintson Preparatory School 2023) According to the County Housing Element's Sites Inventory (County of Marin 2023), large parts of the property are constrained by sea-level rise and a floodplain along Miller Creek. The existing Catholic school facilities setback from U.S. 101 and the surrounding hillside terrain also limit the developable areas on this site. The existing Countywide Plan land use designation is PD (Planned Development) – Agriculture and Environmental Resource and zoned as A2 – Agriculture Limited. While the site provides the opportunity to develop a comparable number of housing units comparable to the proposed project, development of this site as an alternative to the proposed project would not meet some of the basic project objectives. Examples of unmet project objectives are supporting a thriving college campus use that offers amenities to the surrounding community and academic value for the region; providing outstanding, long-distance vistas, such as visual access to the San Francisco Bay (or another elevated vista, perhaps); and creating a unique space with the potential to improve and transform the social fabric of the site and local community. In addition, the applicant maintains an existing lease agreement with Olivet University and there are no plans to sell the proposed project site or move the university to another location. Likewise, it is unknown if Catholic Charities or Winston Preparatory School have any plans to sell this alternative site location or move both school operations to another location. In addition, the applicant does not own other land, have a current lease, or any other type of agreement with any other property owners (including the St. Vincent's School for Boys) to accommodate the proposed project. Because this alternative site location would not meet some of the basic project objectives and legal and logistical constraints related to lease agreements with current tenants and land owners, this alternative site location would not be feasible and has been eliminated from further review.

- Site 3 – San Domenico School. This property is located in Sleepy Hollow at 1500 Butterfield Road and encompasses approximately 522 acres on APN 176-300-30 of which 2.4 acres would be developed with 50 lower income dwelling units per the County Housing Element's Sites Inventory (County of Marin 2023). The majority of the school campus consists of school facilities and steep hillside terrain. However, there are a few areas of the school, each over one acre and less than 10 acres (totaling 2.4 acres), that could allow for housing opportunities (County of Marin 2023). The existing Countywide Plan land use designation is PR (Planned Residential) and zoned as RMP-0.1 – Residential Multiple Planned. While the site provides the opportunity to develop housing units, it is limited to 50 dwelling units on 2.4 acres of noncontiguous land which would not be enough to accommodate a development comparable to the proposed project. Furthermore, the site provides one roadway for ingress and egress and thus has constraints on emergency access and evacuation. Therefore, this alternative site location would not meet some of the project's basic project objectives and has been eliminated from further review.

Although Sites 1, 2 and 3 were identified as potential alternative site locations and could be developed at varying densities with residential dwelling units, they either did not meet the alternate site development criteria outlined above, would not fulfill most of the basic project objectives, had the potential to cause potentially greater environmental impacts, or were not feasibly available. Therefore, this alternative has been determined to be infeasible and thus is not discussed in further detail in this EIR.

5.4.3 Alternative 3: Community Plan Consistent Alternative

The Community Plan Consistent Alternative involves denial of the proposed Community Plan Amendment and approval of a new Master Plan. This assumes that development of the site could occur consistent with the currently approved Strawberry Community Plan, as outlined below. However, for qualifying density bonus projects, State density bonus law requires the County to apply the Countywide Plan land use designation density for the site rather than the zoning or Community Plan density. As such, applying the 2.1 dwelling units/acre density from the Community Plan would be inconsistent with State density bonus law. Per the Countywide Plan, the project site has a land use designation density range of 2-4 dwelling units/acre. While the Countywide Plan would allow a maximum density of 4 dwelling units per acre on the site (addressed above in Section 5.3.3, "Maximum Countywide Plan Density) Alternative," this alternative assumes development of the same number of units as the proposed project (i.e., 324 new/replacement units and 3.3 dwelling units per acre). Because the 1984 Master Plan for the Seminary property expired in 2018, a new Master Plan would be required. This alternative assumes that Olivet University (or an equivalent college) would remain on the site because the existing facilities are suitable for this use, the facilities could be upgraded consistent with existing plans and zoning and the new Master Plan, and lease renewal would be reasonably foreseeable. In addition, Alternative 3 also assumes that university enrollment would increase up to 1,000 students consistent with the 1953 CUP. This alternative would allow for the following development, consistent with the Strawberry Community Plan.

- Up to an additional 324 residential units consisting of new and replacement units, according to a new Master Plan, including a minimum of 90 and maximum of 100 student housing units and a Residential Care Facility (counting as one unit). Similar to the proposed project, 13 existing housing units would be retained on site.
- Some additional development related to the educational use of the university. The only new development specifically discussed as part of the 1982 Community Plan Amendment was a chapel. Other potential development includes a student union building and additional classrooms (shown in the 1955 Use Permit) and a gymnasium (new use). Any such development should be located within or adjacent to the existing campus development and would be exclusively available for use by university students and faculty, as required by the existing Community Plan. The extent of additions to the campus should be determined in a new Master Plan.

The existing Strawberry Community Plan also allows for up to 24 detached single-family residences and 36 attached residential units to be developed on the project site. However, these residential units have already been developed on the Seminary property and therefore are considered to be part of the existing conditions on the site.

AESTHETICS

The Community Plan Consistent Alternative would result in similar visual impacts as the proposed project because this alternative would still construct the same major elements of the proposed project including the same number of residential units, but 90 to 100 units would be dedicated solely to student housing, as well as the residential care facility. While Alternative 3 might not incorporate all the proposed project's amenity improvements such as recreation facilities, open space, parking, circulation elements, or the construction of a new fitness center, it would allow for facility upgrades consistent with existing plans and zoning including the development of a residential care facility, a chapel, a student union building and additional classrooms, and a gymnasium. Thus, this alternative would not completely eliminate or reduce the proposed project's potentially significant impacts related to scenic quality and light and glare and mitigation would still likely be required. As a result, for both the proposed project and Alternative 3, impacts associated with scenic quality and light and glare would be less than significant after implementation of mitigation. Therefore, Alternative 3 would result in similar aesthetics impacts as the project.

AIR QUALITY

Under Alternative 3, maximum daily construction emissions and the overall duration of construction activity would be similar to those of the proposed project though incrementally reduced because not all the academic and amenity improvements would be developed. For operations, although this alternative would not incorporate amenities such as recreation facilities, fitness center, open space, parking, or circulation elements, similar operation-related air pollutant emissions would also be generated because this alternative would still construct the same major elements of the proposed project including the same number of residential units as well as the residential care facility and university enrollment would also be assumed to increase to 1,000 students. Alternative 3 would also not avoid the potentially significant impacts of the proposed project involving short-term construction-related emissions and exposure to TAC emissions and mitigation would still be required. As with the proposed project, long-term operational emissions and the potential to generate emissions leading to odors would be less than significant under Alternative 3. Therefore, the Community Plan Consistent Alternative would result in similar air quality impacts as compared to the proposed project.

ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

The Community Plan Consistent Alternative would involve earthmoving activities similar to the proposed project, which could result in disturbance, destruction, or alteration of known or as-yet-undiscovered/unrecorded unique archaeological resources, historical resources of an archaeological character, tribal cultural resources, or human remains. The Community Plan Consistent Alternative would have a similar development footprint, and therefore would not avoid potential impacts associated with archaeological, historical, or tribal cultural resources. The impacts under the Community Plan Consistent Alternative would be similar to those under the project, and would still require mitigation for unanticipated discovery of unique archaeological resources, historical resources of an archaeological nature, or tribal cultural resources.

BIOLOGICAL RESOURCES

The Community Plan Consistent Alternative would result in similar biological resources impacts as the proposed project because this alternative would still construct the same major elements of the proposed project including the same number of residential units, but 90 to 100 units would be dedicated solely to student housing, as well as the residential care facility. While Alternative 3 might not incorporate all the proposed project's academic and amenity improvements such as recreation facilities, open space, parking, circulation elements, or the construction of a new fitness center, it would allow for facility upgrades consistent with existing plans and zoning as well as the development of a residential care facility, a chapel, a student union building and additional classrooms, and a gymnasium. Similar to the proposed project, this alternative could affect special-status plant species, wildlife species and habitats, as well as riparian habitats, and wildlife movement corridors. However, due to its similar development

footprint, Alternative 3 would result in the same potentially significant impacts to biological resources as compared to the proposed project and mitigation would still be required. Therefore, impacts under this Alternative 3 would be similar to those that would occur under the proposed project.

ENERGY

Under the Community Plan Consistent Alternative, and similar to the proposed project, construction activities would occur within a similar development footprint and energy would be temporarily used for construction activities. New buildings and facilities would incorporate energy efficiency features and would be fully electric. As with the proposed project, implementing the Community Plan Consistent Alternative would not result in the long-term wasteful, inefficient, and unnecessary consumption of energy. Additionally, operational energy demands under Alternative 3 would be similar to those of the project because it would still construct the same major elements of the proposed project including the same number of housing units as well as the residential care facility. Therefore, energy impacts under the Community Plan Consistent Alternative would result in similar impacts to the proposed project.

GEOLOGY AND MINERAL RESOURCES

Construction activities, including ground-disturbing and earthmoving activities, for the Community Plan Consistent Alternative would be similar to those described for the proposed project because the same major elements of the proposed project would be developed, including the same number of units as well was the residential care facility. While Alternative 3 might not incorporate all the proposed project's amenity improvements such as recreation facilities, open space, parking, circulation elements, or the construction of a new fitness center, it would allow for facility upgrades consistent with existing plans and zoning, including the development of a residential care facility, a chapel, a student union building and additional classrooms, and a gymnasium. Thus, consistent with the proposed project, construction activities are not likely to result in damage to and/or destruction of previously undiscovered paleontological resources and thus impacts would remain less than significant. Additionally, other geotechnical hazards, such as ground-shaking, landsliding, and slope stability, would also have similar impacts to the proposed project with the incorporation of mitigation. Therefore, because Alternative 3 would involve the construction of the same major elements within a similar development footprint as the proposed project, geology and soils impacts under the Community Plan Consistent Alternative would also be similar to the proposed project and mitigation would still be required.

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE VULNERABILITY

Under the Community Plan Consistent Alternative, similar construction impacts related to GHG emissions would occur but would be incrementally reduced because not all the academic and amenity improvements would be developed. Although this alternative would not incorporate amenities such as recreation facilities, fitness center, open space, parking, or circulation elements, similar operation-related GHG emissions would be generated because this alternative would still construct the same major elements of the proposed project including the same number of residential units as well as the residential care facility and university enrollment would also be assumed to increase to 1,000 students. As such, residential VMT generated under this alternative would be similar to the proposed project and remain significant and unavoidable. Since operation-related GHG emissions and VMT would be similar to the project, overall impacts under Alternative 3 would be similar to those that would occur under the proposed project and would be significant. Thus, mitigation would be required to address GHG impacts; however, as with the proposed project, GHG impacts would remain significant and unavoidable because mitigation would not be sufficient to meet BAAQMD's VMT reduction requirements or building decarbonization goals.

HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE

No significant hazard impacts would occur under the project because it would be required to comply with federal, State, and local regulations regarding the handling of hazardous materials. As with the project, the use and handling

of hazardous materials under this alternative would be consistent with federal, State, and local regulations, which would minimize the potential for upset or accident conditions or exposure to nearby receptors. Therefore, impacts on public health and safety related to hazardous materials or hazards under the Community Plan Consistent Alternative would be similar to those under the project and remain less than significant.

HYDROLOGY

The Community Plan Consistent Alternative would have a similar footprint as compared to the proposed project. Therefore, the amount of impervious surfaces would be similar under this alternative and there is still potential for construction-related releases of sediment and contaminants into surface waters or groundwater, as well as stormwater generation, changes in drainage patterns, and/or flood risk. Therefore, impacts to hydrology and water quality would be similar under this alternative and remain less than significant.

LAND USE AND PLANNING

Under the Community Plan Consistent Alternative, the development on the site would remain similar to the proposed project. This alternative would develop the same number of units as the proposed project; however, it would not incorporate amenities such as recreation facilities, fitness center, open space, parking, or circulation elements. Development on the site would continue to be subject to the requirements in the Countywide Plan and Development Code. However, as with the proposed project, Alternative 3 would have a significant land use impact due to inconsistencies with goals and policies in the Countywide Plan and Development Code. Therefore, the Community Plan Consistent Alternative would be similar to the proposed project and land use and planning impacts would remain less than significant with mitigation.

NOISE AND VIBRATION

Under Alternative 3, construction activities would be similar to those that would occur under the proposed project since the same number of units would be developed as well as the residential care facility and university enrollment would also be assumed to increase to 1,000 students. However, this alternative would not eliminate the proposed project's potentially significant and unavoidable construction noise impacts. Even with the implementation of mitigation, nearby receptors would be exposed to similar construction noise as the proposed project because construction would occur at the same distance from the residences under this alternative. Similar to the project, this alternative would also result in operational noise impacts related to long-term transportation and stationary noise and mitigation would be required. Therefore, this alternative would result in similar noise and vibration impacts as the proposed project.

POPULATION AND HOUSING

This alternative would still develop the same major elements of the proposed project; however, it would not incorporate all the academic and amenity improvements, such as recreation facilities, fitness center, open space, parking, or circulation elements. Because the number of housing units would remain the same, the residential care facility would still be constructed and university enrollment would still be assumed to increase to 1,000 students under the Community Plan Consistent Alternative, impacts under this alternative would be similar to those of the proposed project. Therefore, overall impacts associated with population and housing would be similar to those of the proposed project and remain less than significant.

PUBLIC SERVICES AND RECREATION

The proposed project would not result in any significant public service impacts that would involve additional construction of new facilities. However, since this alternative would not incorporate amenities such as recreation facilities, fitness center, and open space, there would be a decrease in the number of recreational amenities provided.

The extent of public services needed for the Community Plan Consistent Alternative would be the same as the project because the same number of housing units would be developed as well as construction of the residential care facility and university enrollment would still be assumed to increase to 1,000 students. Thus, mitigation would still be required to address potential impacts related to emergency response. Therefore, the need for public services would be the same under this alternative. Overall impacts associated with public services and recreation would be similar to the project and remain less than significant with mitigation.

TRANSPORTATION

Similar to the proposed project, Alternative 3 would not conflict with a program, plan or ordinance related to transit, roadway, or bicycle and pedestrian facilities. In addition, because this alternative would still develop the same major elements of the proposed project including the same number of housing units, the residential care facility and university enrollment would still be assumed to increase to 1,000 students, project-level and cumulative operational VMT impacts would be similar to the proposed project and be significant. Thus, mitigation would be required to address VMT impacts; however, similar to the proposed project, VMT impacts would remain significant and unavoidable after mitigation because the effectiveness of potential VMT reduction strategies cannot be reliably quantified nor assured at this time. Similar to the proposed project, Alternative 3 would also result in potentially significant impacts related to safety hazards and inadequate emergency access and mitigation would be required. Therefore, because Alternative 3 would not eliminate or reduce any of the proposed project's potentially significant or significant and unavoidable impacts, impacts related to transportation would remain similar to the proposed project.

UTILITIES AND SERVICE SYSTEMS

Under the Community Plan Consistent Alternative, water supply, wastewater, solid waste, electricity, and natural gas demands would be similar to those of the project because this alternative would still construct the same major elements of the proposed project including the same number of residential units as well as the residential care facility and university enrollment would also be assumed to increase to 1,000 students. The proposed project would not require the construction of new or expanded offsite utilities to serve the project's demand, and no additional utilities beyond those constructed as part of the project would be required. Thus, the proposed project would result in less than significant environmental impacts associated with utilities and service systems. Likewise, because this alternative would incorporate similar development to the proposed project to accommodate project-related water demand, wastewater generation, stormwater runoff, and electricity and natural gas demand, impacts under this alternative would be similar to the proposed project. Therefore, impacts on utilities and service systems under the Community Plan Consistent Alternative would be similar under the proposed project and remain less than significant.

RELATIONSHIP TO PROJECT OBJECTIVES

The Community Plan Consistent Alternative would fully meet most of the project objectives because it would still allow for the development of the site in accordance with the currently approved Strawberry Community Plan, as well as the development of the same number of units as the proposed project (i.e., 324 new/replacement units). Under this alternative, Olivet University (or an equivalent college) would remain on the site because the existing facilities are suitable for this use, the facilities could be upgraded consistent with existing plans and zoning and the new Master Plan, and lease renewal would be reasonably foreseeable. Therefore, the Community Plan Consistent Alternative would fully meet the project objectives related to creating an intergenerational community for residents; supporting a thriving campus use; continuing to provide undisturbed views and visual access to the Bay through retainment of undeveloped open space areas within the project site and preservation of existing viewsheds and local ridgelines; supporting a housing balance in the Strawberry community; supporting implementation of the Countywide Plan Housing Element goals and policies to provide a mix of housing units, including affordable units; and developing the project site sensitive and compatible with the scale and form of the surrounding area. However, the Community Plan Consistent Alternative would not meet the project objective to provide improvements to the circulation systems serving the Strawberry community including enhanced trails, bicycle facilities, and pedestrian enhancements on the project site.

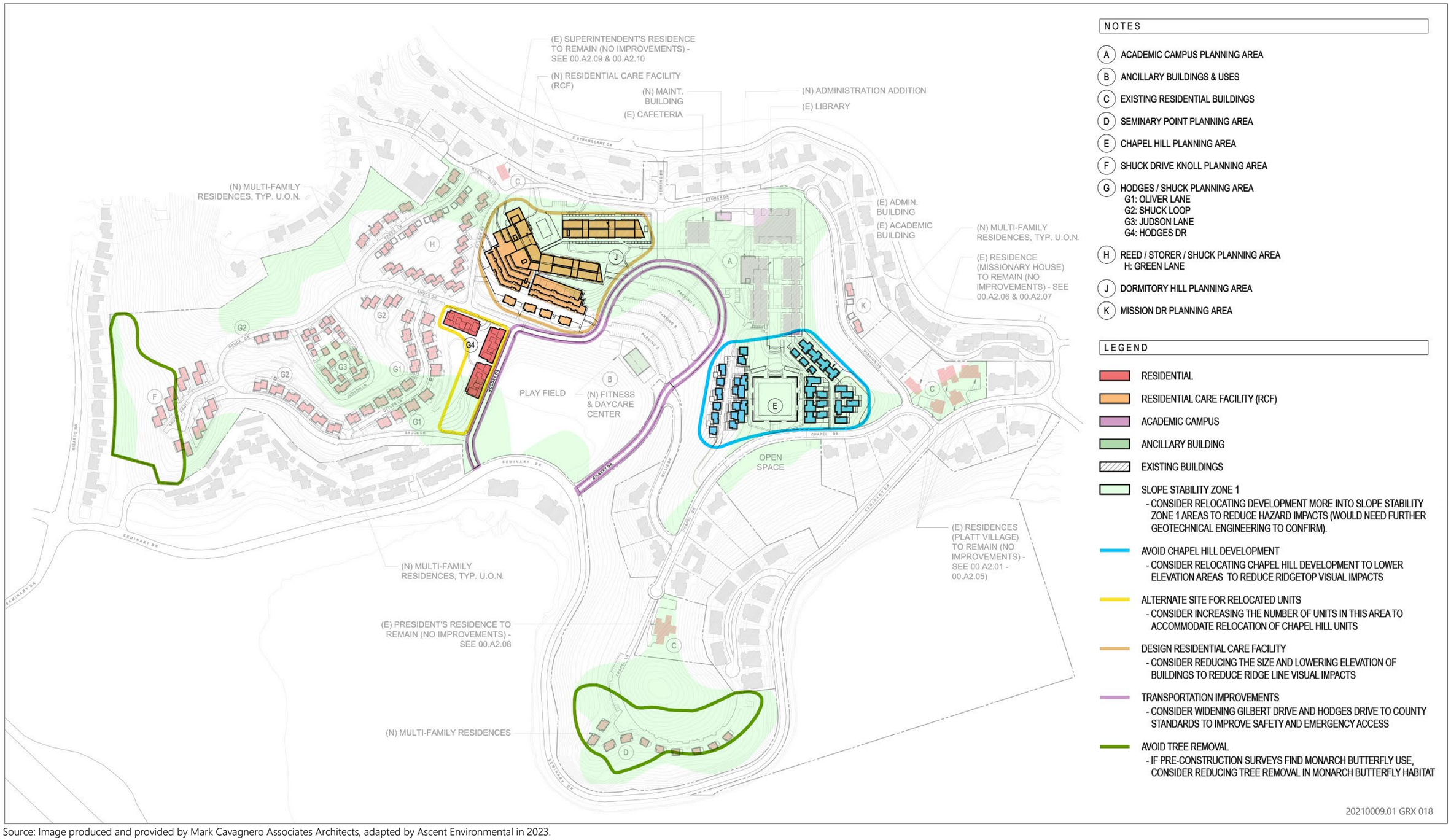
5.4.4 Alternative 4: Mitigated Plan Alternative

In light of state housing laws (also discussed above in Section 5.3.2, Reduced Development Alternative [Seminary Tomorrow Process Outcome]) and the 1953 CUP, the County has considered and determined it is legally infeasible to mandate reducing residential development or student enrollment at the project site. Thus, under the Mitigated Plan Alternative, modifications of the proposed plan (e.g., configuration of uses) would be offered for consideration by the County to reduce environmental impacts. Based on the environmental impact analysis contained in Sections 3.1 through 3.15 of the Draft EIR, the proposed project would result in potentially significant impacts on aesthetics, air quality, archaeological and tribal cultural resources, biological resources, geology and soils, greenhouse gas emissions, noise, public services, and transportation. Moreover, with the implementation of mitigation measures, the proposed project would result in significant and unavoidable impacts related to GHG emissions, construction noise, and VMT. Because the mitigated plan alternative focuses on reconfiguration of the proposed layout, it addresses impacts related to direct physical landscape alteration, rather than operational impacts (i.e., GHG emissions and VMT).

To address potentially significant impacts related to aesthetics, the proposed residential units on Chapel Hill would be located to lower elevations within the project site to reduce local ridgeline visual impacts. These units could possibly be relocated to the Hodges/Shuck Planning Area near the proposed three six-story residential buildings. It should be noted that while the movement of these units to an alternate area on the project site would reduce visual impacts, such a change could result in impacts for other resource areas such as hydrology and water quality and stormwater impacts. Redesign of the residential care facility by reducing the size and lowering the elevation of buildings would also reduce local ridgeline impacts as compared to the proposed project. In addition, to conform with County policies related to visual resources, this alternative would, as part of the project design, incorporate planting of evergreen shrubs and trees along the north side of Chapel Drive, including the south slopes of Chapel Hill extending from Mission Drive to Willis Drive, to buffer views into the project from adjacent streets. Similarly, this alternative would incorporate planting of native shade trees and a naturalistic hedgerow of screening shrubs to screen views of the residential care facility, as well as a variety of fast-growing trees to mitigate the sky-lining effects of the facility. The design of these landscaping features would comply with all County defensible space and landscape plan requirements. This alternative would also incorporate the use of light and slightly darker-valued earth-toned materials that are flat and non-reflective (either integral to the material or painted) to reduce color contrast with the surrounding natural landscape and community setting. All albedo surfaces would have a maximum reflectance coefficient of 0.6 under this alternative.

To address potentially significant impacts related to disturbance or loss of monarch butterfly (should pre-construction surveys find the project site is used for monarch butterfly overwintering in the Shuck Drive Knoll and Seminary Point Planning Areas) this alternative would avoid removal of healthy live overstory Monterey Pine that may contribute to suitable overwintering habitat. If this restriction prohibits construction of residential dwellings in these planning areas, the dwelling units would be relocated to any other planning area. To address potentially significant impacts related to slope stability and landslide hazards, development would be relocated and focused within Slope Stability Zone 1 with its generally gentler slopes, as identified in Figure 3.6-2, "Relative Slope Stability." While further geotechnical engineering would be required to confirm development and design-level stability requirements, this zone is recognized to be the most stable areas on the project site. To address potentially significant impacts related to safety hazards and emergency access, this alternative would also widen Gilbert Drive and Hodges Drive to County standards and construct a roundabout at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol.

Additionally, this alternative would require a minimum of 90 and a maximum of 100 housing units to be reserved for student housing to serve the University student population onsite. Lastly, this alternative would include a new onsite gym that would be exclusively available for use by university students and faculty. These requirements are consistent with the existing Strawberry Community Plan. Figure 5-1, "Mitigated Plan Alternative," identifies the location of the conceptual elements outlined for this alternative.



Source: Image produced and provided by Mark Cavagnero Associates Architects, adapted by Ascent Environmental in 2023.

Figure 5-1 Mitigated Plan Alternative

AESTHETICS

The Mitigated Plan Alternative would result in reduced aesthetic impacts as compared to the project because the proposed residential units on Chapel Hill would be relocated to lower elevations within the project site to reduce local ridgeline visual impacts. These units could possibly be relocated to the Hodges/Shuck Planning Area near the proposed three six-story residential buildings. In addition, redesign of the residential care facility by reducing the size and lowering the elevation of buildings would also reduce local ridgeline impacts as compared to the proposed project. Furthermore, the Mitigated Plan Alternative would include various design features to ensure conformance with County policies related to visual resources, including the incorporation of light and slightly darker-valued earth-toned building materials that are flat and non-reflective, use of albedo surfaces that maximum reflectance coefficient of 0.6, and planting of screening shrubs and trees. Therefore, impacts under this alternative would be less than those that would occur under the project related to local ridgeline visual impacts and color contrast and glare impacts and mitigation would not be required.

AIR QUALITY

The Mitigated Plan Alternative would result in the same air quality impacts as the project because it would develop the same land uses as the proposed project but in a different configuration to reduce potentially significant impacts related to visual resources, biological resources, geotechnical hazards, and transportation and safety hazards. Additionally, consistent with the Strawberry Community Plan, this alternative would require a minimum of 90 and a maximum of 100 housing units to be reserved for student housing and include the construction of a new onsite gym that would be exclusively available for use by university students and faculty. As with the proposed project, this alternative's construction-related air quality impacts would be less than significant with mitigation. This alternative would also generate emissions in the long-term, but overall emissions would be similar to those under the proposed project. As with the proposed project, no exceedance of BAAQMD significance thresholds would occur and this alternative would not conflict with the AQMP. Although the proposed project's long-term impact would not be significant, this alternative's impact would be similar, and mitigation would still be required.

ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

The Mitigated Plan Alternative would involve earthmoving activities similar to the proposed project, which could result in disturbance, destruction, or alteration of known or as-yet-undiscovered/unrecorded archaeological resources, tribal cultural resources, or human remains. Thus, the Mitigated Plan Alternative would not avoid potential impacts associated with unique archaeological resources, historical resources of an archaeological nature, or tribal cultural resources. Therefore, impacts under the Mitigated Plan Alternative would be similar to those under the project, and would still require mitigation for unanticipated discovery of such subsurface cultural resources.

BIOLOGICAL RESOURCES

The Mitigated Plan Alternative would result in reduced biological impacts as compared to the proposed project because it would develop the same land uses as the proposed project but in a different configuration to reduce potentially significant impacts related to monarch butterfly. Additionally, consistent with the Strawberry Community Plan, this alternative would require a minimum of 90 and a maximum of 100 housing units to be reserved for student housing and construct a new onsite gym that would be exclusively available for use by university students and faculty.

Similar to the project, this alternative could affect special-status plant species, wildlife species and habitats, as well as riparian habitats, and wildlife movement corridors. To address potentially significant impacts related to disturbance or loss of monarch butterfly, should pre-construction surveys find the project site is used for monarch butterfly overwintering in the Shuck Drive Knoll and Seminary Point Planning Areas, Alternative 4 would avoid removal of healthy live overstory Monterey Pine that may contribute to suitable overwintering habitat. If this restriction prohibits

construction of residential dwellings in these planning areas, residential dwelling units could be relocated to another planning area. This impact was identified as significant but mitigatable for the proposed project and would remain less than significant with mitigation for Alternative 4 but to a lesser degree. While Alternative 4 would reduce potentially significant impacts related to monarch butterfly by avoiding removal of healthy live overstory Monterey Pine that may contribute to suitable overwintering habitat, impacts on overwintering habitat could still occur related to vegetation removal for wildfire resistance and wildfire treatments. Therefore, with implementation of an alternate design plan to minimize impacts on monarch butterfly, impacts under this alternative would be less than those that would occur under the project with mitigation incorporated.

ENERGY

Under the Mitigated Plan Alternative, and consistent with the proposed project, construction activities would occur at the project site and energy would be temporarily used for construction activities. Also, new buildings and facilities would incorporate energy efficiency features. As with the proposed project, implementation of the Mitigated Plan Alternative would not result in the long-term wasteful, inefficient, and unnecessary consumption of energy. However, this alternative's energy demands would be slightly more than those of the project due to construction of a new onsite gym that would be exclusively available for use by university students and faculty. Therefore, energy impacts under the Mitigated Plan Alternative would be incrementally greater than those under the proposed project but would still remain less than significant.

GEOLOGY AND MINERAL RESOURCES

Construction activities, including ground-disturbing and earthmoving activities, for the Mitigated Plan Alternative would have less impacts than those described for the proposed project because this alternative would include an alternative design to reduce geological hazards. To address potentially significant impacts related to slope stability and landslide hazards, development of the proposed project would be relocated and focused within Slope Stability Zone 1. While further geotechnical engineering mitigation measures would still be required to confirm development and design level stability requirements, this zone is recognized to be the most stable areas on the project site. In addition, consistent with the proposed project, it is highly unlikely that construction activities would result in damage to and/or destruction of previously undiscovered paleontological resources and thus impacts would remain less than significant. Therefore, geology and soils impacts under this alternative would be less than those under the proposed project with incorporation of this design.

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE VULNERABILITY

GHG emissions associated with this alternative would be slightly greater than those of the proposed project due to the minor percent increase in overall building footprint for construction of the new onsite gym. Like the proposed project, this alternative would conflict with applicable plans and policies aimed at GHG emissions reduction. The proposed project's GHG impact would be significant even with the implementation of mitigation, and this alternative's impact would be incrementally greater due to construction and operation of the gym. As such, mitigation would still be required under this alternative; however, similar to the proposed project, GHG impacts would remain significant and unavoidable after mitigation.

HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE

No significant hazard impacts would occur under the project because it would be required to comply with federal, State, and local regulations regarding the handling of hazardous materials. As with the project, the use and handling of hazardous materials under this alternative would be consistent with federal, State, and local regulations, which would minimize the potential for upset or accident conditions or exposure to nearby receptors. Therefore, impacts on public health and safety related to hazardous materials or hazards under the Mitigated Plan Alternative would be similar to those under the project.

HYDROLOGY

Under the Mitigated Plan Alternative, hydrology impacts would be greater as compared to the proposed project. This alternative would include the development of a new onsite gym, the construction of which could potentially impact hydrology and water quality. In addition, redesign of the proposed project under this alternative could result in potentially greater hydrology impacts as moving residential units to other planning areas and focusing development to Slope Stability Zone 1 could result in greater stormwater and drainage impacts in those areas. Therefore, impacts on hydrology under this alternative would be greater than under the proposed project and potentially significant.

LAND USE AND PLANNING

Under the Mitigated Plan Alternative, land use and planning impacts would remain similar to the proposed project. Development on the site would continue to be subject to the requirements in the Countywide Plan and Zoning Code and with implementation of mitigation would be consistent with local plans and policies. Therefore, land use and planning impacts would be less than significant and similar to the proposed project with mitigation incorporated.

NOISE AND VIBRATION

The proposed project would result in significant and unavoidable environmental impacts associated with construction noise, and maximum construction noise levels associated with this alternative would be similar to those that would occur under the proposed project. The minor increase in development related to the construction of the new onsite gym under this alternative would incrementally increase overall construction activity, but the overall duration of construction would be similar. In addition, operational noise impacts would remain similar to the proposed project. Therefore, impacts under Alternative 4 would remain significant and unavoidable with mitigation incorporated and similar to the proposed project.

POPULATION AND HOUSING

Under the Mitigated Plan Alternative, the proposed project would still be constructed; however, the development plan (e.g., configuration of uses) would be modified from the project application to reduce potentially significant impacts related to visual resources, biological resources, geotechnical hazards, and transportation and safety hazards. Additionally, consistent with the Strawberry Community Plan, this alternative would require a minimum of 90 and a maximum of 100 housing units to be reserved for student housing and include the construction of a new onsite gym that would be exclusively available for use by university students and faculty. Therefore, the direct and indirect population and housing impacts would be the same as compared to the proposed project, since the same number of residential units would be developed as well as the residential care facility. As with the proposed project, population and housing impacts under this alternative would not be significant and no mitigation would be required.

PUBLIC SERVICES AND RECREATION

The demand for public services generated at the project site would not change under the Mitigated Plan Alternative. Alternative 4 would result in the same impacts on police, fire, schools, and libraries as compared to the proposed project. In addition, mitigation identified for the proposed project would still be applicable under this alternative to reduce impacts related to fire protection facilities and services to a less than significant level. As with the proposed project, public services and recreation impacts under this alternative would not be significant after mitigation and would overall be similar.

TRANSPORTATION

Temporary construction traffic associated with this alternative would be similar to the proposed project and the impact would be less than significant with mitigation incorporated. In the long-term, the Mitigated Plan Alternative

would result in similar overall trip generation and VMT compared to the proposed project. As such, this alternative would result in significant and unavoidable VMT impacts at the project and cumulative levels, similar to the project. Thus, mitigation would be required; however, similar to the proposed project, VMT impacts would remain significant and unavoidable after mitigation because the effectiveness of potential VMT reduction strategies cannot be reliably quantified nor assured at this time. Additionally, to address potentially significant impacts related to safety hazards and emergency access for the proposed project, this alternative would widen Gilbert Drive and Hodges Drive to County standards and construct a roundabout at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol. However, mitigation would still be required to address safety hazards from insufficient onsite parking for the academic campus. Overall, the severity of transportation impacts under this alternative would be less than those under the proposed project; however, significant unavoidable VMT impacts would remain and mitigation would be required for safety hazards related to parking for the academic campus.

UTILITIES AND SERVICE SYSTEMS

The proposed project would not require the construction of new or expanded offsite utilities to serve the project's demand, and no additional utilities beyond those constructed as part of the project would be required. Thus, the proposed project would result in less than significant environmental impacts associated with utilities and service systems. Under the Mitigated Plan Alternative, while the proposed project would still be developed with an alternative development plan, this alternative would also include the construction of a new onsite gym that would be exclusively available for use by university students and faculty. Thus, water supply, wastewater, solid waste, electricity, and natural gas demands would be incrementally greater than under the proposed project. However, although Alternative 4 would result in incrementally greater demand for utilities and service systems, impacts on utilities and service systems under this alternative would still remain less than significant.

RELATIONSHIP TO PROJECT OBJECTIVES

The Mitigated Plan Alternative would include all the same components as the proposed project but would be in a different configuration on the project site to address location-specific impacts (i.e., those related to direct physical landscape alteration). Under this alternative, no operation-related changes would occur compared to the proposed project, nor would there be any reduction in the number of residential development or student enrollment on the site. As such, because this alternative would still include all of the same project components, albeit in a different configuration on the site, the Mitigated Plan Alternative would fully meet all of the project objectives, including creating an intergenerational community for residents; supporting a thriving campus use; continuing to provide undisturbed views and visual access to the Bay through retainment of undeveloped open space areas within the project site and preservation of existing viewsheds and local ridgelines; supporting a housing balance in the Strawberry community; supporting implementation of the Countywide Plan Housing Element goals and policies to provide a mix of housing units, including affordable units; developing the project site sensitive and compatible with the scale and form of the surrounding area; and providing improvements to circulation systems serving the Strawberry community.

5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Because the No Project/No Build Alternative (described above in Section 5.4.1) would avoid almost all adverse impacts resulting from construction and operation of the proposed project analyzed in Chapter 3, with the exception of transportation impacts which would be greater, it is the environmentally superior alternative. However, the No Project/No Build Alternative would not meet most of the objectives of the project as presented above in Section 5.2.

When the environmentally superior alternative is the No Project Alternative, the State CEQA Guidelines (Section 15126[d][2]) require selection of an environmentally superior alternative from among the other action alternatives evaluated. As illustrated in Table 5-1, below, the Mitigated Plan Alternative would be the environmentally superior action alternative because although the majority of environmental impacts would be similar to those of the proposed project, and no significant and unavoidable impacts would be completely rendered less than significant, the

proposed modified development plan would reduce potentially significant impacts related to visual resources, biological resources, slope stability and landslide hazards, and safety hazards and emergency access. It should be noted that further geotechnical engineering would be required to confirm development and design level stability requirements. In addition, while impacts overall would be reduced, Alternative 4 would result in potentially greater impacts related to water quality and stormwater drainage. Furthermore, impacts would be incrementally higher for energy and GHGs as a result of construction and operation of the onsite gym. Thus, while Alternative 4, on balance, is environmentally superior to the proposed project, both Alternative 4 and the project represent different environmental tradeoffs, with some being greater, and some being lesser, for each policy choice. The Board of Supervisors, when considering the proposed project, will have to weigh and balance these tradeoffs.

Table 5-1 Summary of Environmental Effects of the Alternatives Relative to the Proposed North Coast Land Holdings Project

Environmental Topic	Proposed Project	Alternative 1: No Project/No Build Alternative	Alternative 2: Potential Alternative Locations	Alternative 3: Community Plan Consistent Alternative	Alternative 4: Mitigated Plan Alternative
Aesthetics	LTS/M	Less NI	N/A	Similar LTS/M	Less LTS
Air Quality	LTS/M	Less LTS	N/A	Similar LTS/M	Similar LTS/M
Archaeological, Historical, and Tribal Cultural Resources	LTS/M	Less NI	N/A	Similar LTS/M	Similar LTS/M
Biological Resources	LTS/M	Less NI	N/A	Similar LTS/M	Less LTS/M
Energy	LTS	Less LTS	N/A	Similar LTS	Greater LTS
Geology and Mineral Resources	LTS/M	Less NI	N/A	Similar LTS/M	Less LTS/M
Greenhouse Gas Emissions and Climate Change Vulnerability	SU	Less LTS	N/A	Similar SU	Greater SU
Hazards, Hazardous Materials, and Wildfire	LTS	Less NI	N/A	Similar LTS	Similar LTS
Hydrology	LTS	Less NI	N/A	Similar LTS	Greater PS
Land Use and Planning	LTS/M	Less NI	N/A	Similar LTS/M	Similar LTS/M
Noise	SU	Less LTS	N/A	Similar SU	Similar SU
Population and Housing	LTS	Greater PS	N/A	Similar LTS	Similar LTS
Public Services and Recreation	LTS/M	Less LTS	N/A	Similar LTS/M	Similar LTS/M
Transportation	SU	Less PS	N/A	Similar SU	Less SU
Utilities and Service Systems	LTS	Less LTS	N/A	Similar LTS	Greater LTS

Impact Determination:

NI = No Impact; LTS = Less Than Significant Impact; PS = Potentially Significant Impact; LTS/M = Potentially Significant, reduced to LTS with Mitigation; SU = Potentially Significant and Unavoidable Impact; Similar = Impacts would be similar to those of the project; Less = Impacts would be less than those of the project; Greater = Impacts would be greater than those of the project; N/A = Not Applicable.

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6 OTHER CEQA SECTIONS

6.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

CEQA Guidelines Section 15128 states that "[a]n EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR." During preparation of this EIR, the project was found to result in no impacts on the environment related to agricultural and forestry resources and mineral resources. Consistent with Section 15128, these resource areas are discussed briefly below.

6.1.1 Prime Farmland, Unique Farmland, or Farmland of Statewide Importance

The project site is in an urban community. According to the California Department of Conservation's Farmland Mapping and Monitoring Program's Important Farmland Finder, the project site and surrounding area are designated as "Urban and Built-Up Land" and "Other Land" (Department of Conservation 2022a). In addition, no agricultural land use or zoning is present within or adjacent to the project site. Existing zoning of the project site is a mix of RMP-2.47 and BFC-RMP-2.47. The RMP-2.47 zoning designation indicates Residential, Multiple Planned District. The BFC zoning designation indicates a parcel's location in the Bayfront Conservation combining district. Therefore, there would be no impact to important farmlands and this issue is not discussed further.

6.1.2 Williamson Act and Lands Zoned for Agricultural Use

There are no lands under Williamson Act contract within or adjacent to the project site (Department of Conservation 2022b). In addition, no agricultural land use or zoning is present within or adjacent to the project site. Existing zoning of the project site is a mix of RMP-2.47 and BFC-RMP-2.47. The RMP-2.47 zoning designation indicates Residential, Multiple Planned District. The BFC zoning designation indicates a parcel's location in the Bayfront Conservation combining district. Therefore, there would be no impact on Williamson Act lands and this issue is not discussed further.

6.1.3 Forestry Resources

There are no areas designated as forest land, timberland, or timberland production zones within, or in proximity to, the project site. Therefore, there would be no impact to these resources and this issue is not discussed further.

6.1.4 Mineral Resource Zone Identified by the California Department of Mines and Geology

The project site is not within a State designated Mineral Resource Zone. Therefore, there would be no impact to mineral resources and this issue is not discussed further.

6.2 GROWTH INDUCEMENT

California Environmental Quality Act (CEQA) Section 21100(b)(5) specifies that the growth-inducing impacts of a project must be addressed in an environmental impact report (EIR). Section 15126.2(e) of the State CEQA Guidelines provides the following guidance for assessing growth-inducing impacts of a project:

> Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can induce growth directly, indirectly, or both. Direct growth inducement would result if a project involved construction of new housing. Indirect growth inducement would result, for instance, if implementing a project resulted in any of the following:

- substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises);
- substantial short-term employment opportunities (e.g., construction employment) that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; and/or
- removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

The State CEQA Guidelines do not distinguish between planned and unplanned growth for purposes of considering whether a project would foster additional growth. Therefore, for purposes of this EIR, to reach the conclusion that a project is growth-inducing as defined by CEQA, the EIR must find that the project would foster (i.e., promote or encourage) additional growth in economic activity, population, or housing, regardless of whether the growth is already approved by and consistent with local plans. The conclusion does not determine that induced growth is beneficial or detrimental, consistent with the State CEQA Guidelines (14 CCR Section 15126.2[d]).

If the analysis conducted for the EIR results in a determination that a project is growth-inducing, the next question is whether that growth may cause adverse effects on the environment. Environmental effects resulting from induced growth fit the CEQA definition of "indirect" effects in the State CEQA Guidelines (14 CCR Section 15358[a][2]). These indirect or secondary effects of growth may result in significant environmental impacts. CEQA does not require that the EIR speculate unduly about the precise location and site-specific characteristics of significant, indirect effects caused by induced growth, but a good-faith effort is required to disclose what is feasible to assess. Potential secondary effects of growth could include consequences – such as conversion of open space to developed uses, increased demand on community and public services and infrastructure, increased traffic and noise, degradation of air and water quality, or degradation or loss of plant and wildlife habitat – that are the result of growth fostered by the project.

6.2.1 Growth-Inducing Impacts of the Project

This analysis examines the following potential growth-inducing impacts related to implementation of the project and assesses whether these effects are significant and adverse:

- Foster population growth and construction of housing;
- Eliminate obstacles to population growth;
- Foster economic growth;
- Affect service levels, facility capacity, or infrastructure demand; and
- Encourage or facilitate other activities that could significantly affect the environment.

Implementation of the project would foster short-term and long-term economic growth in the County as a result of new construction and operational employment opportunities and residences. Construction would be reasonably expected to begin in 2024 and take an estimated 4 years to complete. During construction, the estimated peak level of construction workers would be 160 and could range from 10 to 160 workers depending on project component and phase. As described in Section 3.12, "Population and Housing," because most of the labor force would likely be drawn from the large pool of construction workers already living in the region, a substantial number of construction workers would not be reasonably expected to relocate to the area for a temporary job. During operation, up to 530 new residents (for a total of 850 residents, including an estimated number of current residents) would occupy the on-site residences, including the residential care facility, with an additional 253 jobs with full enrollment of the university (216 new campus jobs, 34 jobs for the new residential care facility, and three jobs for the new fitness center). Some of these employees could relocate to the area from outside the region; however, because of the size of the population within the southern portion of Marin County, most of the jobs would likely be filled by people already living in the area, because of the substantial labor pool in the county and region. For this reason, a substantial number of students and other individuals are not expected to relocate to the area in response to implementation of the project.

The project does not involve the extension of roads or other infrastructure that would induce substantial unplanned population growth or remove any additional barriers to population growth. Vehicular access to the project site from US 101 and State Route 131/Tiburon Boulevard and from various local roadways would not be altered for the project; however, the project includes mitigation to construct either a traffic signal or roundabout at the intersection of Seminary Drive/Ricardo Road/Vistal Del Sol and widen the roadways within the project site to meet County of Marin roadway standards. The project would also include the construction of new trails and sidewalks throughout the project site's academic campus and residential areas. The project proposes new pedestrian facilities along several roadways in the project site, thus providing connections between the project's land uses and the Seminary Drive Bus Pad and bus stops at the US 101/Seminary Drive interchange. There are currently pedestrian facilities between these bus stops along US 101 and the entrance to the project site. The new trails and walkways within the project site would provide continuous pedestrian facilities between the US 101 bus hub and the academic campus area as well as the new residential units. Moreover, the project would develop new Class III bicycle routes throughout the internal roadway network as presented in Chapter 2, "Project Description," in Figure 2-8, "Regional Bicycle Access Diagram."

The project site includes existing infrastructure for potable water, sanitary sewer, gas, electricity, and stormwater. Buildout of the project would include retention of this infrastructure, as well as installation of new utility lines and infrastructure to serve development proposed in the various planning areas on-site. All the utility and infrastructure improvements would be installed within the boundaries of the project site and would be scaled to support the growth proposed under the project. While the project would reduce the overall extent of open space on the project site, it also involves making recreation-related improvements on the site, including improvements to existing trails and establishing new trails and pathways (see Figure 2-7, "Pedestrian and Bus Access Diagram"). Additionally, the project would comply with the Marin County Development Code requirement that new residential developments provide developed park and recreational land and/or pay a fee in lieu of parkland dedication to help mitigate the impacts of the new residential demand on existing parkland and recreational facilities. As a result, the project would not be considered to remove a barrier to future growth within the region.

Although the project would foster some economic and population growth associated with new employment and housing opportunities on the project site, the growth would not substantially affect the ability of public service and utility providers to serve their existing customers, as shown in Section 4.13, "Public Services and Recreation," and Section 4.15, "Utilities and Service Systems." The project would require the construction of either a traffic signal or roundabout at the intersection of Seminary Drive/Ricardo Road/Vista Del Sol as well as widening the roadways within the project site to meet County of Marin roadway standards to facilitate the movement of vehicles when emergency response is needed in the area; no additional police or fire protection staff or facilities would be needed.

The population and employment growth expected with project implementation would be minor and would not exceed the projections of the Marin Countywide Plan. Additionally, the project would not extend infrastructure and public services to serve areas outside of the project site. In conclusion, the project has the potential to stimulate the economy both directly (by providing jobs and housing) and indirectly (by creating a demand for local services) in the

region. However, the project would help contribute towards addressing anticipated housing needs and improving the jobs housing balance in the region (refer to Section 4.12, "Population and Housing"). Therefore, the project would not contribute to substantial population growth beyond that anticipated as a direct result of the project, and there is no need to analyze impacts of growth beyond those included and evaluated in Chapter 4, "Cumulative Impacts."

6.3 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

The State CEQA Guidelines Section 15126.2(c) requires EIRs to include a discussion of the significant environmental effects that cannot be avoided if the proposed project is implemented. As documented throughout Chapter 3, "Environmental Impacts and Mitigation Measures," and Chapter 4, "Cumulative Impacts," of this Draft EIR, after implementation of the recommended mitigation measures, most of the impacts associated with the proposed project would be reduced to a less-than-significant level. The following impacts are considered significant and unavoidable; that is, no feasible mitigation is available to reduce the project's impacts to a less-than-significant level. Note, this is only a summary of those impacts; it is important to review the discussions in Chapters 3 and 4 of this EIR to understand the full context of the impact determinations.

- Impact 3.7-1: Generate GHG Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment
- Impact 3.12-1: Generate Substantial Temporary Construction Noise
- Impact 3.14-2: Conflict or be Inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) Regarding Vehicle Miles Traveled
- Cumulatively considerable (significant) contribution to cumulatively significant effects associated with greenhouse gas emissions and climate change vulnerability
- Cumulatively considerable (significant) contribution to cumulatively significant effects associated with the generation of vehicle miles traveled

6.4 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

The State CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the project. Specifically, the State CEQA Guidelines 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 uses in which irreversible damage could result from any potential environmental accidents associated with the project;
- the project would involve a large commitment of nonrenewable resources; or
- the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Construction and operation of the project would involve an irreversible commitment of construction materials and non-renewable resources. The project would involve the use of building materials and energy, some of which are non-renewable resources, to construct the project. However, consumption of these resources would occur with any development in the region and is not unique to the proposed project.

Resources that would be permanently and continually consumed by project implementation include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in significant environmental impacts related to the unnecessary, inefficient, or wasteful use of resources as stated in Impact 3.5-1 of Section 3.5, "Energy." Additionally, efficient and sustainable building design would offset the demand generated by the project to some degree by including on-site photovoltaic solar systems to supply electricity to the project site. New land uses constructed as part of the project would also be fully electric and include EV charging. In addition, the project would include bicycle infrastructure for visitors and employees and design features to reduce the project's energy consumption from the urban heat island effect.

With respect to operational activities, compliance with all applicable building codes, as well as project mitigation measures or project requirements, would ensure that all natural resources are conserved or recycled to the maximum extent feasible. It is also possible that new technologies or systems would emerge, or would become more cost-effective or user-friendly, that would further reduce the site's reliance upon nonrenewable natural resources. Nonetheless, even with implementation of conservation measures, consumption of natural resources would generally increase with implementation of the project.

Additional vehicle trips associated with the project would incrementally increase regional air pollutant emissions. However, as discussed in Section 3.2, "Air Quality," development and operation of the project would not generate air pollutant emissions that would result in a significant impact that cannot be mitigated.

The project would also require a commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, as discussed in Section 3.13, "Public Services and Recreation," and Section 3.15, "Utilities and Service Systems," these public service and utility providers would not experience a significant impact that cannot be mitigated.

CEQA requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. The analysis contained in this EIR concludes that the proposed project would result in significant unavoidable impacts related to GHG emissions that would not be consistent with BAAQMD VMT reduction requirements, temporary construction noise, and vehicle miles traveled, and significant and unavoidable cumulative impacts related to GHG emissions and the generation of vehicle miles traveled. However, the proposed project would provide a mix of housing units, including affordable units, that contribute to meeting the housing goals outlined in the Countywide Plan Housing Element and consistent with the Association of Bay Area Governments' Regional Housing Needs Allocation for Marin County. Thus, the project would assist the County in meeting its share of the regional housing needs, particularly at a time when there is a housing shortage throughout the state.

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