

DRAFT ENVIRONMENTAL IMPACT REPORT

VOLUME I

1 Hamilton Drive Affordable Housing Development

City of Mill Valley, California

SCH#2022120597



MILL VALLEY

wra
Environmental Consultants

PREPARED BY WRA, INC.

NOVEMBER 1, 2023

1 Hamilton Drive Affordable Housing Development (SCH #2022120597)

DRAFT Environmental Impact Report

Volume I

City of Mill Valley, Marin County, California

Prepared for:

City of Mill Valley
26 Corte Madera Avenue
Mill Valley, CA 94941

Attn: Patrick Kelly
pkelly@cityofmillvalley.org

Prepared by:

WRA, Inc.
2169 G East Francisco Boulevard
San Rafael, CA 94901

Attn: Rob Carnachan
robert.carnachan@wra-ca.com

November 2023

WRA#320021-1

Contents

1.0 INTRODUCTION 1
1.1 Purpose for Preparing the EIR 1
1.2 Methodology 2
1.2.1 Definition of Project 2
1.2.2 Project EIR 2
1.2.3 Use of Program EIR to Focus Project EIRs 3
1.2.4 Use of Infill Project Streamlining 4
1.3 General EIR Approach and Sources of Information 8
1.4 Overview of EIR Process 9
1.4.1 Notice of Preparation and EIR Scoping 9
1.4.2 Initial Study/Infill Project Checklist 11
1.4.3 Draft EIR 12
1.4.4 Final EIR 13
1.4.5 Certification 13
1.4.6 Impact Characterization Terminology 14
2.0 SUMMARY 15
2.1 CEQA Requirements 15
2.2 Proposed Project Summary 15
2.3 Summary of Significant Impacts and Mitigation Measures 15
2.4 Summary of Alternatives 28
2.4.1 Alternative 1: No Project 28
2.4.2 Alternative 2: Reduced Density 28
2.4.3 Alternative 3: Reduced Parking 30
2.5 Areas of Controversy 30
2.6 Issues to be Resolved 32
3.0 ENVIRONMENTAL SETTING 33
3.1 Regional Setting 33
3.2 Project Location and Immediate Setting 33
3.3 Project Site and Existing Uses 33
3.3.1 General Plan and Zoning Designations 34
3.3.2 Project Site Access 34
3.3.3 Project Site Existing Uses 34
3.4 Existing/Baseline Conditions 35
4.0 PROJECT DESCRIPTION 40

4.1 Project Background 40
4.2 Project Objectives 41
4.3 Proposed Project 42
4.3.1 Housing Design 42
4.3.2 Affordable Housing and Density Bonuses/Concessions 42
4.3.3 Parking 43
4.3.4 Crosswalk Improvements 43
4.3.5 Architectural Design 43
4.3.6 Grading 44
4.3.7 Utilities and Stormwater Control 44
4.3.8 Project Landscaping 45
4.4 Construction 45
4.4.1 Construction Sequence 46
4.4.2 Haul Routes and Traffic Control 46
4.4.3 Erosion and Sediment Control 46
4.5 List of Project Approvals Required 49
4.5.1 City of Mill Valley 49
4.5.2 Bay Area Air Quality Management District 49
4.5.3 State Water Resources Control Board 49
4.5.4 Marin Municipal Water District 49
5.0 ENVIRONMENTAL ANALYSIS 65
5.1 Aesthetics 65
5.1.1 Introduction 65
5.1.2 Environmental Setting 65
5.1.3 Regulatory Setting 66
5.1.4 Thresholds of Significance 68
5.1.5 Discussion of Impacts 70
5.1.6 Cumulative Impacts 73
5.2 Air Quality 75
5.2.1 Introduction 75
5.2.2 Environmental Setting 75
5.2.3 Regulatory Setting 89
5.2.4 Thresholds of Significance 90
5.2.5 Discussion of Impacts 91
5.2.6 Cumulative Impacts 104

5.3 Biological Resources 106
5.3.1 Introduction 106
5.3.2 Assessment Methodology 106
5.3.3 Environmental Setting 108
5.3.4 Regulatory Setting 109
5.3.5 Existing Conditions 114
5.3.6 Thresholds or Standards of Significance 119
5.3.7 Applicable HEU SEIR Mitigation Measures 120
5.3.8 Discussion of Impacts 121
5.3.9 Cumulative Impacts 127
5.4 Cultural and Tribal Cultural Resources 128
5.4.1 Introduction 128
5.4.2 Regulatory Setting 128
5.4.3 Environmental Setting 132
5.4.4 Assessment Methodology 137
5.4.5 Thresholds of Significance 145
5.4.6 Applicable HEU SEIR Mitigation Measures 146
5.4.7 Discussion of Impacts 147
5.4.8 Cumulative Impacts 150
5.5 Geology and Soils 151
5.5.1 Introduction 151
5.5.2 Environmental Setting 151
5.5.3 Regulatory Setting 155
5.5.4 Project Site Conditions 157
5.5.5 Thresholds of Significance 162
5.5.6 Discussion of Impacts 163
5.5.7 Cumulative Impacts 172
5.6 Noise 173
5.6.1 Introduction 173
5.6.2 Assessment Methodology 173
5.6.3 Environmental Setting 176
5.6.4 Regulatory Setting 177
5.6.5 Thresholds of Significance 179
5.6.6 Applicable HEU SEIR Mitigation Measures 180
5.6.7 Discussion of Impacts 180

5.6.8 Cumulative Impacts 185
5.7 Public Services 186
5.7.1 Introduction 186
5.7.2 Environmental Setting 186
5.7.3 Regulatory Setting 187
5.7.4 Thresholds of Significance 187
5.7.5 Discussion of Impacts 188
5.7.6 Cumulative Impacts 190
5.8 Recreation 192
5.8.1 Introduction 192
5.8.2 Environmental Setting 192
5.8.3 Regulatory Setting 193
5.8.4 Thresholds of Significance 194
5.8.5 Project Design Features 194
5.8.6 Discussion of Impacts 194
5.8.7 Cumulative Impacts 196
5.9 Transportation 197
5.9.1 Introduction 197
5.9.2 Regulatory Setting 197
5.9.3 Environmental Setting 199
5.9.4 Project Design Features 222
5.9.5 Thresholds of Significance 227
5.9.6 Discussion of Impacts 227
5.9.7 Cumulative Impacts 233
5.10 Utilities and Service Systems 234
5.10.1 Introduction 234
5.10.2 Environmental Setting 234
5.10.3 Regulatory Setting 236
5.10.4 Thresholds of Significance 239
5.10.5 Applicable HEU SEIR Mitigation Measures 240
5.10.6 Discussion of Impacts 240
5.10 Cumulative Impacts 243
6.0 EFFECTS DETERMINED NOT TO BE SIGNIFICANT 246
7.0 ALTERNATIVES 252
7.1 CEQA Requirements 252

7.1.1 Streamlining for Infill Projects 252
7.2 Project Objectives and Significant Effects 252
7.2.1 Project Objectives 252
7.2.2 Significant Impacts of the Project 253
7.3 Alternatives Considered but Rejected 253
7.4 Alternatives Considered 255
7.4.1 Alternative 1: No Project 255
7.4.2 Alternative 2: Reduced Density 258
7.4.3 Alternative 3: Reduced Parking 269
7.5 Environmentally Superior Alternative 276
8.0 OTHER CEQA CONSIDERATIONS 289
8.1 Significant Irreversible Changes 289
8.1.1 CEQA Requirements 289
8.1.2 Effects of the Proposed Project 289
8.2 Significant Unavoidable Impacts 290
8.2.1 CEQA Requirements 290
8.2.2 Significant and Unavoidable Impacts of the Proposed Project 290
9.0 SOURCES AND REPORT PREPARERS 291
9.1 Sources 291
9.2 Report Preparers 299
9.2.1 Lead Agency 299
9.2.2 EAH Housing Team 299
9.2.3 Consultant Team 300

List of Tables

Table 2-1. Summary of Significant Impacts and Mitigation Measures 16
Table 4-1. Existing and Proposed Impervious Surface Area on the Housing Site 45
Table 4-2. Conceptual Construction Schedule 48
Table 5.1-1. Proposed Density Bonus Concessions and Waivers 69
Table 5.2-1. Criteria Air Pollutants 77
Table 5.2-2. Typical Non-Road Engine Emissions Standards 82
Table 5.2-3. Federal and State Ambient Air Quality Standards 86
Table 5.2-4. Air Basin Attainment Status Designations 88
Table 5.2-5. Project Consistency with BAAQMD's 2017 CAP 91

Table 5.2-6. Summary of CalEEMod Land Use Input Parameters....94
Table 5.2-7. Construction Assumptions for CalEEMod....94
Table 5.2-8. Estimated Construction Emissions (Pounds per Day)....95
Table 5.2-9. Project Operation Assumptions for CalEEMod....96
Table 5.2-10. Estimated Operation Emissions....96
Table 5.2-11. Health Risks at MEIR During Project Construction....98
Table 5.2-12. Cumulative Health Risks at the MEIR....101
Table 5.5-1. Existing and Proposed Impervious Surface Area....169
Table 5.6-1. Definition of Acoustical Terms....174
Table 5.6-2. Typical Sound Levels Measured in the Environment and Industry....175
Table 5.6-3. Potential Noise Impact from Project Construction Equipment....182
Table 5.6-4. Potential Vibration Disturbance during Construction....184
Table 5.6-5. Potential Vibration Damage to Buildings during Construction....184
Table 5.8-1: Mill Valley Parks....192
Table 5.9-1. Study Intersections and Control Type....201
Table 5.9-2. Transit Routes Serving the Project....202
Table 5.9-3. City of Mill Valley Bicycle Facility Classification....204
Table 5.9-4. Existing and Planned Bicycle Facilities in the Study Area....204
Table 5.9-5. Parking Occupancy Daily Average Observation Results....210
Table 5.9-6.Existing Average Daily Traffic Counts....211
Table 5.9-7. Intersection Level of Service Definitions....212
Table 5.9-8. Existing Intersection Peak Hour Level of Service....215
Table 5.9-9. Cumulative Intersection Peak Hour Level of Service....216
Table 5.9-10. Cumulative and Cumulative Plus Project Intersection LOS – AM & PM Peak Hour....220
Table 5.9-11. Cumulative and Cumulative Plus Project Intersection LOS – Saturday & Saturday with Soccer Peak Hour....221
Table 5.9-12. Project Vehicle Trip Generation Rates....226
Table 5.9-13. Project Vehicle Trip Generation....226
Table 5.9-14. Project Vehicle Trip Distribution Across Study Area Gateways....227
Table 5.10-1. Summary of Environmental Impacts Determined to Not be Significant....246
Table 7-1. Example of Financial Analysis Feasibility....265
Table 7-2. Alternatives Comparison - Impacts....278
Table 7-3. Alternatives Comparison – Ability to Meet Basic Objectives of the Project....287

List of Figures

Figure 3-1. Project Site Regional Location Map 36
Figure 3-2. Aerial Photograph of the Project Site 37
Figure 3-3. Photographs of Project Site Existing Conditions 38
Figure 3-4. Photographs of Project Site Existing Conditions 39
Figure 4-1. Project Site Plan 50
Figure 4-2. Public Safety Building Site Plan 51
Figure 4-3. Proposed Housing Building Cross-Sections 52
Figure 4-4. Project Diagrams 53
Figure 4-5. Housing Building First Floor Plans 54
Figure 4-6. Housing Building Elevations 55
Figure 4-7. Housing Building Elevations 56
Figure 4-8. Proposed Grading and Drainage 57
Figure 4-9. Proposed Utility Plan 59
Figure 4-10. Proposed Landscape Plan 61
Figure 4-11. Vegetation Management Plan 63
Figure 4-12. Conceptual Construction Management Plan 64
Figure 5.2-1. Cumulative Sources of TACs and $PM_{2.5}$ Emissions in the Project Vicinity 99
Figure 5.3-1. Natural Communities and Land Cover within the Project Site 117
Figure 5.3-2. Potential Impacts to Sensitive Natural Communities 124
Figure 5.4-1. Area of Potential Effects 138
Figure 5.4-2. Buried Sensitivity 144
Figure 5.5-1. Project Site Geologic Map 153
Figure 5.5-2. Fault Activity Map 159
Figure 5.5-3. Local Geologic Map 160
Figure 5.5-4. Earthquake Zones of Required Investigation (Liquefaction) 166
Figure 5.5-5. Marin County Liquefaction Map 167
Figure 5.9-1. Transit Facilities in Project Vicinity 203
Figure 5.9-2. Bicycle Facilities in Project Vicinity 206
Figure 5.9-3. Parking Supply and Occupancy Data Collection Locations 209
Figure 5.9-4. Cumulative Plus Project Peak Hour Vehicle Volumes AM & PM 218
Figure 5.9-5. Cumulative Plus Project Peak Hour Vehicle Saturday & Sunday with Soccer 219

Figure 5.9-6. Crosswalks Adjacent to the Project Site 223
Figure 7-1. Alternative 2 Conceptual Plans: Reduced Height Scenario 261
Figure 7-2. Alternative 2 Conceptual Plans: East Wing Elimination Scenario 263
Figure 7-3. Alternative 3 Conceptual Plans: Reduced Parking 271

List of Appendices (see Volume II)

Appendix A. ..... Initial Study/Infill Checklist
Appendix B..... Notice of Preparation and Comments Received in Response
Appendix C. ..... Air Quality Analysis Report
Appendix D. ..... Draft Asbestos Dust Mitigation Plan
Appendix E. ..... Biological Resources Technical Report
Appendix F. ..... Geotechnical Engineering/Geologic Hazards Investigation
Appendix G. ..... Noise Analysis Calculations
Appendix H. ..... Transportation Impact Assessment

List of Acronyms

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ADMP	Asbestos Dust Mitigation Plan
ADT	Average Daily Traffic
APE	Area of Potential Effects
ATCM	Airborne Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
BRTR	Biological Resources Technical Report
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CARB	California Air Resources Board
CCH	Consortium of California Herbaria
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CGS	California Geological Survey
CFR	Code of Federal Regulations
City	City of Mill Valley
CMP	Construction Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
Corps	United States Army Corps of Engineers
County	County of Marin
CSRL	California Soil Research Lab
CY	cubic yards
dB	decibel
dBA	A-weighted decibel
DBL	Density Bonus Law
DPM	diesel particulate matter
DU	dwelling unit
DWR	Department of Water Resources
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
ENA	exclusive negotiating agreement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
EV	electric vehicle
FAR	floor area ratio
Far Western	Far Western Anthropological Research Group
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	Geographic Information System

gpd	gallons per day
HCD	California Department of Housing and Community Development
HEU SEIR	Housing Element Update Subsequent Environmental Impact Report
ISCST3	Industrial Source Complex Short Term air dispersion model
ITE	Institute of Transportation Engineers
JPA	Joint Powers Authority
L_{dn}	Day/Night Noise Level
L_{eq}	Equivalent Noise Level
L_{max}	Maximum Sound Levels
LOS	level of service
MBTA	Migratory Bird Treaty Act
MCSTOPP	Marin County Stormwater Pollution Prevention Program
MEIR	maximally exposed individual resident
MLD	Most Likely Descendant
MMWD	Marin Municipal Water District
Mph	miles per hour
MS4	Municipal Separate Storm Sewer System
MTC	Metropolitan Transportation Commission
MVMC	Mill Valley Municipal Code
MVRS	Mill Valley Refuse Service
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOA	naturally occurring asbestos
NOI	net operating income
NOP	Notice of Preparation
NO_x	nitrogen oxides
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
OPR	Governor's Office of Planning and Research
O_3	ground-level ozone
Parisi	Parisi Transportation Consulting
Pb	lead
PM	particulate matter
PPV	Peak Particle Velocity
PRC	Public Resources Code
PSB	Public Safety Building
RHA	Rivers and Harbors Act
RHNA	Regional Housing Needs Assessment
RMS	Root Mean Square
ROGs	reactive organic gases
RWQCB	Regional Water Quality Control Board
SASM	Sewerage Agency of Southern Marin
SB	Senate Bill
SCP	Stormwater Control Plan
Sf	square feet
SFBAAB	San Francisco Bay Area Air Basin

SFEI	San Francisco Estuaries Institute
SHPO	State Historic Preservation Officer
SMFPD	Southern Marin Fire Protection District
SO_x	sulfur oxides
SO_2	sulfur dioxide
SR	State Route
SRRE	Source Reduction and Recycling Element
SSMP	Sewer System Management Plan
SWQCB	State Water Quality Control Board
TACs	toxic air contaminants
TAM	Transportation Authority of Marin
TCR	Tribal Cultural Resource
TIA	Transportation Impact Assessment
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VdB	vibration decibel
VMT	vehicle miles traveled
WDR	Waste Discharge Requirements
WRA	WRA, Inc.
WSCP	Water Shortage Contingency Plan
WTMP	Wastewater Treatment Plant Master Plan

THIS PAGE INTENTIONALLY LEFT BLANK.

1.0 INTRODUCTION

The City of Mill Valley (City) is partnering with EAH Housing to propose the development of affordable housing on the northeastern portion of the approximately 13-acre City-owned parcel known as 1 Hamilton Drive (Assessor's Parcel Number 030-250-01) within the City. The proposed 1 Hamilton Drive Affordable Housing Development (SCH # 2022120597), referred to herein as the proposed Project or the Project, includes the development of affordable multifamily rental housing and associated infrastructure to meet the City's affordable housing needs. In addition, the Project plans to relocate existing restroom facilities, electric vehicle charging stations, and public parking from the proposed Housing Site to the adjacent Public Safety Building (PSB) parking lot.

The proposed Project Site is 3.67 acres and includes the proposed Housing Site and the PSB Site. The Project includes the establishment of a new ground lease covering an approximately 1.75-acre area of the northeastern portion of the City-owned parcel, referred to herein as the "Housing Site" or "housing development site." This site would be rezoned from O-A (Open Area) to RM-B (Multi-family Residential Bayfront), allowing for the development of affordable multi-family rental housing on the site. The Project includes the development of up to 50 affordable rental housing units, approximately 63 residential parking spaces, and private outdoor spaces on the housing site. The Project also includes the replacement of the existing 38 public parking spaces, one electric vehicle (EV) charging station with two ports, and restroom facilities currently located on the Housing Site to the adjacent PSB parking lot, referred to herein as the "PSB Site". The relocation of these facilities would be accomplished by reconfiguring the adjacent PSB parking lot to provide secured private parking and storage for public safety employees, approximately 50 public parking spaces, public restrooms, and the EV charging station.

A detailed description of the proposed Project is provided in Section 4, Project Description.

1.1 Purpose for Preparing the EIR

Environmental review in compliance with the California Environmental Quality Act (CEQA [PRC §§ 21000, et seq., 14 CCR §§ 15000 et seq.) is required as part of the City's consideration of the Project. In order to develop the Project, the City must adopt at least one discretionary approval. The need for discretionary approvals is the trigger for CEQA applicability to a project.

The City recently updated the Housing Element of its General Plan consistent with requirements under California State law. Part of the Housing Element update required that the City identify adequate housing sites to accommodate the Regional Housing Needs Allocation (RHNA) assigned to the City by the California Department of Housing and Community Development (HCD) and the Association of Bay Area Governments/Metropolitan Transportation Authority (ABAG/MTC). In order to implement the Housing Element update, the City amended its General Plan Land Use Element and Municipal Code, including the Zoning Ordinance. On May 15, 2023, the Mill Valley City Council adopted the Housing Element update and also redesignated the northern portion of the 1 Hamilton site from Community Facility (CF) to Multi-Family Residential (MFR-2) (Resolution No. 23-29). The City Council also certified the Supplemental Environmental Impact Report for the Housing Element Update (HEU SEIR [SCH# 2013052005]). On October 16, 2023, the City adopted additional modifications to the 2023-2031 Housing Element and Land Use Element to address comments received from the HCD. The City is currently awaiting HCD's review and certification of the Housing Element.

Following preparation of an Initial Study for the proposed Project, the City, acting as the lead agency, has determined that the Project could result in potentially significant adverse environmental impacts, and therefore, determined that preparation of an environmental impact report (EIR) will be required. This EIR is a project-level document that evaluates the potential for the proposed Project to result in significant adverse environmental impacts. However, because the HEU SEIR evaluated the potential for the Housing Element Update to result in significant adverse environmental impacts and, in doing so, addressed the impacts of the proposed Project at a programmatic level, this EIR tiers from the analysis in the HEU SEIR, updating existing analysis where appropriate, and presenting new analysis where necessary to evaluate the specific impacts of the proposed Project. This approach is further detailed in Section 1.2 below.

This EIR has been prepared in compliance with the CEQA of 1970, as amended, to inform public decision makers and their constituents of the environmental impacts of the proposed Project. In accordance with CEQA guidelines (PRC §§ 21000, et seq., 14 CCR §§ 15000 et seq.), this report describes both beneficial and adverse environmental impacts generated by the proposed Project and suggests measures for mitigating significant adverse environmental impacts resulting from the proposed Project.

1.2 Methodology

1.2.1 Definition of Project

CEQA Guidelines Section 15378 defines a project as follows: "Project" means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following:

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

Therefore, because amending the zoning ordinance and executing a long-term ground lease and Development Agreement with EAH Housing to build and manage the affordable housing on the site, as well as relocating public facilities from the Housing Site to the PSB Site and reconfiguring the PSB parking lots, are considered a project under CEQA, the 1 Hamilton Drive Affordable Housing Development will be referred to in this EIR as the "proposed Project."

1.2.2 Project EIR

CEQA Guidelines Section 15161 characterizes a project EIR as,

> *the most common type of EIR that examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the*

environment that would result from the development project. The EIR should examine all phases of the project including planning, construction, and operation.

Because the proposed Project is a residential development, this EIR is a project EIR.

1.2.3 Use of Program EIR to Focus Project EIRs

As defined in CEQA Guidelines Section 15168(a), program EIRs are EIRs which may be prepared on a series of actions that can be characterized as one large project and are related either (1) geographically; (2) as logical parts in the chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

As stated in CEQA Guidelines Section 15168(c)(1), "if a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration. That later analysis may tier from the program EIR as provided in Section 15152."

CEQA Guidelines Section 15152 defines "tiering" as using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan) with later EIRs on narrower projects, incorporating by reference the general discussion from the broader EIR and concentrating the later EIR solely on the issues specific to the later project. Furthermore, Section 15152(d) provides the following:

> *Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:*
>
> *(1) Were not examined as significant effects on the environment in the prior EIR; or*
>
> *(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.*

Section 15152(e) further provides that "tiering...shall be limited to situations where the project is consistent with the general plan and zoning of the city or county in which the project is located, except that a project requiring a rezone to achieve or maintain conformity with a general plan may be subject to tiering."

Section 15152(f) states that "a later EIR shall be required when the Initial Study or other analysis finds that the later project may cause significant effects on the environment that were not adequately addressed in the prior EIR". Significant environmental effects have been "adequately addressed" if the lead agency determines that (1) they have been mitigated or avoided as a result of the prior EIR and findings adopted in connection with that prior EIR, or (2) they have been examined at a sufficient level of detail in the prior EIR to enable those effects to be mitigated or avoided by site specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project.

When tiering is used, the later EIR must refer to the prior EIR and state where a copy of the prior EIR may be examined. The later EIR should state that the lead agency is using the tiering

concept and that it is being tiered with the earlier EIR. When a program EIR is being used as the "prior EIR" and where the later activities involve site specific operations, the lead agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were within the scope of the program EIR.

APPLICABILITY TO THE PROPOSED PROJECT

The HEU SEIR is a program EIR that includes the proposed Project among a series of later activities to occur as part of the City's initiative to develop affordable housing. The HEU SEIR was prepared on a series of actions that can be characterized as one large project and are related geographically (all within the City of Mill Valley), as logical parts in the chain of contemplated actions (all housing projects pursuant to the proposed housing element update require future actions to be taken by the City), in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program (future housing projects consistent with the housing element [program]), and each housing project in the City would be carried out under the same authorizing statutory or regulatory authority and will have generally similar environmental effects which can be mitigated in similar ways.

The HEU SEIR is a community-level EIR because it analyzes the environmental effects of the density of the proposed housing element update in the following areas: aesthetics, air quality, biological resources, energy, greenhouse gas emissions, noise, vehicle miles traveled, tribal cultural resources, wildfire and public services and utilities.

The proposed Project constitutes a later activity that would have effects that were not examined in the HEU SEIR. A new Initial Study (see Appendix A) was thus prepared which concluded that the proposed Project's potentially significant effects should be evaluated in a project-level EIR. This project EIR for the proposed Project may employ the tiering concept because the Project includes a rezone that is necessary to achieve conformity with the City's General Plan, as amended by the HEU.

This EIR tiers from the HEU SEIR, which is available in full at www.cityofmillvalley.org/housingelement (Resolution No. 23-29, SCH# 2013052005). In addition, this EIR tiers in some places from the program EIR that was prepared for the City's MV2040 General Plan (SCH# 2013052005), which is available in full atwww.cityofmillvalley.org/generalplan.

The Initial Study (see Appendix A) prepared for the proposed Project serves as the written checklist documenting the evaluation of the site and activity to determine whether the environmental effects of the operation are within the scope of the HEU SEIR and/or the MV2040 General Plan EIR.

1.2.4 Use of Infill Project Streamlining

CEQA Guidelines Section 15183.3 provides for an additional method of streamlining and focusing project EIRs. This section applies only to projects that qualify as "infill," defined as follows:

a. Projects located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least seventy-five percent of the site's perimeter. For the purpose of this subdivision "adjoin" means the infill project is

immediately adjacent to qualified urban uses, or is only separated from such uses by an improved public right-of-way;

b. Projects that would satisfy the performance standards provided in Appendix M; and
c. Projects that would be consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy.

Per CEQA Guidelines Section 15183.3(c), "CEQA does not apply to the effects of an eligible infill project under two circumstances. First, if an effect was addressed as a significant effect in a prior EIR for a planning level decision, then, with some exceptions, that effect need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR. Second, an effect need not be analyzed, even if it was not analyzed in a prior EIR or is more significant than previously analyzed, if the lead agency makes a finding that uniformly applicable development policies or standards, adopted by the lead agency or a city or county, apply to the infill project and would substantially mitigate that effect. Depending on the effects addressed in the prior EIR and the availability of uniformly applicable development policies or standards that apply to the eligible infill project, streamlining under this section will range from a complete exemption to an obligation to prepare a narrowed, project-specific environmental document."

As stated in CEQA Guidelines Section 15183.3(d), "the lead agency must examine an eligible infill project in light of the prior EIR to determine whether the infill project will cause any effects that require additional review under CEQA. Determinations pursuant to this section are questions of fact to be resolved by the lead agency. Such determinations must be supported with enough relevant information and reasonable inferences from this information to support a conclusion, even though other conclusions might also be reached." In order to evaluate whether a project is an eligible infill project, "a lead agency should prepare a written checklist or similar device to document the infill project's eligibility for streamlining and to assist in making the determinations required by this section. A written checklist prepared pursuant to this section should do all of the following:

a. Document whether the infill project satisfies the applicable performance standards in Appendix M (of the CEQA Guidelines).
b. Explain whether the effects of the infill project were analyzed in a prior EIR. The written checklist should cite the specific portions of the prior EIR, including page and section references, containing the analysis of the infill project's significant effects. The written checklist should also indicate whether the infill project incorporates all applicable mitigation measures from the prior EIR.
c. Explain whether the infill project will cause new specific effects. For the purposes of this section, a new specific effect is an effect that was not addressed in the prior EIR and that is specific to the infill project or the infill project site. A new specific effect may result if, for example, the prior EIR stated that sufficient site-specific information was not available to analyze the significance of that effect. Substantial changes in circumstances following certification of a prior EIR may also result in a new specific effect.
d. Explain whether substantial new information shows that the adverse environmental effects of the infill project are more significant than described in the prior EIR. For the purpose of this section, "more significant" means an effect will be substantially more severe than described in the prior EIR. More significant effects include those that result from changes in circumstances or changes in the development assumptions underlying

the prior EIR's analysis. An effect is also more significant if substantial new information shows that: (1) mitigation measures that were previously rejected as infeasible are in fact feasible, and such measures are not included in the project; (2) feasible mitigation measures considerably different than those previously analyzed could substantially reduce a significant effect described in the prior EIR, but such measures are not included in the project; or (3) an applicable mitigation measure was adopted in connection with a planning level decision, but the lead agency determines that it is not feasible for the infill project to implement that measure.

e. If the infill project will cause new specific effects or more significant effects, the written checklist should indicate whether uniformly applicable development policies or standards will substantially mitigate those effects. For the purpose of this section, "substantially mitigate" means that the policy or standard will substantially lessen the effect, but not necessarily below the level of significance. The written checklist should specifically identify the uniformly applicable development policy or standard and explain how it will substantially mitigate the effects of the infill project."

CEQA Guidelines Section 15183.3(d)(2) states that, "after examining the effects of the infill project in light of the analysis in any prior EIR and uniformly applicable development policies or standards, the lead agency shall determine what type of environmental document shall be prepared for the infill project . . . If the infill project would result in new specific effects or more significant effects, and uniformly applicable development policies or standards would not substantially mitigate such effects, those effects are subject to CEQA. With respect to those effects that are subject to CEQA, the lead agency shall prepare an infill EIR if the written checklist shows that the effects of the infill project would be potentially significant. In this circumstance, the lead agency shall prepare an infill EIR."

CEQA Guidelines Section 15183.3(e) states that, "an infill EIR must analyze only those significant effects that uniformly applicable development policies or standards do not substantially mitigate, and that are either new specific effects or are more significant than a prior EIR analyzed. All other effects of the infill project should be described in the written checklist . . . and that written checklist should be circulated for public review along with the infill EIR. The written checklist should clearly set forth those effects that are new specific effects, and are subject to CEQA, and those effects which have been previously analyzed and are not subject to further environmental review. The analysis of alternatives in an infill EIR need not address alternative locations, densities, or building intensities. An infill EIR need not analyze growth inducing impacts."

APPLICABILITY TO THE PROPOSED PROJECT

The proposed Project qualifies as an "infill project" pursuant to CEQA because it is located within an urban area and is immediately adjacent to existing "qualified urban uses" on at least seventy-five percent of the site's perimeter. "Qualified urban uses" are defined in Public Resources Code (PRC) Section 21072 as "any residential, commercial, public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses". The Project site is surrounded by residential uses of single-family homes to the north and east, multifamily residential developments to the south, and parks and recreational uses of Hauke Park to the west, and thus meets the definition.

Additionally, the proposed Project satisfies the infill project performance standards in Appendix M of the CEQA Guidelines which include performance standards related to project design, and additional performance standards by project type. Appendix M of the CEQA Guidelines contains the following performance standards that are applicable to the proposed Project:

> *Section III. Performance Standards Related to Project Design*
>
> *To be eligible for streamlining pursuant to Section 15183.3, a project must implement all of the following:*
>
> *Renewable Energy. All non-residential projects shall include onsite renewable power generation, such as solar photovoltaic, solar thermal and wind power generation, or clean backup power supplies, where feasible. Residential projects are also encouraged to include such onsite renewable power generation.*
>
> *Section IV. Additional Performance Standards by Project Type*
>
> *A. Residential*
>
> *To be eligible for streamlining pursuant to Section 15183.3, a project must satisfy one of the following:*
>
> *Projects achieving below average regional per capita vehicle miles traveled (VMT). A residential project is eligible if it is located in a "low vehicle travel area" within the region.*
>
> *Projects located within ½ mile of an Existing Major Transit Stop or High Quality Transit Corridor. A residential project is eligible if it is located within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor.*
>
> *Low-Income Housing. A residential or mixed-use project consisting of 300 or fewer residential units all of which are affordable to low income households is eligible if the developer of the development project provides sufficient legal commitments to the lead agency to ensure the continued availability and use of the housing units for lower income households, as defined in Section 50079.5 of the Health and Safety Code, for a period of at least 30 years, at monthly housing costs, as determined pursuant to Section 50053 of the Health and Safety Code.*

The proposed Project would implement renewable energy features in the form of on-site solar photovoltaic cells to generate renewable power to satisfy the applicable performance standards related to project design. The Project also qualifies as an infill project as it is intended to provide all rental units on the property to lower income households. The Project would provide approximately 50 low-income housing units, all of which would be made affordable to low-income households for a period of at least 30 years.

Lastly, the proposed Project is consistent with the general use designation, density, and other applicable policies specified for the project area in Plan Bay Area 2040, the sustainable communities strategy document covering the City.

As an infill project, the proposed Project constitutes a later activity that would have effects that were not examined in the HEU SEIR. Pursuant to the requirements of CEQA Guidelines Section 15183.3(d)(2), the City has included an infill environmental checklist within the new Initial Study (see Appendix A) prepared for the Project. The City has determined that the proposed Project constitutes a later activity that would have effects that were not examined in the HEU SEIR. The

Initial Study/infill checklist concluded that the proposed Project's potentially significant effects should be evaluated in a project-level "infill" EIR.

1.3 General EIR Approach and Sources of Information

This EIR has been prepared by WRA in accordance with CEQA and its implementing guidelines, using an interdisciplinary approach. This EIR is an informational document that is intended to inform the decision makers and their constituents, as well as responsible and trustee agencies of the environmental impacts of the proposed Project and to identify feasible mitigation measures that would avoid or reduce the severity of the impacts. The lead agency is required to consider the information contained in this EIR prior to taking any discretionary action to approve the proposed Project.

This EIR has been prepared using available information from private and public sources noted herein, as well as information generated through field investigation by WRA and other technical experts. The purpose of an EIR is to identify a project's significant environmental effects, to indicate the manner in which those significant effects can be mitigated or avoided, and to identify alternatives to the proposed Project.

An EIR is an objective public disclosure document that takes no position on the merits of the proposed Project. Therefore, the findings of this EIR do not advocate a position "for" or "against" the proposed Project. Instead, the EIR provides information on which decisions about the proposed Project can be based. This EIR has been prepared according to professional standards and in conformance with legal requirements.

This EIR focuses on the significant effects on the environment in accordance with CEQA Guidelines Section 15143. The significant effects are discussed with emphasis in proportion to their severity and probability of occurrence. In accordance with CEQA Guidelines Section 15144, preparing this Draft EIR necessarily involved some degree of forecasting. While foreseeing the unforeseeable is not possible, the report preparers and technical experts used best available efforts to find out and disclose all that it reasonably can.

If, after thorough investigation, the report preparers in consultation with the lead agency determined that a particular impact is too speculative for evaluation, the conclusion is noted and the issue is not discussed further (CEQA Guidelines Section 15145). In accordance with CEQA Guidelines Section 15146, the degree of specificity in this Draft EIR corresponds to the degree of specificity involved in the proposed Project.

The information contained in this Draft EIR includes summarized technical data, maps, plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public, pursuant to CEQA Guidelines Section 15147. Placement of highly technical and specialized analysis and data is included as appendices to the main body of the Draft EIR. Appendices to this Draft EIR are provided on the City's website through the following link: https://www.cityofmillvalley.org/931/Hamilton-Drive.

In accordance with CEQA Guidelines Section 15148, preparation of this Draft EIR was dependent upon information from many sources, including technical reports and scientific documents relating to environmental features. If the document was prepared specifically for the proposed

Project, the document is included in the technical appendices discussed above. Documents that were not prepared specifically for the proposed Project but contain information relevant to the environmental analysis of the proposed Project, are cited but not included in the appendices. This Draft EIR cites all documents used in its preparation including, where appropriate, the page and section number of any technical reports that were used as the basis for any statements in the Draft EIR.

1.4 Overview of EIR Process

There are several steps required in an EIR process. The major steps are briefly discussed below.

1.4.1 Notice of Preparation and EIR Scoping

CEQA Guidelines Section 15082 describes the purpose, content and process for preparing, circulating and facilitating early public and public agency input on the scope of an EIR. A notice of preparation is a brief notice sent by the lead agency to notify the Responsible Agencies, Trustee Agencies, the Office of Planning and Research, and involved federal agencies that the lead agency plans to prepare an EIR for the project. The notice must be filed with the County Clerk. The purpose of the notice is to solicit guidance from those agencies as to the scope and content of the environmental information to be included in the EIR.

A notice of preparation (NOP) was prepared for the proposed Project and circulated for 30 days from December 22, 2022 to January 27, 2023, as required by CEQA. Written responses to the NOP were received from the following:

1. Native American Heritage Commission (NAHC), dated December 29, 2022;
2. California Department of Fish & Wildlife, dated January 19, 2023;
3. Soluri Meserve on behalf of Friends of Hauke Park, dated January 27, 2023;
4. Housing Crisis Action, dated January 9, 2023;
5. Jonathan Knight, e-mail dated January 9, 2023;
6. Taylor Newcomb, e-mail dated January 9, 2023;
7. Mary Morgan, e-mail dated January 9, 2023;
8. Jess Lerner, e-mail dated January 9, 2023;
9. Tim Lentini, e-mail dated January 9, 2023;
10. Kalicia Pivirotto, e-mail dated January 10, 2023;
11. Brenda Courtney, e-mail dated January 10, 2023;
12. Kaytee Fink, e-mail dated January 9, 2023;
13. Deborah Toizer, e-mail dated January 9, 2023;
14. Lisa Scarsella, e-mail dated January 11, 2023;
15. Alice McCarthy, e-mail dated January 21, 2023;
16. Anita Scott, e-mail dated January 20, 2023;
17. Ann Mannheimer Matthews, e-mails dated January 21, 2023;
18. Ann and Bill Ritchie, e-mail dated January 21, 2023;
19. Eric Pop, e-mail dated January 3, 2023;
20. Betty Taisch, e-mail dated January 21, 2023;
21. Brad Drury, e-mail dated January 26, 2023;
22. Michael Stern, e-mail dated January 22, 2023;
23. Cameron Fletcher, e-mail dated January 21, 2023;
24. Carlin Long, e-mail dated December 27, 2022;
25. Carlos Montalvan, e-mail dated January 21, 2023;

26. Carolyn Heyder, e-mail dated January 21, 2023;
27. Charles and Jill Canellakis, e-mail dated January 22, 2023;
28. Christopher Lebsock, e-mail dated January 21, 2023;
29. Craig Heath, e-mail dated January 22, 2023;
30. Daphne de Marneffe and Terry Becker, e-mail dated January 22, 2023;
31. Darla Farr, e-mail dated January 26, 2023;
32. Dave Ewing, e-mail dated January 21, 2023;
33. David Chenoweth, e-mail dated January 21, 2023;
34. David Wygant, e-mail dated January 21, 2023;
35. Elizabeth O'Donnell, e-mail dated December 27, 2022;
36. Elizabeth Suzuki, e-mail dated January 26, 2023;
37. Peter Riaboff, e-mail dated January 23, 2023;
38. Eric Bindelglass, e-mail dated January 21, 2023;
39. Jacqueline Chaparro-Moore, e-mail dated January 20, 2023;
40. Gabriel and Susie Ngarangad, e-mail dated January 22, 2023;
41. Gabrielle Tierney, e-mail dated January 21, 2023;
42. Gary Batroff, e-mail dated January 23, 2023;
43. Gillian Emblad, e-mail dated January 21, 2023;
44. Grant Morris, e-mail dated January 20, 2023;
45. Gunnel Strom, e-mail dated January 21, 2023;
46. Friends of Hauke Park, e-mail dated January 27, 2023;
47. Jennifer Bennett, e-mail dated January 21, 2023;
48. Jeralyn Seiling, e-mail dated January 27, 2023;
49. Jim Devitt, e-mail dated January 24, 2023;
50. John Ballard, e-mail dated January 21, 2023;
51. Judith Staples, e-mail dated January 20, 2023;
52. Karen Evans, e-mail dated January 21, 2023;
53. Gail Katz, e-mail dated January 20, 2023;
54. Keith Feldman, e-mail dated January 21, 2023;
55. Kim Hettena, e-mail dated January 21, 2023;
56. Kristi Duchon, e-mail dated January 23, 2023;
57. Ladonna Wood, e-mail dated January 25, 2023;
58. Linda Rames, e-mail dated January 23, 2023;
59. Lisa Edson Design, e-mail dated January 22, 2023;
60. Lynn Perry, e-mail dated January 23, 2023;
61. Marie Greunke, e-mail dated January 27, 2023;
62. Marion Brennan, e-mail dated January 21, 2023;
63. Mark Breitbard, e-mail dated January 21, 2023;
64. Mary Ann Dunlap, e-mail dated January 26, 2023;
65. Michael Stern, e-mail dated January 22, 2023;
66. Michele Dermer, e-mail dated January 25, 2023;
67. Patricia Delucchi, e-mail dated January 26, 2023;
68. Paula McGrath, e-mail dated January 19, 2023;
69. Peggy Mathers, e-mail dated January 22, 2023;
70. Ray Taylor, e-mail dated January 21, 2023;
71. Regina Garcia, e-mail dated January 21, 2023;
72. Rod Eshelman, e-mail dated January 21, 2023;
73. Roger Hefty, e-mail dated January 22, 2023;
74. Sheila Habib, e-mail dated January 21, 2023;

75. Stephanie Breitbard, e-mail dated January 22, 2023;
76. Sue Hefty, e-mail dated January 22, 2023;
77. Susan Letteer, e-mail dated January 21, 2023;
78. Tom Conneely, e-mail dated January 21, 2023;
79. Toni Brayer, Craig Patterson, Alexander Patterson, Lisa Brayer and Kira Costa, e-mail dated January 21, 2023; and
80. Wayne Buder, e-mail dated January 21, 2023.

The notice of preparation, as well as comments received from agencies, organizations, and private individuals are included in Appendix B.

As part of the early consultation process and pursuant to CEQA Guidelines Section 15082(c)(1) regarding projects of statewide importance and Section 15083 regarding early public consultation, a scoping meeting was held on January 12, 2023 at 6:30 P.M. City staff along with WRA staff made a brief presentation. Nine members of the public provided comments on the scope of the EIR, including the following:

- The commenter expressed concern relating to environmental hazards associated with asbestos due to Project construction, particularly effects on children that play in Hauke Park.
- The commenter addressed potential transportation impacts, particularly emergency evacuation via Hamilton Drive.
- The commenter represented the Marin Conservation League and expressed concerns that the EIR may not address hydrology and requests that a discussion of the topic be included and compared to relevant General Plan policies.
- Two commenters both emphasized the importance of constructing story poles on-site to fully understand the Project's aesthetic impacts.
- The commenter represented the Marin Environmental Housing Collaborative and expressed support for the Project.
- The commenter also expressed support for the Project.
- The commenter expressed concerns about flooding and emergency evacuation and asked that the City set aside some of the proposed housing units for essential service workers.
- The commenter represented the Mill Valley Affordable Housing Committee and expressed support for the Project.

The comment letter from the Native American Heritage Commission addresses tribal and cultural resources. Tribal and cultural resources are addressed in Section 13.0 of this Draft EIR. The comment letter from the California Department of Fish and Wildlife addresses sensitive biological resources. Biological resources are addressed in Section 7.0 of this Draft EIR.

The comments from members of the public primarily concern the aesthetics analysis of the Project and, specifically, largely consist of requests to install story poles at the Project site to aid in identifying the extent of the proposed structure. To this end, on May 18, 2023, the City installed story poles at the site. These poles were in place through June 7, 2023.

1.4.2 Initial Study/Infill Project Checklist

An Initial Study was prepared to include the infill project checklist required under CEQA Guidelines Section 15183.3. On the basis of the information contained in the Initial Study, City staff determined that an "infill" EIR covering the following topics should be prepared for the proposed Project:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Noise
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

The Initial Study with the incorporated infill project checklist is provided in Appendix A.

A detailed description of topics that were analyzed in the Initial Study and infill project checklist and were determined to result in less than significant impacts is provided in Section 6, Effects Adequately Addressed in the Initial Study and Housing Element Update SEIR. As detailed in Section 6, the following environmental topics are considered to be "screened out" and will not be further analyzed in this Draft EIR:

- Agriculture and Forestry Resources
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Wildfire

1.4.3 Draft EIR

CONTENTS

This Draft EIR is an informational document which will inform the City of Mill Valley decision makers and the public generally of the significant environmental effect of the proposed Project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the Project. The City is required to consider the information in the EIR along with other information which may be presented to the agency. CEQA Guidelines Article 9 requires a draft EIR to contain the following information:

- Table of Contents;
- Summary;
- Project Description;
- Environmental Setting;
- Consideration and Discussion of Environmental Impacts;
- Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects;
- Consideration and Discussion of Alternatives to the Proposed Project;
- Effects not found to be Significant;

- Growth-Inducing Impacts;
- Unavoidable Impacts;
- Long-term Implications (Growth-Inducing Impacts, Significant Irreversible Environmental Effects, and Significant and Unavoidable Environmental Effects);
- Organization and Persons Consulted; and
- Discussion of Cumulative Impacts.

The detailed contents of this Draft EIR are outlined in the table of contents.

PUBLIC REVIEW

This Draft EIR will be circulated for a 45-day public review period. All comments addressing environmental issues received on the Draft EIR will be addressed in the Final EIR. CEQA Guidelines Section 15204(a) states that in reviewing a draft EIR, persons and public agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters.

CEQA Guidelines Section 15204(c) states that reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence.

1.4.4 Final EIR

CONTENTS

In accordance with CEQA Guidelines Section 15132, the Final EIR will provide the following:

- List of persons, organizations, and public agencies commenting on the draft EIR;
- Comments received on the draft EIR;
- Responses to significant environmental points raised in comments; and
- Revisions that may be necessary to the draft EIR based upon the comments and responses.

According to CEQA Guidelines Section 15204(a), when responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR. The Final EIR and the Draft EIR will together constitute the entire EIR.

1.4.5 Certification

CEQA Guidelines Section 15088 requires the lead agency to provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an EIR.

CEQA Guidelines Section 15090 requires lead agencies to certify the final EIR prior to approving a project. The lead agency shall certify that the final EIR has been completed in compliance with CEQA, the final EIR was presented to the decision-making body of the lead agency and that the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project, and that the final EIR reflects the lead agency's independent judgment and analysis.

1.4.6 Impact Characterization Terminology

This EIR uses the following terminology to denote the significance of environmental impacts:

No Impact: "No impact" means that no change from existing conditions is expected to occur.

Adverse Impacts: Adverse impacts of the Project fall into the following groups:

- A "less-than-significant impact" is an adverse impact but would not cause a substantial adverse change in the physical environment, and no mitigation is required.
- A "significant impact" or "potentially significant impact" would, or would potentially, cause a substantial adverse change in the physical environment, and mitigation is required.
- A "less-than-significant impact with implementation of mitigation measures" means that the impact would cause no substantial adverse change in the physical environment if identified mitigation measures are implemented.
- A "significant and unavoidable impact" would cause a substantial change in the physical environment and cannot be avoided if the Project is implemented; mitigation may be recommended but will not reduce the impact to less-than-significant levels.

Beneficial Impact: A "beneficial impact" is an impact that would result in a decrease in existing adverse conditions in the physical environment if the Project is implemented.

2.0 SUMMARY

2.1 CEQA Requirements

CEQA Guidelines Section 15123 requires an EIR to contain a brief summary of the proposed Project and its consequences. This section also includes a brief summary of the Project description. Detailed Project description information, including figures illustrating the Project location and components, is included in Section 4.0, Project Description.

This summary also identifies each significant effect and the proposed mitigation measures and alternatives to reduce or avoid that effect; areas of controversy known to the lead agency; and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

2.2 Proposed Project Summary

The City is partnering with EAH Housing to propose the development of affordable housing on the northeastern portion of the approximately 13-acre City-owned parcel known as 1 Hamilton Drive (Assessor's Parcel Number 030-250-01) within the City. The proposed 1 Hamilton Drive Affordable Housing Development (Project) includes the development of affordable multifamily rental housing and associated infrastructure to meet the City's affordable housing needs and replacement of existing uses on the site (public restroom, EV charging station, and public parking).

The proposed Project includes the creation of a new ground lease covering an approximately 1.75-acre area of the northeastern portion of the City-owned parcel referenced above. This site would be rezoned from O-A (Open Area) to RM-B (Multi-family Residential Bayfront), allowing for the development of affordable multi-family rental housing on the site (also referred to as "Housing Site," "Housing Development Site"). The Project includes the development of up to 50 affordable rental housing units and approximately 63 residential parking spaces on the Housing Site. The Project also includes the replacement of the existing 38 public parking spaces, one electric vehicle (EV) charging station with two ports, and restroom facilities currently located on the Housing Site to the adjacent Public Safety Building (PSB) parking lot (also referred to as the "PSB Site"). The relocation of these facilities would be accomplished by reconfiguring the adjacent PSB parking lot to provide secured private parking and storage for public safety employees, approximately 50 public parking spaces, public restrooms, and the EV charging station.

2.3 Summary of Significant Impacts and Mitigation Measures

The proposed Project would result in significant or potentially significant impacts. Each significant impact is identified in Table 2-1, Summary of Significant Impacts and Mitigation Measures, located on the following page. The table lists each significant impact by topic area, mitigation measures to avoid or substantially minimize each impact, and the level of significance of each impact after implementation of the mitigation measures. Less-than-significant impacts are not included in the summary table.

Table 2-1. Summary of Significant Impacts and Mitigation Measures

SIGNIFICANT IMPACT	SIGNIFICANCE LEVEL WITHOUT MITIGATION	MITIGATION MEASURE(S)	SIGNIFICANCE LEVEL AFTER MITIGATION
AIR QUALITY			
The Project has the potential to expose sensitive receptors to substantial pollutant concentrations.	Potentially significant	**Mitigation Measure AQ-1** In accordance with CCR, Title 17, Section 93105, a Draft ADMP for the proposed Project has been prepared by Krazan & Associates (Appendix F). The ADMP shall be approved by BAAQMD prior to the start of construction activities at the Project site. The Draft ADMP identifies BMPs to reduce air particulate emissions resulting from soil disturbance or excavation associated with demolition, grading, utility work, construction of Project site infrastructure, and foundation construction. The ADMP shall be implemented in conjunction with the Project's Site-Specific Health and Safety Plan (HASP). The ADMP also includes monitoring and reporting requirements. The proposed Project shall implement all requirements of the Final ADMP as approved by the BAAQMD.	Less than significant
BIOLOGICAL RESOURCES			
The Project has the potential to have a substantial adverse effect, either directly or through habitat modifications, on special-status species.	Potentially significant	**HEU SEIR Mitigation Measure 7-1** The City of Mill Valley will impose a standard condition of approval to be complied with prior to the approval of project plans for: 1) undeveloped housing sites, 2) housing sites within 100 feet of aquatic habitat, or 3) housing sites supporting native vegetation or trees, requiring that applicants of such sites submit a biological resources assessment prepared by a qualified biologist to the City of Mill Valley Planning and Building Department for review and approval. The biological resource assessment shall include the following information as necessary to determine whether special status species are likely to be on the site: a. Database searches to determine if special-status species have been recorded as occurring within the	Less than significant

SIGNIFICANT IMPACT	SIGNIFICANCE LEVEL WITHOUT MITIGATION	MITIGATION MEASURE(S)	SIGNIFICANCE LEVEL AFTER MITIGATION
		general vicinity. Databases include the California Department of Fish and Wildlife's California Natural Diversity Database, the California Native Plant Society Rare and Endangered Plant Inventory, the US Fish and Wildlife Service Endangered Species Program, the US Fish and Wildlife Service National Wetland Inventory; and other biological studies conducted in the vicinity of the housing site, if available. b. Field surveys to: i. Identify and map the principal plant communities; ii. Determine the potential for special-status species and their habitats, wildlife movement corridors, potentially jurisdictional wetlands and waterways, regulated trees, and other significant biological resources to occur; and iii. Identify and map any observed locations of special-status species and/or habitats. c. The biological resources assessment report shall include a description of existing habitats and plant and animal species found on the housing site, and the occurrence of and/or potential for special-status species and their habitats. One or more figures shall be prepared to illustrate habitat types and the location(s) of special-status species occurring on or in the vicinity of the housing site. If potential impacts to biological resources are identified, the applicant shall be required to work with the appropriate local, regional, state, or federal agency to determine what measures are required in order to minimize or avoid impacts to special-status species and incorporate those measures into the project.	

SIGNIFICANT IMPACT	SIGNIFICANCE LEVEL WITHOUT MITIGATION	MITIGATION MEASURE(S)	SIGNIFICANCE LEVEL AFTER MITIGATION
		HEU SEIR Mitigation Measure 7-2 The City shall require, prior to construction of the housing sites identified above in mitigation measure 7-1, measures for the protection of biological resources identified in the biological resources assessment report or by another regional, state, or federal agency with jurisdiction shall be incorporated into the project design and documentation of compliance shall be submitted to the City of Mill Valley's Planning and Building Department prior to the issuance of building permits. Measures may include, but are not be limited to: 1. Focused plant surveys conducted during the appropriate time of year; 2. Protocol-level wildlife surveys; 3. Preconstruction surveys; 4. Incidental take permits from the California Department of Fish and Wildlife and/or U.S. Fish and Wildlife Service; 5. Permits from the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and/or Regional Water Quality Control Board for impacts to jurisdictional aquatic features; and/or 6. Arborist or forestry reports for projects requiring tree removal or the protection of trees adjacent to an impact area. **Mitigation Measures BIO-1a** Pre-construction botanical surveys shall be conducted within the Project site by a qualified biologist during the appropriate timeframe when plants with moderate potential to occur are evident and identifiable. One survey shall be conducted in mid-April, and one in mid-May. If observed, populations or individuals shall be flagged and fully avoided by a 10-foot no-disturbance buffer.	

SIGNIFICANT IMPACT	SIGNIFICANCE LEVEL WITHOUT MITIGATION	MITIGATION MEASURE(S)	SIGNIFICANCE LEVEL AFTER MITIGATION
		Mitigation Measure BIO-1b If special-status plants are present and impacts to those plant populations cannot be avoided, seed or other propagules shall be harvested from at least 50 percent of plants within areas of impact. Harvested seed or propagules shall be stored for reintroduction into the preserved portion of the Project site. **Mitigation Measure BIO-2** To the extent feasible, Project-related activities shall be avoided during the nesting bird season, generally defined as February 1 – August 31. If Project work must occur during the nesting bird season, pre-construction nesting bird surveys shall be conducted within 7 days of ground disturbance or tree/vegetation removal to avoid disturbance to active nests, eggs, and/or young of nesting birds. These surveys shall determine the presence or absence of active nests that may be affected by Project activities. If an active nest is identified, a no disturbance buffer shall be established around the nest until all young have fledged or the nest otherwise becomes inactive (e.g., due to predation). Suggested buffer zone distances differ depending on species, location, baseline conditions, and placement of nest and shall be determined and implemented in the field by a qualified biologist.	
The Project has the potential to conflict with a local policy or ordinance protecting biological resources.	Potentially significant	**HEU SEIR Mitigation Measures 7-1, 7-2, Mitigation Measures BIO-1a, BIO-1b, and BIO-2**	Less than significant

CULTURAL AND TRIBAL CULTURAL RESOURCES			
The Project has the potential to cause a substantial adverse change in the significance of a historical or archaeological resource pursuant to CEQA Guidelines Section 15064.5.	Potentially significant	**Mitigation Measure CUL-1** Project construction crews shall be trained in "basic cultural and tribal resources identification" and have access to a Cultural Resources Awareness Sheet. The sheet shall photographically depict shell midden and associated indicators of precontact and historic-era archaeological sites, and clearly outline the procedures in the event of a new archaeological discovery. These procedures include temporary work stoppage (Stop-Work Order) of all ground disturbance, short-term physical protection of artifacts and their context, and immediate advisement of the cultural resources team and City representatives. Any Stop-Work Order would contain a description of the work to be stopped, special instructions or requests for the Contractor, suggestions for efficient mitigation, and a time estimate for the work stoppage. The archaeologist, in coordination with the consulting tribe (as appropriate) shall examine the findings and assess their significance and offer recommendations for any procedures deemed appropriate to further investigate and/or mitigate adverse impacts to archaeological and tribal resources that have been encountered.	Less than significant
The Project has the potential to disturb human remains interred outside of dedicated cemeteries.	Potentially significant	**Mitigation Measure CUL-2** Upon discovery, the Coroner Division of the Marin County Sheriff's Office will be contacted for identification of human remains. The coroner has 48 hours to examine the remains after being notified. If the remains are Native American, the Coroner must notify the Native American Heritage Commission (NAHC) of the discovery within 24 hours. The NAHC will then identify and contact a Most-Likely Descendant (MLD). The MLD may make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the remains and funerary items. Once formal notification and consultation has occurred, a procedure that may include the preservation,	Less than significant

		excavation, analysis, and curation of artifacts and/or reburial of those remains and associated artifacts will be developed and implemented in collaboration with the MLD and the City. If the remains are not Native American, the Coroner will consult with the cultural resources team and the lead agency to develop a procedure for the proper study, documentation, and ultimate disposition of the remains. If a determination can be made as to the likely identity, either as an individual or as a member of a group, of the remains, an attempt should be made to identify and contact any living descendants or representatives of the descendant community. As interested parties, these descendants may make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the remains and funerary items.	
The Project has the potential to cause a substantial adverse change in the significance of a tribal cultural resource.	Potentially significant	**Mitigation Measures CUL-1 and CUL-2** **HEU SEIR Mitigation Measure 13-1** Consultation with the Federated Indians of Graton Rancheria is required for each proposed housing project in the 6th Cycle Housing Element. Consultation may result in mitigation measures beyond those identified herein. The Planning Department will ensure that all acceptable mitigation measures are implemented prior to issuance of a grading permit. **HEU SEIR Mitigation Measure 13-2** The City of Mill Valley shall impose the following standard condition of approval for all sites identified in the Housing Element Update that are: 1) not completely developed and 2) original surface soils are visible: an archaeological inspection and archaeological records search shall be required prior to approval of the project. The archaeological inspection and records search may result in mitigation measures beyond those identified herein. The Planning Department will ensure that acceptable mitigation	Less than significant

		measures are implemented prior to issuance of a grading permit. **HEU SEIR Mitigation Measure 13-5** The City of Mill Valley shall impose the following standard condition of approval for all sites identified in the Housing Element Update: work shall be halted within 50 feet of potential archaeological resources when uncovered or discovered. Construction workers shall avoid altering the materials and their context. Project personnel shall not collect cultural materials. Prehistoric materials might include obsidian and/or chert flaked-stone tools such as projectile points, knives, or scraping implements, the debris from making, sharpening, and using them ("debitage"); culturally darkened soil containing shell, dietary bone, heat-altered rock, and carbonized plant material ("midden"); or stone milling equipment such as mortars, pestles, handstones, or milling slabs. A qualified professional archaeologist shall evaluate the find and provide appropriate recommendations. If the archaeologist determines that the find potentially qualifies as a historic resource or unique archaeological resource for purposes of CEQA (per CEQA Guidelines Section 15064.5), all work must remain stopped in the immediate vicinity to allow the archaeologist to evaluate any materials and recommend appropriate treatment. A Native American monitor shall be present for the investigation, if the local Native American tribe request. Avoidance of impacts to the resource are preferable. In considering any suggested measures proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the City shall determine whether avoidance is feasible in light of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures are recommended by the archaeologist (e.g., data recovery) shall be instituted. Work may proceed on other parts of the

		Project while mitigation for the historic resources or unique archaeological resources is being carried out. **HEU SEIR Mitigation Measure 13-6** The City of Mill Valley shall impose the following standard condition of approval for all sites identified in the Housing Element Update: If human remains, associated grave goods, or items of cultural patrimony are encountered during construction, the City shall halt work in the vicinity of the find and notify the County Coroner immediately. The City shall follow the procedures in Public Resources Code § 5097.9 and Health and Safety Code § 7050.5. If the human remains are determined to be of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of the determination. The Native American Heritage Commission shall then notify the Most Likely Descendant (MLD), who has 48 hours to make recommendations to the landowners for the disposition of the remains. A qualified archaeologist, the City and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects. The agreement would take into consideration the appropriate excavation, removal recordation, analysis, custodianship, and final disposition of the human remains and associated or unassociated funerary objects. **HEU SEIR Mitigation Measure 13-7** Identified cultural resources shall be recorded on DPR 523 historic resource recordation forms, prior to issuance of a building permit.

GEOLOGY AND SOILS			
The Project has the potential to cause substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides.	Potentially significant	**Mitigation Measure GEO-1** The Project shall incorporate into design and implementation the recommendations of the *Geotechnical Engineering/Geologic Hazards Investigation* prepared by Krazan (Appendix F). The purpose of these recommendations is to stabilize the surface soils on the housing development site to reduce risks associated with geologic hazards.	Less than significant
The Project has the potential to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	Potentially significant	**Mitigation Measure GEO-1**	Less than significant
The Project has the potential to be located on an expansive soil which could create substantial direct or indirect risks to life or property.	Potentially significant	**Mitigation Measure GEO-1**	Less than significant
The Project has the potential to destroy a unique paleontological resource or site or unique geologic feature, either directly or indirectly.	Potentially significant	**Mitigation Measure GEO-2** Project construction crews shall be trained in "basic paleontological resource identification" procedures, including the use of illustrative examples. Should paleontological resources be encountered during Project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If the resources are	Less than significant

		found to be significant, and they cannot be avoided by Project activities, adverse effects on such resources shall be mitigated. Mitigation may include monitoring, recording of the fossil locality, data recovery and analysis, a final report, and accessioning of the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City for review, and (if paleontological materials are recovered) a paleontological repository, such as the University of California Museum of Paleontology.	
		GREENHOUSE GAS EMISSIONS	
The Project has the potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Potentially significant	**HEU SEIR Mitigation Measure 9-1** Applicants for all new individual development projects proposed to implement the 6th Cycle Housing element and for which applications are deemed complete by the City prior to the City adopting and updated, qualified climate action plan, incorporate the project design performance standards identified in items "a" and "b": a. No permanent natural gas infrastructure shall be permitted as part of the improvement plans for individual development projects. Individual projects shall be all electric; and b. Electric vehicle infrastructure (e.g., electric vehicle parking spaces, charging station infrastructure, chargers, etc.) consistent with CAL Green Tier 2 mandatory standards in effect at the time individual building permits are issued shall be installed in all individual development projects.	Less than significant

NOISE			
The Project has the potential to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Potentially significant	**HEU SEIR Mitigation Measure 10-2** The City of Mill Valley shall impose the following standard condition of approval for all sites identified in the Housing Element Update: a Construction Noise Management Plan shall be prepared by the construction contractor and implemented prior to the start of and throughout construction to reduce noise impacts on the nearby existing land uses. The plan will rely on project-level calculations of construction noise and achievable noise level reduction. The plan will establish the procedures the contractor will take to reasonably minimize construction noise at the nearby existing land uses. Additionally, consistent with the MVMC Section 7.16.090(D), the plan would include, but not be limited to, the following measures to reduce construction noise levels as low as practical: • Limit construction to the hours of 7:00 AM to 6:00 PM on weekdays. No noise generating construction activities shall occur on weekends or holidays. • Limit noise from construction workers' radios to the point where they are not audible at existing residences that border the project site. • Locate stationary noise-generating equipment and staging areas as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area. • Prohibit unnecessary idling of internal combustion engines. • Consider temporary noise barriers during construction phases involving earth moving equipment (e.g., grading operations) where they would be effective in reducing the construction noise impact, when directly adjoining sensitive receptors. An eight-foot	Less than significant

		plywood noise barrier could reduce noise levels by at least 5 dBA. • Notify residents adjacent to the project site of the construction schedule in writing. • Post the project's approved construction management plan on the site, which shall include the address, project information, allowable truck route, carpooling requirements, allowable construction hours, site supervisor, and emergency contact.	
UTILITIES AND SERVICE SYSTEMS			
The Project has the potential to require water services outside the available water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Potentially significant	**HEU SEIR Mitigation Measure 14-1** The City of Mill Valley shall impose the following standard condition of approval for all sites identified in the Housing Element Update are proposed prior to approval of an updated MMWD Urban Water Management Plan, shall be required to obtain verification from MMWD prior to approval of planning applications that adequate water supplies exist to support the project.	Less than significant

2.4 Summary of Alternatives

This Draft EIR evaluates the environmental impacts of the following four alternatives to the proposed Project.

2.4.1 Alternative 1: No Project

CEQA Guidelines Section 15126.6 (e) requires the "No Project" alternative be evaluated along with its impacts. The "No Project" alternative analysis must discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services. For this Project, there are two scenarios which might occur under the No Project Alternative, both of which will be described and analyzed in this Draft EIR. A description of each scenario is provided below.

Under the No Project Alternative/Alternative 1, the Housing Site would not be re-zoned for residential uses and would thus continue to be zoned "Open Area", which is inconsistent with the site's General Plan land use designation for multifamily housing. The No Build Alternative would result in the continuation of existing conditions and uses of the Housing Site and PSB Site. The existing public parking lot, public restrooms, and EV charging station would continue to exist on-site. The PSB parking areas would not be reconfigured. No housing units would be developed at the Project site.

Implementation of the No Project Alternative/Alternative 1 in place of the proposed Project would avoid all of the Project's significant impacts but would fail to achieve any of the Project objectives.

2.4.2 Alternative 2: Reduced Density

For this alternative, two reduced density scenarios were evaluated based on public comment/interest in a reduced density scenario and input from EAH Housing to address feasibility. The Reduced Density Alternative (Alternative 2) assumes that the reduction in density and unit count results in a smaller scale building and footprint. Construction on the PSB Site would remain the same as the proposed Project under both scenarios.

The Reduced Density Alternative was selected to evaluate the comparative environmental benefits of constructing a project at the same site location with fewer units. Both scenarios propose to relocate the existing public parking and restroom facilities and construct a podium-style multifamily building with the ground floor serving as a parking garage, similar to the proposed Project.

There are various ways in which the building footprint could be constructed for a reduced density alternative. Two scenarios have been analyzed to address public comments and interest in reducing the number of units for the proposed Project and/or massing of the proposed residential building for the Project. These scenarios further analyze the potential environmental impacts of such an alternative. Both scenarios would require the same amount of tree removal as the proposed Project, and similar levels of landscaping.

REDUCED HEIGHT SCENARIO

The Reduced Height Scenario proposes 32 residential units, as compared to the 50 units included in the proposed Project, which would reduce the height of the housing building from four to three stories (Figure 7-1). Parking would also be reduced to 46 parking spaces while maintaining a residential parking ratio of 1.4 spaces per DU due to the reduced unit count. This scenario assumes the reduction of unit count through the elimination of the top floor of the proposed housing building design and the elimination of a row of underground parking that would otherwise be excavated into the hillside.

For purposes of this analysis, this scenario results in an approximately 36 percent decrease in residential units compared to the proposed Project. Under this Reduced Height Scenario, 17 tandem parking spaces along the eastern side of the residential parking area under the housing building would be eliminated from the proposed Project plans. The elimination of these spaces would reduce the amount of necessary cut into the hillslope. Under this scenario, the total net floor area (excluding parking) of development on the Housing Site would be approximately 51,500 sf, as compared to the Project's proposal of approximately 65,000 sf. The FAR for the Reduced Height Scenario would be 0.68 as compared to the proposed Project's FAR of 0.85.

EAST WING ELIMINATION SCENARIO

The East Wing Elimination Scenario proposes 34 DU, as compared to the 50 units included in the proposed Project by eliminating the eastern wing of the building therefore reducing the amount of required excavation (Figure 7-2). Parking would also be reduced to 39 parking spaces which would reduce the residential parking ratio to 1.1 spaces per DU, as compared to the proposed Project's ratio of 1.4 spaces per DU.

For purposes of this analysis, this scenario would result in an approximately 32 percent decrease in residential units compared to the proposed Project. Under this scenario, 17 tandem parking spaces along the eastern side of the residential parking area under the housing building would be eliminated from the proposed Project plans. In addition, the elimination of the entire eastern wing of the proposed housing building would eliminate seven additional parking spaces under this Scenario. The elimination of the entire eastern wing would reduce the amount of necessary cut into the hillslope. Under this scenario, the total net floor area of development on the Housing Site would be 54,800 sf, as compared to the Project's proposal of approximately 65,000 sf. The FAR for this scenario would be 0.72 as compared to the proposed Project's FAR of 0.85.

Implementation of the Reduced Density Alternative/Alternative 2, under either scenario, in place of the proposed Project would not avoid any of the Project's significant impacts; however, it would reduce the Project's air quality, cultural resources, and geology/soils impacts as compared with the proposed Project. As with the proposed Project, all of the Reduced Density Alternative's significant impacts could be reduced to a less-than-significant level with implementation of the mitigation measures presented in this EIR. The Reduced Density Alternative would fully meet one Project objective, would meet five Project objectives to a lesser extent than the proposed Project, and would not meet two of the Project objectives.

2.4.3 Alternative 3: Reduced Parking

The Reduced Parking Alternative (Alternative 3) was selected to evaluate the comparative environmental benefits of constructing a project involving only the residential multifamily housing and no dedicated residential parking on the Housing Site. A reduced parking scenario was selected rather than no parking due to neighborhood concerns about residential parking impacting the availability of public parking along the street and PSB public parking lot. EAH Housing also indicated interest in providing some dedicated surface parking for residents, as opposed to zero designated residential parking spaces.

Alternative 3 would be located on the same site as the proposed Project and would reconfigure the PSB parking lot similar to the proposed Project. However, under this Alternative, proposed parking Lot B (on the north side of the PSB) would be designated and reserved for residential parking (as opposed to public parking under the proposed Project) and Lot A would be designated for public parking. The public restrooms would be relocated in the same location as the proposed Project. This Alternative would maintain a residential parking ratio of 0.55 designated residential parking spaces per dwelling unit.

Also similar to the proposed Project, this Alternative would include construction of approximately 50 multifamily residential units on the Housing Site (46 are shown in the conceptual design for Alternative 3). However, this Alternative would not provide residential parking on the ground floor of the housing building. Instead, the ground floor of the building would include the administrative offices, residential common areas, building mechanical and support facilities, private open space courtyard for residents, and the three stories above would contain multifamily rental units (Figure 7-3). Construction on the PSB Site would remain the same as the proposed Project.

Under the Reduced Parking Alternative, the amount of necessary cut into the hillslope and the building footprint would be reduced by approximately 3,700 cubic yards as compared to the proposed Project. Under this Alternative, the total net floor area of development on the housing site would be 61,500 sf, as compared to the proposed Project's net floor area of 65,000 sf due to the elimination of the parking garage. The FAR for Alternative 3 would be 0.81 as compared to the proposed Project's FAR of 0.85. The Reduced Parking Alternative would involve the same amount of tree removal as the proposed Project with the removal of 44 trees, as well as similar levels of landscaping.

Implementation of the Reduced Parking Alternative/Alternative 3 in place of the proposed Project would not avoid any of the Project's significant impacts; however, it would reduce the Project's air quality, cultural resources, and geology/soils impacts as compared with the proposed Project. As with the proposed Project, all of the Reduced Parking Alternative's significant impacts could be reduced to a less-than-significant level with implementation of the mitigation measures presented in this EIR. The Reduced Parking Alternative would fully meet seven Project objectives and would not meet one of the Project objectives.

2.5 Areas of Controversy

CEQA Guidelines Section 15123, Summary, requires a discussion of areas of controversy known to the lead agency including issues raised by agencies and the public. Based on written comment letters provided in Appendix B and verbal comments made by members of the public at public meetings, issues known to be of concern include, but are not limited to impacts in the areas of

aesthetics, air quality, and transportation. Some of the general areas of controversy surrounding the project include:

- Opposition to construction of multifamily housing on land previously designated as open area.
- Opposition to construction of multifamily housing on an area currently developed with a public parking lot serving recreational areas.
- Opposition to development of multifamily housing next to a public park and within a primarily single-family residential neighborhood.
- Concerns regarding parking and traffic impacts generated by the proposed housing development.
- Concerns regarding the height and massing of the proposed housing development.
- Concerns regarding construction on a site with bedrock containing naturally occurring asbestos.

Two comment letters in response to the notice of preparation were received from public agencies, are included in Appendix B, and are summarized below:

1. Native American Heritage Commission (NAHC), dated December 29, 2022

The response is a standard letter about AB 52 and SB 18 consultation and recommended consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project. Consultation was conducted and the results are presented in Section 5.4, Cultural Resources, of this Draft EIR.

2. California Department of Fish and Wildlife (CDFW), Bay Delta Region, dated January 27, 2023

CDFW recommended that the CEQA document provide baseline habitat assessments for special status plant, fish and wildlife species located and potentially located at the Project site and surrounding lands, including but not limited to all rare, threatened, or endangered species. The EIR should describe aquatic habitats, such as wetlands or waters of the U.S. or State, and any sensitive natural communities or riparian habitat occurring on or adjacent to the Project site, and any stream or wetland set back distances the city may require. CDFW also recommended pre-construction surveys for special-status species with potential to occur and botanical surveys for special-status plant species, including those with a California Rare Plant Rank, during the blooming period within the Project area.

Analysis was recommended to address the following potential impacts:

- Encroachments into riparian habitats, wetlands or other sensitive areas;
- Potential for impacts to special-status species;
- Loss or modification of breeding, nesting, dispersal and foraging habitat, including vegetation removal, alteration of soils and hydrology, and removal of habitat structural features (e.g., snags, roosts, vegetation overhanging banks);
- Permanent and temporary habitat disturbances associated with ground disturbance, noise, lighting, reflection, air pollution, traffic or human presence; and
- Obstruction of movement corridors, fish passage, or access to water sources and other core habitat features.

These comments are addressed in Section 5.3, Biological Resources, of this Draft EIR.

2.6 Issues to be Resolved

CEQA Guidelines Section 15123 requires an EIR summary to discuss issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects. As discussed throughout this Draft EIR, several potentially significant impacts are identified that require implementation of mitigation measures if the City Council decides to approve the proposed Project or one of the alternatives. The City Council will be required to consider the analysis in this EIR and make a decision whether to approve the proposed Project, or one of the three alternatives discussed and evaluated herein.

3.0 ENVIRONMENTAL SETTING

3.1 Regional Setting

The Project site is located within the City of Mill Valley in Marin County (County), approximately 14 miles north of San Francisco. Marin County encompasses 520 square miles and is one of the nine Bay Area counties. Land uses within the County include rural ranching and dairy operations, industry including information technologies and manufacturing, and vast areas of parkland and open space. The City encompasses approximately 4.8 square miles and is bounded on the east by U.S. Highway 101 and the unincorporated communities of Strawberry and Alto; on the north by the Town of Corte Madera and the City of Larkspur; on the northwest by Mount Tamalpais; and on the south by the unincorporated neighborhoods of Homestead and Almonte, and the Richardson Bay. The City's surrounding setting includes hillsides and steep ridges of coastal mountains and waters of Richardson Bay. Much of the bayfront land in the area has been preserved as park and open space, which provides important habitats and recreational opportunities for residents and visitors. Creeks, marshes, redwood groves, heavily forested and grass-covered hillsides, and chaparral are common landscapes within the area. Single-family residential neighborhoods are situated in the valleys and on the hillsides, while commercial and denser residential areas are situated in the low flat lands in close proximity to transit and along main roadways. Access to the City is primarily limited to two main arterial roadways (Miller Avenue and East Blithedale Avenue) due to topographic and geological conditions.

3.2 Project Location and Immediate Setting

The Project is located on the eastern portion of the parcel at 1 Hamilton Drive (Assessor Parcel Number [APN]: 030-250-01). A map showing Mill Valley and its relationship to the rest of southern Marin County is shown on Figure 3-1. The 1 Hamilton parcel is owned by the City and is approximately 13 acres in size. The western portion of the parcel is considered bayland and includes Hauke Park and Bayfront Park. The eastern portion of the parcel on the east side of Hamilton Drive (which bisects the parcel) includes the City's PSB and parking lot, a ground mounted solar array, public parking lot and public restrooms for park users, and a community garden to the south of the PSB. Single-family residential neighborhoods are located along the hillsides to the east and north of the Project site. Multifamily residential neighbors occur south of the site along Hamilton Drive. Hamilton Drive, which runs adjacent to the western edge of the Project site, provides the access route to and from the Project site, connecting (via Roque Moraes Drive) to East Blithedale Avenue to the north and U.S. 101 to the south. Hamilton Drive has a one-way travel restriction (northbound only) south of the Project site. Hauke Park, located across Hamilton Drive from the Project site, contains extensive grass fields and sports facilities for soccer and baseball.

3.3 Project Site and Existing Uses

The 3.67-acre Project site consists of the proposed Housing Site and the PSB Site, as depicted in Figure 3-2, Aerial Photograph of the Project Site. The housing development site is a 1.75-acre, triangle shaped parcel of land bounded by Hamilton Drive to the west and northwest, Roque Moraes Drive to the east and northeast, and the PSB Site to the south. The PSB Site is bounded by the proposed housing development site to the north, residential properties to the east, community gardens and multifamily development to the south, and Hamilton Drive to the west. The portion of Hauke Park that is across Hamilton Drive from the Project site includes a baseball

diamond and soccer fields. A solar panel installation and community garden are located on the east and south sides of the PSB, respectively. Surrounding General Plan land use designations include Open Space and Single-Family and Multi-Family Residential to the north, Community Facilities to the west and south, and Single-Family and Multi-Family Residential to the south and east (City of Mill Valley 2013).

3.3.1 General Plan and Zoning Designations

The Mill Valley General Plan 2040 Update (General Plan) designates the land use for the PSB Site as "CF" (Community Facility) (City of Mill Valley 2013). The land use designation for the Housing Site was changed from CF to MFR-2 (Multi-Family Residential-2) with the adoption of the Housing Element Update on May 15, 2023. The MFR-2 designation permits multi-family and attached single-family residential land uses, with an allowable density range from 17-29 dwelling units (DU) per acre. The City intends to execute a long-term ground lease agreement with EAH Housing for the Housing Site as part of the proposed Project.

City zoning for both the Housing Site and PSB Site is "OA" (Open Area) Zoning District. The Open Area Zoning District allows development of public parks, playgrounds and recreation areas, crop farming, truck gardening and grazing, golf courses, country clubs, forest preserves, wildlife reserves, equestrian and hiking areas. The Project proposes to rezone the Housing Site to Multi-Family Residential Bayfront (RM-B), which would allow the development of multi-family housing on the site consistent with the MFR-2 land use designation which permits densities of up to 29 dwelling units/acre.

3.3.2 Project Site Access

Access to the Project site is provided from Hamilton Drive, which may be accessed from East Blithedale Avenue on the north via either Kipling Drive or Roque Moraes Drive, or from US-101 via the Seminary Drive exit and Redwood Highway frontage road. Hamilton Drive has a one-way northbound restriction for a short distance to the south of the Project site. An eastbound bus stop for Marin Transit bus routes 17, 17X and 117 (bus routes between the San Rafael Transit Center and Sausalito Ferry terminal) is located approximately 0.5-mile northwest of the Project site at East Blithedale Avenue between Camino Alto and Roque Moraes Drive. A westbound bus stop for these same bus lines is located near the corner of East Blithedale Avenue and Roque Moraes Drive. There is no existing public transit service immediately adjacent to the Project site. One northerly driveway access point on Hamilton Drive permits vehicles to enter and exit the public parking lot that exists on the Housing Site. A second driveway on the south side of the Housing Site also provides access to the public parking lot. Two additional driveways located southerly of these two provide for access to and from the PSB Site. From north to south, these driveways are for Southern Marin Fire Station No. 7, the Mill Valley Police Department, and access to visitor and staff PSB parking. No access to the Project site is provided from the east due to topography.

3.3.3 Project Site Existing Uses

The proposed Project site includes the Housing Site and the PSB Site, both of which are located on the 11-acre City owned parcel at 1 Hamilton Drive. The 1 Hamilton Parcel is bisected by Hamilton Drive, with Hauke Park to the west and the Project site to the east. The Project site is bounded by Hamilton Drive to the west, Roque Moraes Drive to the northeast/east, and a residential property to the south. Natural elevations on the Project site range from approximately

18 feet to 80 feet above sea level at the top of the hillslope adjacent to Roque Moraes Drive. A total of 82 trees are located on the Project site, including 44 native trees, 38 ornamental trees, and two invasive species.

The triangular-shaped proposed Housing Site is approximately 1.75 acres in size and is situated at the northeastern corner of the One Hamilton Drive parcel. The west side of the Housing Site is bound by approximately 630 feet of frontage along Hamilton Drive and the northeast/eastern side is bound by approximately 600 feet of frontage along Roque Moraes Drive. The Housing Site is primarily undeveloped with the exception of the southwestern portion, which contains a public parking lot and restroom facilities intended for use by visitors to Hauke and Bayfront Park. An EV charging station is also present in the parking lot. Topographically, the front of the Housing Site along Hamilton Drive is relatively flat. Behind the existing parking lot, the site rises in a moderately steep hillside. Specifically, elevations on the Housing Site building footprint range from approximately 18 to 45 feet above sea level. The northeastern portion of the Housing Site is comprised of non-native annual grassland and trees on a steep, south- and west-facing slope situated above the public parking lot and restroom for park users.

The PSB Site is bound by the Housing Site to the north, Roque Moraes Drive to the east, a residential property to the south, and Hamilton Drive to the west. The PSB Site is developed with the City's PSB, which includes Southern Marin Fire Station 7 and the Mill Valley Police Department along with supporting offices and facilities. The remainder of the PSB Site contains a wrap-around parking lot that serves the PSB, a ground-mounted solar array, and a community garden.

Photographs of the Project site under existing conditions are presented in Figure 3-3 and Figure 3-4.

3.4 Existing/Baseline Conditions

CEQA Guidelines Section 15125 states that an EIR "must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation [NOP] is published." Section 15125 states that this approach "normally constitute[s] the baseline physical conditions by which a lead agency determines whether an impact is significant."

This EIR evaluates impacts against existing conditions, which are generally conditions existing at the time of the release of the NOP (December 2022). A comparison to current, existing baseline conditions provides the most relevant information for the public, responsible agencies and City decision-makers.



Figure 3-1. Project Site Regional Location Map

1 Hamilton Drive Affordable
Housing Development
Mill Valley, California

0 0.25 0.5 Miles N

wra Environmental Consultants

Figure 3-1. Project Site Regional Location Map



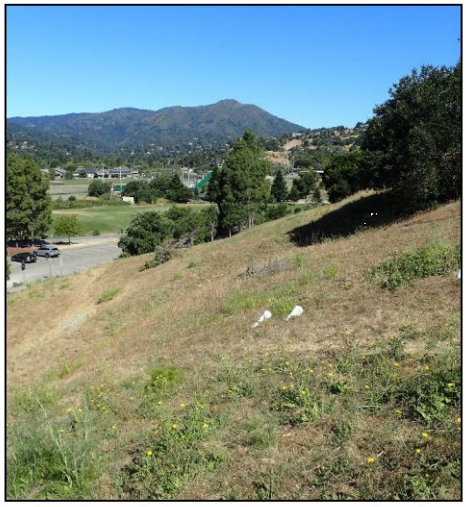
Figure 3-2. Aerial Photograph of the Project Site

1 Hamilton Drive Affordable
Housing Development
Mill Valley, California

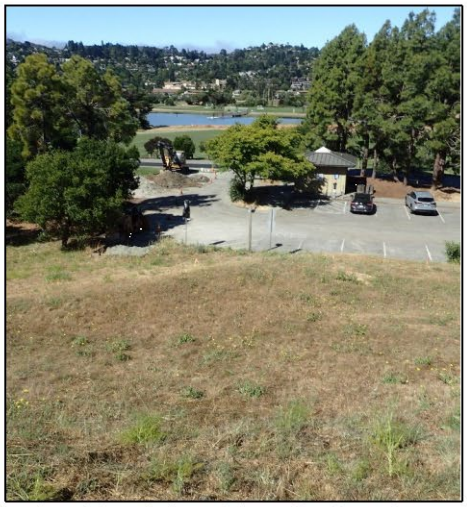
Figure 3-2. Aerial Photograph of the Project Site



View of the northern portion of the PSB site (left) and southern portion of the housing site (right). Hauke Park shown in the distance. Photo taken facing west.



View of the hillslope on the eastern portion of the housing site. Photo taken facing northwest.



View of the existing public parking lot and restroom facilities on the housing site. Photo taken from the hillslope on the housing site, facing west.



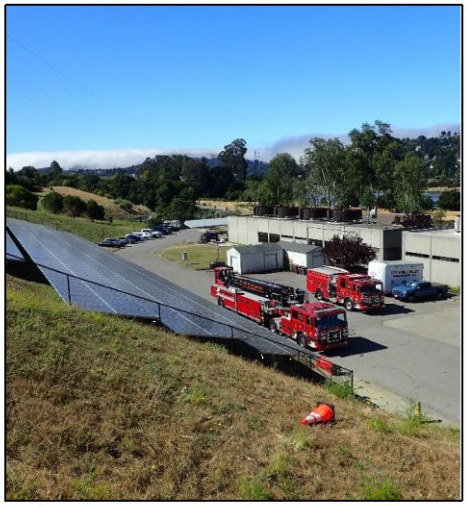
View of the existing public parking lot and restroom facilities on the housing site. Photo taken facing south.

Figure 3-3. Photographs of Project Site Existing Conditions

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 3-3. Photographs of Project Site Existing Conditions



View of the southern portion of the PSB site. Photo taken facing southwest.



View of the existing parking lot on the PSB site. Photo taken facing south.



View of the existing parking lot on the PSB site. Photo taken facing northeast.



View of the front side of the PSB building. Photo taken facing northeast.

Figure 3-4. Photographs of Project Site Existing Conditions

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 3-4. Photographs of Project Site Existing Conditions

4.0 PROJECT DESCRIPTION

This chapter presents a complete description of the proposed Project and includes a description of the Project background, Project site and surroundings, existing site conditions, proposed development of the site, and required Project approvals.

The Project includes the establishment of a long-term ground lease with EAH Housing for the approximately 1.75-acre northeastern portion of a City-owned parcel located at 1 Hamilton Drive. As part of the proposed Project, this portion of the 1 Hamilton Drive parcel (herein referred to as the "Housing Site" or "housing development site") would be rezoned from O-A (Open Area) to RM-B (Multi-family Residential Bayfront), allowing for the development of affordable multi-family rental housing. The proposed Project includes the development of up to 50 affordable rental housing units and approximately 63 residential parking spaces on the Housing Site. The Project also includes the relocation of the existing 38 public parking spaces, one EV charging station with two ports, and restroom facilities currently located on the Housing Site to the adjacent PSB parking lot (also referred to as "PSB Site", "PSB parking lot"). The relocation of these facilities would be accomplished by reconfiguring the PSB parking lot to provide secured private parking and storage for public safety employees, approximately 50 public parking spaces to replace the 38 public parking spaces lost due to the Project on the Housing Site, public restrooms, and EV charging. The Project would also include pedestrian facility safety upgrades to the three existing crosswalks across Hamilton Drive between the Project site and Hauke Park, such as updated high-visibility crosswalk markings, advanced pavement warning markings, and reflective crossing warning signs.

Details concerning the existing features of and conditions at the Project site, including its General Plan and zoning designations, are presented in Section 3, Environmental Setting, of this Draft EIR.

4.1 Project Background

The Mill Valley 2040 General Plan was adopted in 2013. The General Plan contains two overall goals to 1) protect and enhance the natural beauty and small-town character of Mill Valley; and 2) encourage continued diversity of housing, income levels and lifestyles in the community (City of Mill Valley 2013). On May 15, 2023, the City adopted an update to its Housing Element which aims to achieve these General Plan goals by allowing for the creation of an adequate supply of safe, affordable housing for all economic segments of the community, including individuals with special housing needs (City of Mill Valley 2023a). The Housing Element update serves as the City's housing plan for the next eight years, from 2023 to 2031.

The past three housing element updates have included a Housing Element program that identifies the City's interest and intent to explore publicly owned and tax-exempt properties that could accommodate new affordable housing. In 2020, City staff worked with the Housing Advisory Committee to identify potential publicly owned sites and strategies that would result in the development of new affordable housing in Mill Valley. On June 21, 2021, the City Council reviewed and accepted the Housing Advisory Committee's recommendations to select the northern portion of the City-owned 1 Hamilton Drive property and issue a Request for Qualifications to solicit interest and partner with a non-profit home builder. The Housing Site has been deemed "exempt surplus land" for the sole purpose of building affordable homes on the property and the City has entered into an exclusive negotiating agreement (ENA) with EAH Housing. In 2022, the EAH Housing team conducted predevelopment activities to evaluate the

site to assess the feasibility of building and managing approximately 40-50 low-income affordable rental housing units on the site. As part of this work, the City hosted three community workshops to discuss relocating facilities, site planning, building concepts and preliminary design.

On November 30, 2022, City Staff and the EAH Housing team presented preliminary site planning and building concepts to City Council and Planning Commission, with a recommended building concept based on a 45-unit Project and site plan for the relocation of existing facilities to the adjacent parking lot as a condition of building and managing affordable housing on the site. Planning Commission and City Council supported the Project team's preliminary work and Council directed staff to assemble a development review package based on the materials presented.

The proposed Project is included in the 2023-2031 Housing Element Update as part of Housing Program 10, under Goal 2.0 "provide opportunities for a range of housing types suited to residents of varying lifestyle needs and income levels," and is included in the sites inventory based on work to date (e.g., establishment of the ENA, surplus land designation, and Council direction to assemble a development review package). CEQA analysis was conducted for the 2023-2031 Housing Element Update through the issuance and certification of a Subsequent Environmental Impact Report (SCH# 2013052005, Resolution No. 23-29), which is further discussed in Section 1, Introduction, of this Draft EIR.

4.2 Project Objectives

The objectives of the Project consist of the following:

- To implement MV2040 General Plan Goal No. 2, to "encourage the continued diversity of housing, income levels and lifestyles within the community", and Mill Valley Housing Element 2023-2031 Program No. 10, which includes consideration of building multi-family affordable rental housing Project at the 1 Hamilton Drive site.
- To provide new affordable housing units to meet the current and future housing needs of the community with very low, low, and affordable workforce incomes, including households with special needs.
- To provide affordable housing because of its positive impacts on diversity, equity and inclusion.
- To provide affordable housing because of its positive impact on families with more diverse economic backgrounds, joining Mill Valley schools and contributing to the community.
- To provide affordable housing near services, parks and schools.
- To affirm the City's commitment to satisfying its Regional Housing Needs Assessment (RHNA) goals. The Project site is part of the City's sites inventory for the 2023-2031 Housing Element update.
- To construct a 100% affordable housing Project with at least 40 units, and up to 50 multi-family rental units at the 1 Hamilton site that is financially feasible by partnering with a non-profit affordable housing developer for the construction and on-going management of the housing facility.
- To maintain availability of and access to at least 38 public parking spaces and a public restroom facility adjacent to Hauke Park.

4.3 Proposed Project

The Project includes the development of up to 50 affordable housing units and approximately 63 residential parking spaces on the Housing Site, as depicted in Figure 4-1. The Project also includes the replacement of the existing public parking lot and restroom facilities currently located on the Housing Site. The relocation of these facilities would be accomplished by reconfiguration of the PSB parking lot which would include additional public parking spaces, public restrooms, and EV charging. The new public parking spaces would be configured into a "Lot A" and "Lot B" located on each side of the PSB, with fire station/police department parking located behind the PSB, as depicted in Figure 4-2. The new public restrooms would be located in parking "Lot A", adjacent to the northern side of the PSB.

The NOP that was circulated from December 22, 2022 to January 27, 2023 for this Draft EIR indicated that the Project would include up to 50 affordable housing units. Although the Project design plans shown on the figures in this section indicate 45 housing units, the quantitative analyses in this Draft EIR examine a development of 50 units in order to present a conservative evaluation of potential impacts.

4.3.1 Housing Design

The total anticipated gross building area would be approximately 66,000 square feet (sf) and would include up to 49 affordable family rental units and one manager's unit for a total of approximately 50 units. The building area would include approximately 40,000 sf of residential space, approximately 2,200 sf of common space, and approximately 1,600 sf of office space. The residential units would be located on the second, third, and fourth floors of the building and would be comprised of a variety of one-, two-, and three-bedroom units. Current plans call for 17 one-bedroom units, 16 two-bedroom units, and 12 three-bedroom units. Cross sections of the proposed housing building are depicted in Figure 4-3.

4.3.2 Affordable Housing and Density Bonuses/Concessions

The State Density Bonus Law (SDBL) allows a developer to seek density bonuses for housing development that is above the maximum density set under a jurisdiction's General Plan land use plan. In exchange for the increased density, a certain number of affordable housing units must be made available at below market rate rents. In addition to increased density, qualifying applicants can also receive reductions in required development standards. The proposed Project is a 100% affordable housing project and would therefore qualify for a density bonus granted by the City. This density bonus is equal to 80% of the lower income units (44 x .8 = 35.2 density bonus units).

In accordance with the Mill Valley Municipal Code Section 20.81.070, in addition to a density bonus, a qualifying Project may also request one or more concessions or incentives (Mill Valley Municipal Code 2023). As a 100% affordable housing Project, the Project qualifies for 4 incentives or concessions and unlimited waivers or reductions to development standards in order to accommodate the Project. Incentives or concessions may include:

- A reduction in site development standards,
- A modification of zoning code requirements or architectural design requirements,
- Approval of mixed-use zoning in conjunction with the housing Project if other uses would reduce the cost of the housing development, and

- Other regulatory incentives or concessions proposed by the developer to the City, which would result in identifiable, financially sufficient, and actual cost reductions.

4.3.3 Parking

The Project would include approximately 153 total parking spaces on the housing and PSB Sites. Approximately 63 residential parking spaces would be developed on the Housing Site. Building affordable housing allows for reduced parking standards through the SDBL. Recent changes to the law allow further reductions; however, the proposed Project design provides at least one residential parking space per unit. As the Project proposes to develop 45 units, the proposed parking ratio is approximately 1.4 parking spaces per unit. Visitor parking is not required based on state requirements, and no guest spaces would be included in the residential parking garage. Visitor parking would be available through the reconfigured public parking lot on the PSB Site or where permitted on public streets.

In addition to residential parking at the Housing Site, the Project would include the development of up to 50 public parking spaces to replace the existing 38-space public parking lot on the Housing Site. The Project proposes to provide a total of 90 parking spaces on the PSB Site, which currently has 49 parking spaces. Development of the 50 public parking spaces would be facilitated through reconfiguration of the PSB parking lot into a Lot A and Lot B, located on the south and north sides of the PSB, respectively. Each of these lots would contain approximately 25 public parking spaces. The Project would also include 40 secured parking spaces for the exclusive use of the police and fire departments on the eastern side of the PSB.

4.3.4 Crosswalk Improvements

Crosswalks adjacent to the Project site are shown in Figure 5.9-6. The Project would consolidate the two existing Hauke Park Parking Lot entrances into a relocated driveway serving the reconfigured Hauke Park Parking Lot and the Project parking lot underneath the residences. The Project would install continuous sidewalk on Hamilton Drive along the Project frontage, including new ADA-compliant curb ramps for Crosswalk 1 and Crosswalk 2 on the east side of Hamilton Drive. This configuration would have an increased offset from the proposed driveway entrance to the southern pedestrian crosswalk across Hamilton Drive. Further south, Crosswalk 3 between the PSB building and the Hamilton Drive Parking Lot and the Bayfront Park Pathway would also remain in place. The Project would include pedestrian facility safety upgrades to the three existing crosswalks across Hamilton Drive between the Project site and Hauke Park. Safety features would include updated high-visibility crosswalk markings, advanced pavement warning markings, and reflective crossing warning signs.

4.3.5 Architectural Design

The proposed housing building would be constructed in a podium style, with the ground floor being a residential parking garage and floors two, three, and four consisting of a variety of 1-, 2-, and 3-bedroom residential units. The building would be constructed in a “T” shaped floor plan configuration as illustrated in Figure 4-4. The podium (ground floor) would include 63 residential parking spaces, utility rooms, a management and services office, a bike room, and a lobby, as shown in Figure 4-5. On the second floor, a large outdoor courtyard would be situated on the western side of the housing building with seating, tables, and children’s play area. Lighting for the courtyard would include string lights and other pole and building lighting. The height of the building at its tallest point would be approximately 57 feet, as shown on Figure 4-4 and in the

building elevations shown in Figure 4-6 and Figure 4-7. The exterior of the building would be constructed with board-formed concrete for the podium base and a combination of horizontal and vertical wood siding painted earth tones on the residential levels.

The Project would also include the relocation of the public restrooms that are presently situated on the Housing Site. The new public restrooms would be located adjacent to the northern side of the PSB building. Two new storage sheds would also be constructed adjacent to the northeastern side of the PSB building and a new carport would be constructed behind the Police headquarters. These accessory structures are shown on Figure 4-1.

DESIGN STANDARDS AND GUIDELINES

The proposed podium style building type is not specifically addressed in the City's design standards and guidelines; however, the proposed building design is intended to address a number of the City's primary design standards and guidelines, including:

- The building would step back from the street with taller portions of the building situated farther away from Hamilton Drive.
- The structure would be set into the hillside to minimize massing along Hamilton Drive.
- The primary building entry would face the street and the building frontage would be lined with a transparent façade and active uses to the extent possible.
- The parking would be predominantly hidden or softened behind active uses or treated with landscape or trellis elements.
- The building would be broken up into two smaller buildings, connected by a "bridge" to break down the scale.
- The building façade would be articulated to provide relief from the mass of the building.
- The windows would be trimmed, and detailing would reflect the materials of the building, predominantly board-formed concrete, vertical board and batten siding painted, horizontal siding (wide and narrow), and composition shingle roofing.
- The building materials and colors would reflect those of the Mill Valley Community Center at 180 Camino Alto, which illustrates the mix of natural materials and colors that blend into the natural environment.

4.3.6 Grading

The Housing Site rises from an elevation of 15 feet along Hamilton Drive to approximately 45 feet partway up the hillslope. Site grading would be necessary to enable development of the site and accommodate the proposed Project. Since the proposed housing building would be set into the hillside, Project construction will require grading along the base of the existing hillslope. This grading would result in cuts of up to approximately 26 feet below the existing surface grade to accommodate the structure.

Grading for the Project would include approximately 9,500 cubic yards (CY) of cut and 300 CY of fill, totaling approximately 9,200 CY of net off-haul material. The total area of surface disturbance on both the housing and PSB Sites would be approximately 1.80 acres. Project grading and drainage plans for the Project site are depicted in Figure 4-8.

4.3.7 Utilities and Stormwater Control

Water, sanitary sewer, storm drain, electrical and telephone utilities are located subsurface within the Hamilton Drive right-of-way, and the Project would be connected to these utility

services directly. The housing project would be constructed as an all-electric building with rooftop solar panels; there would be no natural gas connection. Figure 4-9 illustrates the proposed arrangement of utilities and connections for the Project.

A preliminary Stormwater Control Plan (SCP) was prepared for the Project in accordance with the criteria established or recommended by the City and pursuant to the Bay Area Stormwater Management Agencies Post Construction Manual. The purpose of the SCP is to remove sediment and other pollutants from post-construction site runoff, and to provide appropriate controls of the flow rate and/or volume of stormwater runoff from the additional impervious surfaces created by the Project. The SCP must be consistent with all provisions of the Phase II Small Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit adopted by the State Water Resources Control Board in 2013. Development of the Project would increase the amount of impervious surface area within the 1.75-acre Housing Site compared to existing conditions as shown below in Table 4-1.

Table 4-1. Existing and Proposed Impervious Surface Area on the Housing Site

	EXISTING	PROPOSED
Total On-site Impervious Surface Area	0.54 (30%)	1.31 acres (73%)
Note: Percentages are approximate and may shift slightly prior to site plan finalization.		

Source: Adobe Associates, Inc. 2022

4.3.8 Project Landscaping

The Project would include various types of landscaping, including ornamental trees, potted plants, raised planting areas, synthetic turf, and native plant communities. Raised planters and large planters would be installed around the podium to provide for stormwater management. The Project landscaping plan is depicted in Figure 4-10.

VEGETATION MANAGEMENT

The existing vegetation on the Project site is primarily composed of oaks, acacias, and pines, as well as grasses. Approximately 82 trees exist on the Project site. Of these, 44 are proposed for removal in order to develop the Project, including 20 native coast live oaks and 21 ornamental trees. A Vegetation Management Plan (VMP) has been prepared for the Project in order to properly maintain the remaining mature trees on-site following Project construction with selective pruning and removal of all dead material per firewise standards. Figure 4-11 presents the Project VMP. As noted on Figure 4-11, future planting would include fire resistant, irrigated shrubs and trees per the specific recommendations for each of the Home Ignition Zones identified in the VMP. Long term vegetation maintenance would include various management activities as stipulated in the Project VMP.

4.4 Construction

Construction of the Project is currently anticipated to occur during 2025 and 2026, with Project completion and occupancy occurring in 2027. The construction phasing and management plan is conceptual at this point and will be refined prior to the commencement of actual construction. The conceptual plan is depicted in Figure 4-12. The final construction phasing and management plan will become part of the construction documents.

4.4.1 Construction Sequence

Project construction is estimated to last for approximately 21 months and would be implemented according to the general schedule shown below in Table 4-2. Construction would occur in three primary phases:

- **Phase 1:** Construct police and fire department rear parking and associated security gates (2 months).
- **Phase 2:** Construct new public parking at PSB Site, new public restrooms, and relocate EV charging stations (2 months). Note that replacement restrooms will be provided for park users prior to demolition of the existing restrooms on the Housing Site.
- **Phase 3:** Demolition of existing parking lot and public restrooms, grading, utilities, and construction of housing building and all other site development (16-18 months).

During Phase 3, proposed Lot B would be used for construction staging and would house a construction office trailer, storage containers, and portable restrooms.

4.4.2 Haul Routes and Traffic Control

As shown on the conceptual construction phasing and management plan, construction vehicles and trucks would generally reach the site via Hamilton Drive from the south. When leaving the site, construction vehicles and trucks would exit by heading north on Hamilton Drive to Roque Moraes Drive and then to East Blithedale Avenue and US-101. Flaggers would be used at the Roque Moraes Drive/Hamilton Drive intersection on a temporary basis during heavy truck usage as well as at the main site ingress/egress location at the driveway on the north side of the PSB. Project-related vehicles would be prohibited from parking in public parking areas meant to serve Hauke and Bayfront Park. Any parking of Project vehicles in the public right-of-way would be subject to separate, date-specific approval by the City's Department of Public Works. Trucks would be required to follow the designated truck route, including approved turnaround locations, from Hamilton Drive to Roque Moraes Drive, to along PG&E substation, to East Blithedale Avenue, to US-101. Traffic management personnel would be stationed at multiple locations to assist with the arrival or departure of large trucks.

Project construction vehicles would park on the PSB parking lot and elsewhere on the Project site. Any Project-related workers, contractors, or subcontractors unable to park on-site would carpool to the site from an acceptable off-site public lot such as the Manzanita Park and Ride. Hamilton Drive would remain open to public traffic throughout the construction period. Public parking would be available in the expanded parking lot at the PSB Site (Lot A) at the PG&E substation parking area at the north end of Hauke Park, and in available on-street parking areas.

4.4.3 Erosion and Sediment Control

A preliminary Erosion and Sediment Control Plan has been prepared for Project construction. This plan will be incorporated into the required Stormwater Pollution Prevention Plan (SWPPP) to be prepared for water quality protection pursuant to the requirements of the State Construction General Permit. The preliminary Erosion and Sediment Control Plan incorporates the following best management practices (BMPs) to reduce sediment runoff and erosion:

- **Inlet Sediment Barriers:** Barriers would be constructed in small, nearly level (less than 5% slope) drainage areas using 1x4 wood or equivalent metal stakes. The top of the frame would be situated well below the ground elevation downslope to prevent runoff from by-

passing the inlet. A temporary dike may be necessary on the downslope side of the structure. Gravel bags would be used in lieu of straw wattles after pavement has been installed.

- **Straw Wattle Check Dams:** Straw wattles are tubes made from straw and bound with biodegradable wrapped netting. Wattles would be embedded 4 inches into the soil and 'keyed' into swale banks. Wattles would be placed perpendicular to drainage flow with ends tightly abutting. Dams should be inspected after each significant storm and maintained and repaired promptly if damage has occurred.
- **Concrete Washout:** The actual layout of the concrete washout would be determined in the field. The "concrete washout" sign would be installed within 30 feet of the temporary concrete washout facility.
- **Straw Wattle Slope Protection:** They are approximately eight inches in diameter and 20 to 30 feet long. These wattles would be used to trap sediment and reduce sheet and rill erosion by reducing slope gradient, increasing infiltration rates, and producing a favorable environment for plant establishment. Wattle installation would require the placement and secure staking of the wattle in a three- to five-inch-deep trench dug on the contour. Ruoff must not be allowed to run under or around the wattle.

Table 4-2. Conceptual Construction Schedule

PHASE	PHASE LENGTH (MONTHS)	MONTHS																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Phase 1 & 1A: Police and Fire Department Parking	2																					
Phase 2: Public Parking & Restrooms	2																					
Phase 3: Housing Building and Site	16-18																					
Grading and Site Utilities	2-4																					
Concrete Slab and Podium	2-3																					
Framing to Roof	3-4																					
Roofing	1																					
Exterior Façade: Windows, WP, Finishes	4																					
Interior Finishes	4																					
Sitework, Landscape, & Finishes	1-2																					
Punch and Completion	1-2																					

4.5 List of Project Approvals Required

The Project would require the following discretionary actions or approvals:

4.5.1 City of Mill Valley

- Rezone the Housing Site from O-A (Open Area) to RM-B (Multi-family Residential-Bayfront) to permit multi-family residential development.
- Long-term Ground Lease or similar document allowing EAH Housing to construct and manage housing on the Housing Site.
- Design Review approval for proposed development at the Housing Site and related improvements on the PSB Site.
- Tree Removal Permit.
- Subsequent administrative encroachment permits for work within and close to the public right-of-way.
- Subsequent administrative grading, stormwater control, and building permits (including all applicable fees).
- Approval of easements.

4.5.2 Bay Area Air Quality Management District

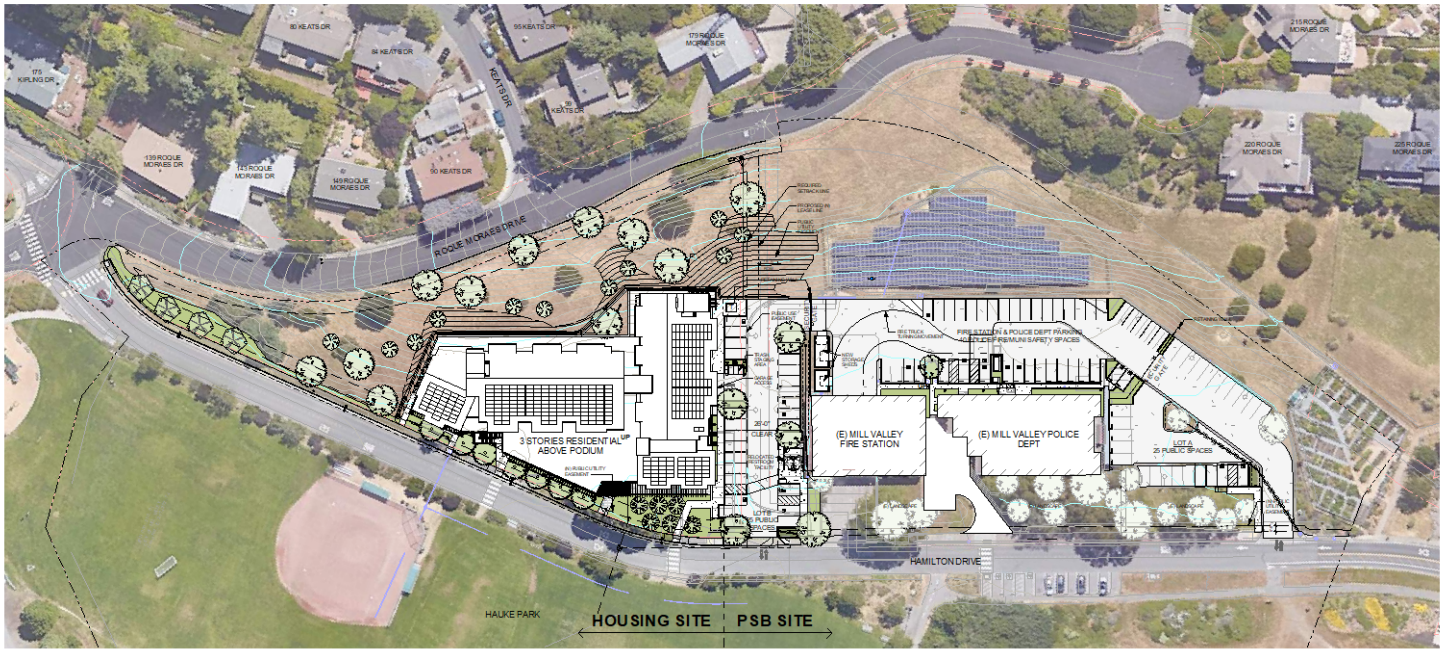
- Asbestos Dust Mitigation Plan approval.

4.5.3 State Water Resources Control Board

- Notice of Intent for coverage under the statewide Construction General Permit, including preparation of a SWPPP

4.5.4 Marin Municipal Water District

- Approval of water service, water meter, landscaping, and irrigation plans.

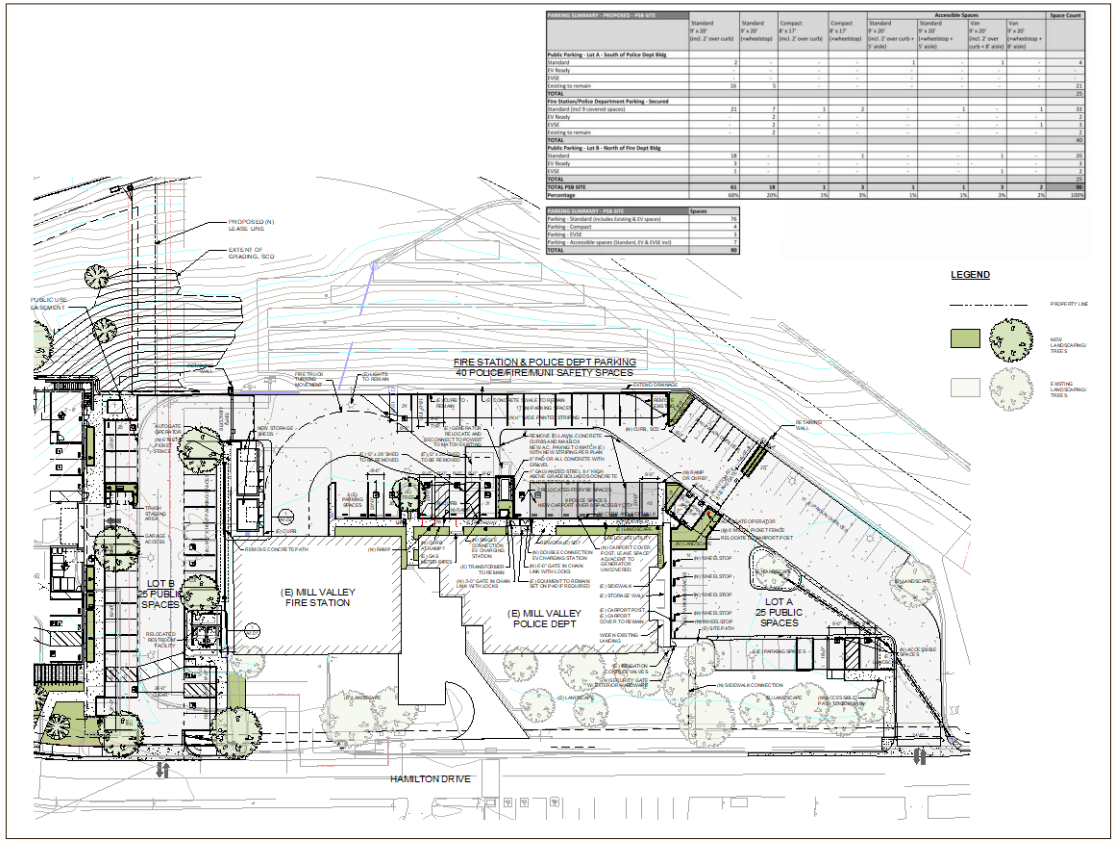


Source: Design Review Plans dated August 2023, Sheet A1.01.

Figure 4-1. Project Site Plan

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 4-1. Project Site Plan

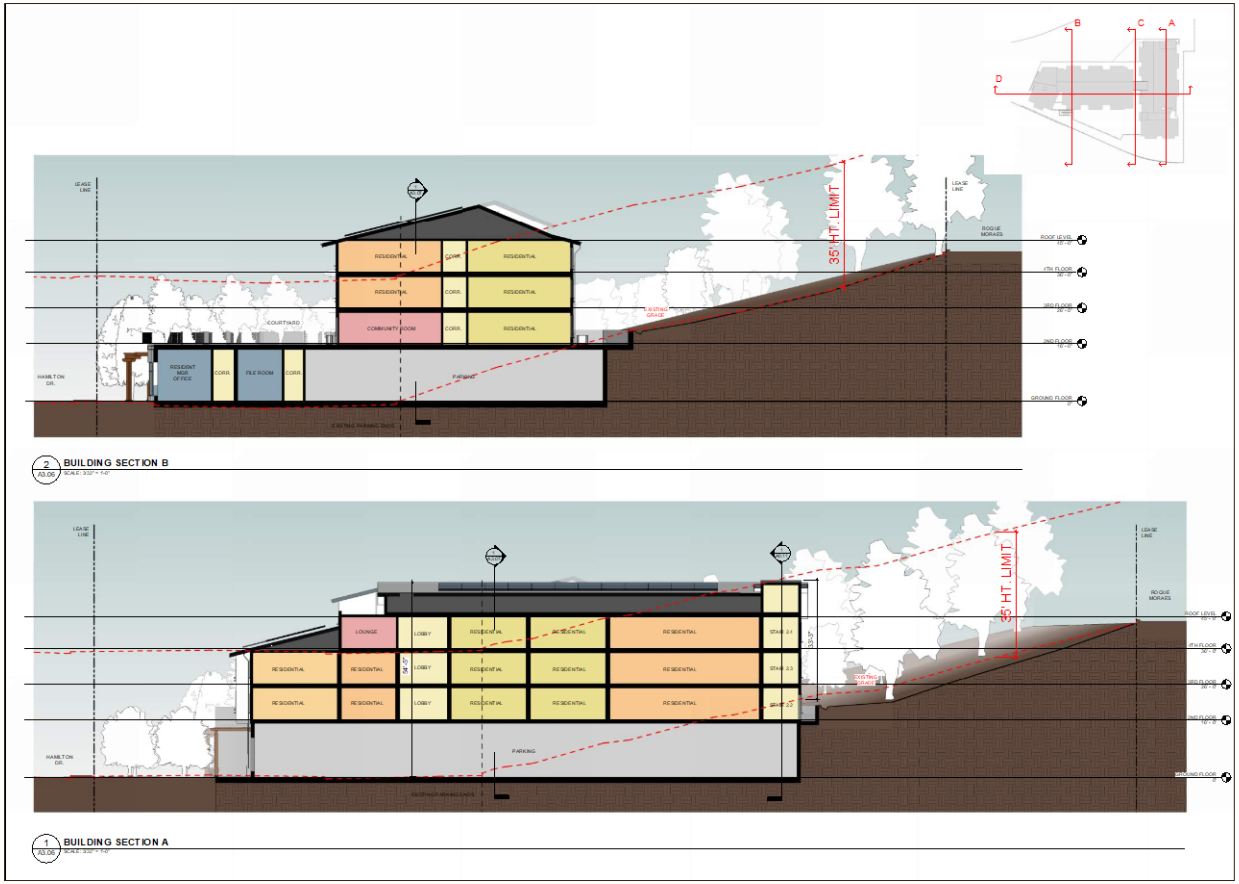


Source: Design Review Plans dated August 2023, Sheet A1.12.

Figure 4-2. Public Safety Building Site Plan

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 4-2. Public Safety Building Site Plan



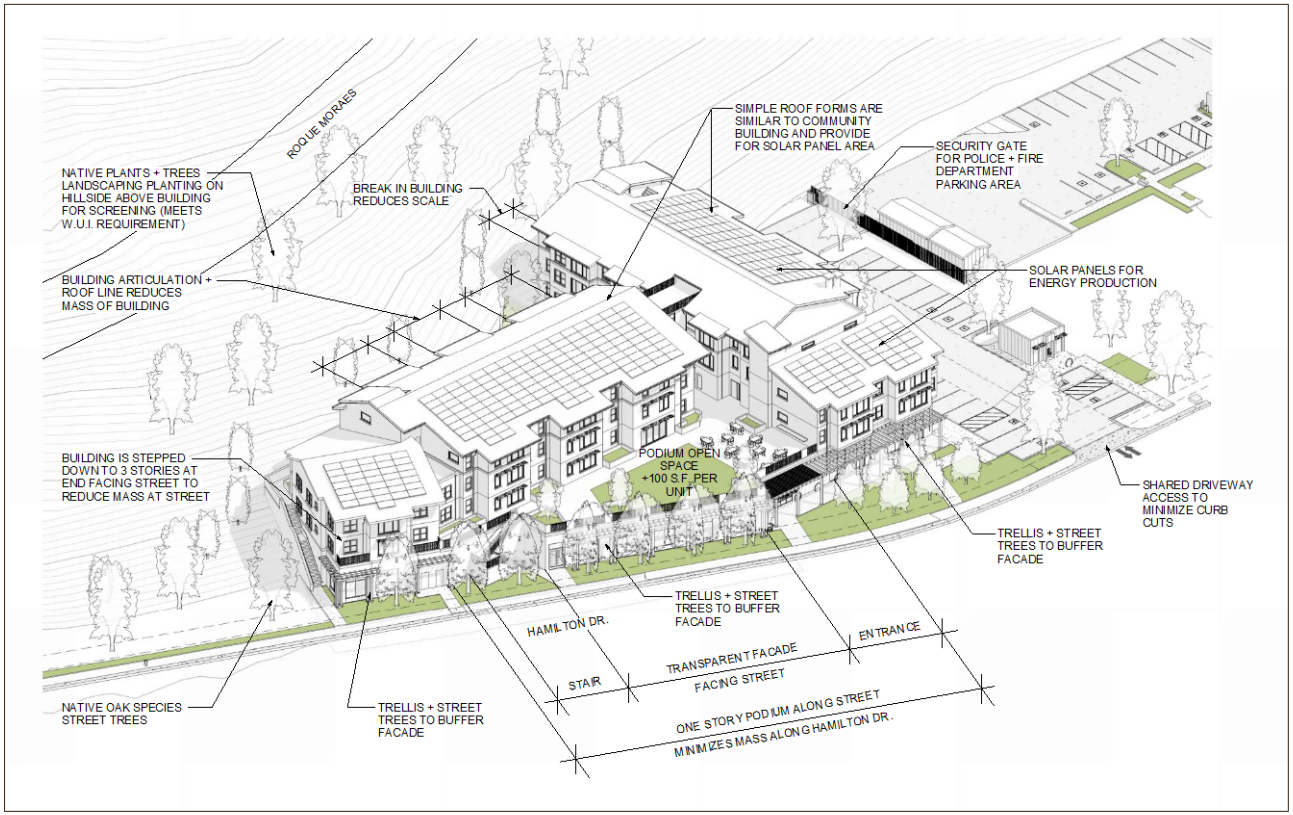
Source: Design Review Plans dated August 2023, Sheet A3.06.

Figure 4-3. Proposed Housing Building Cross-Sections

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 4-3. Proposed Housing Building Cross-Sections



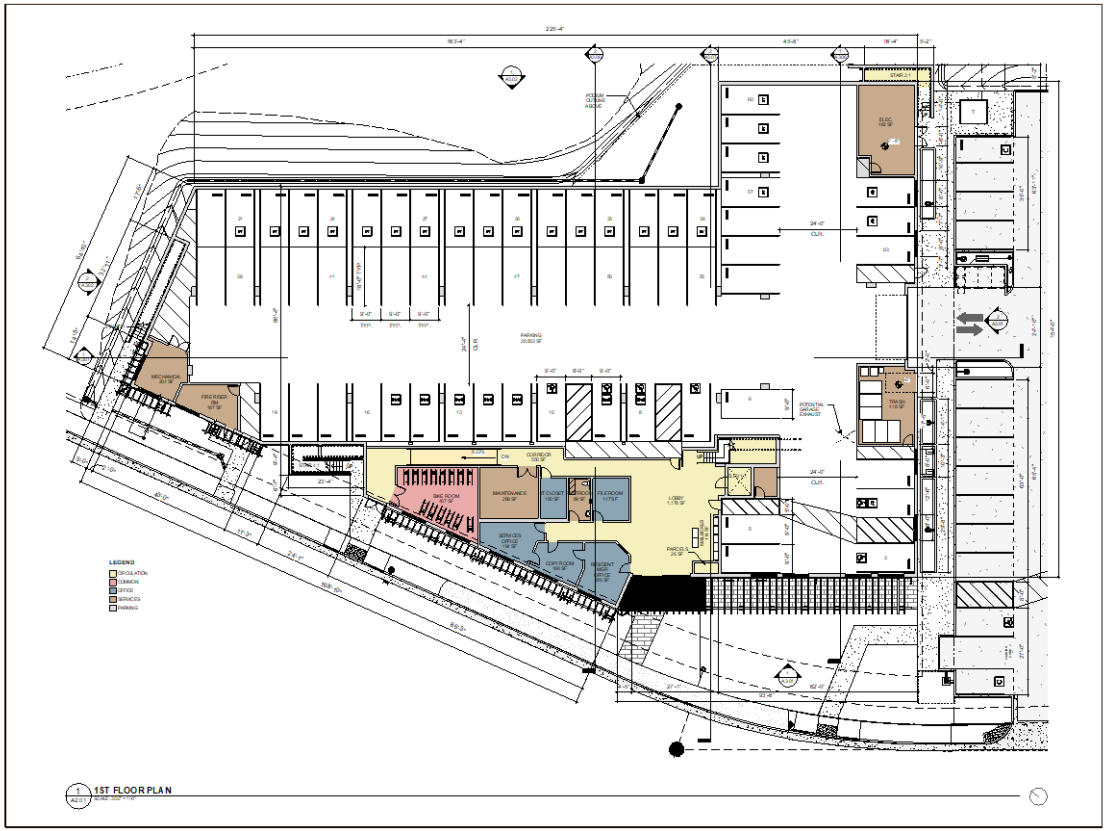
Source: Design Review Plans dated August 2023, Sheet A0.14.

Figure 4-4. Project Diagrams

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 4-4. Project Diagrams



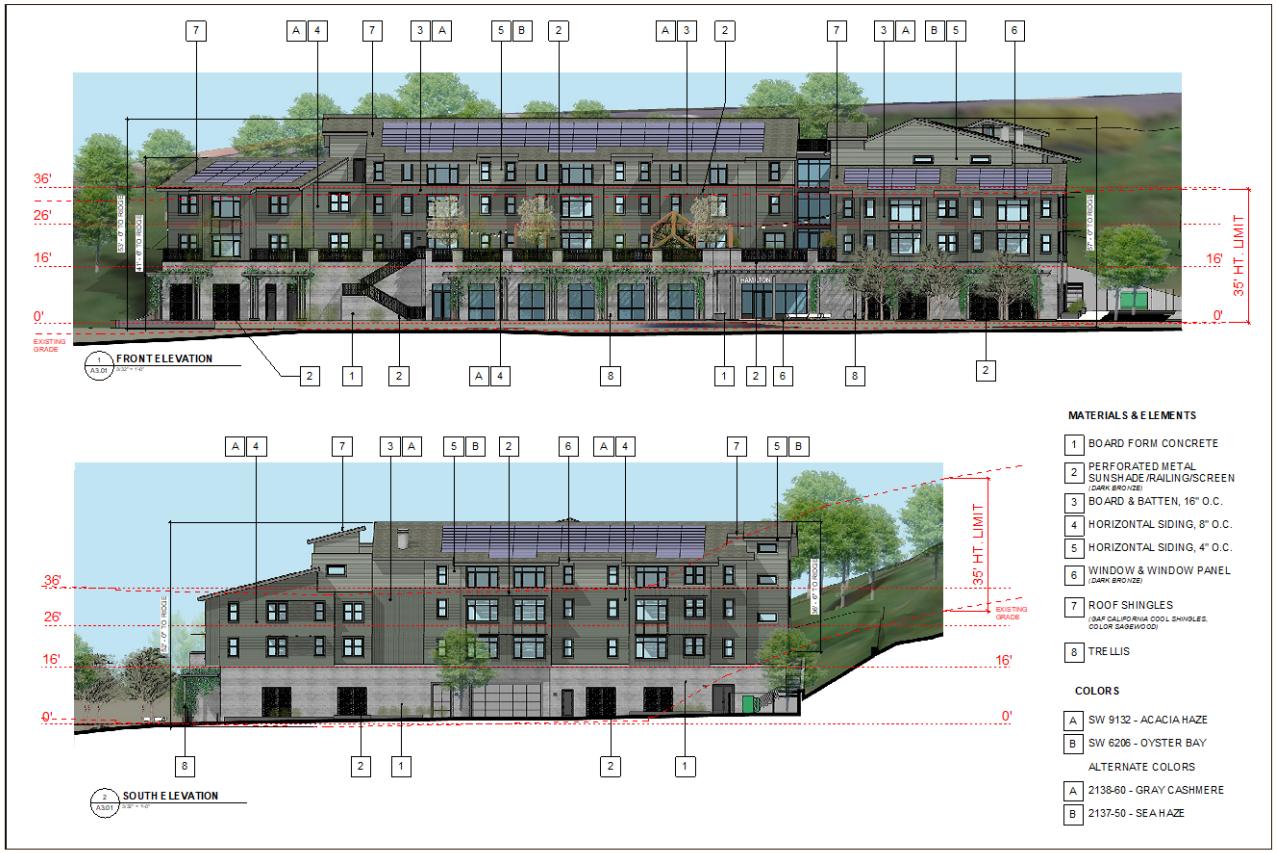
Source: Design Review Plans dated August 2023, Sheet A2.01.

Figure 4-5. Housing Building First Floor Plans

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 4-5. Housing Building First Floor Plans



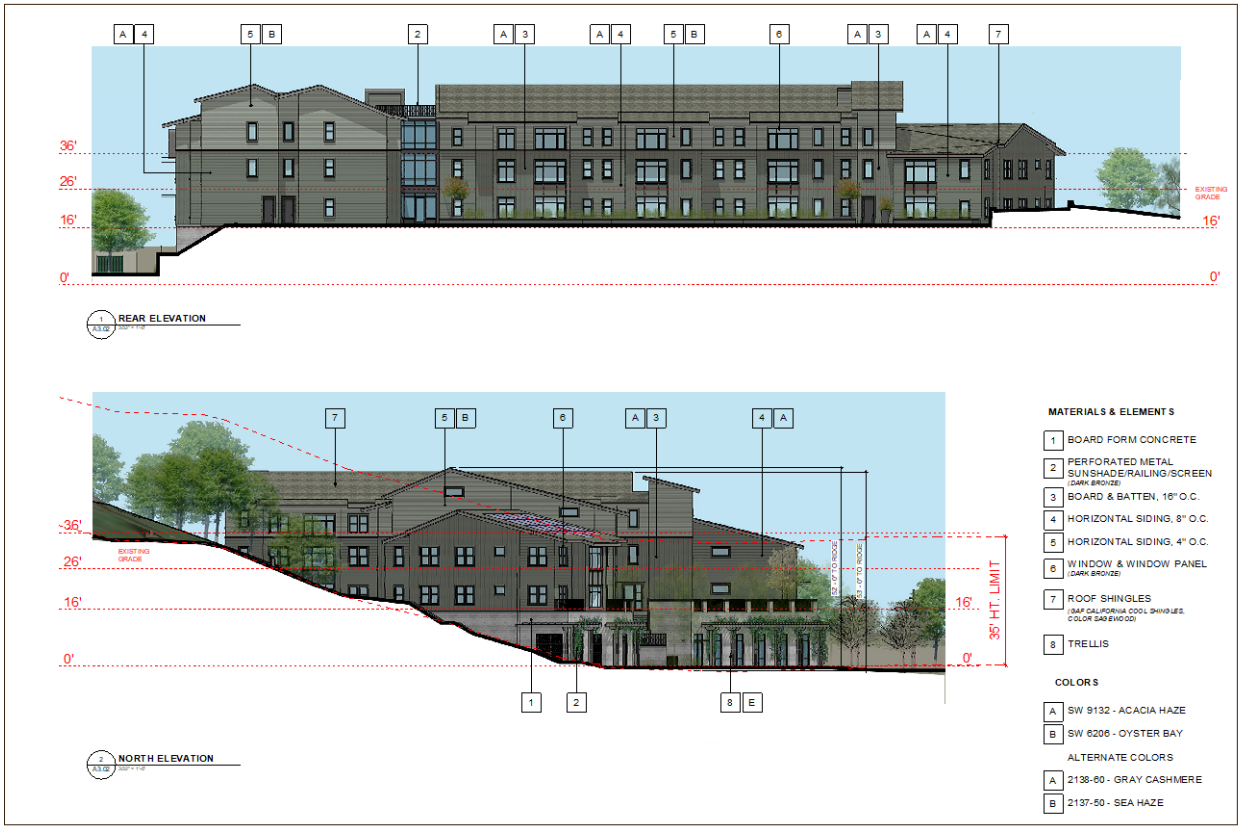
Source: Design Review Plans dated August 2023, Sheet A3.01.

Figure 4-6. Housing Building Elevations

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 4-6. Housing Building Elevations



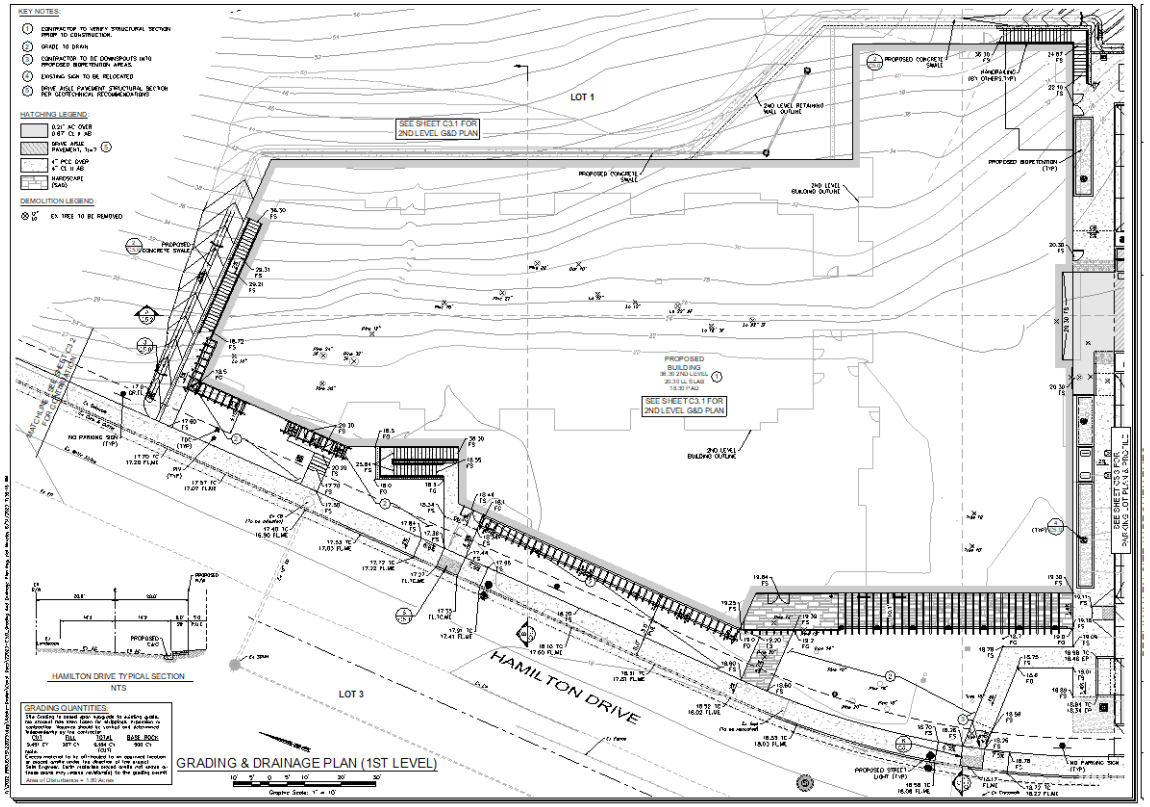
Source: Design Review Plans dated August 2023, Sheet A3.02.

Figure 4-7. Housing Building Elevations

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 4-7. Housing Building Elevations

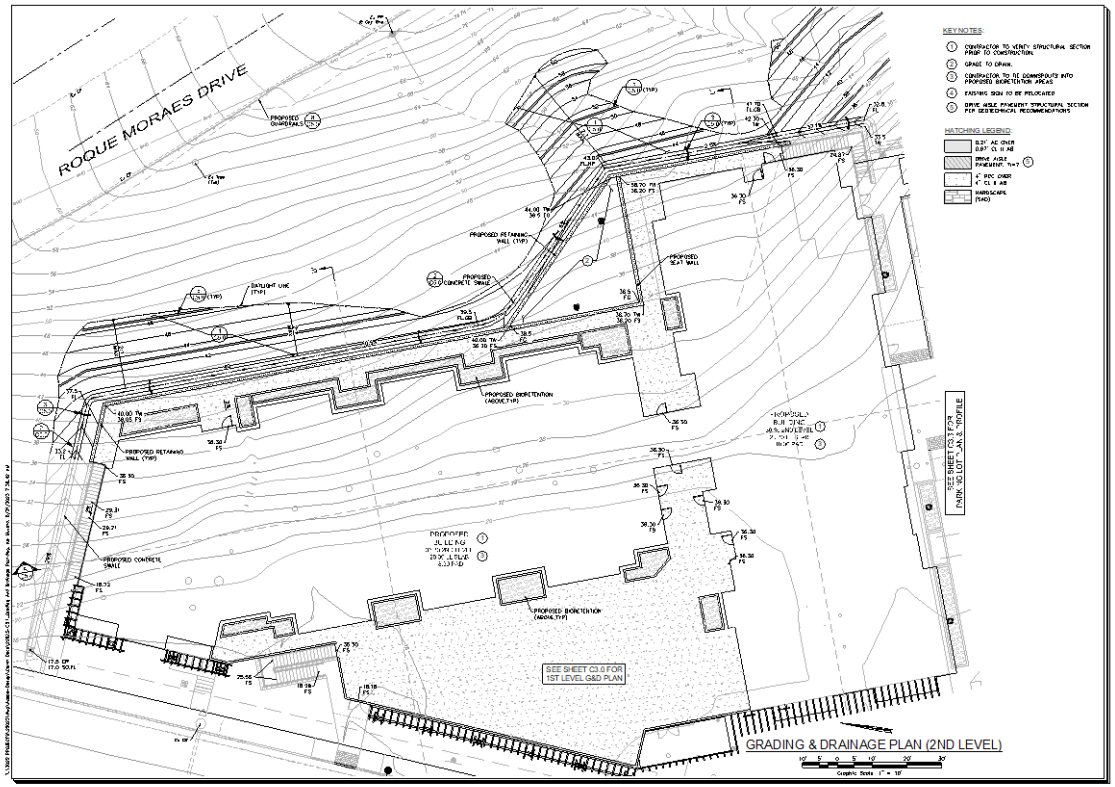


Source: Design Review Plans dated August 2023, Sheets C3.0 and C3.1.

Figure 4-8. Proposed Grading and Drainage

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 4-8. Proposed Grading and Drainage



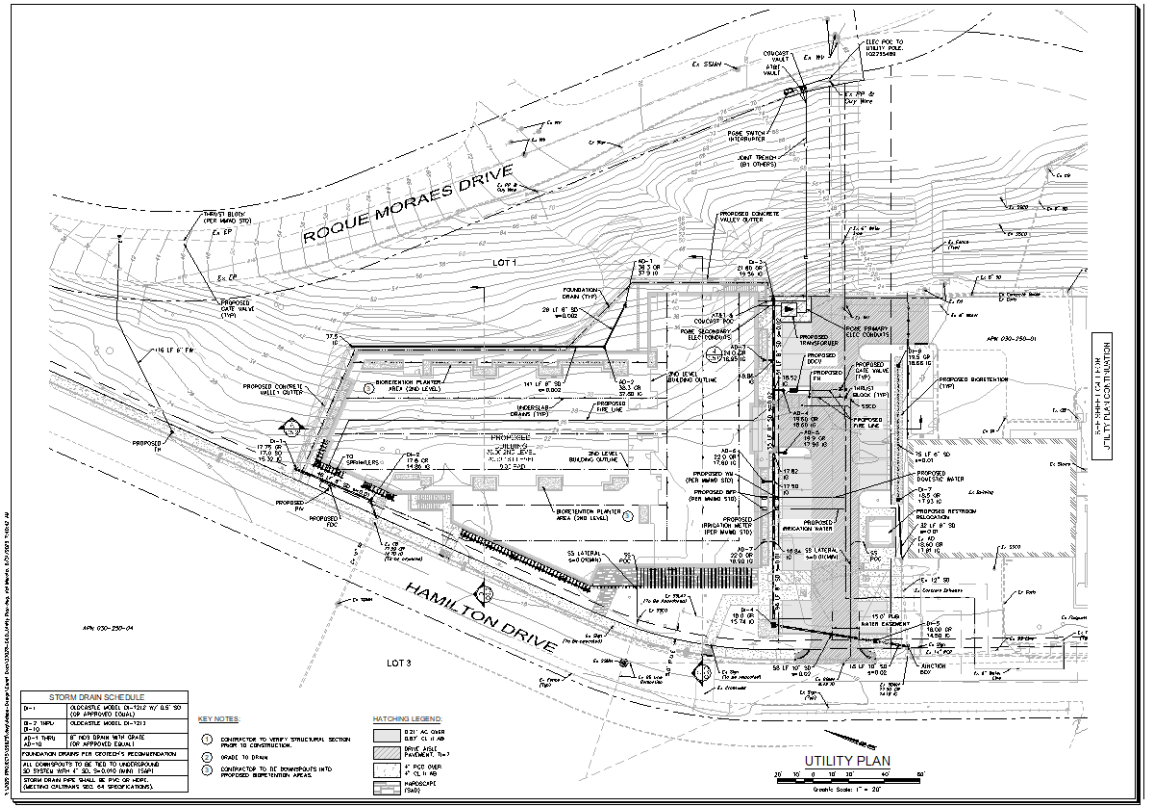
Source: Design Review Plans dated August 2023, Sheets C3.0 and C3.1.

Figure 4-8. Proposed Grading and Drainage

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 4-8. Proposed Grading and Drainage

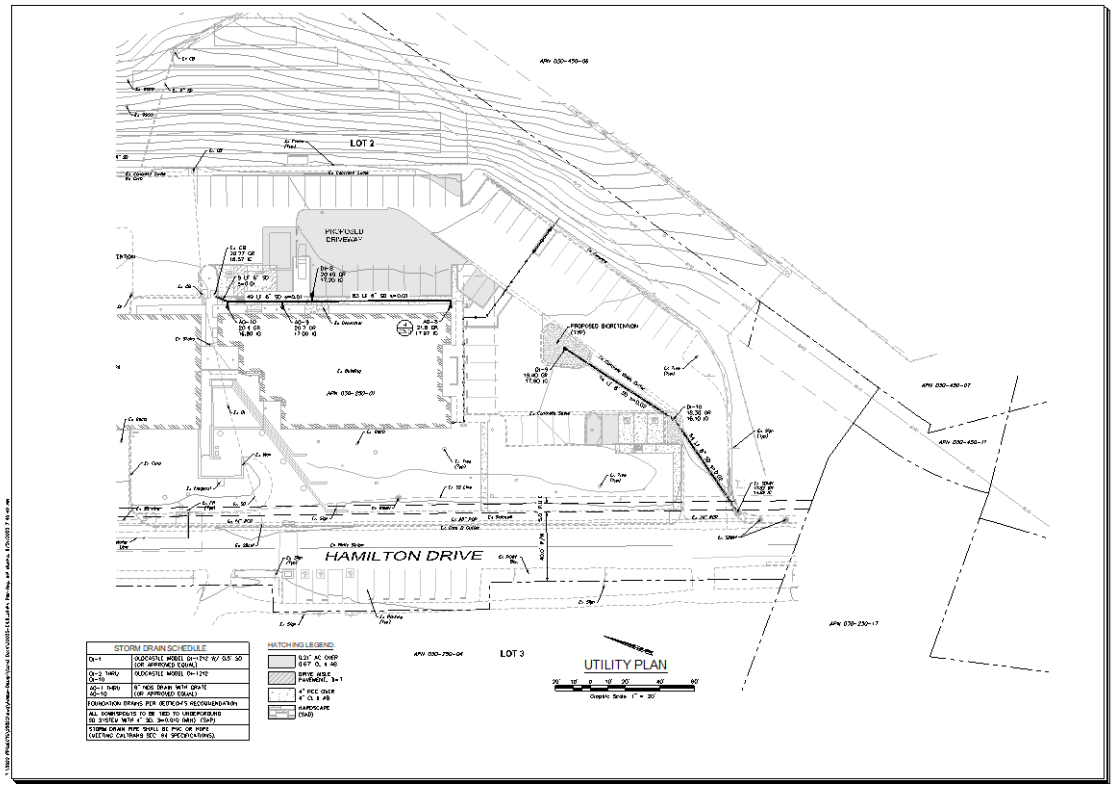


Source: Design Review Plans dated August 2023, Sheets C4.0 and C4.1.

Figure 4-9. Proposed Utility Plan

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 4-9. Proposed Utility Plan



Source: Design Review Plans dated August 2023, Sheets C4.0 and C4.1.

Figure 4-9. Proposed Utility Plan

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 4-9. Proposed Utility Plan



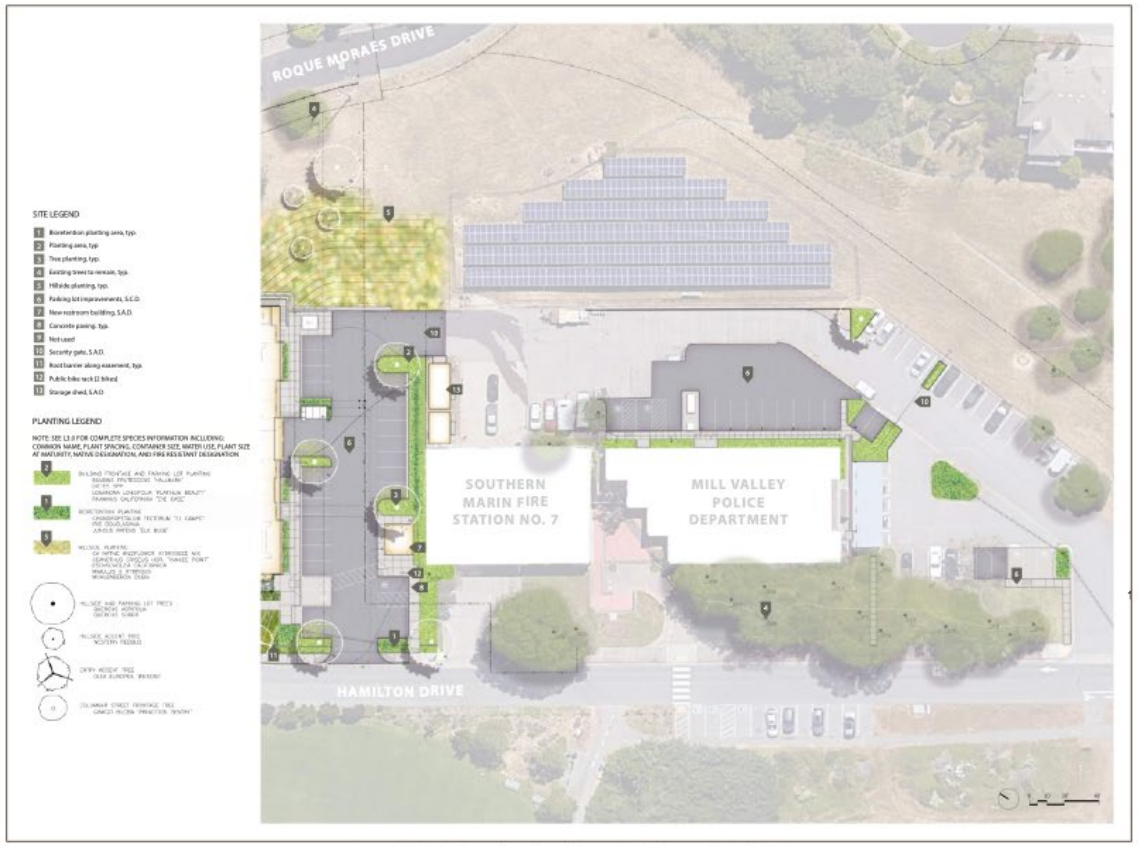
Source: Design Review Plans dated August 2023, Sheets L1.1 and L1.2.

Figure 4-10. Proposed Landscape Plan

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 4-10. Proposed Landscape Plan



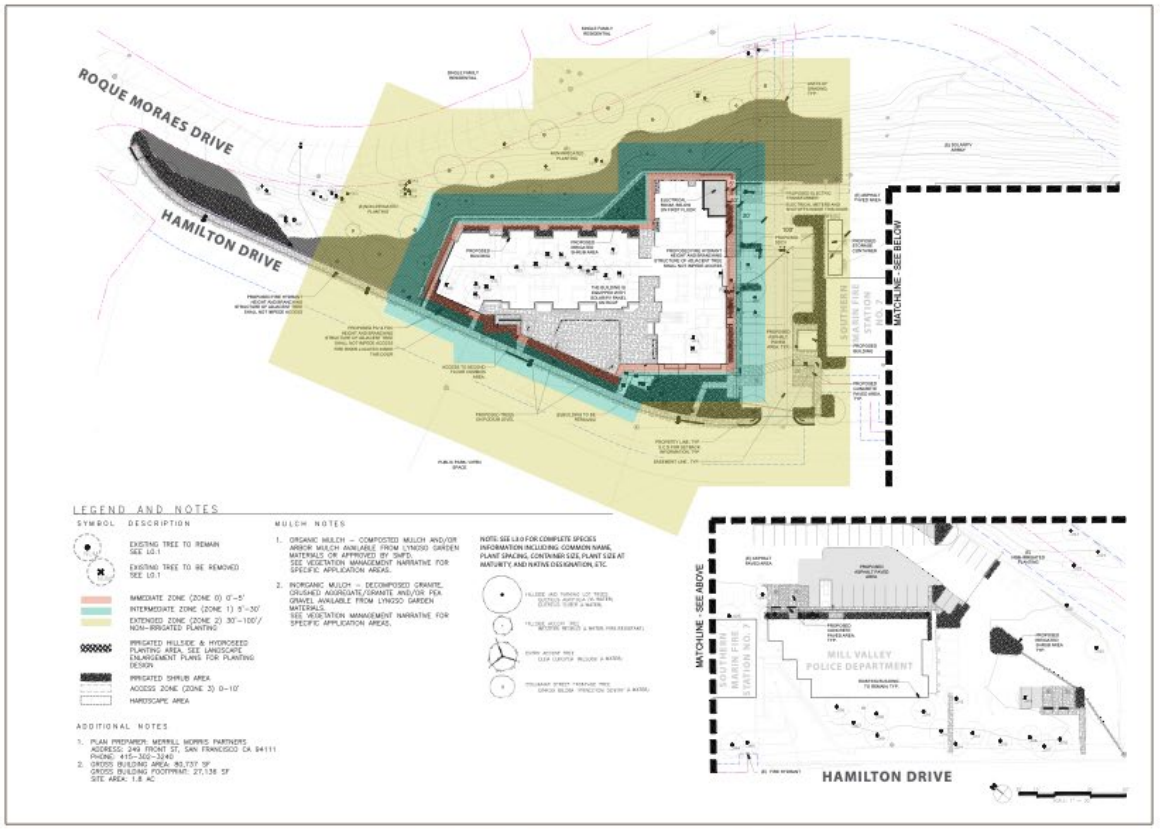
Source: Design Review Plans dated August 2023, Sheets L1.1 and L1.2.

Figure 4-10. Proposed Landscape Plan

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 4-10. Proposed Landscape Plan

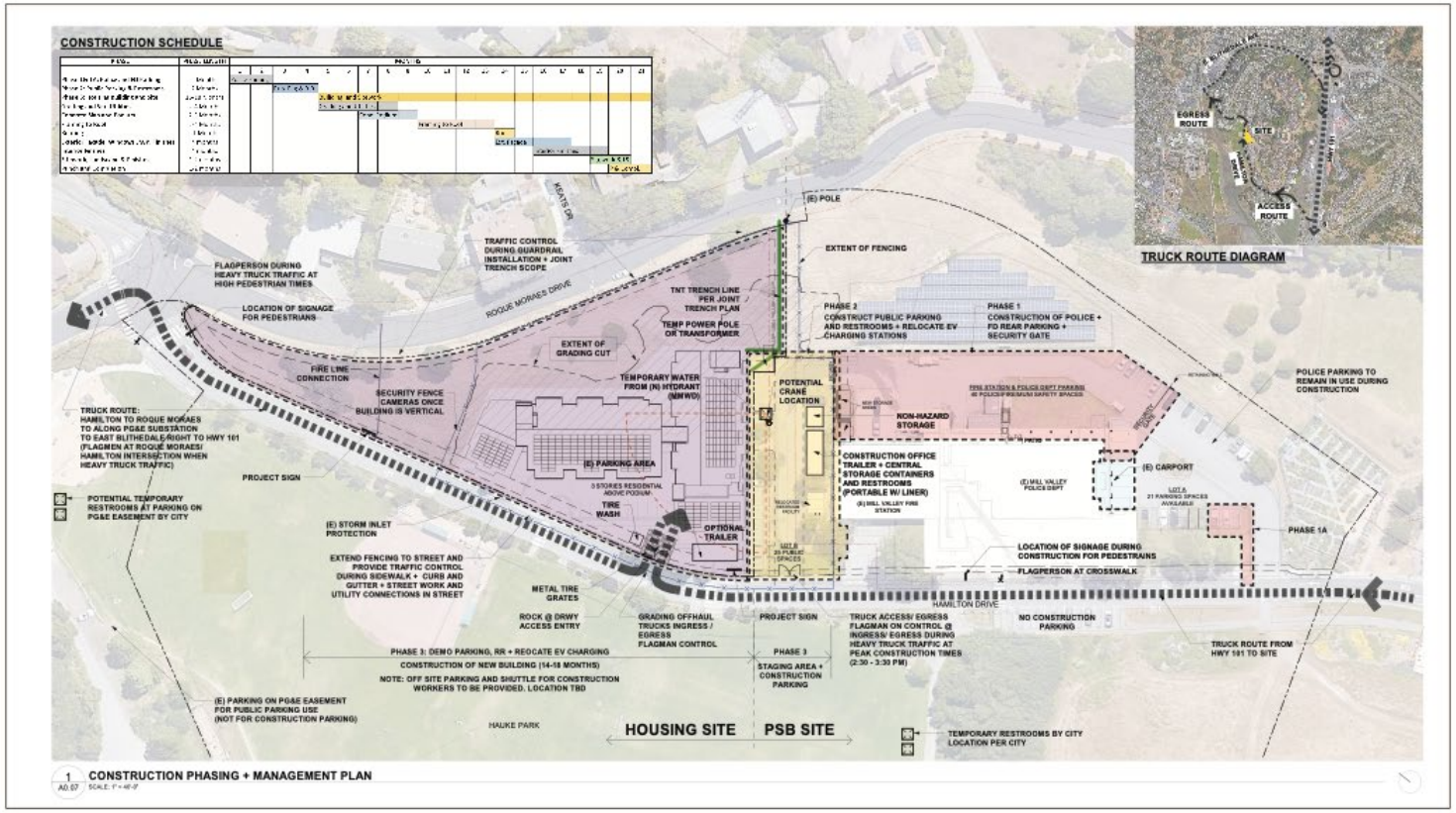


Source: Design Review Plans dated August 2023, Sheet L0.2.

Figure 4-11. Vegetation Management Plan

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 4-11. Vegetation Management Plan



Source: Design Review Plans dated August 2023, Sheet A0.07.

Figure 4-12. Conceptual Construction Management Plan

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 4-12. Conceptual Construction Management Plan

5.0 ENVIRONMENTAL ANALYSIS

5.1 Aesthetics

5.1.1 Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts regarding aesthetics. The analysis in this section evaluates whether the Project would have a substantially adverse effect on a scenic vista; degrade the existing visual character or quality of public views in non-urbanized areas; or create a substantial new source of light or glare which would adversely impact public daytime or nighttime views. A summary of applicable regulations is also provided in this section. In addition, the potential cumulative impacts of the Project in conjunction with other Housing Element Update sites in the area are evaluated.

5.1.2 Environmental Setting

REGIONAL SETTING

The Project site is located in the City of Mill Valley in Marin County, which is part of the larger nine-county San Francisco Bay Area region. Most of the County is in agricultural, grazing land, or open space use, with a relatively small portion being committed to urban uses. Topographically, the County is characterized by coastal and inland valleys and foothills that range from 1,000 to 3,000 feet in elevation. Much of the undeveloped land within the County is in public ownership.

LOCAL SETTING

The City encompasses 4.8 square miles and has a population of approximately 14,121 residents (California Department of Finance 2022). Mill Valley is surrounded by hillsides and steep ridges of the coastal mountains and the water of the Richardson Bay. Many of the nearby ridgelines, as well as much of the bayfront lands, have been preserved as park and open space. Common natural features in the area include creeks, marshes, redwood groves, heavily forested and grass-covered hillsides, and chaparral. The City's single-family residential neighborhoods are primarily located in the valleys and on hillsides, while commercial and more intensive residential uses are situated on the low flat lands. Overall, the City has a quaint small town character due to the plentiful public open space areas and its compact urban footprint.

PROJECT SITE

The Housing Site is located on a 1.75-acre triangle shaped parcel on the northern portion of 1 Hamilton Drive in the City. The northeastern portion of the Housing Site is undeveloped, while the southwestern corner is developed with the Hauke Park Parking Lot and a small restroom facility. The parking lot is used by visitors of the nearby Hauke Park, which is located west of the Project site immediately across Hamilton Drive. The Housing Site is characterized by hillside slopes that range in elevation from 15 feet in the northern areas of the site to 45 feet near the center, to 60 feet in the southern site portions. There are 88 trees scattered around the Project site, while the undeveloped areas are vegetated with grass (WRA 2022).

The Project site is bordered by Hamilton Drive to the west and northwest, Roque Moraes Drive to the east and northeast, and private residential properties to the south. Areas to the north and

east of the Project site consist of residential uses. None of the surrounding areas are protected lands or on topography that is considered a scenic resource within Mill Valley. Photographs of the existing Project site and surrounding uses are depicted in Figure 3-3 and 3-4.

5.1.3 Regulatory Setting

STATE

The State Density Bonus Law (DBL) seeks to encourage the development of affordable and senior housing throughout California. The State DBL is contained in California Government Code Sections 65915 through 65918, and mandates that a city or county shall grant one density bonus, and, if requested by the applicant and consistent with the applicable requirements of the DBL, incentives or concessions, to an applicant proposing to develop affordable housing. A "density bonus" means a density increase over the otherwise maximum allowable gross residential density. The amount of density increase to which the applicant is entitled varies based on the percentage of low-income units being proposed as part of the overall housing development.

LOCAL

City of Mill Valley General Plan

The City's General Plan provides direction regarding the City's vision for future development for various land uses and development types. It also contains broad goals, policies, and programs that aim to guide future design and ensure community vitality. The General Plan consists of seven elements, including a Land Use Element, Mobility Element, Community Vitality Element, Natural Environment Element, Climate Action Element, Hazards and Public Safety Element, Housing Element, and Noise Element. The General Plan contains the following policies and programs related to aesthetics:

> **Policy LU.1 Residential Development:** Residential development shall be compatible with, integrated into, and subordinate to its natural setting.
>
> **Program LU.1-1:** Regularly evaluate and update residential development standards, construction management oversight, and single-family and multi-family design guidelines to ensure that new development and residential remodels are compatible with their natural surroundings and character of the adjoining neighborhood.
>
> **Program LU.1-2:** New residential development or remodels should avoid a design approach or architectural features that exaggerate height, bulk, or mass and create incompatibilities in relation to neighboring properties, distant public views from across a canyon or other parts of the City, or views from the public right-of-way.
>
> **Policy CV.6 Consistent Public Improvements:** Improve Mill Valley's appearance and charm through City policies, regulations, and standards that promote consistently high-quality design and construction.
>
> **Program CV.6-1:** Establish and maintain public improvement and development standards that emphasize the City's attention to detail and design excellence and result in an aesthetically consistent appearance and quality of materials for public roads, sidewalks, pathways, streetlights, street furniture, and other features of the public realm.
> **Program CV.6-2:** Update and Expand the City's design guidelines to address all types of new development (not just single-family residential), redevelopment, and public improvements.

General Plan Housing Element Update

The 2023-2031 Housing Element Update includes policies and programs that address the design of new housing to provide stable, safe, and attractive neighborhoods:

> **Policy 4.1 Facilitate Quality Design through Development Standards and Design Principles.** Assure that new housing is well-designed and based on sustainable development principles to enhance our neighborhood and community.
>
> **Housing Program 18. Objective Design and Development Standards (Program Objective):** Continue to implement a design review process to ensure that new single and multi-family development and substantial modifications to existing structures are compatible with Mill Valley's small-town character, unique environmental, community and scenic attributes. By 2023, develop and adopt objective Multi-Family and Mixed-Use Development Standards and Guidelines and accept the county-wide collaborative "ODDS toolkit" as a reference to continue the discussion of how to creatively apply standards to facilitate infill development. Also clarify design review thresholds based on various streamlining allowed under State Law.
>
> **Housing Program 22A. Redevelopment Process (Program Objective):** In 2023, incorporate objective standards and guidelines into the Mixed-Use Development Standards. By 2025 update design review thresholds established in the City's Zoning Code based on state law and further streamline those housing projects of interest, including but not limited to single family residential remodels and small-scale, infill development that satisfies objective development and design guidelines (Program 18) and consider the removal of the conditional use requirement for mixed use housing in commercial areas (Program 5).

Density Bonus and Mill Valley Zoning Code

The City's density bonus requirements are contained in Chapter 20.81 Density Bonus of the Zoning Code and implement State Density Bonus Law (Government Code Section 65915). A density bonus means a density increase over the otherwise maximum allowable residential density for the zoning district in which the project is located. The City offers density bonuses, incentives, concessions, and waivers for affordable housing development projects in accordance with criteria specified in Chapter 20.81.060 and 20.81.070 of the Zoning Code.

A project applicant may request incentives and/or concessions for a reduction in site development standards or a modification of zoning code requirements for architectural design requirements, approval of mixed-use zoning in conjunction with the housing project, or for other regulatory incentives or concessions proposed by the developer or City that result in identifiable, financially sufficient, and actual cost reductions. Applicants may also seek a waiver or reduction of development standards that would otherwise preclude the construction of an affordable residential development at the densities or with the concessions or incentives permitted by the Zoning Code.

The Zoning Code, Title 20 of the Mill Valley Municipal Code (MVMC), describes allowable uses and development standards for zoning districts in Mill Valley. Development standards include lot size standards, height limits, setbacks, building coverage standards, parking requirements, and landscaping requirements. New development applications within each zoning district are assessed against the applicable development standards.

The City's Design Review process requirements are described in Chapter 20.66 of the Zoning Code. According to the Design Review criteria established in Chapter 20.66.020, all new structures or changes in use of an existing structure of 150 square feet or more of gross floor

area in any zoning district, physical improvements and all additions, extensions, changes in color, and other exterior changes of or to existing buildings, structures, and physical improvements shall be subject to design review.

Multi-Family and Mixed-Use Development Standards and Design Guidelines

In 2016, the City adopted Multi-Family and Mixed-Use Development Standards and Guidelines, which include principles for sustainable site planning, slope design, soils grading and drainage design, landscaping and home hardening, and green building design. These standards and guidelines provide more direction to applicants and enhance community understanding of the application review and approval process.

5.1.4 Thresholds of Significance

Consistent with State CEQA Guidelines Appendix G Environmental Checklist, the project would have a significant impact if it would:

a. *Have a substantial adverse effect on a scenic vista;*

b. *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or,*

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

PROJECT DESIGN FEATURES

Design Standards and Density Bonus

The Project is a 100 percent affordable housing development, meaning that all of the proposed units, excluding the manager's unit, are reserved for lower income households. As such, pursuant to the State DBL, the Project is entitled to a density bonus equal to 80 percent of the lower income units. The Project proposes approximately 50 dwelling units (DU) and would therefore qualify for up to 39 additional units (49 x 0.8 = 39.2 density bonus units). The Project proposes 50 DU for a density of 28.6 DU / acre and is not proposing the 39 additional units that it would be entitled to via a density bonus.

The Project is eligible for up four incentives or concessions and unlimited waivers of design standards per the State DBL. Three concessions and two waivers are being requested for applicable design standards in order to construct affordable housing on the Project site, which are summarized below in Table 5.1-1.

Table 5.1-1. Proposed Density Bonus Concessions and Waivers

	DESIGN STANDARD	REQUIRED	PROPOSED
PROPOSED CONCESSIONS	Setbacks	Front Yard: 15 feet Side Yard: 10 feet	Front Yard: 13 feet Side Yard: 9 feet
	Parking Stall Dimensions	9- by 20-foot stalls	9- by 18-foot stalls
	Private Open Space	50 square feet per DU	0 square feet
PROPOSED WAIVERS	Building Height	Maximum 3 stories	4 stories
	Floor Area Ratio (FAR)	Maximum 0.5 FAR	0.85 FAR

Architectural Design and Landscaping

The design of the proposed housing was influenced by public comments in praise of the design of the Mill Valley Community Center. The housing building is proposed to be constructed in a podium style and would mimic the simple roof form, detailing, materials, and trellises of the Community Center. The "T" shaped building would step back from Hamilton Drive and would include a large courtyard which faces west. The proposed building design meets the intent of a number of the City's primary design standards and guidelines, including:

- Stepping back from the street with taller portions of the building set back from the street.
- While not typically stepping up the hillside, the design does set itself in to the hillside to minimize the impact on the surrounding neighbors.
- The primary building entry faces the street, and the building frontage is lined with a transparent façade and active uses to the extent possible.
- The parking is predominantly hidden or softened behind active uses or is treated with landscape or trellis elements.
- The building is broken up into two smaller buildings, connected by a "bridge" to break down the scale.
- The building façade is articulated to provide relief from the mass of the building.
- The windows will be trimmed and quality detailing will reflect the materials of the building, predominantly board-formed concrete, vertical board and batten siding painted, horizontal siding (wide and narrow), and composition shingle roofing.
- The building materials and colors reflect the Community Center which illustrates the blend of natural materials and colors which blend into the natural environment.

Forty-four trees are proposed for removal in order to develop the Project, including 20 native coast live oaks and 21 ornamental trees. Project landscaping would include a mix of natural and ornamental plantings. The hillside behind and around the housing building would mimic a natural Marin hillside with clusters of oaks and other native wildflower seed mix with plantings such as ceanothus and other native species. The streetscape would include ornamental grasses and shrubs along Hamilton Drive and would transition to a more formal street pattern in front of the housing building with ginkos, olive trees, and ornamental plantings. Refer to Section 4, Project Description, for a more detailed description of the Project characteristics and Project site plans.

5.1.5 Discussion of Impacts

a) Would the project have a substantial adverse effect on a scenic vista?

IMPACT ANALYSIS

Housing Site

Development of up to 45-50 multifamily residential units on the Housing Site was contemplated in the Housing Element Update and analyzed in the HEU SEIR. The HEU SEIR analyzed the impacts of developing single- and multifamily housing on proposed housing sites in the City, including the Project site. The HEU SEIR determined that, while abundant views of scenic and visual resources would remain with the development of multi-family residences, physical change and associated alteration and potential blockage of views could occur. The City does not have any ordinances or regulations associated with protecting scenic vistas. The HEU SEIR concluded that implementation of the policies, and programs contained in the General Plan and Housing Element Update, along with continued compliance with applicable zoning district design requirements and the City's multi-family/mixed-use residential design guidelines would assist in mitigating the change in visual character resulting from implementation of the Housing Element Update. The HEU SEIR concluded that the impact to scenic vistas would be less than significant.

The Housing Element Update amended the land use designation of the Housing Site from Community Facility to Multi-Family Residential 2. The proposed Project would include rezoning the Housing Site from OA to RM-B, which would be consistent with the land use designation of Multi-Family Residential 2. As allowed by the State DBL, a building height waiver, a FAR waiver, and three concessions for reduced setbacks, parking stall dimensions, and private open space requirements are being proposed as part of the Project. Some proposed concessions and waivers, such as building height, FAR, and reduced setbacks, may degrade the quality of scenic views slightly more than was anticipated by the HEU SEIR. However, the proposed increase in allowable building height from three to four stories, increased allowable FAR from 0.5 to .85, and one-to-two-foot reduced setbacks would not constitute a substantial increase in degradation of scenic vistas surrounding the Project site and the City does not have any ordinances or regulations associated with protecting scenic vistas. Further, there are no City-designated scenic vistas in the area of the Project site. The Project would comply with all other design requirements of the RM-B zoning district. Therefore, the impact of the proposed Project activities on the Housing Site would be less than significant.

PSB Site

The proposed Project would reconfigure the PSB parking lot into a Lot A and Lot B in order to maintain public parking spaces for visitors of Hauke and Bayfront Parks. The Project would also relocate the existing public restroom on the Housing Site to the PSB Site. Similar to Project construction work on the Housing Site, views of the PSB Site from Hauke and Bayfront Parks, as well as Roque Moraes Drive, would be temporarily degraded during construction due to the use of heavy construction equipment and signage. This impact would be only temporary and would also occur in already developed areas, and therefore it would be less than significant. During operation, development on the PSB Site would not have an adverse effect on a scenic vista. The area around the City's PSB Site is already developed as a parking lot, and therefore the proposed Project activities on the PSB Site would not cause a significant change in existing view of the PSB Site from Hauke and Bayfront Park or from Roque Moraes Drive. In addition, Project work at the

PSB Site would be contained within the existing footprint of the PSB Site. Therefore, the impact of proposed Project activities on the PSB Site would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not have a substantial adverse effect on a scenic vista. The impact would be **less than significant**.

b) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

IMPACT ANALYSIS

The HEU SEIR analyzed visual impacts of developing residences at all proposed housing sites included in the Housing Element Update, based upon the density and height allowed by the proposed zoning. Development of the Housing Site was analyzed in the HEU SEIR at the density allowed by the proposed RM-B zoning designation as a conservative estimate of the impacts of the HEU. The HEU SEIR analyzed the development of housing units at the Housing Site under the RM-B zoning district design standards, which allow maximum building heights up to three stories. The HEU SEIR concluded that development/redevelopment of the proposed housing sites identified in the Housing Element Update could be taller and denser than most, if not all, existing adjacent development; however, implementation of goals, policies, and programs contained in the General Plan and Housing Element Update, along with compliance with applicable zoning district and adopted residential design guidelines would be required for all future development at each of the proposed housing sites. Adherence with these local policies and programs were concluded in the HEU SEIR to reduce Housing Element Update impacts on visual character and quality to a less-than-significant level.

Development of up to 45-50 multifamily residential units at the Housing Site, which is located in an urbanized area, was analyzed at a programmatic level in the HEU SEIR. The HEU SEIR analyzed the impact of constructing a maximum three-story building on the Housing Site, as is allowed by the RM-B zoning district. As a 100 percent affordable housing project, the proposed Project is eligible for concessions and waivers for development standards pursuant to the State DBL. As such, the Project proposes a waiver for building height standards in order to construct a four-story building on the Project site, which is one story over the maximum building height allowed by the RM-B zoning district. In addition, the Project is requesting a FAR waiver to increase the maximum FAR over what is allowed by the RM-B zoning district, from 0.5 to 0.85. Assuming these waivers are granted, the Project would be taller and denser than allowed by the RM-B zoning district, which is a project-level impact that was not analyzed in the HEU SEIR. Given this, a project-level impact analysis is provided in the following paragraphs.

Construction

Construction of the Project in an urbanized area would temporarily degrade the existing visual character of the Housing Site and PSB Site due to the use of trucks and heavy machinery. The Project site is visible from various public areas including but not limited to Hauke Park and public

streets and therefore, public views of the Project site would be degraded during Project construction. Construction is anticipated to last for 21 months and therefore the impact of construction activities on public views would be temporary and less than significant.

Operation

As part of the proposed Project, the Housing Site would be rezoned to RM-B, which is consistent with the MFR-2 land use designation. The MFR-2 land use designation permits development up to 29 DU per acre, and the RM-B zoning district permits densities up to 15 DU per acre. As a 100 percent affordable housing development, the Project is eligible for additional density bonus units up to 80 percent of the proposed low-income units, and therefore the Project qualifies for 39 additional density bonus units. Approximately 50 units are being proposed on the 1.75-acre Housing Site (approximately 28.6 DU per acre), which is consistent with the land use designation and zoning district.

A building height waiver, a FAR waiver, and three concessions for reduced setbacks, parking stall dimensions, and private open space requirements are being requested for the proposed housing building. If approved, the building height waiver and FAR waiver would increase the height and density of the proposed housing building over what is allowed by the RM-B district. The Project site is surrounded by Hauke Park to the west, the PSB to the south, and residential neighborhoods to the north and east. The proposed housing building would be constructed against a hillside on the western side of Roque Moraes Drive. Due to the topography of the Housing Site, the mass and height of the housing building would be substantially obstructed from views from public streets to the north and east. In addition, public views of Pickleweed Inlet, Richardson Bay, and adjacent open space areas (including Mount Tamalpais) would not be completely obstructed by the proposed Project given its construction against the hillside and other intervening buildings and vegetation that limit some of these views to the public. Therefore, although the proposed housing building would be taller and denser than other buildings in the area, it would not significantly impact visual character or the quality of public views. Aside from these concessions and waivers, the Project would comply with all other design standards for the applicable zoning district and land use designation. During operation, the PSB Site would appear similar to existing conditions because the Project work would be contained within the existing site footprint, which is already developed as a parking lot. No significant impact to the visual character of the PSB Site would occur. All proposed development on the PSB Site would be consistent with applicable zoning regulations governing scenic quality. The impact of the Project related to visual character and quality of public views, and conflicts with zoning and other regulations governing scenic quality, would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project is in an urbanized area would not conflict with applicable zoning and other regulations governing scenic quality. The impact would be **less than significant**.

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

IMPACT ANALYSIS

The HEU SEIR concluded that buildout of the Housing Element Update could introduce new sources of light and glare, including night lighting for buildings and security lighting. The HEU SEIR identified that proposed housing sites would be located in Mill Valley's existing residential neighborhoods and downtown core with similar sources of light in the surrounding areas, and would also be subject to General Plan policies LU-1 and LU-4, as well as Housing Element Update policy 4.1 and programs 18 and 22a. These policies would ensure implementation of the City's resident development standards related to lighting, "Good Neighbor Policy," lighting standards established in the City's 2016 Multi-Family and Mixed Use Development Standards, and the City's Design Review process as outlined in the MVMC Section 20.66. These standards all serve to minimize light pollution, respect privacy, and ensure safe nighttime conditions. The HEU SEIR concluded that implementation of the standards described above would ensure that development facilitated by the Housing Element Update would have a less than significant impact related to light and glare.

Development of up to 45 to 50 multifamily residential units on the Housing Site was analyzed in the HEU SEIR. The proposed Project would comply with all applicable local plans, policies, and standards related to light and glare. No concessions or waivers related to light and glare are being requested as part of the proposed Project. The proposed housing building would include building materials and colors similar to those of the Mill Valley Community Center, which illustrates the mix of natural materials and colors that blend into the natural environment. New sources of lighting on the PSB Site would be limited to lights around the public restroom facility and parking lot. Therefore, no significant changes to light and glare would occur on the PSB Site. The proposed Project would not introduce a new light and glare impact that was not thoroughly analyzed by the HEU SEIR. The impact of the Project related to light and glare would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area. The impact would be **less than significant**.

5.1.6 Cumulative Impacts

The HEU SEIR evaluated the cumulative impacts of implementing the Housing Element Update in combination with buildout of the General Plan. The HEU SEIR concluded that implementation of the Housing Element Update would result in development that may not be consistent with the visual quality and character of surrounding development due to the rezoning of proposed housing sites that would increase the allowable maximum permitted height. However, the HEU SEIR concluded that with required adherence to goals and policies in the General Plan and Housing Element Update and the city's other design requirements discussed throughout this section, the impacts of the Housing Element Update to visual resources would not be cumulatively considerable.

The HEU SEIR asserted that projects facilitated by implementation of the Housing Element Update would be required to comply with General Plan policies LU-1 and LU-4 and Housing Element Update policy 4.1 and programs 18 and 22a, which ensure implementation of the City's resident development standards related to lighting and the City's "Good Neighbor Policy." In addition, all future housing projects would be subject to lighting standards established in either the City's adopted residential design guidelines as well as the City's Design Review process as outlined in the MVMC Section 20.66. Compliance with these local plans, policies, and ordinances regarding light and glare would ensure that impacts of the Housing Element Update would not be cumulatively considerable. As the increased density associated with the Project was anticipated by and analyzed in the HEU SEIR, the Project would not introduce new cumulatively considerable impacts that were not analyzed in the HEU SEIR.

5.2 Air Quality

5.2.1 Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts regarding air quality. The analysis in this section evaluates whether the Project would conflict with an applicable air quality plan, result in a cumulatively considerable increase in criteria pollutants, expose sensitive receptors to substantial pollutant concentrations, or result in other emissions that would affect a substantial number of people. This section includes an analysis of potential impacts from exposure to dust from naturally occurring asbestos (NOA) in rock on the Project site that could be generated during grading and other ground-disturbing activities during Project construction. A summary of applicable regulations is also provided. In addition, the potential cumulative impacts of the Project in conjunction with other Housing Element Update sites in the City are evaluated.

5.2.2 Environmental Setting

The City is located within the San Francisco Bay Area Air Basin (SFBAAB). Some air basins have natural characteristics that limit the ability of natural processes to either dilute or transport air pollutants. The major determinants of air pollution transport and dilution are climatic and topographic factors such as wind, atmospheric stability, terrain that influences air movement, and sunshine. Wind and terrain can combine to transport pollutants away from upwind areas, while solar energy can chemically transform pollutants in the air to create secondary photochemical pollutants such as ozone. The following discussion provides an overview of the environmental setting regarding air quality in the SFBAAB.

AMBIENT AIR QUALITY AND CLIMATE

The SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns. The Coast Range splits resulting in a western coast gap, Golden Gate, and an eastern coast gap, Carquinez Strait, which allow air to flow in and out of the SFBAAB and the Central Valley to the east. The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high-pressure cell is centered over the northeastern Pacific Ocean resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below to the surface because of the northwesterly flow produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold-water band resulting in condensation and the presence of fog and stratus clouds along the Northern California coast.

The San Francisco Bay Area has a Mediterranean climate characterized by wet winters and dry summers. During the summer, the high-pressure cell generally keeps storms from affecting the California coast. During the winter, the Pacific high-pressure cell weakens, resulting in increased precipitation and the occurrence of storms. The highest air pollutant concentrations in the Bay Area generally occur during inversions, when a surface layer of cooler air becomes trapped beneath a layer of warmer air. An inversion reduces the amount of vertical mixing and dilution of air pollutants in the cooler air near the surface.

The City is located in the southern part of Marin County, which is bounded on the west by the Pacific Ocean, on the east by San Pablo Bay, on the south by the Golden Gate, and on the north

by the Petaluma Gap. In southern Marin, the distance from the ocean is short and elevations are lower, resulting in higher incidence of maritime air in that area. The prevailing wind directions throughout Marin County are generally from the northwest. The temperatures of cities next to the Bay are moderated by the cooling effect of the Bay in the summer and the warming effect of the Bay in the winter.

CRITERIA AIR POLLUTANTS AND PRECURSORS AND THEIR EFFECTS ON HUMAN HEALTH

The six most common and widespread air pollutants of concern, or "criteria air pollutants," are ground-level ozone, nitrogen dioxide, particulate matter, carbon monoxide, sulfur dioxide, and lead. In addition, reactive organic gases are a key contributor to the criteria pollutants because they react with other substances to form ground-level ozone. The common properties, sources, and related health and environmental effects of these pollutants are summarized in Table 5.2-1.

Health effects of criteria air pollutants include, but are not limited to, asthma, bronchitis, chest pain, coughing, throat irritation, and airway inflammation. Currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's criteria air pollutant emissions and specific human health impacts. Consequently, the Bay Area Air Quality Management District's (BAAQMD) thresholds of significance for criteria air pollutants are not intended to address regional impacts but address localized human health impacts that may result from an individual project's criteria air pollutant emissions.

Ozone

Ground-level ozone (O_3) is created by complex chemical reactions between nitrogen oxides and volatile organic compounds in the presence of sunlight. Since ground-level O_3 is not emitted directly into the atmosphere, but is formed because of photochemical reactions, it is considered a secondary pollutant.

O_3 is a strong irritant that attacks the respiratory system, leading to the damage of lung tissue. Asthma, bronchitis, and other respiratory ailments, as well as cardiovascular diseases, are aggravated by exposure to O_3. A healthy person exposed to high concentrations may become nauseated or dizzy, may develop a headache or cough, or may experience a burning sensation in the chest. Research has shown that exposure to O_3 damages the alveoli (the individual air sacs in the lung where the exchange of oxygen and carbon dioxide between the air and blood takes place). Research has shown that O_3 also damages vegetation.

Table 5.2-1. Criteria Air Pollutants

POLLUTANT	PROPERTIES	MAJOR SOURCES	RELATED HEALTH & ENVIRONMENTAL EFFECTS
Ozone	Ground-level ozone is not emitted directly into the air. It results from chemical reactions between nitrogen oxides and volatile organic compounds in presence of sunlight.	• Automobiles • Industrial facilities • Gasoline vapors • Chemical solvents • Electric utilities	• Chest pain, coughing, throat irritation, and airway inflammation • Worsens bronchitis, emphysema, and asthma • Affects sensitive vegetation and ecosystems
Nitrogen Dioxide	Reddish-brown gas formed during combustion of fuel. Nitrogen dioxide is a part of a group of highly reactive gases known as nitrogen oxides.	• Combustion of fuel • Automobiles • Power plant • Off-road equipment	• Irritate respiratory system / increase respiratory infections • Development of asthma • Forms acid rain – harms sensitive ecosystems • Creates hazy air • Contributes to nutrient pollution in coastal waters
Respirable and Fine Particulate Matter	Mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, soot, dirt, or smoke can be seen with the naked eye. Others are so small that they can only be detected with an electron microscope.	• Automobiles • Power Plants • Construction sites • Tilled farm fields • Unpaved roads • Smokestacks	• Aggravated asthma • Irritation of the airways, coughing, and difficulty breathing • Decreased lung function • Premature death • Reduced visibility
Carbon Monoxide	Colorless, odorless gas released when something is burned.	• Fuel combustion • Industrial processes • Highly congested traffic	Chest pain for those with heart disease Vision problems Dizziness, unconsciousness, and death (at high levels)
Sulfur Dioxide	Colorless acid gas with a pungent odor formed during combustion of fuel. In the entire group of sulfur oxides, sulfur dioxide is the	• Fuel combustion • Industrial processes • Locomotives, ships, and other heavy equipment • Volcanoes	• Makes breathing difficult • Worsens asthma • Contributes to acid rain • Reduced visibility • Damages statues and monuments

POLLUTANT	PROPERTIES	MAJOR SOURCES	RELATED HEALTH & ENVIRONMENTAL EFFECTS
	component of the greatest concern.		
Lead	Lead is a naturally occurring element found in small amounts in the earth's crust.	• Ore and metal processing • Leaded aviation fuel • Waste Incinerators • Utilities • Lead-acid battery manufacturers	• High blood pressure and heart disease in adults • Behavioral problems, learning deficits, and lowered IQ in infants and young children • Decreased plant and animal growth • Neurological effects in vertebrates

Source: USEPA 2023

If project-generated concentrations of reactive organic gases and/or nitrogen oxides exceed the applicable thresholds of significance, concentrations of ground-level O_3 resulting from these pollutants could potentially result in significant adverse human health impacts.

Reactive Organic Gases

Reactive organic gases (ROGs) are emitted from a variety of sources, including liquid and solid fuel combustion, evaporation of organic solvents, and waste disposal. ROGs are any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, as well as a list of compounds specifically excluded by the California Air Resources Board or the United States Environmental Protection Agency.

Nitrogen Dioxide

Nitrogen dioxide (NO_2) primarily gets in the air from the combustion of fuel in cars, trucks and buses, power plants, and off-road equipment. NO_2 is a reddish-brown gas that can irritate the lungs and can cause breathing difficulties at high concentrations. NO_2 is one of a group of highly reactive gases known as nitrogen oxides (NO_X). NO_2 is used as the indicator for the larger group of NO_X, which also includes nitrous acid and nitric acid. NO_X is a major contributor to ozone formation. NO_X also contributes to the formation of particulate matter (see discussion below).

Particulate Matter

Particulate matter refers to a wide range of solid or liquid particles in the atmosphere, including smoke, dust, aerosols, and metallic oxides. Particulate matter with diameter of 10 micrometers or less is referred to as PM_{10}. $PM_{2.5}$ includes a subgroup of finer particles that have a diameter of 2.5 micrometers or less. Particulate matter is directly emitted to the atmosphere as a byproduct of fuel combustion, wind erosion of soil and unpaved roads, and from construction or agricultural operations. Small particles are also created in the atmosphere through chemical reactions. Approximately 64 percent of fugitive dust is respirable particulate matter. Minimal grading typically generates about 10 pounds per day per acre on average while excavation and earthmoving activities typically generate about 38 pounds per day per acre.

Although particles greater than 10 micrometers in diameter can cause irritation in the nose, throat, and bronchial tubes, natural mechanisms remove most of these particles. Particles less than 10 micrometers in diameter are able to pass through the body's natural defenses and the mucous membranes of the upper respiratory tract and enter into the lungs. The particles can damage the alveoli. The particles may also carry carcinogens and other toxic compounds, which can adhere to the particle surfaces and enter the lungs.

Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless gas that is released when fuel is burned. The greatest sources of CO to outdoor air are cars, trucks and other vehicles or machinery that burn fossil fuels. A variety of household items such as gas space heaters, furnaces, fireplaces, lanterns, gas stoves, grills, and lawn equipment also release CO and can affect air quality indoors. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease or anemia, as well as fetuses. Even healthy people exposed to high CO concentrations can experience headaches, dizziness, fatigue, unconsciousness, and even death.

Sulfur Dioxide

Within the larger group of gaseous sulfur oxides (SO_X), sulfur dioxide (SO_2) is the component of greatest concern and is used as the indicator for the group. Emissions that lead to high concentrations of SO_2 generally also lead to the formation of other SO_X. SO_2 is a colorless acid gas with a pungent odor. SO_2 is produced by the combustion of sulfur-containing fuels, such as oil, coal and diesel. SO2 dissolves in water vapor to form acid and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and their environment. Health effects of SO_2 include damage to lung tissue and increased risk of acute and chronic respiratory disease.

Lead

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. Thirty years ago, mobile sources were the main contributor to ambient Pb concentrations in the air. Pb was phased out of on-road vehicle gasoline between 1975 and 1996. Consequently, levels of Pb in the air decreased 98 percent between 1980 and 2014 (USEPA 203) As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions. The highest levels of Pb in air are generally found near Pb smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.

Sources of Criteria Pollutants

On-road Vehicles

The gasoline and diesel fuels used in most on-road vehicles are mixtures of hydrocarbons, compounds which contain hydrogen and carbon atoms. Hydrocarbon emissions result when fuel molecules in the engine do not burn or burn only partially. Hydrocarbon pollutants also escape into the air through fuel evaporation. On-road cars, trucks, motorcycles, and buses are a major source of criteria pollutants. Approximately 57 percent of ROG emissions and 63 percent of NO_X emissions in the air basin are attributed to vehicular traffic. Off-road mobile sources contribute approximately 9 percent of ROG emissions and 18 percent of NO_X emissions (BAAQMD 2017). Cars and trucks produce air pollution throughout their life, including pollution emitted during

vehicle operation, refueling, manufacturing, and disposal. Additional emissions are associated with the refining and distribution of vehicle fuel.

Off-road Construction, Industrial, and Agricultural Vehicles

Emissions generated during construction are "short-term" in the sense that they would be limited to periods of site development and construction. Agricultural emissions are frequently seasonal or occur sporadically. Off-road vehicle emissions are typically generated by the use of heavy equipment and the transport of materials. Emissions consist primarily of reactive organic gases, nitrogen oxides, suspended particulate matter, and carbon monoxide. Emissions of reactive organic gases, nitrogen oxides, and carbon monoxide are generated primarily by the operation of gas and diesel-powered motor vehicles. Calculating ROG and NO_X emissions from typical construction equipment is not necessary in air quality analysis of projects because temporary emissions of these ozone precursors have been accommodated in state- and federally-required air quality plans. Construction equipment exhaust PM_{10} emissions greater than 82 pounds per day or an average of 10 tons per year are considered significant.

Construction, Industrial, and Agricultural Dust

Suspended particulate matter emissions are generated primarily by wind erosion of exposed graded or tilled surfaces. Construction- and agricultural-generated emissions vary substantially from day to day depending on the level of activity, the specific construction equipment used, and weather conditions. Construction- and agricultural-related emissions can cause a substantial increase in localized concentrations of PM_{10}, for which the air basin is currently in nonattainment. Particulate emissions from construction and agricultural activities can lead to adverse health effects, as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces.

The BAAQMD has not established a threshold for fugitive dust emissions from grading and other construction activities, but rather relies on best management practices to reduce dust emissions at all construction sites. The initial phases of construction generate the highest emissions of PM_{10} from fugitive dust because initial site preparation activities typically involve the most intense grading. During other construction phases, additional materials are typically imported to a site including base rock, select soil/gravel for trenches and building pads, and asphalt for paving. Without controls, dust from construction would be transported off-site via wind erosion of unpaved surfaces or through soils tracked onto paved roads where PM_{10} enters the air through the motion of passing cars and trucks.

Area Sources

Area sources are fixed or local pollution sources that are not issued individual operating permits by the BAAQMD. Area sources include fuel combustion from space and water heating, landscape maintenance equipment, and fireplaces/stoves, evaporative emissions from asphalt paving activities, architectural coatings, and consumer products (e.g., adhesives, cleaners, hair spray). Area sources also include those criteria emissions from stationary sources that do not fall under air district permitting.

Stationary Sources

Stationary sources are primarily considered a source of toxic air contaminants, but many stationary sources do emit particulate matter, which is classified as a criteria pollutant as well. Many of the stationary sources emitting significant volumes of particulate matter are involved in industrial processes such as quarrying or processing of earth materials.

TOXIC AIR CONTAMINANTS AND THEIR EFFECTS ON HUMAN HEALTH

Toxic air contaminants ("TACs") are pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations. Potential human health effects of toxic air contaminants include birth defects, neurological damage, cancer, and death. There are hundreds of different types of toxic air contaminants with varying degrees of toxicity. Individual toxic air contaminants vary greatly in the health risk they present. At a given level of exposure, one toxic air contaminant may pose a hazard that is many times greater than another. TACs can be classified as either carcinogens or non-carcinogens.

Toxic air contaminants are defined in California Health and Safety Code section 39655. Based on the California Health and Safety Code definition, the State establishes a list of toxic air contaminants in California Code of Regulations section 93000. The list was most recently revised in 2007 and includes the following substances:

- Benzene (C6H6);
- Ethylene Dibromide (BrCH2CH2Br, 1,2-dibromoethane);
- Ethylene Dichloride (ClCH2CH2Cl, 1,2-dichloroethane);
- Hexavalent chromium (Cr (VI));
- Asbestos [asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), tremolite, actinolite, and anthophyllite];
- Dibenzo-p-dioxins and Dibenzofurans chlorinated in the 2, 3, 7 and 8 positions and containing 4, 5, 6 or 7 chlorine atoms;
- Cadmium (metallic cadmium and cadmium compounds);
- Carbon Tetrachloride (CCl4, tetrachloromethane);
- Ethylene Oxide (1,2-epoxyethane);
- Methylene Chloride (CH2Cl2, Dichloromethane);
- Trichloroethylene (CCl2CHCl, Trichloroethene);
- Chloroform (CHCl3);
- Vinyl chloride (C2H3Cl, Chloroethylene);
- Inorganic Arsenic;
- Nickel (metallic nickel and inorganic nickel compounds);
- Perchloroethylene ($C2Cl_4$, Tetrachloroethylene);
- Formaldehyde (HCHO);
- 1,3-Butadiene (C_4H_6);
- Inorganic Lead;
- Particulate Emissions from Diesel-Fueled Engines; and
- Environmental Tobacco Smoke.

California Code of Regulations section 93001 establishes a much longer list of "hazardous air pollutants," derived from the Clean Air Act. Some of these substances are duplicative of the section 93000 list. Two types of toxic air contaminants are more common or more relevant to the Project site: diesel particulate matter and asbestos.

Diesel Emissions

Diesel exhaust is especially common during the grading stage of construction (when most of the heavy equipment is used), and adjacent to heavily trafficked roadways where diesel trucks are common. Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs. Diesel engines emit a complex mix of pollutants including nitrogen oxides, particulate matter, and TACs. The most visible constituents of diesel exhaust are very small carbon particles or soot, known as diesel particulate matter (DPM). Diesel exhaust also contains over 40 cancer-causing substances, most of which are readily adsorbed on the soot particles. Among the TACs contained in diesel exhaust are dioxin, lead, polycyclic organic matter, and acrolein. Diesel engine emissions are responsible for about 70 percent of California's estimated cancer risk attributable to TACs (Bay Area Air Quality Management District 2022b). As a significant fraction of particulate pollution, diesel particulate matter contributes to numerous health impacts, including increased hospital admissions, particularly for heart disease, but also for respiratory illness, and even premature death.

The EPA regulates diesel engine design and fuel composition at the federal level and has implemented a series of measures since 1993 to reduce nitrogen oxides and particulate emissions from off-road and highway diesel equipment. Before EPA began regulating sulfur in diesel, diesel fuel contained as much as 5,000 parts per million (ppm) of sulfur. In 2006, EPA introduced stringent regulations to lower the amount of sulfur in diesel fuels to 15 ppm. This fuel is known as ultra-low sulfur diesel. EPA's diesel standards target emissions from on-road (or highway) vehicles and non-road engines and equipment. Collectively, diesel standards reduce harmful emissions from both on-road and non-road diesel sources by more than 90 percent (United States Environmental Protection Agency 2021b).

EPA Tier 1 non-road diesel engine standards were introduced in 1996, Tier 2 in 2001, Tier 3 in 2006, with final Tier 4 in 2014 (DieselNet 2022). The California Air Resources Board held the first public workshop on the development of Tier 5 emissions standards that seek to further reduce NO_x and particulate matter in a 2028-2030 timeframe. Table 5.2-2 compares emissions standards for NO_x and particulate matter from non-road engine Tier 1 through Tier 4 for typical engine sizes.

Table 5.2-2. Typical Non-Road Engine Emissions Standards

ENGINE TIER AND YEAR INTRODUCED	NO_x EMISSIONS			PARTICULATE EMISSIONS		
	100-175 HP	175-300 HP	300-600 HP	100-175 HP	175-300 HP	300-600 HP
TIER 1 (1996)	6.90	6.90	6.90	--	0.40	0.40
TIER 2 (2001)	--2	--2	--2	0.22	0.15	0.15
TIER 3 (2006)	--2	--2	--2	--†3	--†3	--†3
TIER 4 (2014)	0.30	0.30	0.30	0.015	0.015	0.015

Source: DieselNet 2022
Notes:
Expressed in g/bhp-hr, where g/bhp-hr stands for grams per brake horsepower-hour.
Tier 1 standards for NO_x remained in effect.
† - Not adopted, engines must meet Tier 2 PM standard.

As illustrated in the table, emissions for these pollutants have decreased significantly for construction equipment manufactured over the past 20 years, and especially for construction equipment manufactured in the past five years.

In California, non-road equipment fleets can retain older equipment, but fleets must meet averaged emissions limits. As of January 2018, new equipment for large and medium fleets must be Tier 3 or better; by January 2023 small fleets must meet the Tier 3 or better standard; and over time the older equipment must be fitted with particulate filters. Large and medium fleets have increasingly strict fleet compliance targets through 2023 and small fleets through 2029. A small fleet has total horsepower of 2,500 or less, and a medium fleet has total horsepower of between 2,500 and 5,000.

Owners or operators of portable engines and other types of equipment can register their units under the California Air Resources Board's (CARB) statewide Portable Equipment Registration Program in order to operate their equipment throughout California without having to obtain individual permits from local air districts (California Air Resources Board 2022b).

Asbestos

Asbestos handling and disposal are regulated by Federal and State law. Asbestos is found in several kinds of building materials. Asbestos is generally not harmful when asbestos-containing materials are left undisturbed, but when disturbed, microscopic fibers can be dislodged and remain in the air for long periods. If asbestos fibers are inhaled, they can become lodged in body tissues and pose a serious health threat, in particular lung disease.

Naturally occurring asbestos (NOA) has sometimes been used for unpaved gravel roads, landscaping, and fill. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. While it is present all over the state of California - in 42 of 58 counties - NOA can be found most abundantly in and around Humboldt County, in areas of San Benito and Monterey counties, and in western El Dorado County. Although Marin County is not identified by the EPA as an area of high risk for NOA exposures (Environmental Protection Agency 2022), as described in Section 5.5, Geology and Soils, NOA is present on the Project site in the form of serpentine rock substrate. When rock containing asbestos is broken or crushed, asbestos fibers may be released and become airborne. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma, and asbestosis. Earthwork activities during construction work at sites containing NOA could potentially disturb NOA rock and release asbestos fibers into the air if not properly managed.

CARB has adopted the Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, which requires construction and grading projects to implement best available dust mitigation measures where NOA rock is likely to be encountered. CARB defines "asbestos-containing material" as any material that has an asbestos content of 0.25 percent or greater (confirmed with an approved asbestos bulk test method). In accordance with CCR, Title 17, Section 93105, construction projects greater than one acre in size must prepare and submit an Asbestos Dust Mitigation Plan (ADMP) to BAAQMD for review and approval. The ADMP must indicate how construction and grading operations will minimize emissions and ensure that no equipment or operation will emit visible dust across the property line.

SENSITIVE RECEPTORS

Although air pollution can affect all segments of the population, certain groups are more susceptible to its adverse effects than others. Children, the elderly, and the chronically or acutely ill are the most sensitive population groups. These sensitive receptors are commonly associated with specific land uses such as residential areas, schools, retirement homes, and hospitals. In addition, certain air pollutants, such as carbon monoxide, only have significant effects if they directly affect a sensitive population.

The CARB's Air Quality and Land Use Handbook: *A Community Health Perspective* (2005) (handbook) encourages local land use agencies to consider the risks from air pollution prior to making decisions that approve the siting of new sensitive receptors (e.g., schools, homes, or daycare centers) near sources of concentrated air pollution. A supplement to the handbook, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways*, was adopted by CARB in 2017 and provides guidance on methods to reduce exposures to mobile-source emissions through congestion management and site design that improves emissions dispersion. The CARB also has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of diesel particulate matter. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of diesel particulate matter emissions from California highways, and a number of others apply to off-road vehicles and construction equipment. The CARB and BAAQMD recommend that local planning agencies consider proximity of sensitive receptors to high-volume roadways. Both agencies make recommendations regarding the siting of new sensitive land uses near freeways, truck distribution centers, dry cleaners, gasoline dispensing stations, and other air pollution sources including the following locations:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day (the BAAQMD defines high-volume roadways as those with more than an average of 10,000 vehicles per day);
- Within 1,000 feet of a major service and maintenance rail yard, including distribution centers with 100 or more daily truck trips or 40 daily truck trips that use refrigeration units;
- Within 300 feet of any dry-cleaning operation (for operations with two or more machines, provide 500 feet); and
- Within 50-300 feet of a large gas station.

The BAAQMD also recommends local agencies consider the siting of new sensitive land uses within the district's screening distance of 1,000 feet of permitted stationary sources that exceed the air district's health risk standards. Siting of new sensitive land uses within these recommendation distances may be possible, but only after site-specific studies are conducted to identify site- and project-specific health risks. The BAAQMD and CARB recommendations acknowledge that land use agencies have to balance other siting considerations such as housing and transportation needs, economic development priorities, and other quality of life issues.

SOURCES OF TOXIC AIR CONTAMINANTS

Construction Emissions

Emissions generated during construction are "short-term" in the sense that they would be limited to the actual periods of site development and construction. Short-term construction emissions are typically generated by the use of heavy equipment, the transport of materials, and

construction employee commute trips. Construction-related emissions consist primarily of volatile organic compounds, nitrogen oxides, diesel particulate matter, suspended particulate matter, and carbon monoxide. Emissions of volatile organic compounds, nitrogen oxides, DPM, and carbon monoxide are generated primarily by the operation of gas and diesel-powered motor vehicles, asphalt paving activities, and the application of architectural coatings. Suspended particulate matter emissions are generated primarily by wind erosion of exposed graded surfaces.

Permitted Stationary Sources

The BAAQMD issues permits for stationary equipment that would result in the emission of toxic air contaminants and maintains a database of these sources. Generally, if a sensitive land use is proposed within 1,000 feet of an existing source, or if a new source is proposed within 1,000 feet of a sensitive receptor, the potential effects must be considered. Permitted stationary sources within the City of Mill Valley include generators, gasoline stations, and several other uses. Based on the BAAQMD's 2023 permitted stationary source risk map, there is one existing stationary source within 1,000 feet of the Project site – a generator on the southern portion of the PSB Site that is owned by the City of Mill Valley (Facility 19147).

High Traffic Roadways

Unlike industrial or stationary sources of air pollution, siting of new sensitive receptors does not require air quality permits or approval by air districts but could increase risks of air pollution-related health problems. The risks of exposure to diesel exhaust and potential health effects resulting from prolonged exposure are greater near high-volume freeways. On-road diesel-fueled vehicles contribute about 26 percent of statewide diesel particulate matter emissions, and on a typical urban freeway (truck traffic of 10,000-20,000 per day), diesel particulate matter represents about 70 percent of the potential cancer risk from the vehicle traffic.

The BAAQMD recommends an assessment of potential exposures to mobile-source TACs that can increase cancer risks when sensitive receptors are proposed to be located within 1,000 feet of a high-volume freeway or roadway. For Mill Valley the air district identifies U.S. Highway 101 as the only roadway with greater than 10,000 Average Annual Daily Traffic (Bay Area Air Quality Management District 2022c). U.S. Highway 101 is located along the eastern city boundary of Mill Valley and, according to information on the Caltrans Traffic Census webpage, in 2020 carried between 146,000 and 159,000 trips per day on average, with as many as 123,000 trips per day during the peak month. In 2017, prior to the COVID pandemic, U.S. Highway 101 carried between 168,000 and 194,000 average trips per day (Caltrans 2022). The Project site is not located within 1,000 feet of U.S. Highway 101.

AIR QUALITY STANDARDS

Both the U.S. Environmental Protection Agency and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants that represent safe levels that avoid specific adverse health effects associated with each pollutant.

Federal and State Standards for Air Pollutants

Ambient air quality is described in terms of compliance with the federal and state standards. Both the federal and state governments have developed ambient air quality standards for the most prevalent pollutants, which include ozone, carbon monoxide, nitrogen dioxide, sulfur

dioxide, suspended particulate matter, and fine particulate matter. The state standards generally have lower thresholds than the federal standards. When thresholds are exceeded at regional monitoring stations, an "attainment plan" must be prepared that outlines how an air district will achieve compliance. Generally, these plans must provide for district- wide emission reductions of five percent per year averaged over consecutive three-year periods. Table 5.2-3 lists federal and state ambient air quality standards for common air pollutants.

AIR BASIN ATTAINMENT STATUS

Air pollutants of concern in the air basin are ozone, particulate matter (PM_{10} and $PM_{2.5}$), and toxic air contaminants (BAAQMD 2017). The CARB is required to designate areas of the state as attainment, non-attainment, or unclassified regarding its compliance with state standards for criteria air pollutants. An "attainment" designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area.

A "non-attainment" designation indicates that a pollutant concentration violated the standard at least once, excluding an "unclassified" designation that signifies available data does not support either an attainment or non-attainment status. A "non-attainment transitional" status is a subcategory of the nonattainment designation and signifies that the area is close to attaining the standard for that pollutant. The California Clean Air Act divides districts into moderate, serious, and severe air pollution non-attainment categories, with increasingly stringent control requirements mandated for each category. Table 5.2-4 identifies the current status within the air basin for each criteria pollutant.

Table 5.2-3. Federal and State Ambient Air Quality Standards

POLLUTANT	AVERAGING TIME	NATIONAL STANDARDS[1]				CALIFORNIA STANDARDS[2]	
		Primary[3, 4]		Secondary[3, 5]		Concentration[3]	
		ppm	µg/m3	ppm	µg/m3	ppm	µg/m3
O3[6]	1 Hour	-	-	-	-	0.09	180
	8 Hour	0.07	137	0.07	137	0.07	137
PM10[7]	24 Hour	-	150	-	150	-	50
	Annual	-	-	-	-	-	20
PM2.5[7]	24 Hour	-	35	-	35	-	-
	Annual	-	12	-	15	-	12
CO	8 Hour	9	10	-	-	9.0	10
	1 Hour	35	40	-	-	20.0	23
NO2[8]	Annual	0.053	100	0.053	100	0.03	57
	1 Hour	0.10	188	-	-	0.18	339
SO2[9]	Annual	0.03	See note 9	-	-	-	-
	24 Hour	0.14	See note 9	-	-	0.04	105

POLLUTANT	AVERAGING TIME	NATIONAL STANDARDS[1]				CALIFORNIA STANDARDS[2]	
		Primary[3, 4]		Secondary[3, 5]		Concentration[3]	
		ppm	µg/m3	ppm	µg/m3	ppm	µg/m3
	3 Hour	-	-	0.5	1,300	-	-
	1 Hour	0.075	196	-	-	0.25	655
Pb[10, 11]	30 Day Average	-	-	-	-	-	1.5
	Rolling 3-month Average	-	0.15	-	0.15	-	-
	Calendar Quarter	See note 10	1.5	See note 10	1.5	-	-
Visibility Reducing Particles[12]	8 Hour	No Federal Standards				See note 12	
Sulfates	24 Hour					-	25
Hydrogen Sulfide	1 Hour					0.03	42
Vinyl Chloride10	24 Hour					0.01	26

Source: CARB 2016
Notes:

1. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For $PM_{2.5}$, the 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 EPA for further clarification and current federal policies.
2. California standards for ozone, carbon monoxide, sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas (mg/m3).
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
5. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
6. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
7. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m3 to 12.0 µg/m3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
9. On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
10. The California Air Resources Board has identified lead and vinyl chloride as 'TACs' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
12. In 1989, the California Air Resources Board converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table 5.2-4. Air Basin Attainment Status Designations

POLLUTANT	STATE	FEDERAL
Ozone (O_3)	Non-attainment	Non-attainment
Inhalable Particulates (PM_{10})	Non-attainment	Unclassified
Fine Particulates ($PM_{2.5}$)	Non-attainment	Non-attainment1
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead (Pb)	Attainment	-

Source: BAAQMD 2017

Note: On January 9, 2013, EPA issued a final rule to determine that the Bay Area attains the 24-hour $PM_{2.5}$ national standard. This EPA rule suspends key State Implementation Plan requirements as long as monitoring data continues to show that the air district attains the standard. Despite this EPA action, the Bay Area will continue to be designated as "non-attainment" for the national 24-hour $PM_{2.5}$ standard until such time as the air district submits a "re- designation request" and a "maintenance plan" to EPA and EPA approves the proposed re-designation.

ODORS

Odor impacts could result from siting a new odor source near existing sensitive receptors. Odors are generally regarded as an annoyance rather than a health hazard, although some odorous substances can be harmful at higher concentrations. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

5.2.3 Regulatory Setting

FEDERAL

Clean Air Act

The Clean Air Act was enacted in 1970 and is the comprehensive federal law that regulates air emissions from stationary and mobile sources in the United States. The Clean Air Act authorizes the Environmental Protection Agency to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants.

STATE

California Air Resources Board

The California Air Resources Board (CARB) is tasked with protecting the public from the harmful effects of air pollution and developing programs and actions to combat climate change. CARB is the lead agency for State climate change programs and oversees all air pollution control efforts in California to attain and maintain health-based air quality standards.

LOCAL

Bay Area Air Quality Management District

California's 35 local Air Districts are responsible for regional air quality planning, monitoring, and stationary source and facility permitting. The BAAQMD regulates stationary sources of air pollution in the nine counties surrounding the San Francisco Bay, including Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara County, and the western portion of Solano and southern portion of Sonoma County. The BAAQMD also publishes guidelines for evaluating air quality impacts under CEQA. The most recent update to the BAAQMD CEQA Air Quality Guidelines was published in 2022.

2017 Clean Air Plan

In accordance with the California Clean Air Act, the BAAQMD is required to prepare and update an air quality plan that outlines measures by which both stationary, mobile, and area sources of pollutants can be controlled to achieve ambient air quality standards in areas designated as nonattainment. The BAAQMD adopted the 2017 Clean Air Plan (CAP): Spare the Air, Cool the Climate, in April 2017. The CAP is consistent with greenhouse gas (GHG) reduction targets adopted by the State of California and lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. To fulfill State ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emission of ozone precursors (reactive organic gases [ROGs] and nitrogen oxides [NOx]) and reduce transport of ozone and its precursors to neighboring air basins.

Mill Valley General Plan

The General Plan contains the following policies and programs related to air quality:

> **Policy CL.2 Carbon Offsets:** Offset carbon emissions through carbon credits or allowances, and through natural sequestration methods.
>
> **Program CL1-9:** Improve air quality by discouraging wood burning and providing incentives to replace existing inefficient wood-burning devices.

Policy CL.3 Monitoring: Establish a baseline and monitor the City and community contribution to greenhouse gas emissions.

5.2.4 Thresholds of Significance

Consistent with State CEQA Guidelines Appendix G Environmental Checklist, the project would have a significant impact if it would:

a. *Conflict with or obstruct implementation of the applicable air quality plan:*

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

c. *Expose sensitive receptors to substantial pollutant concentrations; or,*

d. *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

PROJECT DESIGN FEATURES

The Project would include the relocation of the existing electric vehicle (EV) charging stations from the proposed Housing Site to the PSB Site.

The Project would include measures to control construction-related fugitive dust emissions as recommended by the BAAQMD and required by State law. During Project construction, the contractor would implement a dust control program that includes the following measures which would be included in contract specifications for the Project:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per 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 15 miles per hour (mph).
- 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 5 minutes (as required by California Airborne Toxic Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). 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 mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency (City of Mill Valley) regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

5.2.5 Discussion of Impacts

a) Conflict with or obstruct implementation of the applicable air quality plan?

IMPACT ANALYSIS

The 2017 CAP includes 85 control measures to reduce ROG, NOx, PM_{10}, $PM_{2.5}$, TACs, and GHGs. Based on the BAAQMD's current CEQA Air Quality Guidelines, the following criteria should be considered to determine if a project would conflict with or obstruct implementation of the 2017 CAP:

- Does the project support the primary goals of the air quality plan?
- Does the project include applicable control measures from the air quality plan?
- Does the project disrupt or hinder implementation of any air quality plan control measures?

The BAAQMD's 2017 CAP is the applicable air quality plan for projects located in the SFBAAB. Consistency may be determined by evaluating whether the Project supports the primary goals of the 2017 CAP, including applicable control measures contained within the 2017 CAP, and would not disrupt or hinder the implementation of any 2017 CAP control measures. The primary goals of the 2017 CAP are the attainment of ambient air quality standards and reduction of population exposure to air pollutants for the protection of public health in the Bay Area. Because the Project would not result in any significant and unavoidable air quality impacts related to air pollutant emissions, ambient concentrations, or public exposures (see Impacts b through d, below, and *Greenhouse Gas Emissions in Section 4.8 of the Initial Study*), the Project supports the primary goals of the 2017 CAP.

The 2017 CAP includes control measures that aim to reduce air pollution and GHGs from stationary, area, and mobile sources. The control measures are organized into nine categories: stationary sources, transportation, buildings, energy, agriculture, natural and working lands, waste, water, and super-GHG pollutants (e.g., methane, black carbon, and fluorinated gases). As described in Table 5.2-5, the Project would be consistent with applicable control measures from the 2017 CAP.

According to the BAAQMD's CEQA Air Quality Guidelines, the Project would not conflict with or obstruct implementation of the applicable air quality plan, and the impact would be less than significant.

Table 5.2-5. Project Consistency with BAAQMD's 2017 CAP

CONTROL MEASURES	PROPOSED PROJECT CONSISTENCY
Stationary Source	**Not applicable**. The stationary source measures, which are designed to reduce emissions from stationary sources, are incorporated into rules adopted by the BAAQMD and then enforced by the BAAQMD's Permit and Inspection programs. Since the Project does not include any stationary sources, the stationary source control measures of the 2017 CAP are not applicable to the Project.

CONTROL MEASURES	PROPOSED PROJECT CONSISTENCY
Transportation	**Consistent.** The transportation control measures are designed to reduce vehicle trips, use, miles traveled, idling, or traffic congestion for the purpose of reducing vehicle emissions. As discussed in the Project-specific *Transportation Impact Assessment* prepared by Parisi Transportation Consulting (Appendix H), the Project would result in a less-than-significant transportation impact. Therefore, the Project design is consistent with the transportation measures of the 2017 CAP.
Energy	**Not applicable.** The energy control measures are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the Bay Area, as well as decreasing the carbon intensity of the electricity used by switching to less GHG-intensive fuel sources for electricity generation. Since these measures primarily apply to electrical utility providers, the energy control measures of the 2017 CAP are not applicable to the Project.
Buildings	**Consistent.** The BAAQMD has authority to regulate emissions from certain sources in buildings such as boilers and water heaters but has limited authority to regulate buildings themselves. Therefore, the building control measures focus on working with local governments that have authority over local building codes to facilitate adoption of best practices and policies to control GHG emissions. As discussed in Initial Study Section 4.6, Energy, the Project would be required to comply with state and locally mandated energy efficiency/conservation measures. Based on information provided by the applicant, the Project would include energy efficient mechanical systems, LED lighting throughout, and would be designed to exceed Title 24 requirements. In addition, the Project would include the installation of EV infrastructure. Therefore, the proposed Project would be consistent with the buildings control measures of the 2017 CAP.
Agriculture	**Not applicable.** The agriculture control measures are designed to primarily reduce emissions of methane. Since the Project does not include any agricultural activities, the agriculture control measures of the 2017 CAP are not applicable to the Project.
Natural and Working Lands	**Not applicable.** The control measures for the natural and working lands sector focus on increasing carbon sequestration on rangelands and wetlands, as well as encouraging local governments to adopt ordinances that promote urban-tree plantings. Since the Project would not disturb any rangelands or wetlands, the natural and working lands control measures of the 2017 CAP are not applicable to the Project.
Waste Management	**Consistent.** The waste management measures focus on reducing or capturing methane emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. The Project would comply with local requirements for waste management. Therefore, the Project would be consistent with the waste management control measures of the 2017 CAP.

CONTROL MEASURES	PROPOSED PROJECT CONSISTENCY
Water	**Not applicable.** The water control measures to reduce emissions from the water sector will reduce emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works (POTWs), and promoting the use of biogas recovery systems. Since these measures apply to POTWs and local government agencies (and not individual projects), the water control measures of the 2017 CAP are not applicable to the Project.
Super GHGs	**Not applicable.** The super-GHG control measures are designed to facilitate the adoption of best GHG control practices and policies through the BAAQMD and local government agencies. Since these measures do not apply to individual developments, the super-GHG control measures of the 2017 CAP are not applicable to the Project.

Source: BAAQMD 2019

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not conflict with or obstruct implementation of an applicable air quality plan. The impact would be **less than significant**.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

IMPACT ANALYSIS

The SFBAAB is designated as a nonattainment area for ozone, PM_{10}, and $PM_{2.5}$. Construction and operation of the Project would generate criteria pollutant emissions that could potentially impact regional air quality. The BAAQMD recommends using the most current version of the California Emissions Estimator Model (CalEEMod Version 2022.1) to estimate construction and operational emissions of pollutants from a project. CalEEMod uses widely accepted models for emission estimates combined with appropriate default data for a variety of land-use projects that can be used if site-specific information is not available. The default data (e.g., type and power of construction equipment) are supported by substantial evidence provided by regulatory agencies and a combination of Statewide and regional surveys of existing land uses. The primary input data used to estimate emissions associated with construction and operation of the Project are summarized in Table 5.2-6. A copy of the CalEEMod report for the Project, which summarizes the input parameters, assumptions, and findings, is provided in Appendix C.

Table 5.2-6. Summary of CalEEMod Land Use Input Parameters

LAND-USE TYPE	CALEEMOD LAND-USE TYPE	UNITS	UNIT AMOUNT
Residential Apartments	Apartments Mid Rise	Dwelling Units	50
		Square Feet	42,200
Parking Garage (Housing Site)	Enclosed Parking Structure	Spaces	63
		Square Feet	22,200
Office	General Office Building	Square Feet	1,600
Parking Lot (PSB Site)	Parking Lot	Space	90

Notes: Building square footage for residential land use includes residential area and common area. The enclosed parking structure building square footage was calculated by subtracting the residential and office areas from the total building area of 66,000 square feet.

Criteria Air Pollutants from Construction

Project construction activities would generate criteria air pollutant emissions that could potentially affect regional air quality. During construction, the primary pollutant emissions of concern would be ROG, NOx, PM_{10}, and $PM_{2.5}$ from the exhaust of off-road construction equipment and on-road construction vehicles related to worker vehicles, vendor trucks, and haul trucks. In addition, fugitive dust emissions of PM_{10} and $PM_{2.5}$ would be generated by soil disturbance and demolition activities, and fugitive ROG emissions would result from paving. Emissions of ROG, NOx, PM_{10}, and $PM_{2.5}$ during Project construction were estimated using the CalEEMod input parameters summarized in Table 5.2-6 and additional assumptions summarized in Table 5.2-7.

Table 5.2-7. Construction Assumptions for CalEEMod

CALEEMOD INPUT CATEGORY	CONSTRUCTION ASSUMPTIONS AND CHANGES TO DEFAULT DATA
Construction Phase	Project construction was assumed to begin in January 2025. Based on the size of a project, CalEEMod applies default assumptions regarding equipment usage and construction phase lengths. These default assumptions are based on a statewide survey of construction projects. The survey results are organized in CalEEMod based on lot acreage size. While the project site is approximately 1.8 acres, the multi-story development projects included in the CalEEMod construction survey were at least two acres. Therefore, the default equipment usage and construction phase lengths for a 2-acre lot were used to estimate the total hours of equipment operation (and associated emissions) required to construct the project.
Material Movement	Approximately 9,200 cubic yards of soil is expected to be hauled off-site.
Demolition	The existing parking lot (approximately 19,400 square feet of asphalt paving, plus a restroom building) would be demolished and hauled off-site.

Notes: Default CalEEMod data used for all other parameters are not described.
Source: CalEEMod Report, Appendix C.

Construction of the Project is anticipated to begin in January 2025 and continue for 21 months through late-2026. To analyze daily emission rates, the total emissions estimated during

construction were averaged over the total working days (455 days) and compared to the BAAQMD's thresholds of significance. As shown in Table 5.2-8, the Project's estimated emissions for ROG, NOx, and exhaust PM_{10} and $PM_{2.5}$ during construction were below the BAAQMD's thresholds of significance and would not result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment; therefore, the impact on regional air quality would be less than significant.

Table 5.2-8. Estimated Construction Emissions (Pounds per Day)

EMISSIONS SCENARIO	ROG	NOX	EXHAUST PM10	EXHAUST PM2.5
Construction Emissions	2.1	6.1	0.22	0.22
Thresholds of Significance	54	54	82	54
Exceed Threshold?	**No**	**No**	**No**	**No**

Source: CalEEMod Report, Appendix C.

The generation of fugitive dust PM_{10} and $PM_{2.5}$ emissions from soil disturbance activities during Project construction could result in a cumulatively considerable net increase in regional PM_{10} and $PM_{2.5}$ concentrations. Emissions of fugitive dust PM_{10} and $PM_{2.5}$ during Project construction were estimated using the CalEEMod input parameters summarized in Table 5.2-6 and additional assumptions summarized in Table 5.2-7. Averaged over the total working days (455 days), the Project's estimated emissions for fugitive dust PM_{10} and $PM_{2.5}$ during construction were 0.4 pounds per day and 0.13 pound per day, respectively. The BAAQMD does not have a quantitative threshold of significance for fugitive dust PM_{10} and $PM_{2.5}$ emissions; however, the BAAQMD considers implementation of BMPs to control dust during construction sufficient to reduce air quality impacts from fugitive dust to a less-than-significant level.

Criteria Air Pollutants from Operation

Project operation would generate criteria air pollutant emissions that could potentially affect regional air quality. The primary pollutant emissions of concern during Project operation would be ROG, NOx, and exhaust PM_{10} and $PM_{2.5}$ from mobile sources, energy use, and area sources (e.g., consumer products, architectural coatings, and landscape maintenance equipment). Project emissions were estimated for 2027, which is the earliest expected year of operation. Since statewide vehicle emission standards are required to improve over time in accordance with the CARB's Advanced Clean Cars Program and Low-Emission Vehicle Program, estimating emissions for the earliest year of operation provides the maximum expected annual emissions. Additional project-specific information used to calculate operation emissions in CalEEMod, including changes to default data, is summarized in Table 5.2-9.

Table 5.2-9. Project Operation Assumptions for CalEEMod

CALEEMOD INPUT CATEGORY	OPERATION ASSUMPTIONS AND CHANGES TO DEFAULT DATA
Vehicle Trips	Daily trip rates for the residential land use were adjusted according to the project-specific Transportation Impact Assessment prepared by Parisi Transportation Consulting. (Appendix H)
Hearths	The project does not include woodstoves or wood-burning fireplaces.

Notes: Default CalEEMod data used for all other parameters are not described.
Source: CalEEMod Report, Appendix C.

The estimated maximum annual emissions and average daily emissions during operation of the Project are presented in Table 5.2-10. As shown in Table 5.2-10, the Project's estimated ROG, NOx, PM_{10}, and $PM_{2.5}$ emissions during operation were below the BAAQMD's threshold of significance and would not result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment; therefore, the impact on regional air quality would be less than significant.

Table 5.2-10. Estimated Operation Emissions

EMISSIONS SOURCE	Maximum Annual Emissions (Tons)				Average Daily Emissions (Pounds)			
	ROG	NOx	PM10	PM2.5	ROG	NOx	PM10	PM2.5
Area	0.23	0.16	0.37	0.10	1.24	0.88	2.02	0.52
Energy	0.24	<0.005	<0.005	<0.005	1.32	0.02	<0.005	<0.005
Mobile	<0.005	0.03	<0.005	<0.005	0.01	0.15	0.01	0.01
Total Project Emissions	0.5	0.2	0.4	0.1	2.6	1.1	2.0	0.5
Thresholds of Significance	10	10	15	10	54	54	82	54
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod Report, Appendix C.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would not result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment. The impact would be **less than significant**.

c) Expose sensitive receptors to substantial pollutant concentrations?

IMPACT ANALYSIS

As discussed previously, the term "sensitive receptor" refers to a location where individuals are more susceptible to poor air quality. Sensitive receptors include schools, convalescent homes, and hospitals because the very young, the old, and the infirm are more susceptible than the rest of the public to air-quality-related health problems. Residential areas are also considered

sensitive to poor air quality because people are often at home for extended periods, thereby increasing the duration of exposure to potential air contaminants. The BAAQMD recommends evaluating the potential impacts to sensitive receptors located within 1,000 feet of a project. Existing sensitive receptors near the Project site include single-family residential homes and public recreational areas surrounding the Project site. Consistent with HEU SEIR Mitigation Measure 6-3, the Project's potential impacts to sensitive receptors from emissions of TACs are discussed below.

DPM and PM2.5 Emissions during Construction

Project construction would generate DPM and PM2.5 emissions from the exhaust of off-road diesel construction equipment and fugitive PM2.5 emissions primarily from on-site earthwork activities. In accordance with guidance from the BAAQMD and Office of Environmental Health Hazard Assessment (OEHHA), a health risk assessment was conducted to estimate the incremental increase in cancer risk and chronic hazard index (HI) to sensitive receptors from DPM emissions during construction (OEHHA 2015). The acute HI for DPM was not calculated because an acute reference exposure level has not been approved by OEHHA and CARB, and the BAAQMD does not recommend analysis of acute non-cancer health hazards from construction activity.

The annual average concentrations of DPM and $PM_{2.5}$ during construction were estimated within 1,000 feet of the Project using the U.S. Environmental Protection Agency's (EPA) Industrial Source Complex Short Term (ISCST3) air dispersion model. For this analysis, emissions of exhaust PM_{10} were used as a surrogate for DPM, which is a conservative assumption because more than 90 percent of DPM is less than 1 micron in diameter. The input parameters and assumptions used for estimating emission rates of DPM and $PM_{2.5}$ from off-road diesel construction equipment are included in Appendix C.

Daily emissions from construction were assumed to occur over the construction hours established by the City of Mill Valley from 8:00 AM to 5:00 PM Monday through Friday. The exhaust and fugitive dust from off-road equipment were represented in the ISCST3 model as area sources encompassing the proposed building location.

A uniform grid of receptors spaced 20 meters apart with receptor heights of 1.5 meters (for ground-level receptors) was encompassed around the Project site as a means of developing isopleths (i.e., concentration contours) that illustrate the air dispersion pattern from the various emission sources. The ISCST3 model input parameters included one year of BAAQMD meteorological data from Station 3901 located about 4.1 miles northwest of the Project site.

Based on the annual average concentrations of DPM and PM2.5 estimated using the air dispersion model, potential health risks were evaluated for the maximally exposed individual resident (MEIR) located about 60 feet east of the Project site across Roque Moraes Drive. The location of the MEIR is shown in Figure 5.2-1.

The incremental increase in cancer risk from on-site DPM emissions during construction was assessed for an infant exposed to DPM starting from birth. This exposure scenario represents the most sensitive individual who could be exposed to adverse air quality conditions in the vicinity of the project site. It was conservatively assumed that the MEIR would be exposed to an annual average DPM concentration over the entire estimated duration of construction at each location,

which is about 21 months. The input parameters and results of the health risk assessment are included in Appendix C.

Table 5.2-11 summarizes the estimated health risks at the MEIR due to unmitigated DPM and PM2.5 emissions from project construction and compares them to the BAAQMD's thresholds of significance. The estimated cancer risk and chronic HI for DPM and annual average PM2.5 concentration from construction emissions were below the BAAQMD's thresholds at the MEIR location. Therefore, project construction would not expose sensitive receptors to substantial pollutant concentrations and the impact would be less than significant.

Table 5.2-11. Health Risks at MEIR During Project Construction

CONSTRUCTION SCENARIO	DIESEL PARTICULATE MATTER		PM2.5
	Cancer Risk (per million)	Chronic Hazard Index	Annual Average Concentration (µg/m³)
Unmitigated Emissions	8.7	0.01	0.06
Thresholds of Significance	10	1	0.3
Exceed Threshold?	**No**	**No**	**No**

Note: µg/m³ = micrograms per cubic meter
Source: CalEEMod Report, Appendix C.



Figure 5.2-1. Cumulative Sources of TACs and PM2.5 Emissions in the Project Vicinity

wra Environmental Consultants

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.2-1. Cumulative Sources of TACs and $PM_{2.5}$ Emissions in the Project Vicinity

Asbestos Emissions during Construction

As described in Section 5.5, Geology and Soils, NOA is present on the Project site. When rock containing asbestos is broken or crushed, asbestos fibers may be released and become airborne. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma, and asbestosis. Earthwork activities during project construction could potentially disturb NOA rock and release asbestos fibers into the air if not properly managed, which is a potentially significant impact with respect to human health at off-site receptor locations, including people recreating in Hauke Park.

CARB has adopted the Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, which requires construction and grading projects to implement best available dust mitigation measures where NOA rock is likely to be encountered. CARB defines "asbestos-containing material" as any material that has an asbestos content of 0.25 percent or greater (confirmed with an approved asbestos bulk test method). In accordance with CCR, Title 17, Section 93105, construction projects greater than one acre in size must prepare and submit an Asbestos Dust Mitigation Plan (ADMP) to BAAQMD for review and approval. The ADMP must indicate how construction and grading operations will minimize emissions and ensure that no equipment or operation will emit visible dust across the property line. Upon completion of construction activities, disturbed surfaces must be stabilized (e.g., with vegetative cover or pavement) to prevent visible emissions of asbestos-containing dust caused by wind speeds of 10 miles per hour or more. The BAAQMD must also be notified at least 14 days prior to any construction or grading in areas with NOA rocks.

In order to address the potential for Project construction activities to emit asbestos dust, Mitigation Measure AQ-1 would be implemented, which requires the Project to comply with all recommendations and requirements of the BAAQMD-approved ADMP. Implementation of Mitigation Measure AQ-1 will ensure that Project construction work would not expose off-site receptors to asbestos and would reduce the impact to a less-than-significant level.

Toxic Air Contaminants during Operation

The proposed Project would not add any stationary source (e.g., diesel emergency generator) that would generate TACs such as DPM and $PM_{2.5}$. Therefore, Project operation would not expose sensitive receptors to substantial pollutant concentrations and there would be no impact.

Cumulative Toxic Air Contaminant Emissions

In addition to a project's individual TAC emissions during construction and operation, the potential cumulative health risks to the MEIR from existing and reasonably foreseeable future sources of TACs were evaluated to represent the worst-case-exposure scenario for sensitive receptors in the Project vicinity.

The BAAQMD's online screening tools were used to provide conservative estimates of how much existing and foreseeable future TAC sources would contribute to cancer risk, HI, and $PM_{2.5}$ concentrations. The individual health risks associated with each source were summed to find the cumulative health risk at the MEIR. The supporting health risk calculations are included in Appendix C.

Based on the BAAQMD's 2023 permitted stationary source risk map (BAAQMD 2023), there is one existing stationary source within 1,000 feet of the MEIR, City of Mill Valley (Facility 19147), which is associated with a cancer risk of 3.04 per one million persons, chronic hazard index of 0.002, and PM2.5 concentration of 0.004 µg/m^3. The health risks do not exceed BAAQMD's health risk standards. Preliminary health risk screening values at the MEIR were determined using the 2021 permitted stationary source inventory data and BAAQMD Health Risk Calculator with Distance Multipliers (Beta Version 5.0) (BAAQMD 2023). There are no future developments located within 1,000 feet of the MEIR that could require an emergency generator or other stationary source of TACs.

Preliminary health risk screening values at the MEIR from exposure to mobile sources of TACs were estimated based on the BAAQMD's Mobile Source Screening Map for roadway, rail, and railyard, which provides conservative health estimates reflective of 2022 for residents living near roadways, rail lines, and rail yards (BAAQMD 2023).

Estimates of the cumulative health risks at the MEIR are summarized and compared to the BAAQMD's cumulative thresholds of significance in Table 5.2-12. The estimated cancer risk and chronic HI for DPM and annual average PM2.5 concentration were below the BAAQMD's cumulative thresholds. Therefore, the Project's emissions of DPM and $PM_{2.5}$ during construction would have a less than significant cumulative impact on nearby sensitive receptors.

Table 5.2-12. Cumulative Health Risks at the MEIR

SOURCE	SOURCE TYPE	METHOD REF	CANCER RISK (10^{-6})	CHRONIC HI	PM2.5 (µG/M^3)
Project					
Off-Road Construction Equipment	Diesel Exhaust		8.7	<0.01	0.06
Existing Stationary Sources					
City of Mill Valley (Facility 19147)	Diesel Generator	1,2	1.51	<0.01	<0.01
Existing Mobile Sources					
Roadway	Mobile	3	7.4	0.02	0.15
	Cumulative Health Risks		17.6	<0.1	0.2
	Thresholds of Significance		100	10.0	0.8
	Exceed Threshold?		**No**	**No**	**No**

Notes: µg/m^3=micrograms per cubic meter; HI=hazard index; Ref=reference
Health risk screening values derived using the following BAAQMD tools and methodologies:

1) BAAQMD's 2021 stationary source emissions data.
2) BAAQMD's Diesel Internal Combustion Engine Distance Multiplier Tool.
3) BAAQMD Beta version Mobile Source Screening Map for roadway, rail and railyard.

MITIGATION MEASURES

Mitigation Measure AQ-1

In accordance with CCR, Title 17, Section 93105, a Draft ADMP for the proposed Project has been prepared by Krazan & Associates (Appendix F). The ADMP shall be approved by BAAQMD prior to the start of construction activities at the Project site. The Draft ADMP identifies BMPs to

reduce air particulate emissions resulting from soil disturbance or excavation associated with demolition, grading, utility work, construction of Project site infrastructure, and foundation construction. The ADMP shall be implemented in conjunction with the Project's Site-Specific Health and Safety Plan (HASP). The ADMP also includes monitoring and reporting requirements. The proposed Project shall implement all requirements of the Final ADMP as approved by the BAAQMD.

Presented below are examples of the types of measures that may be included in the Final ADMP for the Project as refined and approved by the BAAQMD:

Track-Out Dust Prevention and Control Measures

Track-out dust results when vehicles leave the project site with residual dirt or dust on the tires or undercarriage of the vehicle. The residual dust becomes deposited on paved road surfaces leaving the subject site and can later be stirred up as airborne dust by subsequent vehicular traffic. To control track-out dust, the following measures shall be implemented:

- Removal of any visible soils from a paved public roadway at any location where vehicles exit the Project site.
- Installation of one or more track-out prevention measures.
- Inspection and cleaning of vehicle/equipment surfaces that can collect soil (e.g., bumpers, fenders, wheel wells, etc.) prior to leaving the Project site.

Soil Stockpiles

Dust emissions from excavations, active and inactive soil stockpiles, and other exposed soil-disturbed areas shall be controlled using measures such as:

- Adequately moisture conditioning the exposed soils,
- Use of a temporary cover (plastic sheeting, tarps, etc.),
- Establishing and maintaining a surface crust,
- Application of chemical dust suppressants or chemical stabilizers,
- Installation of wind barriers around storage piles, and/or
- Installation of wind barriers across open areas.

In addition, to prevent the general public from accessing soil storage piles, security fencing will be erected and maintained around where the soil stockpiles are located.

Roads, Parking Lots, and Staging Areas

To control fugitive dust emission from construction traffic traveling on unpaved surfaces, the following measures shall be implemented:

- No vehicle or equipment shall exceed 15 miles per hour on unpaved surfaces. Visible speed limit signs shall be posted at Project site entrances.
- One or more of the following:
    - Watering on-site soils every two hours of active operations or sufficiently often to keep them adequately moisture-conditioned;
    - Applying chemical dust suppressants consistent with the manufacturer's directions; and/or
    - Maintaining a gravel cover.

Implementation of erosion control measures identified in the Project's Storm Water Pollution Prevention Plan (SWPPP) will help control fugitive dust emissions within the Project site, as well on public roadways, staging areas, and parking areas.

To control fugitive dust emissions from construction traffic traveling on paved public roads, the following measures shall be implemented:

- No vehicle will be allowed to exit unpaved portions of the Project site except through treated Project site exits.
- Construction areas adjacent to and above grade from any paved public roadway shall be treated with BMPs, as specified in the Project's SWPPP.

Earthwork Activities

Excavation activities shall be visually monitored daily for the generation of fugitive dust. If dust is being generated, water will be applied to the point of disturbance to control dust emissions. In addition, measures such as 1) pre-wetting the ground to depth of anticipated cuts, and 2) application of water prior to any land clearing, would be used to control dust emissions. If wind speeds are high enough to result in dust emissions crossing the Project site boundary, grading operations will be suspended until wind speeds recede.

Controls for Off-site Transport

Any material generated from activities conducted within the Project site and which material is to be off hauled must be done so with vehicles/equipment that are maintained such that:

- No spillage can occur from holes or other openings in cargo compartments.
- The loads are adequately moisture conditioned and either 1) covered with a tarp or 2) loaded onto the trucks such that material does not touch the front, back, or sides of the cargo compartment at any point less than 12 inches from the top and that no point of the load extends above the top of the cargo compartment.
- Trucks carrying loose soil shall be covered before leaving the Project site.

If surplus soil and/or rock is to be off hauled, it will be analyzed for asbestos content to gain acceptance into an appropriate disposal facility prior to transportation. BMPs identified in the ADMP related to the off-site transportation of asbestos material will be implemented.

Contingency Dust Control Measures

In the event the above measures do not control/suppress fugitive dust emissions from construction activities, the use of contingency measures may be implemented. Measures may include but are not limited to:

- Streets adjacent to the Project site shall be swept as necessary to remove accumulated dust and soil,
- Vehicle/equipment travel shall be reduced to the maximum extent practicable,
- Designated on-site roadways shall be watered more frequently as necessary to control dust emissions,
- Paved public roads shall be washed at the end of each work day, and
- Minimizing drop heights into dump trucks and/or trailers.

Air Monitoring

Airborne asbestos dust monitoring is required when earth disturbing activities are active. The airborne asbestos dust monitoring network will consist of a network of high-volume air sampling instruments that are stationed around the perimeter of the Project site. If air monitoring stations detect levels of airborne asbestos above the action level, on-site work will be suspended until such time that the reported asbestos levels have declined below action levels. A detailed explanation of airborne asbestos dust monitoring is provided in Appendix D.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Mitigation Measure AQ-1 would be implemented to control asbestos dust emissions resulting from Project construction activities. With implementation of Mitigation Measure AQ-1, the impact of the proposed Project related to exposing sensitive receptors to substantial pollutant concentrations would be **less than significant**.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

IMPACT ANALYSIS

During construction, the use of diesel-fueled equipment would result in temporary emissions that lead to odors. However, these odors would be concentrated near the Project site and would dissipate quickly, and therefore would not affect a substantial number of people. As a residential development, significant odors or other emissions are not expected to be generated from the Housing Site for a substantial duration. No new odors or other emissions would be generated from the PSB Site during Project operation, as the primary site uses would remain the same. Therefore, Project impacts related to odors and other emissions would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. The impact would be **less than significant**.

5.2.6 Cumulative Impacts

The HEU SEIR concluded that implementation of the Housing Element Update, which includes development of the proposed Project, would contribute to cumulative air quality impacts for ozone precursors (primarily from an increase in vehicle miles travelled and energy demand) and PM_{10}. The HEU SEIR estimated based on CalEEMod emission modelling that operational ROG (ozone) and PM_{10} emissions generated by future development facilitated by the Housing Element Update would contribute annual operational emissions of approximately 20 tons of ROG annually and 11 tons of PM_{10} annually. The estimated 11 tons of operational PM_{10} emissions per year would be less than the BAAQMD's annual threshold and therefore would not be cumulatively considerable.

The HEU SEIR found that implementation of the Housing Element Update would have the potential to generate ROG emissions that exceed BAAQMD's annual threshold of 10 tons per year. However, existing commercial and office uses on the proposed housing sites included in the Housing Element Update already contribute operational ROG emissions that impact regional air quality. Implementation of the Housing Element Update would replace operational emissions from existing development with emissions from housing development. Given this, the HEU SEIR concluded that existing emissions volumes would be large enough that the net change in ozone precursor emissions resulting from existing to proposed uses would not exceed the BAAQMD threshold. In addition, compliance with General Plan policies and programs would reduce

operational area source ozone precursors and PM_{10} emissions to less than cumulatively considerable.

The proposed Project would not introduce any cumulative impact that was not analyzed in the HEU SEIR. Although the HEU SEIR did not include consideration of the portion of the proposed Project to be developed on the PSB Site, that component of the proposed Project (relocated public restrooms and EV charging stations and reconfigured parking) would not generate new mobile air emissions and would thus have a negligible effect on cumulative air emissions. The identified asbestos impact of the proposed Project would be site-specific and would be mitigated to a less than significant level by Mitigation Measure AQ-1. Other projects in the area may have site-specific asbestos impacts, however they would be required to comply with asbestos dust mitigation requirements as set forth by the BAAQMD to reduce impacts to the maximum extent possible. Therefore, no other projects would exacerbate the asbestos impact of the proposed Project. The impact would not be cumulatively considerable.

5.3 Biological Resources

5.3.1 Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts with regard to biological resources. The analysis in this section evaluates whether the Project would have a substantial adverse effect on any special-status species, riparian habitat, sensitive natural community, protected wetland, or wildlife corridor; interfere with the movement of native or resident migratory species; or conflict with any local policies, ordinances, or conservation plans protecting biological resources. A summary of applicable regulations is also provided in this section. In addition, the potential cumulative impacts of the Project in conjunction with other Housing Element Update sites in the area are evaluated. In accordable with HEU SEIR Mitigation Measures 7-1 and 7-2, which are applicable to the proposed Project, a *Biological Resources Technical Report* (BRTR) was prepared for the Project in August 2023 by WRA, Inc. Information in this section is based on and adapted from the BRTR, which is provided in Appendix E (WRA 2023).

5.3.2 Assessment Methodology

On February 4, 2022, WRA biologists completed an initial field review to document: (1) land cover types (e.g., vegetation communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic land cover types (e.g., wetlands) are present, and (4) if special-status species are present[1]. Following the initial site visit, WRA conducted two formal wetland delineations within the Project site on March 8, 2022, and June 14, 2023, as well as a focused protocol-level rare plant survey on July 14, 2023, to further support the determinations made in this assessment. The methods and results of these surveys are discussed in greater detail below. In addition, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive land cover types and special-status species, including:

- San Rafael 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2021)
- Contemporary aerial photographs (Google Earth 2023)
- Historical aerial photographs (NETR 2023)
- National Wetlands Inventory (USFWS 2023a)
- California Aquatic Resources Inventory (SFEI 2017)
- California Natural Community List (CDFW 2023a)
- California Natural Diversity Database (CNDDB; CDFW 2023b)
- Biogeographic Information and Observation System (BIOS, CDFW 2023c)
- CNPS Inventory (CNPS 2023)
- Consortium of California Herbaria (CCH1 2023, CCH2 2023)
- USFWS Information for Planning and Consultation (USFWS 2023b)
- eBird Online Database (Cornell Lab of Ornithology 2023)
- California Bird Species of Special Concern in California (Shuford and Gardali 2008)
- California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- A Manual of California Vegetation, Online Edition (CNPS 2023)

[1] Due to the timing of the assessment, it may or may not constitute protocol-level species surveys; see Section 5.3.5 if the site assessment would constitute a formal or protocol-level species survey.

- Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)
- Database searches (i.e., CNDDB, CNPS) for special-status species focused on the San Rafael and eight surrounding USGS 7.5-minute quadrangles.

VEGETATION COMMUNITIES AND OTHER LAND COVER TYPES

During the site visits, WRA evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. In most instances, communities are characterized and mapped based on distinct shifts in plant assemblage (vegetation) and follow the California Natural Community List (CDFW 2023a) and A Manual of California Vegetation, Online Edition (CNPS 2023). These resources cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists. When undescribed variants are used, it is noted in the description. Vegetation alliances (natural communities) with a CDFW Rank of 1 through 3 (globally critically imperiled [S1/G1], imperiled [S2/G2], or vulnerable [S3/G3]) (CDFW 2023a), were evaluated as sensitive as part of this evaluation.

Following the initial site visit on February 4, 2022, WRA conducted two formal wetland delineations on March 8, 2022, and June 14, 2023. The Project site was reviewed for the presence of wetlands and other aquatic resources according to the methods described in the Corps Manual (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Corps 2008). Areas meeting these indicators were mapped as aquatic resources and categorized using the vegetation community classification methods described above.

SPECIAL-STATUS SPECIES

Potential occurrence of special-status species within the Project site was evaluated by first determining which special-status species occur in the vicinity of the Project site through a literature and database review as described above. The presence of suitable habitat for special-status species was evaluated during the site visits based on physical and biological conditions of the site, as well as the professional expertise of the investigating biologists. The potential for each special-status species to occur within the Project site was then determined according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Unlikely.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

- **Present.** Species is observed on the site or has been recorded (i.e., CNDDB, other reports) on the site in the recent past.

If a more thorough assessment was deemed necessary, a targeted or protocol-level assessment or survey was conducted or recommended as a future study. If a special-status species was observed during the site visit, its presence was recorded and discussed below in Section 3.4.5. If designated critical habitat is present for a species, the extent of critical habitat present and an evaluation of critical habitat elements is provided as part of the species discussions below.

Special-status Plants

WRA conducted a protocol-level rare plant survey within the Project Site on July 14, 2023, following the protocol for plant surveys described in recommended resource agency guidelines (CNPS 2001, CDFW 2018, and USFWS 1996). The survey date corresponded with the period of time when late-blooming species with potential to occur in the Study Area were evident and identifiable. The survey was conducted by a botanist with experience identifying California and Marin County flora. All plants were identified using the Jepson eFlora (Jepson Flora Project 2023) to the lowest taxonomic level necessary to determine whether or not they were rare. The survey was floristic in nature, with all observed species recorded and included on a species list (included in Appendix E). The survey was conducted by visually surveying all habitat suitable for moderate to high-potential plant species determined during the database search prior to the site visits (included in Appendix E).

WILDLIFE CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

To account for potential impacts to wildlife movement/migratory corridors, WRA biologists reviewed maps from the California Essential Connectivity Project (CalTrans 2010), and habitat connectivity data available through the CDFW Biogeographic Information and Observation System (CDFW 2023c). Additionally, aerial imagery (Google Earth 2023) for the local area was referenced to assess if local core habitat areas were present within, or connected to the Project site. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

The potential presence of native wildlife nursery sites was also evaluated as part of assessment. Examples of native wildlife nursery sites include nesting sites for native bird species (particularly colonial nesting sites), marine mammal pupping sites, and colonial roosting sites for other species (such as for monarch butterfly [*Danaus plexippus*]).

5.3.3 Environmental Setting

SOILS AND TOPOGRAPHY

The Project site is relatively flat along the border of Hamilton Drive; however, east of the Hauke Park Parking Lot, the Project site is characterized by a moderately steep hillside. The location of the proposed housing development rises from an elevation of 15 feet above sea level at its lowest point to approximately 80 feet at its highest point along Roque Moraes Drive.

According to the California Soil Resource Lab (CSRL), the Project site is underlain by one soil mapping unit: Saurin-Urban land-Bonnydoon complex, 30 to 50 percent slopes (CSRL 2023). The parent soil series of all the Project site's mapping units are summarized below[2].

> Saurin-Urban land-Bonnydoon complex, 30 to 50 percent slopes: This soil type is a combination of three different series: the Saurin series, Urban land series, and Bonnydoon series. The Saurin series consists of moderately deep, well drained soils formed from sandstone and shale that occur on slopes of 2 to 75 percent grade. The Urban land series consists of non-native fill imported to the area for development. The Bonnydoon series consists of shallow, excessively drained soils formed from sandstone and shale that occur on slopes of 5 to 85 percent grade (CSRL 2023).

Although it is not mentioned in the formal description of the mapped soil type, serpentine substrate is present in the Project site (USGS 2023).

CLIMATE AND HYDROLOGY

The Project site is located in the southeastern portion of Mill Valley. The average monthly maximum temperature in the area is 70.5 degrees Fahrenheit, while the average monthly minimum temperature is 45 degrees Fahrenheit. Predominantly, precipitation falls as rainfall between November and March with an annual average precipitation of 37 inches.

The local watershed is Arroyo Corte Madera Del Presidio-Frontal San Francisco Bay Estuaries and the regional watershed is San Pablo Bay. There are no blue-line streams within the Project site (USGS 2021). A Riverine feature is shown as being present in the southern portion of the Project site in the NWI (USFWS 2023a) and California Aquatic Resources Inventory (SFEI 2017). However, the data displayed in these resources is often coarsely mapped and not field-verified. Indeed, the location where the Riverine feature is mapped is fully developed and has been for decades (Google Earth 2023). The entirety of the Study Area was evaluated during the aquatic resource delineation site visits, and no riverine features are present.

5.3.4 Regulatory Setting

FEDERAL

Clean Water Act

The Corps regulates "Waters of the United States" under Section 404 of the Clean Water Act (CWA). Waters of the United States are defined in the Code of Federal Regulations (CFR) as including the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, such as tributaries, lakes and ponds, impoundments of waters of the U.S., and wetlands that are hydrologically connected with these navigable features (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic

[2] CSRL (2023) soil mapping is derived from U.S. Department of Agriculture (USDA) soil surveys. These surveys are predictive in nature, and while some ground-truthing took place during the production of the surveys, much of the soil maps was not field-verified. The soil boring data included in the Project's Geotechnical Engineering Investigation examined depths much deeper than typical USDA soils surveys and thus presents a more detailed analysis of the soil profile at the Project site.

vegetation, (2) hydric soils, and (3) wetland hydrology. Unvegetated waters including lakes, rivers, and streams may also be subject to Section 404 jurisdiction and are characterized by an ordinary high-water mark (OHWM) identified based on field indicators such as the lack of vegetation, sorting of sediments, and other indicators of flowing or standing water. The placement of fill material into Waters of the United States generally requires a permit from the Corps under Section 404 of the CWA.

Endangered Species Act

Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the federal Endangered Species Act (ESA). The ESA (16 USC 1531 et seq.) is implemented by the USFWS and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of endangered and threatened plant and animal species (referred to as "listed species"). "Proposed" or "candidate" species are those that are being considered for listing and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to take of any listed species. “Take” under the ESA is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance and impacts to habitat for listed species. Actions that may result in take of an ESA-listed species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features “essential to the conservation of the species.” Protections afforded to designated critical habitat apply only to actions that are funded, permitted, or carried out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act provides for conservation and management of fishery resources in the U.S., administered by NMFS. This Act establishes a national program intended to prevent overfishing, rebuild overfished stocks, ensure conservation, and facilitate long-term protection through the establishment of Essential Fish Habitat (EFH). EFH consists of aquatic areas that contain habitat essential to the long-term survival and health of fisheries, which may include the water column, certain bottom types, vegetation (e.g., eelgrass (Zostera spp.)), or complex structures such as oyster beds. Any federal agency that authorizes, funds, or undertakes action that may adversely affect EFH is required to consult with NMFS.

Eagles and Native Birds

The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America’s eagle species (bald eagle [*Haliaeetus leucocephalus*] and golden eagle [*Aquila chrysaetos*]) that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act of 1918. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal.

Rivers and Harbors Act

The Corps regulates construction in navigable waterways of the U.S. through Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 U.S. Code [USC] 403). Section 10 of the RHA requires Corps approval and a permit for excavation or fill, or alteration or modification of the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States. Section 10 requirements apply only to navigable waters themselves, and are not applicable to tributaries, adjacent wetlands, and similar aquatic features not capable of supporting interstate commerce.

STATE

California Endangered Species Act

Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the California Endangered Species Act (CESA). The CESA (CFGC 2050 et seq.) prohibits the take of any plant and animal species that the CFGC determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to candidate species that are proposed for listing as threatened or endangered under CESA. The definition of a "take" under CESA ("hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.

California Fish and Game Code

Nesting Birds and Birds of Prey

Sections 3503, 3503.5, 3513, and 3800 of the CFGC prohibit the take, possession, or destruction of birds, including their nests and eggs. Birds of prey are specifically protected in California under provision of the CFG, Section 3503.5. This section of the CFGC establishes that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the CFGC. Disturbance that causes nest abandonment and/or loss of reproductive effort, such as construction during the breeding season, is considered take by the CDFW. For bat species, the Western Bat Working Group designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.

Plant and Wildlife Species

Specific plant and wildlife species that are designated in the CFGC as protected even if not listed under CESA or ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGC. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of "take" is the same under the California Fish and Game Code and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act (NPPA), CDFW has listed 64 “rare” or “endangered” plant species, and prevents “take”, with few exceptions, of these species. CDFW may authorize take of species protected by the NPPA through the Incidental Take Permit process, or under a NCCP.

Streams and Lakes

Streams and lakes, as habitat for fish and wildlife species, are regulated by CDFW under Sections 1600-1616 of California Fish and Game Code (CFGC). Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term “stream,” which includes creeks and rivers, is defined in the CCR as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). The term “stream” can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Riparian vegetation has been defined as “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself” (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

California Department of Fish and Wildlife

Plant and Wildlife Species

To address additional species protections afforded under CEQA, CDFW has developed a list of special species as “a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status.” This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Special Concern. Plant species on the California Native Plant Society (CNPS) Rare Plant Inventory (Inventory; CNPS 2023) with California Rare Plant Ranks (Rank) of 1 and 2, as well as some with a Rank of 3 or 4, are also considered special-status plant species and must be considered under CEQA. Some Rank 3 and Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Additionally, any species listed as sensitive within local plans, policies and ordinances are likewise considered sensitive. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

Sensitive Natural Communities

Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFW 2023a) and keeps records of their occurrences in its California Natural Diversity Database (CNDDB; CDFW 2023b). Natural communities are ranked 1 through 5 in the CNDDB based on NatureServe's (2020) methodology, with those communities ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service must be considered and evaluated under CEQA (California Code of Regulations [CCR] Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act and Section 21083.4 of California Public Resources Code.

California Porter-Cologne Water Quality Control Act

The term "Waters of the State" is defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The SWRCB and nine RWQCB protect waters within this broad regulatory scope through many different regulatory programs. Waters of the State in the context of a CEQA Biological Resources evaluation include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019). The SWRCB and RWQCB issue permits for the discharge of fill material into surface waters through the State Water Quality Certification Program, which fulfills requirements of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Clean Water Act permit are also required to obtain a Water Quality Certification. If a project does not require a federal permit but does involve discharge of dredge or fill material into surface waters of the State, the SWRCB and RWQCB may issue a permit in the form of Waste Discharge Requirements.

LOCAL

Mill Valley General Plan

The General Plan contains the following programs pertaining to biological resources:

> **Program NE.2-4:** Retain plant and wildlife habitat areas, including those that contain known sensitive resources (e.g., sensitive habitats; special-status, threatened, endangered, or candidate species; and species of concern) and that are contiguous with other existing natural areas and/or wildlife movement corridors.
>
> **Program NE.2-5:** Preserve the ecological integrity of watersheds and creek corridors that support riparian resources by preserving or restoring native plants and removing invasive non-native plants; developing "pools," "riffles," "cover," and "slow flow" areas; and removing or providing alternatives to barriers to fish movements.
>
> **Program NE.2-7:** Preserve and protect wetland resources in compliance with applicable regional, state, and federal regulations and to provide a buffer to sea level rise.
>
> **Program NE.2-8:** Revise the City's heritage tree regulations and related education programs to protect populations, stands (groves), and heritage specimens of native tree species consistent with the City's fire and flood prevention strategies and programs and considering the following:
>
> - Tree protection and planting in riparian zones,
> - Street tree planting and maintenance,
> - Reduction of tree/public infrastructure conflicts,
> - Vegetation management, and
> - Root pruning.

Mill Valley Municipal Code

Injuring Wild Birds and Animals

Chapter 6.16 – Injuring Wild Birds and Animals of the MVMC provides protection to both listed and unlisted birds and other wildlife species. Under this section of Municipal Code, it is unlawful to "shoot, trap, or in any way intentionally destroy or injure any wild birds and/or animals, with the exception of mice, rats, gophers, and moles, within the limits of the City of Mill Valley."

Tree Ordinance

Chapter 12.04 of the MVMC regulates the protection of certain trees on public properties within the City limits, and defines "Public Trees and Shrubs" as follows:

> *"All trees or shrubs located or to be planted on any park, playground, or other property owned or controlled by the City, or upon any public street, parkway, alley, sidewalk, or highway within the public right-of-way."*

Section 12.04.040, which applies to trees or shrubs on property owned or controlled by the City, states that any person who desires to plant, remove, replace, trim, brace, or in any manner alter Public Trees and Shrubs, shall file an application for a permit with the Parks Superintendent of the City, except for Heritage Trees, which shall be filed in accordance with Chapter 20.67 of this Code. Furthermore, the application shall be accompanied by the appropriate filing fee as established by resolution of the City Council. The Parks Superintendent shall be notified 48 hours in advance of commencement of work.

The Municipal Code defines "Heritage Trees" as any of the following:

- oak (*Lithocarpus densiflorus*): 65-inch circumference/approx. 20-inch DBH;
- tanbark oak (*Quercus* [Spp.]): 75-inch circumference/approx. 24-inch DBH;
- madrone (*Arbutus mensiezii*): 75-inch circumference/approx. 24-inch DBH;
- coast redwood (*Sequoia sempervirens*): 95-inch circumference/approx. 30-inch DBH; and
- Any other tree designated by resolution of the City Council following a noticed public hearing, because of its unusual size, age or other specific significance to the community.

A "Protected Tree" shall mean any tree for which a tree removal permit is required by this chapter or a tree that is required to be preserved as part of a development review approval. Section 20.67.120, which applies to trees on privately owned properties and projects requiring approval under Title 20, the Zoning Ordinance, states that conditions of approval may be attached to any tree removal permit, as deemed necessary, to accomplish the purposes of this chapter. These conditions shall include, but not be limited to, the following replanting requirements:

- Heritage trees shall be replaced based on the following formula: For each six inches or fraction thereof of the diameter of the removed tree, three trees of the same genus and species (or another native species, if approved by the review body), shall be planted on the project site."
- Non-heritage trees approved for removal and associated with a development permit shall have a minimum replanting ratio of 1:1.

5.3.5 Existing Conditions

VEGETATION COMMUNITIES AND OTHER LAND COVER

WRA observed three land use types within the Project site: developed, non-native annual grassland, and seasonal wetland. Land cover types within the Project site are shown in Figure 5.3-1. The non-sensitive land cover types in the Project site include non-native grasslands, developed areas, and an artificial (non-jurisdictional) seasonal wetland. The only sensitive community includes one (jurisdictional) seasonal wetland.

Terrestrial Land Cover

Developed Area (no vegetation alliance). CDFW Rank: None.

This community comprises 2.12 acres of the Project site and includes the public parking and restroom facilities, public safety buildings and associated parking, and landscaped areas. Trees and ornamental plants growing in these areas include pine trees (*Pinus* sp.), silver wattle (*Acacia dealbata*), pampas grass (*Cortaderia selloana*), firethorn (*Pyracantha* sp.), and several other landscaping trees.

Non-native annual grassland (Avena spp. – Bromus spp. Herbaceous Semi-Natural Alliance). CDFW Rank: None.

This community comprises the northeastern portion of the Project site (1.54 acres) and is characterized by a steep, south-facing slope. The non-native annual grassland is dominated by ruderal (weedy) species including wild oat (*Avena fatua*), slim oat (*Avena barbata*), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), Harding grass (*Phalaris aquatica*), hairy vetch (*Vicia villosa* ssp. *villosa*), black mustard (*Brassica nigra*), salsify (*Tragopogon porrifolius*), Italian rye grass (*Festuca perennis*), annual blue grass (*Poa annua*), and brome fescue (*Festuca bromoides*). Other non-native herbaceous species observed in this community include sweet fennel (*Foeniculum vulgare*), mustard (*Brassica* sp.), wild radish (*Raphanus sativus*), crane's bill geranium (*Geranium molle*), hairy cat's ear (*Hypochaeris radicata*), broadleaf filaree (*Erodium botrys*), and California burclover (*Medicago polymorpha*), among others.

Purple needlegrass (*Stipa* pulchra) is present throughout much of this land cover type, but the absolute cover of this species is too low to map separately. Other native species occur at low percent cover within this land cover type, such as common soaproot (*Chlorogalum pomeridianum* var. *pomeridianum*), harvest brodiaea (*Brodiaea elegans* ssp. *elegans*), bedstraw (*Galium aparine*), coyote brush (*Baccharis pilularis*), and coast live oak (*Quercus agrifolia*).

Aquatic Resources

Seasonal Wetlands (no alliance). CDFW Rank: Sensitive.

Seasonal wetlands are areas that are inundated and/or saturated for part of the year, typically during the wet season (between October and March), and which are dominated by hydrophytic (wetland) vegetation cover. Within the Project site, there are two small potential seasonal wetlands, totaling 0.015 acre (Attachment A - Figure 4 of the BRTR). The northernmost seasonal wetland (0.011 acres) is a shallow depression located in the northern portion of the Project site between the base of the hillslope to the east and Hamilton Drive to the west. In addition to direct precipitation and runoff, its hydrology is also supported by water seeping out of the adjacent hillslope. Dominant vegetation within this seasonal wetland included Italian ryegrass and fiddle dock (*Rumex pulcher*).

The southernmost seasonal wetland (0.004 acres) is a linear, shallow depression located just north of the parking lot and adjacent to Hamilton Drive. It captures direct precipitation and surface runoff, and when enough water is present, drains into a culvert under Hamilton Drive. The dominant vegetation within this seasonal wetland consisted of bristly ox-tongue (*Helminthotheca echioides*).

This feature did not satisfy the hydric soil criteria described in the Arid West Manual, and therefore does not meet the definition of a wetland. Furthermore, based on the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2019), "Artificial wetlands are wetlands that result from human activity." This small 0.004-acre wetland is an artificial wetland that was constructed in uplands to

convey stormwater runoff to a storm drain inlet. The hydrology is highly ephemeral, and since it does not meet the hydric soil criterion, this feature would not be considered a water of the U.S. or State and is not classified as sensitive.

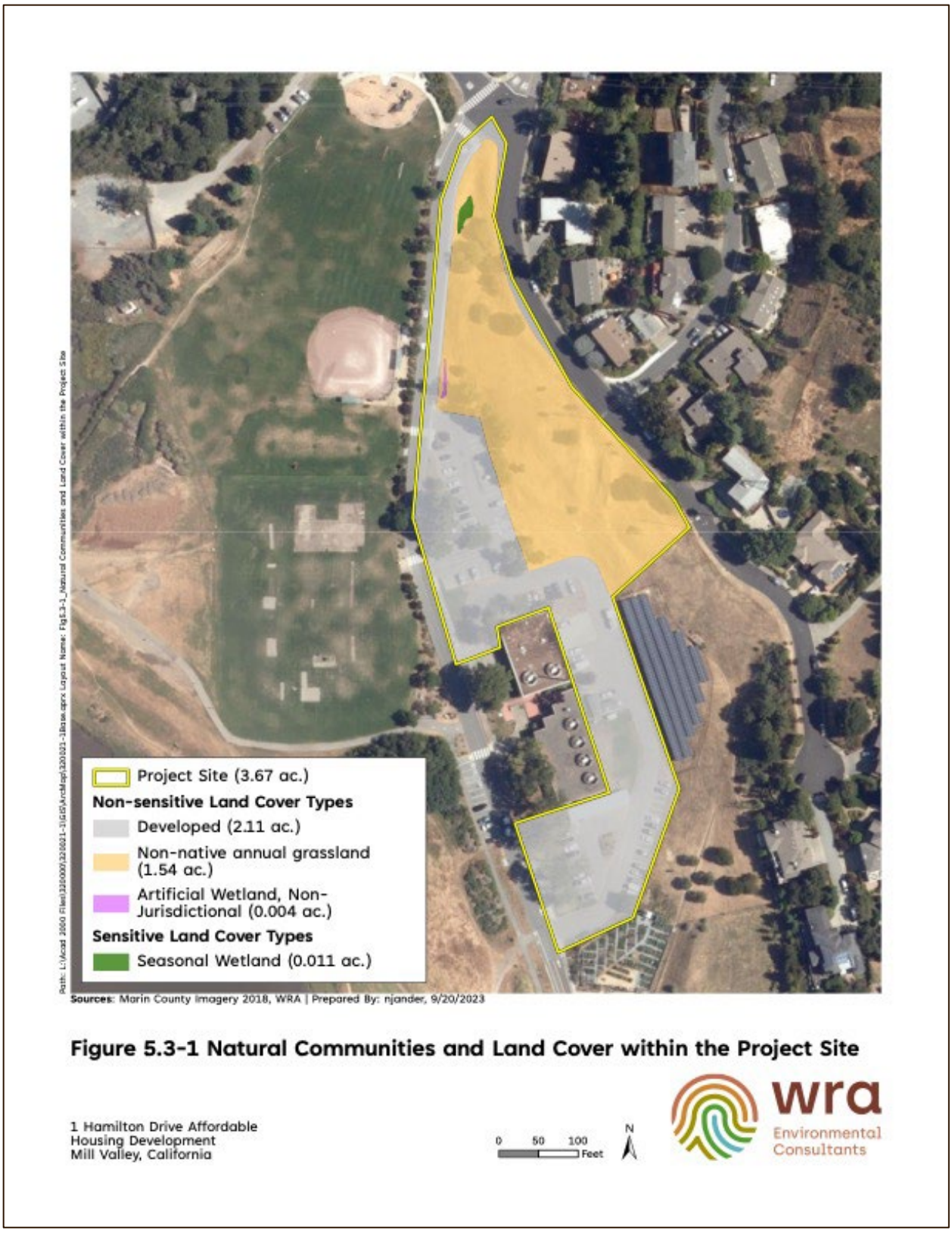


Figure 5.3-1. Natural Communities and Land Cover within the Project Site

SPECIAL-STATUS SPECIES

Special-status Plants

No special-status plant species were observed in the Project site during the site assessment on February 4, 2022; during wetland delineation site visits on March 8, 2022, and June 14, 2023; and during a protocol-level special-status plant survey on July 14, 2023. Based upon a review of the resource databases, 113 special-status plant species have been documented in the greater vicinity of the Project site. Nine of these species have the potential to occur within the Project site. The February 4, 2022, and March 8, 2023, site visits did not occur during periods of time when special-status plant species with potential to occur in the Project site would have been evident and identifiable. The June 14, 2023, delineation site visit did not evaluate the entire Project site. The July 14, 2023, protocol-level survey occurred during the period of time when the following four species would have been evident and identifiable:

- Tiburon buckwheat (*Eriogonum luteolum* var. *caninum*)
- congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*)
- Marin western flax (*Hesperolinon congestum*)
- woolly-headed lessingia (*Lessingia hololeuca*)

Because those four species were not observed, they are assumed to absent from the Project site. The remaining 104 species documented from the greater vicinity are unlikely or have no potential to occur for one or more of the following:

- Hydrologic conditions (e.g., tidal, riverine) necessary to support the special-status plant species are not present in the Project site;
- Common associated plant species and natural communities are absent;
- Edaphic (soil) conditions (e.g., volcanic tuff, limestone) necessary to support the special-status plant species are not present in the Project site;
- Unique pH conditions (e.g., alkali scalds, acidic bogs) necessary to support the special-status plant species are not present in the Project site;
- The Project site is geographically isolated (e.g. below elevation, coastal environ) from the documented range of the special-status plant species; and
- The Project site is above/below the documented elevation range of the species.

Special-status Wildlife

No special-status wildlife species were observed in the Project site during the site visits. Forty-four special-status wildlife species have been documented in CNDDB within the vicinity of the Project site. All 44 were determined to have no potential, or are unlikely to occur within the Project site or immediate vicinity due to one or more of the following reasons:

- The setting of the Project site is within a suburban landscape, disconnected from suitable habitat;
- Aquatic habitats necessary to support special-status wildlife species (e.g., ponds, brackish waters, streams) are not present in the Project site;
- Vegetation communities (e.g., tidal or freshwater marsh, oak woodlands, old-growth coniferous forest) that provide nesting and/or foraging resources necessary to support special-status wildlife species are not present in the Project site;
- Structures or vegetation (e.g., caves, old-growth trees) necessary to provide nesting or cover habitat to support special-status wildlife species are not present in the Project site; and

- The Project site is outside of the species' documented range.

The absence of such habitat features eliminates components critical to the survival or movement of the special-status species known to occur in the vicinity. Additionally, given the Project site's relative proximity to sensitive habitats associated with Richardson Bay, many species documented nearby are obligates to marine or tidal marsh habitats, including California Ridgway's rail (*Rallus obseletus obsetus*), California black rail (*Laterallus jamaicensis*), and salt-marsh harvest mouse (*Reithrodontomys raviventris).* The absence of suitable tidal marsh habitat within or in the immediate vicinity of the Project site precludes these species from occurring within the Project site.

Wildlife Corridors and Native Wildlife Nursery Sites

No native wildlife nursery sites are present within the Project site.

Wildlife movement between suitable habitat areas can occur via open space areas lacking substantial barriers. The terms "landscape linkage" and "wildlife corridor" are often used when referring to these areas. The key to a functioning corridor or linkage is that it connects two larger habitat blocks, also referred to as core habitat areas (Beier and Loe 1992; Soulé and Terbough 1999). It is useful to think of a "landscape linkage" as being valuable in a regional planning context, a broad scale mapping of natural habitat that functions to join two larger habitat blocks. The term "wildlife corridor" is useful in the context of smaller, local area planning, where wildlife movement may be facilitated by specific local biological habitats or passages and/or may be restricted by barriers to movement. Above all, wildlife corridors must link two areas of core habitat and should not direct wildlife to developed areas or areas that are otherwise void of core habitat (Hilty et al. 2019).

The Project site is not within a designated wildlife corridor depicted in the Essential Connectivity Areas dataset published by CDFW, which provides baseline data on landscape-scale corridor areas (CDFW 2023c). The Project site occurs within a larger context of existing development and does not provide corridor linkage between core habitat areas. Furthermore, the Project site is partially developed and is subject to a high degree of anthropogenic disturbance, which substantially reduces its value as a "stepping stone" corridor for avian or terrestrial species. Although common, urban-adapted species, including native birds, and mammals such as squirrels, raccoons or opossums, presumably utilize the Project site for movement at a local scale, no true habitat corridors can be said to exist within the Project site.

5.3.6 Thresholds or Standards of Significance

Consistent with State CEQA Guidelines Appendix G Environmental Checklist, the Project would have a significant impact if it would:

a. *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS);*

b. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;*

c. *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;*

d. *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;*

e. *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or,*

f. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

5.3.7 Applicable HEU SEIR Mitigation Measures

HEU SEIR Mitigation Measure 7-1

The City of Mill Valley will impose a standard condition of approval to be complied with prior to the approval of project plans for: 1) undeveloped housing sites, 2) housing sites within 100 feet of aquatic habitat, or 3) housing sites supporting native vegetation or trees, requiring that applicants of such sites submit a biological resources assessment prepared by a qualified biologist to the City of Mill Valley Planning and Building Department for review and approval. The biological resource assessment shall include the following information as necessary to determine whether special status species are likely to be on the site:

a. Database searches to determine if special-status species have been recorded as occurring within the general vicinity. Databases include the California Department of Fish and Wildlife's California Natural Diversity Database, the California Native Plant Society Rare and Endangered Plant Inventory, the US Fish and Wildlife Service Endangered Species Program, the US Fish and Wildlife Service National Wetland Inventory; and other biological studies conducted in the vicinity of the housing site, if available.

b. Field surveys to:

    i. Identify and map the principal plant communities;
    ii. Determine the potential for special-status species and their habitats, wildlife movement corridors, potentially jurisdictional wetlands and waterways, regulated trees, and other significant biological resources to occur; and
    iii. Identify and map any observed locations of special-status species and/or habitats.

c. The biological resources assessment report shall include a description of existing habitats and plant and animal species found on the housing site, and the occurrence of and/or potential for special-status species and their habitats. One or more figures shall be prepared to illustrate habitat types and the location(s) of special-status species occurring on or in the vicinity of the housing site. If potential impacts to biological resources are identified, the applicant shall be required to work with the appropriate local, regional, state, or federal agency to determine what measures are required in order to minimize or avoid impacts to special-status species and incorporate those measures into the project.

HEU SEIR Mitigation Measure 7-2

The City shall require, prior to construction of the housing sites identified above in mitigation measure 7-1, measures for the protection of biological resources identified in the biological

resources assessment report or by another regional, state, or federal agency with jurisdiction shall be incorporated into the project design and documentation of compliance shall be submitted to the City of Mill Valley' s Planning and Building Department prior to the issuance of building permits.

Measures may include, but are not be limited to:

1. Focused plant surveys conducted during the appropriate time of year;
2. Protocol-level wildlife surveys;
3. Preconstruction surveys;
4. Incidental take permits from the California Department of Fish and Wildlife and/or U.S. Fish and Wildlife Service;
5. Permits from the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and/or Regional Water Quality Control Board for impacts to jurisdictional aquatic features; and/or
6. Arborist or forestry reports for projects requiring tree removal or the protection of trees adjacent to an impact area.

5.3.8 Discussion of Impacts

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?

IMPACT ANALYSIS

Special-status Plants

The Project site has potential to support the following nine special-status plant species:

- bent-flowered fiddleneck
- Brewer's milk-vetch
- Oakland star-tulip
- Tiburon buckwheat
- congested-headed hayfield tarplant
- Marin western flax
- bristly leptosiphon
- woolly-headed lessingia
- two-fork clover

Four of those species were not observed during the July 13, 2023, protocol-level plant survey and are assumed to be absent from the Project site:

- Tiburon buckwheat
- congested-headed hayfield tarplant
- Marin western flax
- woolly-headed lessingia

If present, the remaining five special-status plant species may be directly impacted by Project activities, which would be considered a potentially significant impact under CEQA. To reduce potential impacts to special-status plant species to a less-than-significant level, Mitigation Measure BIO-1a would be implemented. BIO-1a requires pre-construction botanical surveys to be

conducted by a qualified biologist within the Project site to determine whether special-status plant species are present. If no special-status plant species are found, then the Project will not have any impacts to the species and no additional mitigation measures are necessary. If special-status plant species are determined to be present on the Project site, Mitigation Measure BIO-1b would be implemented. Mitigation Measure BIO-1b would require seed or other propagules to be harvested from the special-status plant species on-site, and to be stored for reintroduction into the preserved portion of the Project site. Implementation of these mitigation measures would reduce potential impacts to special-status plant species to a less-than-significant level.

Special-status Wildlife

This BRTR concluded that all special-status wildlife species documented in the region either have no potential or are unlikely to occur within the Project site or immediate vicinity, primarily due to the absence of suitable habitat. Therefore, no impacts to special-status wildlife species are anticipated as a result of the Project. No mitigation measures are required.

Native Nesting Birds and Special-status Birds

The BRTR determined that no special-status bird species have potential to nest within the Project site or in the immediate vicinity. However, non-special-status native birds (e.g., passerines) may nest on the ground, in trees, and in vegetation within and immediately surrounding the Project site. The active nests of such birds are protected under the federal MBTA, as well as by CFGC. If construction begins during the avian nesting season (generally February 1 to August 31), nesting birds may be impacted directly through the removal of nest structures, or indirectly through localized disturbance sufficient to cause nest abandonment. Impacts to common native nesting birds would be considered a potentially significant impact under CEQA. To reduce potential impacts to native nesting birds to a less-than-significant level, Mitigation Measure BIO-2 would be implemented. BIO-2 would require that, to the extent feasible, Project activities shall be avoided during the nesting bird season. If Project work must occur within the nesting bird season, pre-construction nesting bird surveys would be required, and no disturbance buffers shall be established around any active nests that are identified by these surveys. Implementation of BIO-2 would reduce potential impacts to native nesting birds to a less-than-significant level.

MITIGATION MEASURES

Mitigation Measure BIO-1a

Pre-construction botanical surveys shall be conducted within the Project site by a qualified biologist during the appropriate timeframe when plants with moderate potential to occur are evident and identifiable. One survey shall be conducted in mid-April, and one in mid-May. If observed, populations or individuals shall be flagged and fully avoided by a 10-foot no-disturbance buffer.

Mitigation Measure BIO-1b

If special-status plants are present and impacts to those plant populations cannot be avoided, seed or other propagules shall be harvested from at least 50 percent of plants within areas of impact. Harvested seed or propagules shall be stored for reintroduction into the preserved portion of the Project site.

Mitigation Measure BIO-2

To the extent feasible, Project-related activities shall be avoided during the nesting bird season, generally defined as February 1 – August 31. If Project work must occur during the nesting bird season, pre-construction nesting bird surveys shall be conducted within 7 days of ground disturbance or tree/vegetation removal to avoid disturbance to active nests, eggs, and/or young of nesting birds. These surveys shall determine the presence or absence of active nests that may be affected by Project activities.

If an active nest is identified, a no disturbance buffer shall be established around the nest until all young have fledged or the nest otherwise becomes inactive (e.g., due to predation). Suggested buffer zone distances differ depending on species, location, baseline conditions, and placement of nest and shall be determined and implemented in the field by a qualified biologist.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would have no impact on special-status wildlife species. The Project shall implement Mitigation Measure BIO-1a, -1b, and BIO-2 to reduce impacts to special-status plant species and native and nesting birds to a less-than significant level. Therefore, the Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS). The impact of the proposed Project would be **less than significant with mitigation incorporated**.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

IMPACT ANALYSIS

Potential impacts to sensitive natural communities on the project site are shown in Figure 5.3-2. Two small potentially jurisdictional seasonal wetlands occur within the Project site, comprising a total acreage of 0.015 acres. The northernmost seasonal wetland, the larger of the two (0.011 acres), would be fully avoided by the Project. The smaller, wetland feature to the south (0.004 acres) is an artificial wetland that does not meet the hydric soil criterion and would not be considered a water of the U.S. or State. Therefore, no impacts to sensitive natural communities would occur as a result of the proposed Project.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. **No impact** would occur.

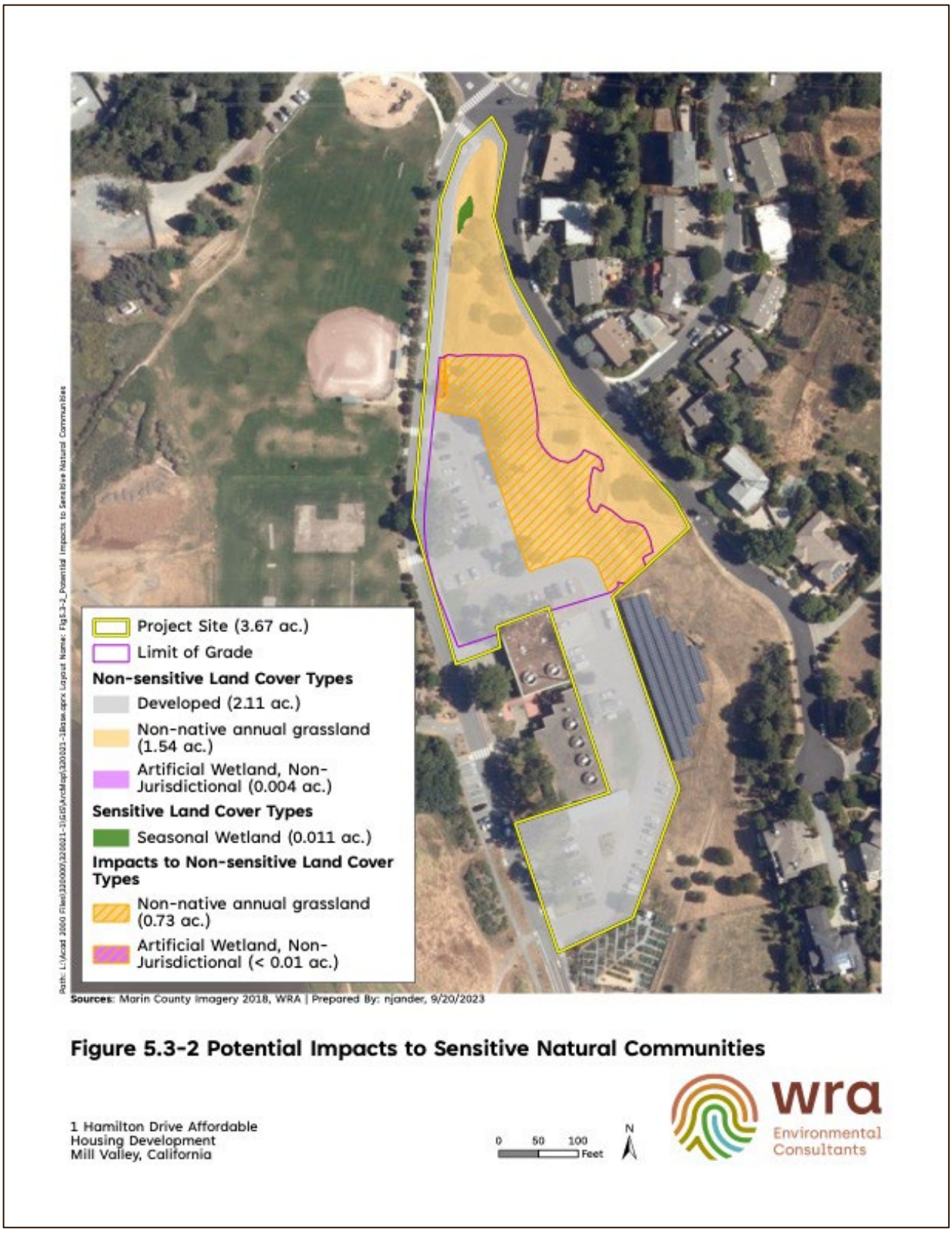


Figure 5.3-2. Potential Impacts to Sensitive Natural Communities

c) 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?

IMPACT ANALYSIS

As discussed above in Impact b), the northernmost seasonal wetland on the Project site would be preserved by the Project. As such, the Project would not result in any impacts to jurisdictional waters of the U.S. or State. No other aquatic resources are present within the Project site.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not have a substantial effect on State or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **No impact** would occur.

d) 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?

IMPACT ANALYSIS

The Project site is not located within a designated wildlife corridor and no portions of the Project site provide connectivity between areas of suitable habitat. For terrestrial species, all portions of the Project site are within a greater context of urban development, and no aquatic habitat is present within or immediately adjacent to the Project site. No impacts to migratory corridors would occur as a result of the Project.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not 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**. No impact** would occur.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

IMPACT ANALYSIS

The Project would not conflict with relevant local policies and ordinances examined in this analysis, as detailed below.

Mill Valley General Plan

As discussed above in Impact b), the Project would not result in impacts to sensitive natural communities.

No impacts to special-status wildlife species or wildlife movement corridors are anticipated as a result of the Project. Impacts to any special-status plants with potential to occur within the Project site would be minimized by Mitigation Measure BIO-1. Impacts to native trees would be mitigated in accordance with Chapter 20.67 of the Mill Valley Tree Ordinance, as detailed below. Therefore, the Project would comply with the relevant policies contained within the General Plan.

City of Mill Valley Tree Ordinance

On March 16, 2022 and May 3, 2023, WRA conducted an arborist survey at the Project site to identify and document the presence of all trees as defined by MVMC Chapter 12.04 and any "Heritage Tree" as defined by Chapter 20.67. Eighty-two trees were identified within the Project site, including 44 native trees, 38 ornamental trees, and two species that are listed as invasive species by the California Invasive Plant Council (Cal-IPC 2022). Of the trees identified in the Project site, 44 trees will be removed by the proposed development. Twenty of the trees to be removed are native coast live oaks and 21 of the trees to be removed are ornamental trees, including one non-native multi-trunk cork oak, which also qualifies as a "Heritage Tree," per the City's Tree Ordinance.

In accordance with Section 20.67 of the MVMC, the Project must complete Tree Disposition Plan, Vegetation Management Plan, and Landscape Enlargement Plan (Van Meter Williams Pollack, LLP 2023, Pg. L0.1, L0.2, L1.1) to compensate for the trees to be removed. The landscape plans include planting a minimum of 44 native replacement trees in addition to other native herbaceous plants.

The Project would obtain a tree removal permit from the City of Mill Valley for the removal of all trees per Chapter 20.67. All measures required by the permit and conditions outlined in the MVMC would be adhered to. Mitigation for disturbance/removal of trees shall be implemented according to Section 20.67.120 of the MVMC. The project's landscape plans propose the installation of new trees, shrubs, and other landscaping, consistent with the City's vegetation management requirements. The City would require implementation of the Project's landscape plan as a required condition of approval, which is typically considered sufficient mitigation for replacement of the trees removed to accommodate the project.

Mill Valley Municipal Code, Chapter 6.16 – Injuring Wild Birds and Animals

The Project site does not contain suitable habitat to support special-status wildlife species, nor will the Project impede the ability of common local wildlife to utilize the area. Common native birds have potential to nest within the Project site, within vegetation and trees slated for removal. Mitigation Measure BIO-2 would ensure that the initiation of construction activities associated with the Project shall not harm any active nests of birds protected by the MBTA and CFGC.

The proposed Project would be consistent with all relevant local plans and policies, including the General Plan, the City's Tree Ordinance, and the MVMC. The implementation of Mitigation Measures BIO-1a, -1b, and BIO-2 would ensure that Project impacts would be less than significant.

MITIGATION MEASURES

The Project shall implement Mitigation Measures BIO-1a, -1b, and BIO-2.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would implement Mitigation Measures BIO-1a, -1b, and BIO-2 to reduce impacts related to relevant local policies and ordinances to a less than significant level. Therefore, the impact would be **less than significant with mitigation incorporated**.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

IMPACT ANALYSIS

No adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan includes the Project site area. As such, the Project would not have the potential to conflict with any such plan.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed 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. **No impact** would occur.

5.3.9 Cumulative Impacts

The HEU SEIR concluded that implementation of the Housing Element Update, which analyzed the development of up to 45-50 multifamily residential units at the Housing Site, would not have a cumulatively considerable impact on biological resources. Past development in the City has permanently removed plant and wildlife habitats to varying degrees, which has reduced the range and number of multiple plant and wildlife species and contributed to threats to their continued survival. Special-status species are recognized by numerous federal and state agencies and are given specific consideration and protection under CEQA and other regulations. Housing projects facilitated by implementation of the Housing Element Update are required to obtain applicable regulatory permits related to special-status species from federal, state, and local agencies, as well as comply with HEU SEIR Mitigation Measures 7-1 and 7-2, if applicable. In addition, housing projects are required to comply with General Plan policies and associated implementation measures. Given this, the HEU SEIR determined that impacts of the Housing Element Update to biological resources would not be cumulatively considerable. The proposed Project will comply with Mitigation Measures 7-1 and 7-2 of the HEU SEIR and would not conflict with other General Plan policies. Therefore, the impact of the proposed Project to biological resources would not be cumulatively considerable.

5.4 Cultural and Tribal Cultural Resources

5.4.1 Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts related to cultural and tribal cultural resources. The analysis in this section evaluates whether the Project would cause a substantial adverse change in the significance of a historical, archaeological, or tribal cultural resource; or disturb any human remains, including those interred outside of dedicated cemeteries. A summary of applicable regulations is also provided in this section. In addition, the potential cumulative impacts of the Project in conjunction with other Housing Element Update sites are evaluated. Information in this section is based on and adapted from an *Archaeological Resources Inventory Report* (Archaeological Inventory and Testing Report) prepared by Far Western Anthropological Research Group, Inc. (Far Western) in July 2023 (DeBaker, Helmer, & Osterlye 2023). The Archaeological Inventory and Testing Report is available at the City for review by qualified individuals only.

5.4.2 Regulatory Setting

The regulatory framework relevant to cultural and tribal resources is described below.

FEDERAL

National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) (Title 54 USC §306108) and its implementing code of regulations (36 CFR Part 800, as amended 2006) require that projects undertaken by federal agencies (and/or federally funded projects or projects requiring federal approval) consider the effects of their actions on properties that may be eligible for listing or are listed in the National Register of Historic Places (National Register). To determine whether an undertaking could affect National Register-eligible properties, cultural resources (including archaeological and architectural properties) must be inventoried and evaluated for listing in the National Register. Although compliance with Section 106 is the responsibility of the lead federal agency, in this case Reclamation, others may undertake the work necessary to comply with Section 106. The Section 106 process entails four primary steps, listed below:

1. Initiation of consultation with consulting parties (36 CFR §800.3)
2. Identification and evaluation of historic properties within the Area of Potential Effect (APE) (36 CFR §800.4)
3. Assessment of adverse effects on historic properties within the APE (36 CFR §800.5)
    - If there are historic properties that will be affected, consult with the California State Historic Preservation Officer (SHPO) regarding adverse effects on historic properties.
    - If there are no historic properties that will be affected, implementation of the project in accordance with the findings of no adverse effect shall proceed (36 CFR §800.5[d][1]).
4. Resolution of adverse effects and proceeds in accordance with the Memorandum of Agreement, if determined appropriate (36 CFR §800.6).

National Register of Historic Places Criteria for Evaluation

The significance of cultural resources is determined using the four National Register Criteria for Evaluation (Criteria A-D) at 36 CFR §60.4, which state that a historic property is any site, building, structure, or object that:

A. Is associated with events that made a significant contribution to the broad patterns of our history (Criterion A);
B. Is associated with the lives of persons significant to our past (Criterion B);
C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C); and/or,
D. Has yielded, or may be likely to yield, information important in prehistory or history (Criterion D).

If the SHPO concurs with the agency's determination that a cultural resource is eligible for inclusion to the National Register, then it is automatically eligible for the California Register of Historical Resources (California Register). If a resource does not have the level of integrity necessitated by the National Register, it may still be eligible for the California Register, which allows for a lower level of integrity.

National Register Seven Aspects of Integrity

A cultural resource's integrity is determined using the National Register's seven aspects of integrity at 36 CFR §60.4, which state that a historic property must not only be shown to be significant under the National Register criteria, but it also must retain historic integrity. The seven aspects of integrity include location, design, setting, materials, workmanship, feeling, and association. A property must meet one or more of the Criteria for Evaluation before a determination can be made about its integrity.

STATE

California Register of Historical Resource

The California Register is a listing of State of California resources that are significant within the context of California's history, and includes all resources listed in or formally determined eligible for the National Register. The criteria used to determine the significance of an impact to a "historical resource" (important archaeological or built-environment resources) are based on Appendix G of the CEQA Guidelines. California regulations require that effects to cultural resources be considered only for resources meeting the criteria for eligibility to the California Register, as outlined in PRC § 5024.1. The California Register is intended to encourage and promote recognition and protection of cultural resources, including buildings and structures. CEQA recognizes two types of significant archeological resources: "unique" archeological resources (PRC § 21083.2) and archeological resources that qualify as "historic resources" (PRC § 21084.1 and CEQA Guidelines § 15064.5), and the latter may include California Register-eligible archeological resources as well as archeological resources "in a local register of historical resources." The California Register identifies resources considered to be important for state and local planning purposes and affords certain protection under CEQA. Resources must possess physical integrity, as well as integrity of setting, and meet at least one of the following criteria (CEQA Guidelines, CCR § 15064.6).

A resource that is eligible to the California Register is one that:

1) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2) is associated with the lives of persons important in California's past;
3) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic value; or
4) has yielded, or may be likely to yield, information important in prehistory or history.

Demolition, replacement, substantial alteration, or relocation of an eligible resource are actions that could change the eligibility of a resource.

Assembly Bill 52 and Tribal Cultural Resources

AB 52 amended CEQA to address California Native American tribal concerns regarding how cultural resources of importance to tribes are treated under CEQA. With the addition of AB 52, CEQA now specifies that a project that may cause a substantial adverse change in the significance of a "tribal cultural resource" [as defined in PRC 21074(a)] is a project that may have a significant effect on the environment. According to AB 52, tribes may have expertise in tribal history and "tribal knowledge about land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.

The AB 52 process entails the following:

- The CEQA lead agency must begin consultation with a California Native American tribe(s) that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe(s) requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe(s) requests consultation.
- A proposed Negative Declaration, Mitigated Negative Declaration (MND), or a Draft EIR cannot be released for public review before the tribe(s) has had the opportunity to request consultation.
- If the tribe(s) requests formal consultation, a proposed Negative Declaration, MND, or EIR cannot be adopted or certified by the lead agency until consultation between the tribe(s) and the lead agency has occurred and has concluded.

AB 52 further defines the following legislative terms:

Tribal Cultural Resource: The passage of AB 52 created a new category of resource called a "tribal cultural resource" (TCR). The statute clearly identifies a TCR as a separate and distinct category of resource, separate from a historical resource. PRC § 21074 defines a TCR as any of the following under its subsections (a) through (c):

(a)(1) Sites, features, places, and objects with cultural value to descendant communities or cultural landscapes that are any of the following:

- Included in the California Register of Historical Resources.
- Included in a local register of historical resources as defined in subdivision (k) of § 5020.1.
- Deemed to be significant pursuant to criteria set forth in subdivision (c) of § 5024.1.

(a)(2) Sacred places, including, but not limited to, Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines that meet either of the following criteria:

- Listed on the California Native American Heritage Commission's (NAHC) Sacred Lands File pursuant to § 5097.94 or 5097.96 and a California Native American tribe has submitted sufficient evidence to the lead agency demonstrating that the sacred places are of special religious or cultural significance to the California Native American tribe or contain known graves and cemeteries of California Native Americans.
- Listed or determined pursuant to criteria set forth in subdivision (g) of §5024.1 to be eligible for listing in the California Register.

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

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

California Native American Tribe: New PRC § 21074 defines a "California Native American Tribe" to mean a Native American tribe located in California that is on the contact list maintained by the NAHC. This definition is broader than the concept of a "federally recognized tribe" that is typically used in implementing various federal laws, including the National Environmental Policy Act.

Formal Tribal Consultation: Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification notice that includes a brief description of the proposed project and its location as well as the lead agency contact information, and a notification statement that the federally recognized California Native American tribe has 30 days to request consultation.

Treatment of Mitigation Measures and Alternatives: New PRC § 21080.3.2 provides that as part of the consultation process, parties can propose mitigation measures. If the California Native American tribe requests consultation to include project alternatives, mitigation measures, or significant effects, the consultation would be required to cover those topics. New§ 21082.3 provides that any mitigation measures agreed upon during this consultation "shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring program" if determined to avoid or lessen a significant impact on a TCR.

Senate Bill 18 and Traditional Tribal Cultural Places

SB 18 requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. SB 18 also requires the Governor's Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations.

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government.

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.).

5.4.3 Environmental Setting

PRECONTACT CONTEXT

The archaeological context for the Project area is framed by the San Francisco Bay Region precontact cultural sequence, often referred to as the Central California Taxonomic System, which was defined largely based on stylistic variation in artifacts from burials found in the lower Sacramento Valley (Lillard et al. 1939). This chronology is based largely on changes in well-dated shell bead types and is effectively a Late Holocene occupation sequence (post-3800 cal BP [calibrated years before present]). Owing to a dearth of evidence for earlier occupation in the Bay Area, additional terms are generally lacking reference to the Terminal Pleistocene through Middle Holocene archaeological record.

Terminal Pleistocene (13,500-11,600 cal BP)

The Terminal Pleistocene is generally considered to be represented by wide ranging, mobile hunters and gatherers who periodically exploited large game (Haynes 2002). Throughout California, Terminal Pleistocene occupation is infrequently encountered and poorly understood, and most often represented by isolated fluted points, which are a form of stone tools (Erlandson et al. 2007; Rondeau et al. 2007). No fluted points or archaeological deposits dating to the Terminal Pleistocene have been documented in the Bay Area.

Early Holocene (11,600-7700 cal BP)

In much of Central California, Early Holocene occupation is indicative of semi-mobile hunter-gatherers exploiting a wide range of food resources from marine, lacustrine, and terrestrial contexts (Erlandson et al. 2007; Jones et al. 2002; Meyer and Rosenthal 1995; Moratto 2002). Early Holocene assemblages often include stemmed points, crescents, and steep-edged formed flake tools that share many attributes with contemporaneous material of the Mojave Desert (Rosenthal et al. 2007). Early Holocene precontact material in the Bay Area has rarely been encountered in sites, resulting in few and poorly established archaeological patterns.

Middle Holocene (7700–3800 cal BP)

Comparatively, Middle Holocene occupations are much more ubiquitous than earlier time segments. More than 30 Bay Area archaeological sites have produced radiocarbon dates indicating occupation during the Middle Holocene. Both surface and buried sites are present, including a number of substantial residential settlements. Resource exploitation began to shift toward a lacustrine and maritime focus with the expansion of San Francisco Bay's estuary, mud flats, and freshwater tidal marshes in the Middle Holocene. The presence of a diverse range of habitation sites, including the basal layers of some Bay margin shellmounds, suggests higher population levels, more complex adaptive strategies, and longer seasonal occupation than during the Early Holocene. Along with burial by alluviation, undoubtedly the earliest sites situated along the Bay margins have been inundated by subsequent sea-level rise.

Late Holocene (3800–170 cal BP)

The Late Holocene is generally divided into the following five main time periods: Early, Early/Middle Transition, Middle, Middle/Late Transition, and Late. The Late Holocene is very well documented in the Bay Area with more than 200 dated sites, reflecting widespread occupation by complex hunter-gatherers (Milliken et al. 2007).

The Early Period marks the establishment of a number of large shellmounds. Bay margin sites reveal a strong emphasis on marine shellfish (particularly bay mussel and oyster), marine fishes, and marine mammals. In contrast, interior sites emphasized freshwater fish and shellfish along with terrestrial mammals. Nuts and berries appear to have been particularly important plant resources. Burials are common, tend to be flexed, and the regular use of mortuary offerings all suggest well-developed mortuary practices. Artifacts recovered mostly from burial contexts indicate an extensive trade network provided access to finely crafted implements made of obsidian originating east of the Sierra Nevada and from Napa County (Hughes and Milliken 2007). Abalone (*Haliotis spp.)* and olivella (*Callianax biplicata*) beads and ornaments may also represent trade items.

The Middle Period appears to have witnessed greater settlement permanence—characterized either by sedentary or multi-season occupation. Terrestrial resources appear to have been more heavily exploited than in previous periods, based on food remains and isotopic analysis of human bone (Bartelink 2006). Shifts in resource emphasis included greater exploitation of deer, less reliance on oysters, greater exploitation of mussels, and an increase in acorn exploitation (Bickel 1978; Greengo 1951; Simons 1992).

The Late Period is the best-documented Late Holocene time segment, although some have suggested a decline in the number of settlements. The bow and arrow appear in the Late Period and archaeobotanical remains reveal heavy reliance on small seed exploitation, while the faunal evidence indicates a wide range of resources notably sea otters, rabbits, clams, and deer. Funerary rituals were strongly patterned and included flexed interments and “killed” grave offerings, along with occasional cremations. Extensive trade relations also appear to have flourished with neighboring groups.

Archaeological Research in Eastern and Southern Marin County

Nelson’s (1909) survey of the entire San Francisco Bay Area documented almost half of the shellmounds (approximately 200) in the eastern portion of Marin County, clustered next to the bay and slightly upstream along drainages. As part of the early efforts to understand the nature and history of Bay Area shellmound occupation, Nelson (1910a, 1910b, 1911) excavated, in quick succession, three sites in the Northeast Bay—the Sausalito Mound, the San Rafael Foster Mound, and the nearby Greenbrae Mound.

This early interest in site formation and site structure was then replaced by chronology building within a cultural-historical framework. This emphasis on cultural-historical classification continues to play a fundamental role in structuring how researchers examine the local archaeological record and how field methods were conducted, which has shifted away from trenching to grid unit excavation.

After World War II, numerous excavation projects were undertaken in Marin County. Cultural resources management excavation projects dominated Marin County fieldwork from the late 1960s onward.

For the most part, the archaeology of eastern Marin County has continued to be explored on a piecemeal, site-by-site basis, building a relatively robust archaeological database that includes a burgeoning suite of 69 radiocarbon dates from 19 sites. Despite the prevalence of known sites, Marin County data are rarely considered in recent discussions of the social function of Bay Area mound space (Lightfoot 1997; Lightfoot and Luby 2002; Luby 2004; Luby and Gruber 1999). In addition, recent use of behavioral ecology models to explore foraging efficiency and resource depression in the Bay Area through archaeological deposits have yet to be extended to Marin County.

ETHNOGRAPHIC CONTEXT

The APE falls within southern extent of the aboriginal territory of the Coast Miwok (Barrett 1908; Collier and Thalman 1996; Goerke 2007; Kelly 1978; Kroeber 1925; Milliken 2009). Centered in Marin County, the Coast Miwok spoke one of the California Penutian languages, and were closely related linguistically to the nearby Lake Miwok. They had one of the highest population densities in the Bay Area (Milliken 2010). Coast Miwok territory at historical contact extended from the northern edge of the bay to near Duncans Point, and from the coast to beyond Sonoma River. This area, covering around 1,000 square miles, included both open coast and bay littoral settings. Prior to European contact, the native people of the Bay Area were hunters and gatherers. Subsistence activities centered around the seasonal availability of gathered resources such as acorn, nuts, seeds, greens, and bulbs; hunting deer, pronghorn, tule elk, smaller animals, sea mammals, and waterfowl; fishing; and collecting shellfish (oysters, mussels, and abalone). The proliferation of shell middens throughout the Bay Area attests to the heavy reliance on marine food resources.

The Coast Miwok settlement system consisted of a primary village located along a principal stream, with satellite communities or special-use sites, usually seasonally occupied, in the surrounding countryside. In general, domestic structures were conical in shape with a central hearth, built of perishable wood, grass, rushes and tule around a frame fashioned of two forked poles. .The buildings were the residences of nuclear families and typically contained approximately six to 10 inhabitants. At larger settlements, two special function buildings—a sweathouse and ceremonial building—were often present. Although relatively little is known of Coast Miwok social organization, moieties and secret societies existed, and tribelet leaders were non-hereditary (Kelly 1978). These chiefs were people who played key roles in leading subsistence procurement events, ceremonies, and dances. The basic social unit appears to have been the patrilineal extended family (Slaymaker 1982). Social ranking may have existed, and clam shell disk beads appeared to have played an important role as a medium of exchange.

The Project site is located within the traditional territory of the Coast Miwok tribal community known as the Huimen (Milliken 2009). The Huimen lived at the southern tip of the Marin peninsula, including the area around Richardson Bay (Milliken 2009). Milliken (2009) estimates their territory to have covered approximately 38 square miles, with a population density of 5.8 people per square mile, less than the population density seen to the north. This estimate assumes that the 163 Huimen baptized at Mission Dolores represented approximately 90 percent of the pre-Hispanic population (Milliken 2009). Beyond Mission record data, very little is known of this multifamily political group.

Contact-era Ethnohistory

From its early beginnings, European encroachment in central and northern California focused heavily on the San Francisco Bay as a safe landing and central transportation hub. The Coast Miwok and Pomo to the north of the Golden Gate, and Ohlone to the south, were all particularly impacted by Spanish missionization.

The first large groups of Coast Miwoks that went to Mission of our Seraphic Father San Francisco de Asis (Mission Dolores) were part of a mass migration occurring in 1794–1795. Then, between 1800 and 1817, Coast Miwok represented the majority of the incoming Mission Dolores population, at which time Mission San Rafael was founded, in late 1817, and began affecting Tribes throughout the north bay. When missions were secularized in the 1830s, many Natives transitioned to servitude to Mexican landowners. Others were left to find their way home, often finding their childhood homes and families gone; many others never returned. Settlements gathered at Olompali, the site of a large Coast Miwok village with an occupation extending into precontact times, and at Nicasio, where the San Rafael Christian Indians were granted approximately 80,000 acres of mission lands in 1835 (Federated Indians of Graton Rancheria 2023). Though pre-contact population estimates place the Coast Miwok at 1,500 to 3,000, by 1908 there were only an estimated 11 individuals remaining (Barrett 1908).

Federated Indians of Graton Rancheria

Encroachment of European settlement culminated in a series of acts and bills removing land and political status from tribal governments. The 1871 Indian Appropriations Act established Rancherias and Reservations for the purported purpose of protection from increasing westward settlement and development but having the effect of forcing Native Americans onto legally protected but generally undesirable land with few resources for economic development through farming or mining. An 1862 bill passed by US Congress allowed the government to extinguish Indian title to any Californian lands donated to the Pacific Railroad Company (Reed 1923), and the 1871 Indian Appropriation Act removed the recognition of Native Americans as independent nations, designating all Native peoples as legal “wards” of the federal government. Native Californians were left landless and legally powerless, often making their way as itinerant farm workers or commercial fishermen. Legal land entitlement remained out of reach until 1920, when the Bureau of Indian Affairs purchased a 15.45-acre tract of land in Graton, Sonoma County to create a “village home” for dispersed people of Marshall, Bodega, Tomales, and Sebastopol (Federated Indians of Graton Rancheria 2023). This home consolidated neighboring, traditionally interactive groups into a single entity—Graton Rancheria—thus establishing them, temporarily, as a federally recognized tribe of American Indians.

In 1958, Congress passed the California Rancheria Act, terminating all 41 Rancherias, extinguishing the recognition of their residents as American Indians, and removing the land from Federal Trust. At each Rancheria, the land was to be distributed to selected individuals, removing protections of Native title and trust and leading to large losses of land during a period of explosive residential and commercial development by surrounding municipalities. As with many other California Tribes, federal recognition for the Coast Miwok was not restored until decades later, after tribal members raised money to travel to Washington to campaign for restoration of federal status and rights. For the Graton Rancheria, campaigning began in 1990, with recognition restored in 1997, and a tribal constitution ratified by the Bureau of Indian affairs in 2002, allowing the tribe to re-establish a land base, provide funding for cultural preservation, and establish tribally owned businesses capable of achieving self-sufficiency (Federated Indians of Graton Rancheria 2023).

Today, the Graton Rancheria community encompasses "a federation of Coast Miwok and Southern Pomo groups recognized as a tribe by the United States Congress. The Miwok of west Marin County have, through the years, been referred to as Marshall Indians, Marin Miwok, Tomales, Tomales Bay, and Hookooeko" (Federated Indians of Graton Rancheria 2023). The Tribe opened the Graton Resort and Casino in 2013, which now funds various programs and services for its tribal membership, including environmental and cultural preservation, elder care, childcare, housing, legal support, emergency financial support, education, and employment. Graton Rancheria has developed a Tribal Heritage Preservation Office program with a designated Tribal Heritage Preservation Officer and Sacred Site Protection Committee responsible for protecting the Tribe's tribal cultural resources.

HISTORICAL CONTEXT

The historic era began in Marin County with early contact between the Coast Miwok and sea going Europeans. This included landings by Francis Drake in 1579 and Sebastian Rodriquez Cermeño in 1595. These explorers were the first to document the activities of native Coast Miwok inhabitants.

Spanish policy throughout the late 1700s and early 1800s was directed toward establishing missions, presidios, and secular towns known as pueblos, with all land being held by Spain. Several missions were established in the Bay Area, most notably Mission San Francisco de Asís (or Mission Dolores) in 1776 (Beck and Haase 1974). In addition, the Russians established a trading colony at Fort Ross near Bodega Bay along the coast of Sonoma County in 1811. Subsequently, the Spanish established Mission San Rafael in 1817, north of the project APE. With the founding of the missions, agriculture was introduced in the form of gardens, orchards, grain fields, and pastures for mission livestock, with native inhabitants often used as laborers. Spanish occupation of Alta California was the driving force behind tribal disintegration, with native people leaving their villages for the missions, where padres controlled their daily lifestyles, working, eating, praying, and other religious expression.

The Spanish Period in Northern California lasted until 1821, when the Mexican government gained control over Alta California. Following secularization of the missions by the Mexican government in 1822, land formerly held by Spain was divided into vast tracts owned by individuals. These "ranchos" granted by the government were used primarily for farming and raising cattle. At this point, many of the native people who had been laboring in the mission gardens, orchards, and fields moved to the ranchos, still working as manual laborers, and mixing with other tribes.

The APE is located on what was the 7,845-acre "Rancho Corte Madera del Presidio" Mexican land grant, granted to John Reed by Governor Juan Alvarado in 1834 (Hoffman 1862). Rancho Corte Madera del Presidio historically encompassed the present-day communities of Corte Madera, Tiburon, Belvedere, and central and eastern Mill Valley. The name translates to "where wood is cut for the Presidio," referencing Reed's earliest enterprise on his acquisition: Marin County's first sawmill, located approximately 1.7 miles west of the APE at present-day Cascade Drive and Molino Avenue in downtown Mill Valley.

Agriculture continued to be the major economic pursuit with the onset of the American Period (ca. 1846), in particular to supply the gold mines from 1848 to the 1850s. In the 1850s, land grants were subdivided for towns and eventually, in the 1860s, for the railroad right-of-way.

Establishment of railroads expanded the agricultural life of California and led to more innovative ways of shipping and preserving food supplies, such as transporting fruit and meat in refrigerator cars developed in 1880.

The City of Mill Valley was incorporated in 1900, and following the 1906 San Francisco earthquake and fire, displaced San Franciscans settled throughout Marin County, including Mill Valley. The development of the region as a bedroom community to San Francisco steadily grew, with the mid-twentieth century seeing the largest spike in the wake of World War II. Today, Mill Valley comprises a population of 14,000 residents, with the civic focal point centered around the Arroyo Corte Madera del Presidio, east of the APE across the Pickleweed Inlet.

5.4.4 Assessment Methodology

Far Western prepared an Archaeological Report for the proposed Project to comply with CEQA and the California Code of Regulations, Title 14, chapter 3, Sections 15000 et seq. and Section 106 of the National Historic Preservation Act. The Archaeological Report documents the results of a records search, archival review, buried site sensitivity assessment, Native American outreach and consultation efforts, and archaeological survey.

AREA OF POTENTIAL EFFECTS

The APE includes all potential work locations as defined by the City (Figure 5.4-1). The APE encompasses approximately 5.4 acres and includes the approximately 1.75-acre proposed Housing Site, the portions of the PSB Site that would be altered by the Project, and the area on the upper hillside where the guardrail would be installed along Roque Moraes Drive. Project related ground disturbing activities would involve grading for the foundation, trenching for underground utilities, and tree removal and planting. The depth of proposed disturbance for the foundation and grading work would extend to 26 feet below the current ground surface in portions of the APE where the building and parking garage would be cut into the hillside and all other Project related activities would extend no greater than six feet deep.



Source: Far Western Anthropological Research Group, Inc. Archaeological Resources Inventory for the One Hamilton Drive Affordable Housing Development Project, Marin County, California. Figure 3. July 2023.

Figure 5.4-1. Area of Potential Effects

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 5.4-1. Area of Potential Effects

RECORDS SEARCH

To support preparation of the HEU SEIR, EMC Planning group, on behalf of the City, requested a records search for the entire City limits at the Northwest Information Center (NWIC) in Rohnert Park, California. The City provided Far Western with the results of this records search encompassing the APE plus a one-quarter mile buffer and provided results for any studies conducted or new resources identified. In addition, basemaps were examined for previously recorded archaeological sites and surveys, and the following sources were reviewed:

- National Register of Historic Places,
- California Register of Historical Resources,
- California Inventory of Historic Resources (1976 and updates),
- Office of Historic Preservation's Historical Property Data File,
- California State Historical Landmarks (1996 and updates),
- California State Points of Historical Interest (1992 and updates),
- California Department of Transportation Historic Bridge Inventory List, and
- Office of Historic Preservation's Built Environment Resource Directory.

The records search indicated that one previous cultural resources study, S-1450 (Chavez 1979), has been conducted within the southernmost portion of the APE, which covers six percent of the APE. The study consisted of a records search and pedestrian survey for the Eucalyptus Knoll Development and did not result in the identification of archaeological resources. No studies including fieldwork have been previously conducted within the APE over the past 20 years.

The records search identified two previously recorded cultural resources within the one-quarter mile buffer, none of which intersect the APE: one precontact archaeological resource (CA-MRN-638) and one historic-era archaeological resource (CA-MRN-59).

ARCHIVAL REVIEW

Far Western reviewed historical maps and aerial photographs depicting features such as roads, buildings, other structures and infrastructure, and waterways. The objectives of this historical map and aerial photograph review were to examine the history of land use within the APE and to provide additional information regarding the potential for the presence of historic-era resources within the APE. The below section summarizes a review of the available historical maps and other online documentary sources that encompass the APE. The following types of maps were reviewed:

- Land Survey Plat Maps (Matthewson 1858),
- Historic USGS Topographic Quadrangle Maps (USGS 1897, 1941, 1950, 1954, 1968, 1980, 1993),
- Ethnographic and Archaeological Maps (Nelson 1909, Barrett 1908, Heizer 1978),
- County Atlas and Miscellaneous Maps (Austin and Whiteny 1873; Bancroft and Knight 1871; Dodge 1892, Duflot de Mofras 1844; Hartmann 1849; Hoffman et al. 1873; Ransom and Nagel 1860; Ringgold and Stuart 1852),
- Historic Aerial Imagery (NETR 1946, 1948, 1952, 1956, 1958, 1968), and
- Coastal Survey Maps (US Coastal Survey 1851; US Coast and Geodetic Survey 1944)

NATIVE AMERICAN CONSULTATION

To support preparation of the HEU SEIR, EMC Planning Group, on behalf of the City, contacted the NAHC requesting a review of their Sacred Lands File for the Housing Element Update, as well as a list of individuals/groups who might have knowledge concerning cultural and tribal resources within the City. The NAHC's response, dated May 17, 2022, provided a list of three Native American contacts including the Federated Indians of Graton Rancheria (Graton Rancheria), Guidiville Indian Rancheria, and Wuksache Indian Tribe/Eshom Valley Band that could provide additional information about archaeological and/tribal resources in the area. In December 2022, the City contacted the NAHC to initiate consultation under AB 52 and SB 18 for the proposed Project. The NAHC responded on December 29, 2022 with guidance and recommendations on consultation with the appropriate Native American organizations. On April 27, 2023, letters detailing the proposed Project scope, records search results, and pedestrian survey results were sent to representatives of Graton Rancheria, Guidiville Indian Rancheria, and Wuksache Indian Tribe/Eshom Valley Band. Graton Rancheria THPO Buffy McQuillen responded to the City on May 19, 2023 with a request to formally consult on the Project. To date, no response has been received from the Guidiville Indian Rancheria or the Wuksache Indian Tribe/Eshom Valley Band.

Follow up emails were sent to Graton Rancheria on June 6 and June 12, 2023 by the City's Senior Planner, Danielle Staude, to schedule a meeting regarding the Project and the tribe responded with their available dates on June 14, 2023. A consultation meeting between the City and Graton Rancheria occurred on June 27, 2023, to discuss the results of the archaeological study and proposed Project design and schedule. As a result of the meeting the Tribe requested a copy of the Archaeological Report and a field visit to further discuss the new building plans and potential TCR sensitivity. The on-site meeting occurred on July 26, 2023. Graton Rancheria has requested that geoarchaeological sampling be conducted at the Project site in order to better define the potential presence of tribal cultural resources and inform the final archaeological monitoring plan for the Project.

PRECONTACT SITE SENSITIVITY ASSESSMENT

Large portions of the archaeological record are buried by Holocene (11,700 years ago to present) age deposits throughout northern and central California (Meyer 2013; Meyer and Rosenthal 2008; Meyer et al. 2011; Rosenthal and Meyer 2004a, 2004b). This is particularly true in low-lying areas where sediments tend to accumulate (e.g., floodplains). As buried sites can only be associated with landforms that developed during the span of human occupation, the search for such sites can be limited to portions of the landscape that were formed during the Terminal Pleistocene (25,000 million years ago [mya] to 12,900 years ago) and Holocene (Goebel et al. 2008; Waters and Stafford 2007).

Additionally, precontact sites tend to occur in specific geo-environmental settings (Pilgram 1987; Rosenthal and Meyer 2004a). It is well known that precontact occupation sites are most often associated with level or nearly level landforms that occur near perennial streams, especially near the confluence of one or more streams (Pilgram 1987:44–47). Analysis of precontact sites in other parts of central California has indicated that the majority are located within 200 meters (656 feet) or less of a present or former water source (Rosenthal and Meyer 2004a). Thus, environmental variables can help estimate the relative probability that people occupied any one point on the landscape, as demonstrated by previous studies throughout California (Meyer 2013; Meyer and Rosenthal 2008; Meyer et al. 2010).

Using a GIS database, buried site potential within the Project area was assessed based on distance to water, slope, and landform age. Because specific soil series are often associated with deposits of a particular age, they can also be used to define the age and extent of different age landforms. Landform age was assessed based on soil survey data in combination with Far Western's extensive radiocarbon database (with dates from both natural and cultural contexts), specifically dates that are associated with those soil units when available, as well as relative degree of soil development as described for the mapped soil unit, cut-and-fill relationships, and geomorphic position. The highest potential for buried sites occurs where young surface deposits are located on level landforms adjacent to a water source. Buried site potential diminishes with greater distance from a water source and increasing surface slope and landform age.

The Project area is located on the east edge of the Pickleweed Inlet, a finger of Richardson Bay, along Hamilton Drive in Mill Valley. It is situated on a pre-Quaternary (>2.56 mya) hillslope of the Franciscan Complex scraped onto the Great Valley complex from the Pacific and North American subduction zone and then moved and faulted by the San Andreas Fault system creating a mosaic of basement rocks overlain by Cenozoic (66 mya to present) rocks and sediments throughout the San Francisco Bay region (Graymer et al. 2006). The hillslopes within and surrounding the APE have been incised by numerous stream systems and slope and stream processes continue to shape the landscape.

Additionally, during the last glacial maximum (22,000 years ago), vast ice sheets covered the northern part of the continent, and the climate in central California was considerably cooler than at any time since. The California coastline was located some 25 to 50 kilometers west of its current position (Atwater et al. 1977; Bard et al. 1996; Helley et al. 1979; Yokoyama et al. 2000) and combined runoff from the Sacramento and San Joaquin Rivers merged to form the "California River" (Howard 1979) in the Franciscan Valley, what is now occupied by the San Francisco Bay. As the continental ice sheets began to melt some 16,000 years ago, the world's oceans rose rapidly, causing the Pacific shoreline to migrate eastward (Bard et al. 1996). There was a cumulative approximately 70-meter (230-foot) rise in sea level during the Terminal Pleistocene and Early Holocene (11,700 to 8,200 years ago). Over the past 6,000 years, the sea slowly inundated the Franciscan Valley burying Late Pleistocene and Early Holocene land surfaces (Borchardt 1992; Gmoser et al. 1999; Helley et al. 1979; McIlroy et al. 2001; Meyer 2000; Stewart et al. 2002) with additional transgressive episodes during the Late Holocene (4,200 years ago to present) further burying the landscape (Atwater et al. 1979:349; Price 1981). Finally, during the early twentieth century, deposits of artificial fill were placed around the margins of the bay to reclaim the marshes and wetlands for human development (Lee and Praszker 1969). While some precontact archaeological resources may have been destroyed by historical development, others may have been covered and protected by artificial fill.

Buried site Sensitivity Assessment

A detailed landform age map was created by using a combination of digital soil series developed by the National Resources Conservation Service (Natural Resources Conservation Service 2021) and Quaternary geology mapping by Witter et al. (2006), which was then cross referenced with a regional radiocarbon database to predict the landform age. The majority of the APE is situated on weakly to well-developed soil profiles (predominately the Saurin-Urban Land-Bonny Doon complex) on pre-Quaternary age residuum from sandstone and shale. The hillslope on the east side of the APE ranges from 15 to 75 percent slopes with well-developed, mature profiles on the lesser slopes indicative of long-term landform stability and weakly developed profiles on the

steeper slopes likely due to their unstable topographic position rather than recent age. In the west end of the APE, soils are mapped as historical-modern landfill overlying bay marsh. Once the landform age was established, the potential for encountering buried precontact archaeological sites in the Project area was modeled based on the age and distribution of surface deposits combined with the proximity to water resources (i.e., distance to water) including the historical bay margin. This method has proven useful in other predictive modeling efforts in California (e.g., Meyer and Rosenthal 2008; Rosenthal and Meyer 2004a, 2004b). The highest potential for buried sites occurs where young deposits (late Holocene-age or later) occur within 330 feet of a perennial water source, with the potential diminishing rapidly at distances of 650 feet or more from active or formerly active sources of fresh water (e.g., springs, streams, lakes, and estuaries). For submerged sensitivity, the potential for offshore (submerged) sites was elevated where the offshore area was within 300 meters of the historic-era shoreline, submerged relatively late in time (<3,200 years ago), relatively level, and/or within 300 meters of a former stream channel (Goldman 1969; USGS 2009).

The model used for precontact buried archaeological resources in the APE shows a small, isolated area at the western extent of the APE with highest potential to contain buried archaeological resources (Figure 3.5-2). Other than this specific area, most of the APE has very low potential for buried archaeological resources due to being situated upon pre-Quaternary age residuum. While gently sloping areas near water features have the potential for surface archaeological resources (Pilgram 1987:44–47), the Project area has very low potential for preserving intact buried precontact components.

Given the majority of the Project APE is in pre-Quaternary age residuum with very low sensitivity, most of the APE does not have potential for buried archaeological sites. The small area assessed as having high sensitivity is situated at the western extent of the APE (excluding the hillside) which overlaps with a portion of proposed excavations up to 25 feet deep to accommodate the new building foundation. This portion of the APE has been previously disturbed by the construction of the existing paved parking lot and restrooms.

Historic-Era Subsurface Site Sensitivity and Potential

Historic-era site potential depends on the written record and an understanding of modern and historical disturbances. A wide range of primary and secondary historical sources can be used to construct an understanding of historic land use within the APE. This section addresses the degree to which the APE is sensitive for historic-era archaeology, and the degree of previous disturbance. The potential that historic-era archaeological resources will be encountered is considered in relation to specific Project activities, the location of Project-related subsurface disturbances, and the vertical extent of Project disturbances.

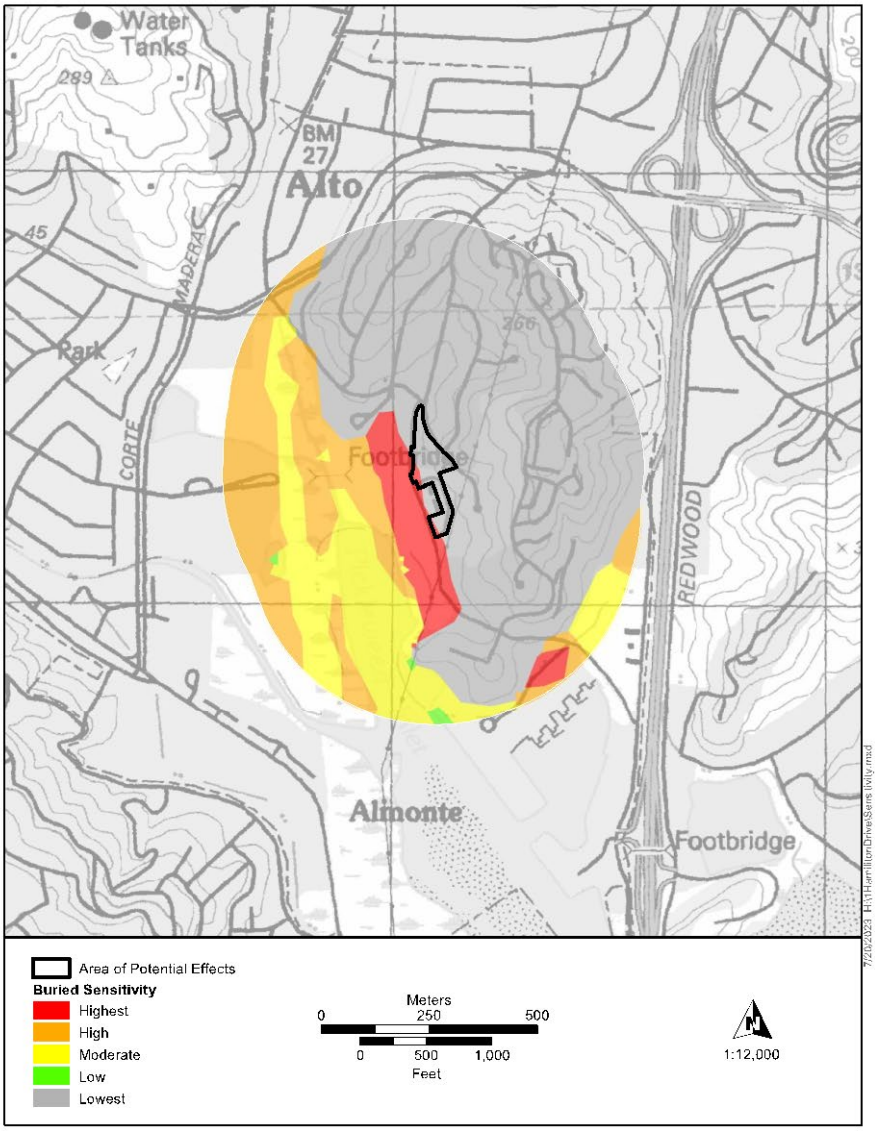
The archival review documents the examination of historical maps and aerial photographs dating back to the 1840s. None of the sources depicted any structures, landscape alterations, or other cultural activity within the APE.

While no historic-era features are documented within the APE, its location adjacent to Richardson Bay suggests that more ephemeral cultural modifications may have been present. These types of features are often not documented or are difficult to see on some historical maps and aerial photographs; however, as they are typical of agricultural and pastoral land use areas, it is possible that similar features were once present within the APE: property and pasture delineations such as fence posts, wire, and stacked rock; outlying structural remains such as

foundation pads; and water related features such as tanks and troughs. These types of historical archaeological features are typically found to be present on or near the ground surface, rather than deeply buried. As no structures are documented historically within or near the APE, it seems unlikely the APE would be a site for more than expedient dumping of refuse generated by those passing through.

Infilling of the bay and subsequent construction and maintenance of the fire and police stations and adjoining roads has introduced ground-disturbing impacts within the western portion of the APE. A maintained road appears on early USGS topographic maps before its replacement with present-day Hamilton Drive. It is unknown the depth of disturbance created by the buildings; however, as the most likely types of historic-era archaeological remains would be found near-surface, these would likely have been removed by the construction. It is possible, however, that these structures have capped foundational or historical surfaces (e.g., road surface) immediately below that were otherwise not depicted on early maps.

Given the historic land use of the APE and ongoing use and maintenance of the police and fire stations, there is low likelihood of encountering historic-era archaeological deposits within the APE.



Source: Far Western Anthropological Research Group, Inc. Archaeological Resources Inventory for the One Hamilton Drive Affordable Housing Development Project, Marin County, California. Figure 6. July 2023.

Figure 5.4-2. Buried Sensitivity

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.4-2. Buried Sensitivity

PEDESTRIAN SURVEY

Far Western archaeologists conducted a pedestrian survey of the Project site on April 19, 2023. The survey was conducted in transects paced no farther than 15 meters apart using geographic features, property boundaries, printed maps, and a submeter GPS unit to determine survey boundaries. All exposed areas, rodent holes, trails, and drainages were carefully examined for the presence of cultural materials. The survey was documented using digital photographs and a handheld submeter GPS unit. Exposed soils in drainages, trails, and rodent runs were inspected carefully for cultural materials.

The entirety of the APE was accessible, resulting in 100 percent survey coverage. Ground surface visibility was generally poor, as underbrush, duff, and grasses covered much of the ground surface. The southern and western portions of the APE were primarily obscured by paving for Hamilton Drive, the parking lots, and decorative landscaping. The best visibility was within the hillslope in the northeast portion of the APE, as well as exposed soils along road cuts, drainages, and occasional bare patches. In these locations, all soils were carefully examined for the presence of cultural materials. When visible, native soils were generally characterized by a light to medium brown loam with moderate compaction and exposed bedrock outcrops. No precontact/Native American or historic-era archaeological sites or artifacts were identified during the field survey.

5.4.5 Thresholds of Significance

Consistent with State CEQA Guidelines Appendix G Environmental Checklist, the project would have a significant impact if it would:

a. *Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5;*

b. *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;*

c. *Disturb any human remains, including those interred outside of dedicated cemeteries; or*

d. *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

    i. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or,*

    ii. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

5.4.6 Applicable HEU SEIR Mitigation Measures

HEU SEIR Mitigation Measure 13-1

Consultation with the Federated Indians of Graton Rancheria is required for each proposed housing project in the 6th Cycle Housing Element. Consultation may result in mitigation measures beyond those identified herein. The Planning Department will ensure that all acceptable mitigation measures are implemented prior to issuance of a grading permit.

HEU SEIR Mitigation Measure 13-2

The City of Mill Valley shall impose the following standard condition of approval for all sites identified in the Housing Element Update that are: 1) not completely developed and 2) original surface soils are visible: an archaeological inspection and archaeological records search shall be required prior to approval of the project. The archaeological inspection and records search may result in mitigation measures beyond those identified herein. The Planning Department will ensure that acceptable mitigation measures are implemented prior to issuance of a grading permit.

HEU SEIR Mitigation Measure 13-5

The City of Mill Valley shall impose the following standard condition of approval for all sites identified in the Housing Element Update: work shall be halted within 50 feet of potential archaeological resources when uncovered or discovered. Construction workers shall avoid altering the materials and their context. Project personnel shall not collect cultural materials. Prehistoric materials might include obsidian and/or chert flaked-stone tools such as projectile points, knives, or scraping implements, the debris from making, sharpening, and using them ("debitage"); culturally darkened soil containing shell, dietary bone, heat-altered rock, and carbonized plant material ("midden"); or stone milling equipment such as mortars, pestles, handstones, or milling slabs. A qualified professional archaeologist shall evaluate the find and provide appropriate recommendations. If the archaeologist determines that the find potentially qualifies as a historic resource or unique archaeological resource for purposes of CEQA (per CEQA Guidelines Section 15064.5), all work must remain stopped in the immediate vicinity to allow the archaeologist to evaluate any materials and recommend appropriate treatment. A Native American monitor shall be present for the investigation, if the local Native American tribe request. Avoidance of impacts to the resource are preferable. In considering any suggested measures proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the City shall determine whether avoidance is feasible in light of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures are recommended by the archaeologist (e.g., data recovery) shall be instituted. Work may proceed on other parts of the Project while mitigation for the historic resources or unique archaeological resources is being carried out.

HEU SEIR Mitigation Measure 13-6

The City of Mill Valley shall impose the following standard condition of approval for all sites identified in the Housing Element Update: If human remains, associated grave goods, or items of cultural patrimony are encountered during construction, the City shall halt work in the vicinity of the find and notify the County Coroner immediately. The City shall follow the procedures in Public Resources Code § 5097.9 and Health and Safety Code § 7050.5. If the human remains are determined to be of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of the determination. The Native American Heritage

Commission shall then notify the Most Likely Descendant (MLD), who has 48 hours to make recommendations to the landowners for the disposition of the remains. A qualified archaeologist, the City and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects. The agreement would take into consideration the appropriate excavation, removal recordation, analysis, custodianship, and final disposition of the human remains and associated or unassociated funerary objects.

HEU SEIR Mitigation Measure 13-7

Identified cultural resources shall be recorded on DPR 523 historic resource recordation forms, prior to issuance of a building permit.

5.4.7 Discussion of Impacts

a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

IMPACT ANALYSIS

Records Search, Archival Research, and Field Survey

The Archaeological Inventory and Testing Report prepared for the proposed Project indicated that there are no documented historical or archaeological resources on the Project site. Two cultural resources were found to be documented within one-quarter mile of the Project site, including one historic-era archaeological resource and one precontact archaeological resource. Neither of these two resources have been evaluated for listing in the National or California Registers. Neither of these resources intersect the Project site.

In addition to the records search and literature review, a pedestrian survey of the Project site was conducted to identify potential cultural resources on-site. All exposed areas were inspected carefully for cultural materials. No precontact/Native American or historic-era archaeological sites or artifacts were identified during the pedestrian survey.

Site Sensitivity Assessments

The Archaeological Report assessed the sensitivity of the Project site for encountering subsurface historic-era and precontact archaeological resources. Far Western determined that the Project site's sensitivity for historic-era resources is low. The precontact site sensitivity assessment suggested that a small portion in the westernmost project site carries high potential for buried precontact Native American archaeological resources, and the remaining 95 percent E has low potential for buried sites. While the western extent of the Project site appears to have been previously disturbed by the construction of Hamilton Drive and the present parking lot and restrooms, high sensitivity remains for deeply buried precontact deposits in this location. As such, additional identification steps were completed for compliance with Section 106 of the NHPA and the identification of historic properties and historical resources under NEPA. Subsurface archaeological testing in the western extent of the Project site via geoarchaeological cores and hand augers did not result in the identification of any cultural material. As a result of the inventory survey and testing efforts, no historical resources and/or historical properties have

been identified within the Project site. The testing efforts were carried out in collaboration with a cultural monitor from the Federated Indians of Graton Rancheria (Graton Rancheria).

Accidental discovery of archaeological resources during ground-disturbing activities at the Project site cannot be precluded. Therefore, the Project would implement Mitigation Measure CUL-1 pertaining to the accidental discovery of subsurface archaeological resources on the Project site. Implementation of Mitigation Measure CUL-1 would reduce the impact to a less-than-significant level.

MITIGATION MEASURES

Mitigation Measure CUL-1

Project construction crews shall be trained in "basic cultural and tribal resources identification" and have access to a Cultural Resources Awareness Sheet. The sheet shall photographically depict shell midden and associated indicators of precontact and historic-era archaeological sites, and clearly outline the procedures in the event of a new archaeological discovery. These procedures include temporary work stoppage (Stop-Work Order) of all ground disturbance, short-term physical protection of artifacts and their context, and immediate advisement of the cultural resources team and City representatives. Any Stop-Work Order would contain a description of the work to be stopped, special instructions or requests for the Contractor, suggestions for efficient mitigation, and a time estimate for the work stoppage. The archaeologist, in coordination with the consulting tribe (as appropriate) shall examine the findings and assess their significance and offer recommendations for any procedures deemed appropriate to further investigate and/or mitigate adverse impacts to archaeological and tribal resources that have been encountered.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would implement Mitigation Measures CUL-1 to address the accidental discovery of subsurface tribal cultural or archaeological resources on the Project site during Project construction activity. The impact of the proposed Project would be **less than significant with mitigation incorporated**.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

IMPACT ANALYSIS

No human remains have been identified within the Project site. However, the potential for discovery of human remains cannot be precluded. The Project would implement Mitigation Measure CUL-2 to address the accidental discovery of human remains, as required by CEQA Guidelines §15064.5 (e). With the implementation of Mitigation Measure CUL-2, the impact would be less than significant.

MITIGATION MEASURES

Mitigation Measure CUL-2

Upon discovery, the Coroner Division of the Marin County Sheriff's Office will be contacted for identification of human remains. The coroner has 48 hours to examine the remains after being notified. If the remains are Native American, the Coroner must notify the Native American Heritage Commission (NAHC) of the discovery within 24 hours. The NAHC will then identify and contact a Most-Likely Descendant (MLD). The MLD may make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the remains and funerary

items. Once formal notification and consultation has occurred, a procedure that may include the preservation, excavation, analysis, and curation of artifacts and/or reburial of those remains and associated artifacts will be developed and implemented in collaboration with the MLD and the City.

If the remains are not Native American, the Coroner will consult with the cultural resources team and the lead agency to develop a procedure for the proper study, documentation, and ultimate disposition of the remains. If a determination can be made as to the likely identity, either as an individual or as a member of a group, of the remains, an attempt should be made to identify and contact any living descendants or representatives of the descendant community. As interested parties, these descendants may make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the remains and funerary items.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would implement Mitigation Measure CUL-2, which addresses the accidental discovery of human remains. The impact would be **less than significant with mitigation incorporated**.

d) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or,

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

IMPACT ANALYSIS

As described previously, Graton Rancheria has requested to formally consult with the City on the proposed Project. Consultation meetings have occurred, and Graton Rancheria recommended that a geoarchaeological investigation of the Project site be performed. As noted previously, preliminary results of this geoarchaeological investigation within the highly sensitive area at the Project site did not reveal the presence of cultural resources. However, the accidental discovery of tribal cultural resources, including human remains, during ground-disturbing activities at the Project site cannot be precluded. Therefore, the Project would implement Mitigation Measures CUL-1 pertaining to the accidental discovery of buried archaeological resources on the Project site and CUL-2 pertaining to the discovery of unknown human remains on the Project site. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce the impact to a less-than-significant level.

MITIGATION MEASURES

The Project would implement Mitigation Measures CUL-1 and CUL-2.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of Mitigation Measures CUL-1 and CUL-2, the Project would not cause a substantial adverse change in the significance of a TCR. The impact of the proposed Project would be **less than significant with mitigation incorporated**.

5.4.8 Cumulative Impacts

The HEU SEIR concluded that implementation of the Housing Element Update, which includes development of the proposed Project, would not have a cumulatively considerable impact on cultural or tribal cultural resources. Graton Rancheria tribal representatives have requested that the City continue to consult with them on Housing Element Update projects. The proposed Project would implement Mitigation Measures CUL-1 and CUL-2 to address potential impacts to cultural and TCRs on the Project site, which would reduce impacts of the Project to a less than significant level. Therefore, the impact of the proposed Project to cultural and tribal cultural resources would not be cumulatively considerable.

5.5 Geology and Soils

5.5.1 Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts related to geology and soils. The analysis in this section evaluates whether the Project would cause adverse effects due to rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, or landslide; result in substantial erosion; would be located on an unstable soil unit or expansive soil; or would destroy a unique paleontological resource or geologic feature. A summary of applicable regulations is also provided in this section. In addition, the potential cumulative impacts of the Project in conjunction with other Housing Element Update sites are evaluated. Information in this section is based on and adapted from a *Geotechnical Engineering/Geologic Hazards Investigation* (Geotechnical Report, Appendix F) prepared by Krazan & Associates, Inc. (Krazan) in August 2023 (Krazan 2023).

5.5.2 Environmental Setting

REGIONAL SETTING

The Project site is located in the eastern portion of the City within the central portion of the Coast Ranges Geomorphic Province of California. The Project site is located west of the San Francisco Bay and is within the eastern facing slope of the Pacific Coast Range/Mount Tamalpais within the Coast Range Province. The Coast Ranges generally consist of an alternating series of parallel mountains and valleys located adjacent to the Pacific Coast. The bedrock units that form the range have been disrupted by intense folding, faulting, and crushing that occurred when the range was formed by the processes of plate tectonics. During the Jurassic and Cretaceous Periods (approximately 80 to 150 million years ago), the Pacific Oceanic Plate, which was progressively moving towards the east, collided with the North American Continental Plate, which was moving towards the west. This collision caused the less rigid Pacific Oceanic Plate to be subducted beneath the North American Continental Plate. The colliding motion of the two plates caused portions of the Pacific Oceanic Crust and overlying marine sediments to be piled onto the North American Continental Plate along the west coast of California. The resulting chaotic jumble of bedrock units scraped off onto the North American Plate is known as the "Franciscan Assemblage" and comprises a large portion of the Coast Range Province. Subsequent development of a series of northwest-trending fault zones has further contributed to the deformation of the Coast Ranges.

During the Pleistocene Epoch ("Ice Age"), the San Francisco Bay depression was formed by down faulting (down warping) of the earth's crust. During this time, sea levels lowered by as much as 350 feet, leading to increased erosion by the streams and rivers discharging into the bay. With the melting of the last ice sheets, beginning about 12,000 years ago, the sea level gradually rose to its present level. Much of the clay and silt carried by the river flood waters were deposited within the quiet bay waters, resulting in significant accumulations of "bay mud" in marshlands and mudflats.

LOCAL SETTING

The Project site lies within the limits of the City and the near surface soils consist of alluvial, colluvial, and sedimentary rock depositional environments along the eastern slope of the Pacific

Coast Range/Mount Tamalpais within the Coast Ranges Province adjacent to the tidal marshes and alluvial fill along the western margins of the San Francisco Bay.

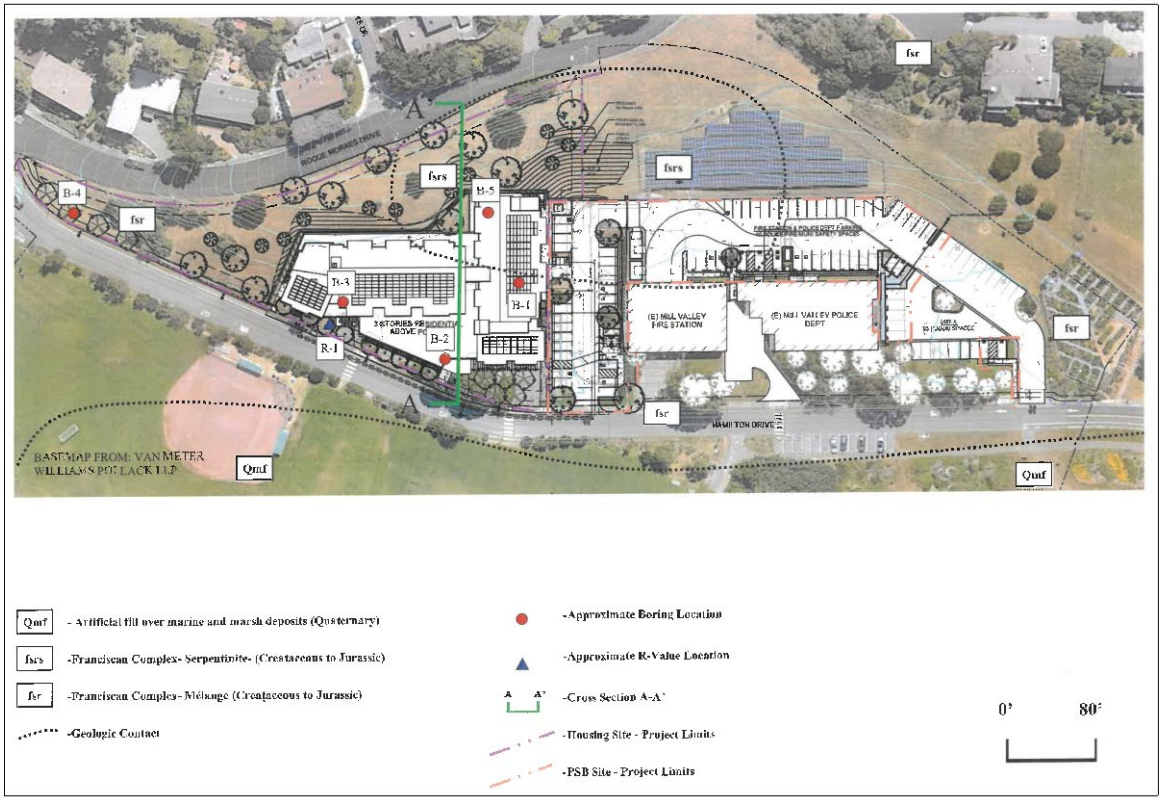
Arroyo Corte Madera Del Presidio Creek or Sutton-Manor Creek, Old Mill Creek, Coyote Creek, and the Pickleweed Inlet to Richardson Bay are located nearby. Alluvial fans, flood deposits, and tidal marsh deposits formed by these drainage courses are the predominant flatland geomorphic features in the area. The elevated portion of the area is characterized by sediments and rock shed from the Coast Range that accumulated primarily as a complex of alluvial fan or colluvial deposit. The Project site is located within the transition of the flatland marsh deposits and the sloping hills. The majority of the site is comprised of the Franciscan Complex mélange while the southeastern portion of the site is mapped as Franciscan Serpentinite (Figure 5.5-1).

LITHOLOGY

In general, the Coast Ranges are composed of sedimentary and metamorphic bedrock interspersed with volcanics. The 2000 Geologic Map and Map Database of Parts of Marin, San Francisco, Alameda, Contra Costa, and Sonoma Counties indicated that the near-surface deposits in the Project site are identified mainly as Franciscan mélange terrain and serpentinite. The near surface soils are made up of clay sands and sandy clays with varying amounts of gravel. At depth, these younger sediments are underlain by Cretaceous and Jurassic rock which consist of a Franciscan mélange and serpentinite. Within the central portion of the Project site, a large block of serpentinite is mapped (Blake, Graymer, and Jones 2000). The remaining areas of the Project site are mapped as Franciscan Complex mélange with two small outcrops or large blocks of chert and greenstone, located approximately 400 feet to the northwest and southeast of the site (Blake, Graymer, and Jones 2000). West of the Project site, quaternary artificial fills overlay quaternary marine and marsh deposits.

The modern depositional processes operating on the valleys and lowlands are mainly the result of the region's Mediterranean climate and active tectonic setting. The interaction between easily eroded bedrock and the heavy winter rains causes large seasonal fluctuations in the sediment loads carried by streams from the uplands down to the bay. During times of high surface-water runoff, sediments are supplied from slopewash, landslides, and gullying, then carried by shifting alluvial channels to the marshlands and bay. Some material is deposited on the alluvial plain, especially when streams overtop their banks and spread their sediment-laden waters over the low plains and basins.

The subsurface information obtained by Krazan indicates that the surface and near-surface soil deposits at the Project site generally consist of clayey sand, sandy clay, and silty sand with varying amounts of gravel, which are consistent with soil deposits mapped in the area.



Source: Krazan Geotechnical Engineering. Multi-family Residential Development, 1 Hamilton Drive, Mill Valley, CA. Site Geologic Map, Figure 2. August 2023.

Figure 5.5-1. Project Site Geologic Map

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

Figure 5.5-1. Project Site Geologic Map

STRUCTURE AND FAULTS

The San Francisco Bay region is tectonically dominated by horizontal shear caused by the relative motion of the Pacific and North American plates. The northwest-southeast shear, probably with some other superposed influences, produces right-lateral strike-slip, plus a variety of other types of crustal movements. Since the boundary of the plates is generally diffuse, the various structural responses occur over a relatively broad band from the foot of the continental slope to the Central Valley.

Active faults in the Project site region are predominantly characterized by strike-slip motion (right-lateral). Major nearby faults showing evidence of earthquake activity within historic time (past 200 years) in relation to the site include the San Andreas (6.68 miles west), the San Gregorio (10.33 miles south), Hayward-Rodgers Creek (11.28 miles east), Point Reyes (17.34 northwest), West Napa (23.81 miles east), the Green Valley (26.17 miles east), the Mount Diablo (26.43 miles east), the Calaveras (28.55 miles southeast), the Monte Vista- Shannon (35.06 miles south), and the Greenville (37.66 miles east) faults. These faults are considered to be active, as they have demonstrated geologic displacement over the past 10,000 years.

The San Andreas fault, located 6.68 miles west, is the closest active fault to the site. To the east of the San Andreas, is the Hayward-Rogers Creek and the Calaveras fault. The Calaveras fault extends 76 miles, splaying from the San Andreas fault near Hollister and terminating at Danville at its northern end.

The San Andreas and San Gregorio Fault zones are major strike-slip-fault systems that form part of the active plate boundary between the Pacific and North American Plates. The San Gregorio Fault is offshore for most of its length, whereas the San Andreas Fault extends offshore south of Bolinas northwest of San Francisco. On the basis of magnetic and seismicity data, motion on the San Andreas Fault has been interpreted to step over to another fault, the Golden Gate Fault, that lies 3 km to the east of the San Andreas Fault and also goes offshore near San Francisco. All three faults merge and come onshore again at Bolinas Lagoon. The slip rate along the San Andreas fault in the vicinity of the Project site is on the order of 17 mm/year to 24 mm/year.

The Hayward-Rodgers Creek fault system is 140 km long, extending from near Healdsburg on the north to the Warm Springs district of Fremont on the south. South of San Pablo Bay, the fault passes through heavily urbanized areas where much evidence of the fault is obscured. The southern part of the fault produced the regionally damaging 1868 M6.8 earthquake. The East Bay Source Characterization Group considers the Hayward-Rogers Creek fault to be a three-segment system, identified as the Rogers Creek fault, the northern segment of the Hayward fault (Hayward North) and the southern segment of the Hayward fault (Hayward South). Slip rates for the Hayward-Rogers Creek fault are ±2 mm/year for each of the three fault segments based on paleoseismic and fault-creep data consistent with new paleoseismic observations of a minimum rate of 7-10 mm/year for the past 8,400 years on the Hayward South fault at Union City and 8.4±2 mm/year for the past 900 years on Rogers Creek fault (Krazan 2023).

The Calaveras fault forms the western margin of Livermore Valley and San Ramon Valley. The Calaveras fault is one of the most geologically active and complex faults in San Francisco Bay Region. As many as twelve M>S earthquakes have occurred on the Calaveras fault during historical time. The Calaveras fault exhibits heterogeneous surface creep in the southern section, with slip rates as high as 17 mm/year Slip rates at the Town of Hollister decrease from about 11

mm/year to 7 mm/year within 2.3 km along the fault. Surface creep is absent along the northern section.

The Monte Vista Fault, located 35.06 miles south, is a potentially active geologic fault, i.e., a fault capable of generating destructive earthquakes, in the San Francisco Bay Area. It is a relatively short fault that runs between and generally parallel to the much longer San Andreas Fault and Hayward Fault zones, trending northwest along the eastern foothills of the Santa Cruz Mountains on the west side of San Francisco Bay. The most recent activity was estimated to have been approximately 700,000 years ago. It has a slip rate of 0.4 mm/year. However, a recent magnitude 2.6 earthquake has been attributed to this fault.

The northwest-trending central Greenville fault system, consisting of several segments or strands, is located 37.66 east of the site. The fault is exposed for over 80 km along its length, from the north end, near Mt. Diablo, to its southern terminus in San Antonio Valley along the eastern side of Livermore Valley.

5.5.3 Regulatory Setting

STATE

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621) was enacted by the State of California in 1972 to address the hazard of surface faulting to structures for human occupancy. The purpose of the Act, as provided in CGS Special Publication 42, is “to prohibit the location of most structures for human occupancy across the traces of active faults and to mitigate thereby the hazard of fault-rupture." The Alquist-Priolo Earthquake Fault Zoning Act is also intended to increase the safety of citizens and minimize the loss of life during and immediately following earthquakes by facilitating seismic retrofitting to strengthen buildings against ground shaking.

The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones known as “earthquake fault zones” around the surface traces of active faults and to issue appropriate maps to assist local jurisdictions in planning, zoning, and building regulation functions. The State Geologist must continually review new geologic and seismic data and revise existing zones and delineate additional earthquake fault zones when warranted by new information. Local agencies must enforce the Alquist-Priolo Earthquake Fault Zoning Act in the development permit process, where applicable. The Act requires that, before a project located within an earthquake fault zone can be permitted, cities and counties shall require a geologic investigation, prepared by a licensed geologist, to demonstrate that structures will not be constructed across active faults. If an active fault is found, a structure for human occupancy may not be placed over the trace of the fault and must be set back a minimum of 50 feet (CDC 2023). The Alquist-Priolo Earthquake Fault Zoning Act and its regulations are presented in California Department of Conservation, California Geological Survey (CGS) Special Publication 42, *Fault-Rupture Hazard Zones in California.*

Seismic Hazard Mapping Act

In 1990, the California State Legislature passed the Seismic Hazard Mapping Act to protect public safety from the effects of strong shaking, liquefaction, landslides, or other ground failure, and other hazards caused by earthquakes. The Act requires that the State Geologist delineate

various seismic hazards zones on Seismic Hazards Zones Maps. Specifically, the maps identify areas where soil liquefaction and earthquake-induced landslides are most likely to occur. A site-specific geotechnical evaluation is required prior to permitting most urban developments within the mapped zones. The Act also requires sellers of real property within the zones to disclose this fact to potential buyers.

State publications supporting the requirements of the Seismic Hazards Mapping Act include CGS Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California, and CGS Special Publication 118, Recommended Criteria for Delineating Seismic Hazard Zones in California. The objectives of Special Publication 117 are to assist in the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations and to promote uniform and effective statewide implementation of the evaluation and mitigation elements of the Seismic Hazards Mapping Act. Special Publication 118 implements the requirements of the Seismic Hazards Mapping Act in the production of Probabilistic Seismic Hazard Maps for the state.

Seismic Safety Act

The California Seismic Safety Commission (Commission) was established by the Seismic Safety Act in 1975 to provide oversight, review, and recommendations to the Governor and State Legislature regarding seismic issues. The Commission's name was changed to Alfred E. Alquist Seismic Safety Commission in 2006. The Commission has adopted several documents based on recorded earthquakes, including the following (AEASSC 2023):

- Research and Implementation Plan for Earthquake Risk Reduction in California 1995 to 2000, report dated December 1994; and
- Commercial Property Owner's Guide to Earthquakes Safety, report dated October 2006.

California Building Code

The California Building Code is contained in Title 24 of the California Code of Regulations, and is a compilation of building standards, including seismic safety standards for new buildings. California Building Code standards are based on: (i) building standards that have been adopted by State agencies without change from a national model code, (ii) building standards based on a national model code that have been changed to address particular California conditions, and (iii) building standards authorized by the California legislature but not covered by the national model code. Given the State's susceptibility to seismic events, the seismic standards contained in the California Building Code are some of the strictest in the world. The Code includes provisions for demolition and construction, as well as regulations regarding building foundations on soil types. The Code applies to all occupancies in the State, except where stricter standards have been adopted by local jurisdictions.

LOCAL

City of Mill Valley General Plan

The General Plan contains the following policies and programs regarding geology and soils:

> **Program NE.1-3:** Use "best available" science and technology, such as "Marin Maps" or other Geographic Information System (GIS) or technical resources, to make critical natural resource and hazard data and mapping accessible to the community and to reinforce the links between residents and the surrounding natural environment.

Program NE.1-4: Identify and continually update mapping data showing areas of the City that are vulnerable to the effects of climate change-related hazards, including landslides, sea level rise, flooding, loss of barrier habitats (e.g., wetlands), changing storm cycles and increased rainfall, and extended periods of excessive heat.

Policy HZ.1 Hazard Identification and Mitigation: Identify all hazards that threaten the City. Determine the likelihood of occurrence and severity of all hazards, further categorize them as either "sudden onset" disasters (e.g., earthquakes, wildfire) or "slow onset" disasters/phenomena (e.g., drought, extreme heat, sea level rise), and strengthen hazard mitigation policies and regulations.

Program HZ.1-1: Use geographic information systems, such as Marin Maps, to review and update hazard information and quantify the vulnerability of people and structures in hazard areas.

Program HZ.6-4: Ensure that all grading and site improvements and structures minimize geotechnical, seismic, and flood hazards.

City of Mill Valley Municipal Code

Title 14 of the MVMC addresses building and construction. Earthwork activities, including grading, are subject to requirements of the MVMC Chapter 14.32 Grading. Specifically, Section 14.32.030 requires projects to obtain a grading permit, Section 14.32.060 requires submittal and approval of an Erosion Control Plan, and Section 14.32.080 establishes requirements for grading during the rainy season. The MVMC incorporates by reference the California Building Code, with City amendments for additional requirements. The Building Division within the City's Department of Planning and Building is responsible for implementing and enforcing the provisions of Title 14 of the MVMC.

5.5.4 Project Site Conditions

SOIL PROFILE AND SUBSURFACE CONDITIONS

The Geotechnical Report indicated that subsurface conditions found at the Project site are typical of those found in the geologic region of the site. Generally, the upper soils consisted of approximately 6 to 12 inches of very loose clayey sand or sandy clay. These soils are disturbed, have low strength characteristics and are highly compressible when saturated. Below the loose surface soils, approximately 2 to 3 feet of loose clayey sand or firm to very stiff sandy clay was encountered. Field and laboratory tests suggest that these soils are moderately strong, slightly compressible and have a moderate expansion potential. A representative soil sample had an expansion index of 70.

Below approximately 3 to 4 feet, layers of predominately medium dense to very dense clayey sand or stiff to hard sandy clay and sandy clay with gravel were encountered. Field and laboratory tests suggest that these soils are moderately and slightly compressible. Below approximately 9 to 14 feet, Franciscan Complex mélange or weathered serpentinite rock was encountered within Borings No. B-4 and B-5 along the northern and eastern half of the site. This weathered rock was moderately strong and extended to the auger refusal depth of 34 feet in the deep Boring No. B-5.

GROUNDWATER

Test boring locations were checked for the presence of groundwater during and immediately following the drilling operations. Groundwater was encountered at depths of 5 to 13 feet below existing site grade in the borings drilled along the western edge of the site. Water table elevations may fluctuate with time and are dependent on seasonal precipitation, irrigation, land use and climatic conditions, and other factors. Therefore, water level observations at the time of the geotechnical field investigation may vary from those encountered during the construction phase of the Project.

GEOLOGIC HAZARDS

Geologic Subgrade

Information obtained from the geologic literature, as well as data from the site exploration, indicate the general soil profile at the site consists predominately of loose to very dense clayey sand or firm to hard sandy clay and sandy clay with gravel was encountered. Below these surface soils, weathered Franciscan Complex mélange or serpentinite rock was encountered in some of the borings. Loose surface soil and fill material on the site would be removed and recompacted as recommended by the Geotechnical Engineering Investigation, and therefore the geologic subgrade of the site can be conservatively approximated as "soft soil". A Joyner-Boore Class D subgrade classification is considered appropriate for the soil profile and corresponds with a National Earthquake Hazard Reduction Program (BSSC, 1994) Site Class D. The site class definition from the 2022 California Building Code and ASCE 7-16, that is most consistent with the site conditions is Site Class D.

Faults

The Project site is included on the Earthquake Zones of Required Investigation Map. The Project site is not within a Fault-Rupture Hazard Zone, but a *Fault Activity Map of California* from the California Department of Conservation shows that a pre-Quaternary, unnamed fault is located within or near the site (Figure 5.5-2). This fault is oriented running northwest to southeast along the eastern portion of the Housing Site and appears to be ¾ of a mile long. This is a pre-Quaternary fault and is classified as having no recognized Quaternary displacement. This means that there is no record of the fault having been active at any time during the past 1,600,000 years. Another reference to this unnamed fault was made on a local geologic map available for review on Macrostrat.org. No fault orientation is made on the geologic map, but the digitized summary of the serpentine block unit within the Franciscan Complex formation on/near the Project site describes that there is a “certain” fault within the area (Figure 5.5-3). For land use planning purposes, pre-Quaternary faults are presumed to be effectively inactive and do not require further investigation under the Alquist-Priolo Act. The nearest zoned active faults are portions related to the San Andreas fault located more than 6.68 miles west of the Project site (Krazan 2023).

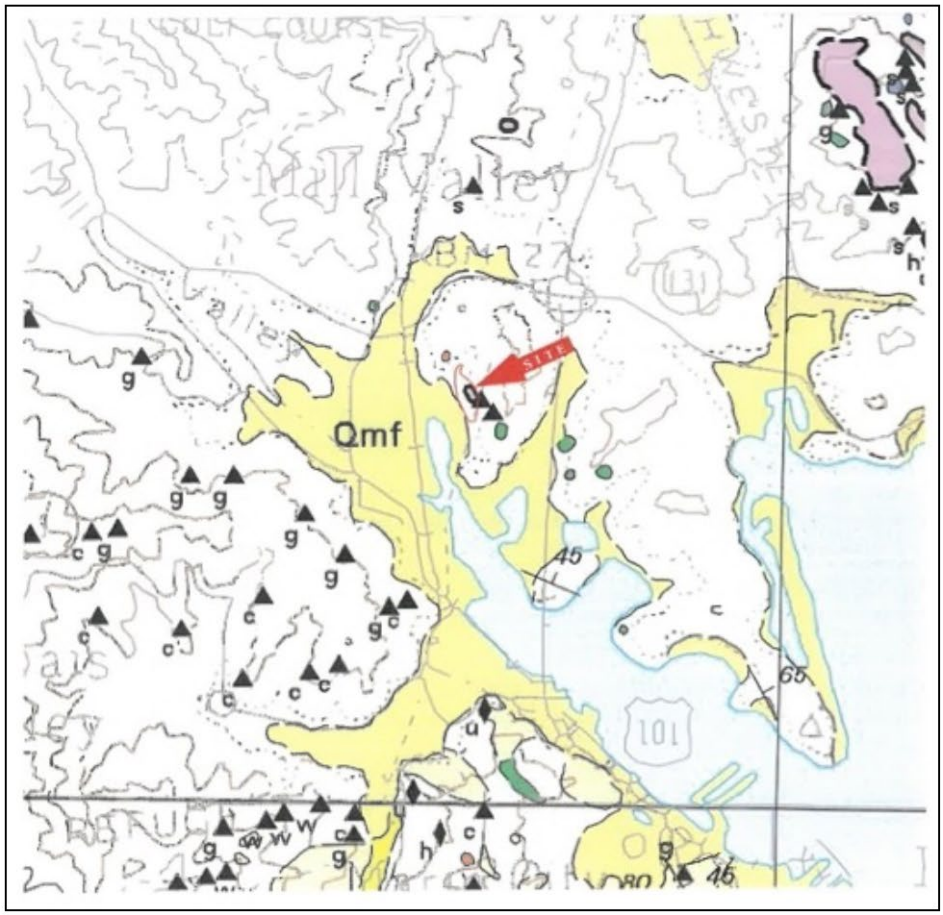


Source: Krazan Geotechnical Engineering. 1 Hamilton Drive Multi-family Residential Development. Fault Activity Map. Figure 7. August 2023.

Figure 5.5-2. Fault Activity Map

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.5-2. Fault Activity Map



Source: Krazan Geotechnical Engineering. 1 Hamilton Drive Multi-family Residential Development. Local Geological Map. Figure 6. August 2023.

Figure 5.5-3. Local Geological Map

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.5-3. Local Geologic Map

Soil Liquefaction

Soil liquefaction is a state of soil particles suspension caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs in soils such as sand in which the strength is purely friction. However, liquefaction has occurred in soils other than clean sand. Liquefaction usually occurs under vibratory conditions such as those induced by seismic event. To evaluate the liquefaction potential of the site, the following items were evaluated:

- Groundwater depth,
- Soil type,
- Relative density,
- Initial confining pressure, and
- Intensity and duration of groundshaking.

The soils and rock encountered within a depth of 34 feet on the Project site predominately consist of loose to very dense clayey sand or firm to hard sandy clay and sandy clay with gravel. Very dense, highly to moderately weathered serpentinite rock was encountered at a depth of approximately 14 feet below site grade within Boring No. B-5. The bore was terminated at 34 feet due to auger refusal. Groundwater was encountered at depths of 5 to 13 feet below existing grade in the borings drilled along the western edge of the Housing Site. No groundwater was encountered within Boring No. B-5. Groundwater data was available within the vicinity of the site, but groundwater depth on the lower elevation west side of the site sits around 5 feet.

The potential for soil liquefaction during a seismic event was evaluated using the LIQUEFYPRO computer program (Version 5.9d) developed by CivilTech Software. For the analysis, a maximum earthquake magnitude of 7.86 was used. A peak horizontal ground surface acceleration of 0.728g was considered conservative and appropriate for the liquefaction analysis. A groundwater depth of 5 feet was used for the analysis. The analysis indicates that soils above a depth of 5 feet are non-liquefiable due to the absence of groundwater. The soils below a depth of 5 feet are considered to be slightly liquefiable with factors of safety ranging from 2.33 to 5.0. The analysis indicates that the total and differential seismic induced settlement is not anticipated to exceed ¼ inch and ½ inch, respectively. Accordingly, the liquefaction potential at the site is considered low and measures to mitigate the liquefaction potential should consider the anticipated settlements in the Project design.

Seismic Settlement

One of the most common phenomena during seismic shaking accompanying any earthquake is the induced settlement of loose unconsolidated soils. The estimated seismic settlement was determined at the Project site using the settlement analysis method by Modified Stark/Olsen (1987). Settlement values were determined at Boring No. B-5 and are described in detail in the Geotechnical Report.

The native soils within the Project site are not conducive to hydrocollapse due to the relatively low void -ratio and shallow ground water. Any loose fill material at the site could be vulnerable to hydrocollapse.

Pickleweed Inlet or Arroyo Corte Madera Del Presidio Creek lies approximately 500 feet west of the property line of the Project site. The potential for lateral spreading was evaluated using the "Revised Multilinear Regression Equations for Predication of Lateral Spread Displacement" by Youd, Hansen, Corbett and Bartlett (Youd et al. 2002). Based on a lack of shallow liquefiable

soils within the subject site and the distance of proposed structures from the existing creek, the structures are not likely subject to lateral spreading hazards.

Slope Stability and Potential for Slope Failure

The site is located on an area with moderate sloping hillsides. The surrounding land to the west of the site is relatively level and is utilized as a park with ball fields. However, the ground slopes upward from approximately mid-site and to the northeast. East of the site, Roque Moraes Drive, Keats Drive, and a residential development are terraced upward into a hill with the uppermost elevation being around 240 feet. Approximately ½ of southwestern area of the site is sloping roughly 1 to 2° to the east mainly within the asphaltic concrete parking area. The remaining northern and eastern ½ of the site has moderately upsloping hillsides. The slope steepens upward from the relatively flat parking area and mid site, the site slopes between 3 to 25°. Along the northeastern edge of the site, an increase in slope occurs and up to 45 to 50° southwesterly facing slope exist. The total relief across the site is around 60 feet. Roque Moraes Drive is located along this northeastern edge of the site. This road slopes from an upper elevation of 80 feet from the southeast down to an approximate elevation of 20 feet northwest at the intersection with Hamilton Drive. The slope is covered with sparse to moderate weed and grass growth, and several small to large trees are scattered across the site. The surface soils along the slope appeared to consist of relatively loose clayey sand and sandy clay with varying amounts of gravel. No significant slope failures were noted during our site visits, but evidence of prior cut and grading is visible in the southeastern slope of the site. Minor slope instability, predominately related to erosion, was observed at various locations throughout the slope. However, no significant slope failures were noted during field surveys by Krazan.

Naturally Occurring Asbestos

As discussed in Section 5.2, Air Quality, the Project site is located within a geologic area known to contain a group of silicate minerals that occur as asbestiform fibers or naturally occurring asbestos (NOA). Asbestos is a known carcinogen and inhalation of asbestos may result in the development of lung cancer or mesothelioma. Asbestos is a naturally occurring mineral that is commonly found in serpentinites, ultramafic rocks, and some mafic rocks, which exist primarily within the northern two-thirds of the State of California. Refer to Section 5.2, Air Quality for a more detailed discussion of NOA.

5.5.5 Thresholds of Significance

Consistent with State CEQA Guidelines Appendix G Environmental Checklist, the Project would have a significant impact if it would:

a. *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

    i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;*

    ii) *Strong seismic ground shaking;*

    iii) *Seismic-related ground failure, including liquefaction;*

    iv) *Landslides;*

b. *Result in substantial soil erosion or the loss of topsoil;*

c. *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;*

d. *Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code, creating substantial direct or indirect risks to life or property;*

e. *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or,*

f. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

5.5.6 Discussion of Impacts

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

IMPACT ANALYSIS

As described in Section 5.5.3 Project Site Conditions, the Project site is not within a Fault-Rupture Hazard Zone delineated on an Earthquake Zones of Required Investigation Map. Local geologic maps indicated that a pre-Quaternary, unnamed fault is located within or near the Project site. This fault is oriented running northwest to southeast along the eastern portion of the Housing Site and appears to be ¾ of a mile long. This fault is classified as having no recognized Quaternary displacement (i.e., within the last 1.6 million years) on the *Fault Activity Map of California* provided by the California Department of Conservation. Geotechnical studies conducted for Eucalyptus Terrace, a nearby subdivision, did not identify a fault running through the area (Herzog 1985). For land use planning purposes, pre-Quaternary faults are presumed to be effectively inactive per the Alquist-Priolo Act and do not require further investigation. This is not meant to imply that inactive fault traces will not rupture, only that they have not been shown to have ruptured for at least 1.6 million years and that the probability of fault rupture is low. The nearest zoned active faults are portions related to the San Andreas fault located more than 6.68 miles west of the Project site (Krazan 2023).

The Project would be required to comply with the California Building Code as adopted by the City and additional stipulations set forth in the MVMC. Additionally, the Project would implement Mitigation Measure GEO-1, which requires incorporation of the recommendations provided by the Geotechnical Report in Project design and construction. Implementation of Mitigation Measure GEO-1 and adherence to standards of the California Building Code would ensure that the proposed Project's impacts related to rupture of a known earthquake fault would be less than significant.

MITIGATION MEASURES

Mitigation Measure GEO-1

The Project shall incorporate into design and implementation the recommendations of the *Geotechnical Engineering/Geologic Hazards Investigation* prepared by Krazan (Appendix F). The purpose of these recommendations is to stabilize the surface soils on the housing development site to reduce risks associated with geologic hazards. The Geotechnical Report provides recommendations related to the following:

- Groundwater influence on structures and construction activities,
- Site preparation,
- Slope construction/reconstruction,
- Slope preparation,
- Engineered fill,
- Drainage and landscaping,
- Utility trench backfill,
- Conventional and drilled pier foundations,
- Floor slabs and exterior flatwork,
- Lateral earth pressures and retaining walls,
- Pavement design, and
- Seismic parameters per the 2022 California Building Code.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death, involving rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Mitigation Measure GEO-1 would be implemented to ensure that risks associated with geologic hazards and seismic activity are minimized to the extent possible. With implementation of Mitigation Measure GEO-1, the impact of the proposed Project related to rupture of a known earthquake fault would be **less than significant with mitigation incorporated**.

ii) Strong seismic ground shaking?

IMPACT ANALYSIS

Documentation and mapping included in the Natural Hazards section of the Marin County Multijurisdictional Local Hazard Mitigation Plan Annex dated 2021, and the Safety Element of the City's General Plan referenced documents generally indicate that the Project site is subject to relatively moderate to high seismicity and related hazards.

The Mill Valley area has historically experienced a moderate to high degree of seismicity. Krazan conducted a data review of historic earthquakes with magnitudes greater than 4.0 within approximately 50 miles of the Project site and historic earthquakes with magnitudes greater than 5.0 within approximately 100 miles of the Project site. The earthquake data indicated that 380 events with magnitudes greater than 4.0 occurred within 50 miles of the Project site between 1800 and 2022. The data indicated that 16 events exceeded magnitudes of 5.0 within 20 miles of the Project site. The nearest listed event occurred approximately 3.5 miles south of the Project site in 1808 and had a magnitude of 6.3. Numerous earthquakes are listed with magnitudes between 5.0 and 6.0 beyond about 40 miles of the Project site (Krazan 2023). Given this, the possibility of strong seismic ground shaking at the Project site cannot be precluded and this impact is considered to be potentially significant. Implementation of Mitigation Measure GEO-1

requires incorporation of the recommendations provided by the Geotechnical Report in Project design and construction. Recommendations related to site preparation, engineered fill, and building foundations would ensure that risks associated with strong seismic ground shaking are reduced to the extent possible. In addition, the Project would be required to comply with the California Building Code and additional requirements adopted by the MVMC. These measures would ensure that Project impacts related to strong seismic ground shaking would be less than significant.

MITIGATION MEASURES

The Project shall implement Mitigation Measure GEO-1.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Mitigation Measure GEO-1 would be implemented to ensure that risks associated with geologic hazards and seismic activity are minimized to the extent possible. With implementation of Mitigation Measure GEO-1, the impact of the proposed Project related to strong seismic ground shaking would be **less than significant with mitigation incorporated**.

iii) ***Seismic-related ground failure, including liquefaction?***

IMPACT ANALYSIS

As described previously, the Geotechnical Report concluded that liquefaction potential at the site is considered low. The Project site is not included on the "Liquefaction or Landslide Susceptibility" Map dated 2003, prepared by the U.S. Geological Survey (Figure 5.5-4). A map generated for Marin County shows that the Project site lies within a very low potential for liquefaction although just to the west, is a very high liquefaction potential area (Figure 5.5-5). The Project would implement Mitigation Measure GEO-1 which would include recommendations to stabilize soils on-site. Implementation of GEO-1 would ensure that Project impacts related to liquefaction would be less than significant.



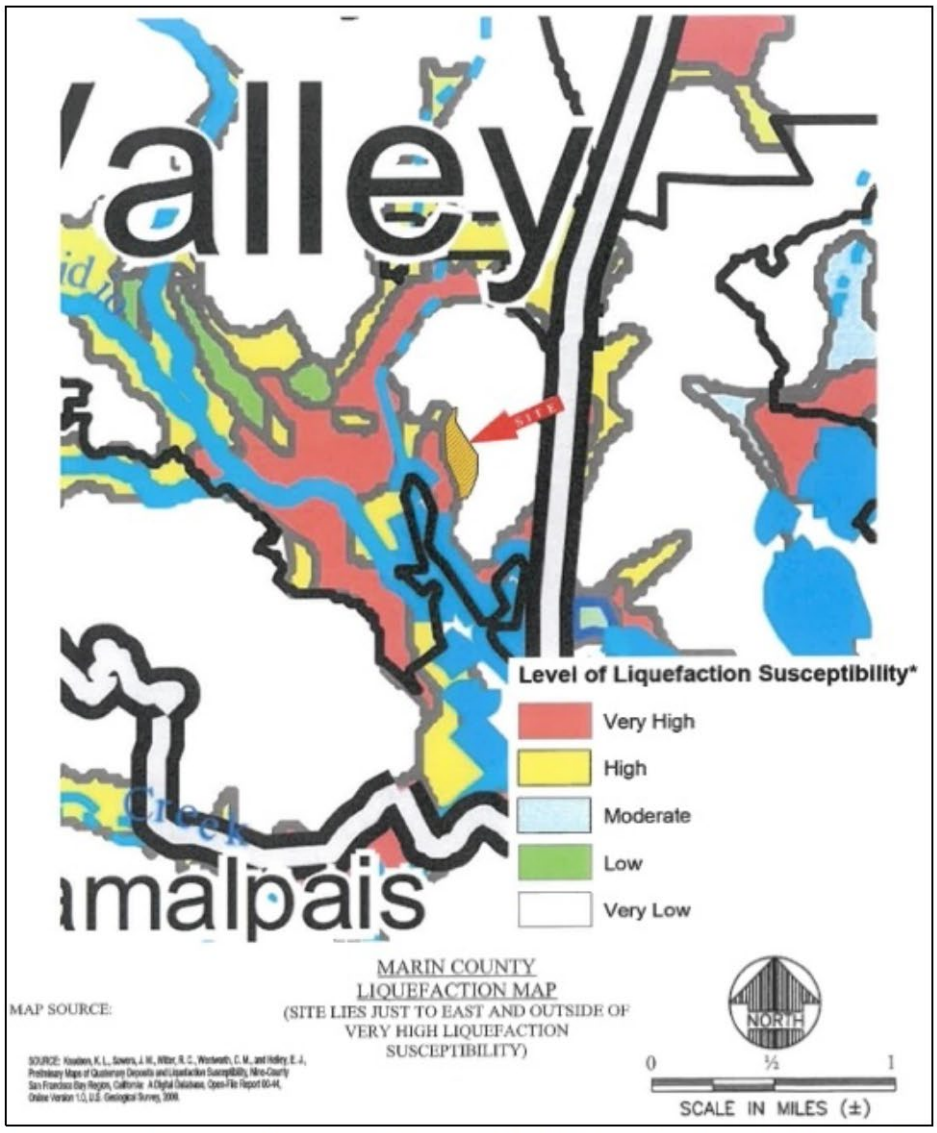
Source: Krazan Geotechnical Engineering. 1 Hamilton Drive Multi-family Residential Development. Earthquake Zones of Required Investigation (Liquefaction). Figure 11. August 2023.

Figure 5.5-4. Earthquake Zones of Required Investigation (Liquefaction)

wra Environmental Consultants

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.5-4. Earthquake Zones of Required Investigation (Liquefaction)



Source: Krazan Geotechnical Engineering. 1 Hamilton Drive Multi-family Residential Development. Marin County Liquefaction Map. Figure 12. August 2023.

Figure 5.5-5. Marin County Liquefaction Map

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.5-5. Marin County Liquefaction Map

MITIGATION MEASURES

The Project shall implement Mitigation Measure GEO-1.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death, involving liquefaction. Mitigation Measure GEO-1 would be implemented to ensure that risks associated with geologic hazards and seismic activity are minimized to the extent possible. With implementation of Mitigation Measure GEO-1, the impact of the proposed Project related to liquefaction would be **less than significant with mitigation incorporated**.

iv) *Landslides?*

IMPACT ANALYSIS

The Project site is located in an area with moderate sloping hillsides. Minor slope instability, predominantly related to erosion, was observed by Krazan at various locations throughout the Project site slope. However, no significant slope failures were noted during the field surveys. As previously noted, the Project site is not included on the "Liquefaction or Landslide Susceptibility" Map dated 2003, prepared by the U.S. Geological Survey (Figure 5.4-3). Maps prepared by the County include the Project site in an are designated as "few landslides" (County of Marin 2022). The Project would implement Mitigation Measure GEO-1 which includes recommendations for slope construction and reconstruction. These recommendations would ensure that modifications to the slope and slope reconstruction would not pose a significant risk of landslide on the Project site. With implementation of Mitigation Measure GEO-1, the proposed Project's impacts related to landslides would be less than significant.

MITIGATION MEASURES

The Project shall implement Mitigation Measure GEO-1.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death, involving landslides. Mitigation Measure GEO-1 would be implemented to ensure that risks associated with geologic hazards and seismic activity are minimized to the extent possible. With implementation of Mitigation Measure GEO-1, the impact of the proposed Project related to landslides would be **less than significant with mitigation incorporated**.

b) Result in substantial soil erosion or the loss of topsoil?

IMPACT ANALYSIS

Construction-related ground disturbance (grading and excavating) from the proposed Project would increase the potential for soil erosion and loss of topsoil on the Project site. The Project would obtain a Grading Permit from the City, which would require the approval of an Erosion Control Plan and Stormwater Control Plan. These Plans would contain measures to minimize soil erosion and loss of topsoil during Project construction.

A preliminary Stormwater Control Plan has been prepared which is intended to remove sediment and other pollutants from post-construction site runoff, and to provide appropriate controls of the flow rate and/or volume of stormwater runoff from the additional impervious surfaces created by the Project. This Plan would be reviewed by the City prior to approval and must be found consistent with all provisions of the Phase II Small MS4 National Pollutant Discharge Elimination System (NPDES) Permit and Phase II Stormwater Permit. A summary of on- and off-site existing and proposed impervious surface areas provided by the Preliminary Grading Plans is provided below in Table 5.5-1.

Table 5.5-1. Existing and Proposed Impervious Surface Area

	EXISTING	PROPOSED
On-Site Impervious	0.40 acres (22%)	0.83 acres (46%)
Off-Site Impervious	0.14 acres (Proposed for demolition)	0.18 acres
Total Impervious	0.54 (30%)	1.01 acres (56%)

A preliminary Erosion and Sediment Control Plan has been prepared by the Project applicant, which would incorporate the following elements into the Project design to reduce sediment runoff and erosion:

- **Inlet Sediment Barriers:** Barriers would be constructed in small, nearly level (less than 5% slope) drainage areas using 1x4 wood or equivalent metal stakes. The top of the frame would be situated well below the ground elevation downslope to prevent runoff from by-passing the inlet. A temporary dike may be necessary on the downslope side of the structure. Gravel bags would be used in lieu of straw wattles after pavement has been installed.
- **Straw Wattle Check Dams:** Wattles would be embedded 4 inches into the soil and 'keyed' into swale banks. Wattles would be placed perpendicular to drainage flow with ends tightly abutting. Dams should be inspected after each significant storm and maintained and repaired promptly if damage has occurred.
- **Concrete Washout:** The actual layout of the concrete washout would be determined in the field. The "concrete washout" sign would be installed within 30 feet of the temporary concrete washout facility.
- **Straw Wattle Slope Protection:** Straw wattles are tubes made from straw and bound with biodegradable wrapped netting. They are approximately eight inches in diameter and 20 to 30 feet long. These wattles would be used to trap sediment and reduce sheet and rill erosion by reducing slope gradient, increasing infiltration rates, and producing a favorable environment for plant establishment. Wattle installation would require the placement and secure staking of the wattle in a three- to five-inch-deep trench dug on the contour. Runoff must not be allowed to run under or around the wattle.

The implementation of an Erosion Control Plan and Stormwater Control Plan would reduce Project impacts related to soil erosion and loss of topsoil to a less than significant level.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not result in substantial soil erosion or loss of topsoil with the implementation of an Erosion Control Plan and Stormwater Control Plan. The impact would be **less than significant**.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

IMPACT ANALYSIS

The Geotechnical Report concluded that the surface soils on the Project site have a loose consistency. These soils are disturbed, have low strength characteristics, and are highly compressible when saturated, and could therefore become unstable as a result of the Project. The Project would implement Mitigation Measure GEO-1 which requires recommendations provided in the Geotechnical Report to be included in Project design and construction. The Geotechnical Report recommends that the on-site surface soils be recompacted, with the intent to stabilize the soils and locate any unsuitable or pliant areas that were not found during the field survey performed by Krazan. Implementation of Mitigation Measure GEO-1 would reduce Project impacts related to unstable geologic and soil units to a less than significant level.

MITIGATION MEASURES

The Project shall implement Mitigation Measure GEO-1.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project site is underlain by loose surface soils that have the potential to become unstable as a result of the Project. Mitigation Measure GEO-1 would be implemented to ensure that risks associated with geologic hazards and seismic activity are minimized to the extent possible. With implementation of Mitigation Measure GEO-1, the impact of the proposed Project related to unstable geologic and soil units would be **less than significant with mitigation incorporated**.

d) Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?

IMPACT ANALYSIS

The Geotechnical Report concluded that the surface and near surface soils observed on the Project site consist of predominantly clayey sand, sandy clay, and clayey sand with gravel. The clayey soils on-site are considered to be moderately expansive. The Project would implement Mitigation Measure GEO-1 which would include measures to reduce potential risks associated with expansive soils to the extent possible. Implementation of Mitigation Measure GEO-1 would reduce impacts of the proposed Project related to expansive soils to a less than significant level.

MITIGATION MEASURES

The Project shall implement Mitigation Measure GEO-1.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would not be located on an expansive soil which would create substantial direct or indirect risks to life or property. Mitigation Measure GEO-1 would be implemented to ensure that risks associated with geologic hazards and seismic activity are minimized to the extent possible. With implementation of Mitigation Measure GEO-1, the impact of the proposed Project related to expansive soils would be **less than significant**.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

IMPACT ANALYSIS

The proposed Project would not include the use of septic tanks or alternative wastewater disposal systems. The Project would connect to existing sewer utilities within the City. No impact related to soils that are incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems would occur.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would not include the use of the use of septic tanks or alternative wastewater disposal systems. Therefore, **no impact** would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic features?

IMPACT ANALYSIS

Paleontological resources (fossils) have most commonly been identified in Marin County in Pleistocene and Pliocene sediments (University of California Museum of Paleontology 2014). Older Pleistocene surfaces and decomposing Franciscan Formation bedrock in the vicinity of the Project site have the potential to contain significant fossils, although it is unlikely that Project excavation would extend to a sufficient depth to encounter such fossils. However, there is a remote chance that unanticipated discoveries could occur.

Therefore, the Project would implement Mitigation Measure GEO-2, which specifies protective actions should unknown paleontological resources be discovered on the Project site.

MITIGATION MEASURES

Mitigation Measure GEO-2

Project construction crews shall be trained in “basic paleontological resource identification” procedures, including the use of illustrative examples. Should paleontological resources be encountered during Project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If the resources are found to be significant, and they cannot be avoided by Project

activities, adverse effects on such resources shall be mitigated. Mitigation may include monitoring, recording of the fossil locality, data recovery and analysis, a final report, and accessioning of the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City for review, and (if paleontological materials are recovered) a paleontological repository, such as the University of California Museum of Paleontology.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of Mitigation Measure GEO-2, the Project would not directly or indirectly destroy a unique paleontological resource or unique geologic feature. The impact would be **less than significant with mitigation incorporated.**

5.5.7 Cumulative Impacts

Other future development in the area of the proposed Project site could be impacted by some or all of the same issues as the proposed Project. However, these issues are site-specific and there is little, if any, cumulative relationship between the development of the proposed Project and past or future development. Therefore, the impacts of the proposed Project related to geology and soils would not be cumulatively considerable.

5.6 Noise

5.6.1 Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts with regard to noise. The analysis in this section evaluates whether the Project would generate a substantial temporary or permanent increase in ambient noise levels in excess of applicable standards or regulations or generate excessive groundborne vibration or noise. A summary of applicable regulations is also provided in this section. In addition, the potential cumulative impacts of the Project with other Housing Element Update sites in the area are evaluated.

5.6.2 Assessment Methodology

GENERAL INFORMATION ON NOISE

Noise is defined as unwanted sound that annoys or disturbs people and can have an adverse psychological or physiological effect on human health. Sound is measured in units of decibels (dB) on a logarithmic scale. Decibels describe the purely physical intensity of sound based on changes in air pressure but cannot accurately describe sound as perceived by the human ear, which is only capable of hearing sound within a limited frequency range. To better characterize noise levels perceived by a human ear, a decibel scale called A-weighting (dBA) is typically used. On this scale, the low and high frequencies are given less weight than the middle frequencies. Decibels and other acoustical terms are defined in Table 5.6-1. Typical A-weighted noise levels at specific distances are shown for different noise sources in Table 5.6-2.

In an unconfined space, such as outdoors, noise attenuates with distance. Noise levels at a known distance from point sources are reduced by 6 dBA for every doubling of that distance for hard surfaces (e.g., asphalt) and by 7.5 dBA for every doubling of distance for soft surfaces (e.g., vegetative areas). Noise levels at a known distance from line sources (e.g., roads, highways, and railroads) are reduced by 3 dBA for every doubling of the distance for hard surfaces and 4.5 dBA for every doubling of distance for soft surfaces. Greater decreases in noise levels can result from the presence of intervening structures.

A typical method for determining a person's subjective reaction to a new noise is by comparing it to existing conditions. The following describes the general effects of noise on people (Salter, 1998):

- A 3-dBA change is considered barely noticeable.
- A 5-dBA change is considered clearly noticeable, but not dramatic.
- A 10-dBA change is perceived as a doubling or halving in loudness.

Table 5.6-1. Definition of Acoustical Terms

TERM	DEFINITION
Ambient Noise Level	The existing level of environmental noise at a given location from all sources near and far.
Decibel (dB)	A unit describing the amplitude of sound on a logarithmic scale. Sound described in decibels is usually referred to as sound or noise "level." This unit is not used in this analysis because it includes frequencies that the human ear cannot detect.
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level (dBA)	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, in a manner similar to the frequency response of the human ear, and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted.
Maximum Sound Levels (Lmax)	The maximum sound level measured during a given measurement period.
Equivalent Noise Level (Leq)	The average A-weighted noise level during the measurement period. For this CEQA evaluation, Leq refers to a 1-hour period unless otherwise stated.
Community Noise Equivalent Level (CNEL)	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels to sound levels during the evening from 7:00 to 10:00 p.m. and after addition of 10 decibels to sound levels during the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level (L_{dn})	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to sound levels during the night between 10:00 p.m. and 7:00 a.m.
Vibration Decibel (VdB)	A unit describing the amplitude of vibration on a logarithmic scale.
Peak Particle Velocity (PPV)	The maximum instantaneous peak of a vibration signal.
Root Mean Square (RMS) Velocity	The average of the squared amplitude of a vibration signal.

Sources: Salter 1998, FHWA 2018.

Table 5.6-2. Typical Sound Levels Measured in the Environment and Industry

NOISE SOURCE (DISTANCE IN FEET)	A-WEIGHTED SOUND LEVEL IN DECIBELS (DBA)
Jet Aircraft (200)	112
Subway Train (30)	100
Truck/Bus (50)	85
Vacuum Cleaner (10)	70
Automobile (50)	65
Normal Conversation (3)	65
Whisper (3)	42

Source: Salter 1998.

Because sound pressure levels are based on a logarithmic scale, they cannot be added or subtracted using linear methods. For instance, if one noise source emits a sound level of 90 dBA, and a second source is placed beside the first that also emits a sound level of 90 dBA, the combined sound level is 93 dBA, not 180 dBA. In other words, a doubling of sound source results in an increase of 3 dBA. When the second noise source is lower than the first noise source by at least 10 dBA, the contribution from the second noise source to the overall sound level is negligible (i.e., close to zero). In such cases, no adjustment factor is needed because the contribution from the lower noise source makes no perceptible difference in what people can hear or measure. For example, if one noise source generates a noise level of 95 dBA and another noise source is added that generates a noise level of 80 dBA, the higher noise source will dominate the noise environment, and the combined noise level will remain at about 95 dBA.

Traffic noise levels are often expressed in terms of the hourly dBA. The noise levels generated by vehicular sources mainly depend on traffic volume, the speed, and the percent of trucks within the fleet. Increases in these three factors will lead to higher noise levels. As mentioned above, doubling the number of sources, such as traffic volume, increases the noise level by approximately 3 dBA due to the logarithmic nature of noise levels (FHWA 2018).

GENERAL INFORMATION ON VIBRATION

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Several different methods are used to quantify vibration. Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors to vibration include structures (especially older masonry structures) and people (especially residents, the elderly, and sick). Vibration amplitudes are usually expressed as either Peak Particle Velocity (PPV) or as Root Mean Square (RMS) velocity. PPV is appropriate for evaluating potential damage to buildings, but it is not suitable for evaluating human response to vibration because it takes the human body time to respond to vibration signals. The response of the human body to vibration is dependent on the average amplitude of a vibration event. Thus, RMS is more appropriate for evaluating human response to vibration. PPV and RMS are described in units of inches per second (in/sec), and RMS is also described in vibration decibels (VdB).

Groundborne vibration can transmit energy into buildings. This vibration can cause a rumbling sound and audible noise within the buildings, which is referred to as groundborne noise. Like

noise that travels through the air, groundborne noise is usually measured in decibels (dB or dBA). Groundborne noise is typically dominated by low-frequency components, and the non-linearity of human hearing causes sounds dominated by low-frequency components to seem louder than higher-frequency sounds with the same sound level. As a result, groundborne noise has the potential to disturb people at lower sound levels than broadband noise.
The relationship between groundborne vibration and groundborne noise depends on the frequency content of the vibration. For example, the groundborne noise measured in dBA will be approximately 40 dBA less than the groundborne vibration measured in VdB if the spectrum peak is around 30 Hz, and 25 dBA lower if the spectrum peak is around 60 Hz. Environmental vibration is rarely of sufficient magnitude to be perceptible or cause audible groundborne noise unless there is a specific vibration source close by, such as a railroad line.

NOISE-SENSITIVE RECEPTORS

Noise-sensitive receptors are locations where people are more susceptible to the adverse effects of noise pollution, including, but not limited to, residences, schools, places of worship, hospitals, elderly-care facilities, hotels, libraries, and parks. Noise-sensitive receptors in the Project vicinity include single-family residences to east and north of the Project site across the Roque Moraes Drive, multifamily residences to the south of Project site, Hauke Park to the west of the Project site across Hamilton Drive, the Mill Valley Middle School located about 1,280 feet to the west of the Project site boundary, and the Mt. Tamalpais United Methodist Church located about 1,870 feet to the west of the Project site boundary. The nearest noise-sensitive receptors to the Project site are the single-family residences located to the east of the Project site and Hauke Park to the west of the Project site.

VIBRATION-SENSITIVE RECEPTORS

Vibration-sensitive receptors are locations where people are more susceptible to the adverse effects of vibration. These may include residences and other buildings where people normally sleep such as hotels and hospitals, as well as buildings that have the potential for activity interference such as schools, places of worship, doctors' offices, concert halls, recording studios, and theatres (FHWA 2018). Vibration-sensitive receptors in the Project vicinity include single-family residences to the east and north of the Project site across the Roque Moraes Drive, the multifamily residences to the south of the Project site, the Mill Valley Middle School, and the Mt. Tamalpais United Methodist Church. The nearest residential vibration-sensitive receptors to the Project site are the single-family residences located about 55 feet to the east of the Project site boundary; the nearest institutional vibration sensitive receptor is the Mill Valley Middle School about 1,280 feet to the west of the Project site boundary.

In certain situations, vibration can also cause structural damage. Historic buildings tend to be more susceptible to vibration (due to age and less modern construction techniques) depending on the condition of the buildings. There are no designated historic buildings or buildings eligible for historic designation but not designated in the Project site vicinity.

5.6.3 Environmental Setting

According to the Mill Valley General Plan (City of Mill Valley 2013), major roadways cause most of the ambient noise in the City. The primary noise sources in the vicinity of the Project site are traffic on East Blithedale Avenue and traffic on US Highway 101, located approximately 0.30 miles east. Based on the estimated traffic noise level maps in the General Plan, ambient noise

level in the Project vicinity from traffic was about 55 dBA in 2013 and is estimated to be the same level in 2035 (City of Mill Valley 2013).

5.6.4 Regulatory Setting

In California, noise is primarily regulated at the local level, through the implementation of general plan policies and local noise ordinances. The State of California provides guidance for the preparation of general plan noise elements. The purpose of a local general plan is to identify the general principles intended to guide land use and development, and cities and counties commonly adopt ordinances to specify the standards and requirements for implementing the principles of the general plan. Vibration is regulated at the federal and State level.

FEDERAL

Federal Transit Administration

The Federal Transit Administration (FTA) has developed a general construction noise threshold of 90 dBA Leq at the nearest noise-sensitive receptor (FTA 2006). According to the FTA, if the combined noise level in one hour from the two noisiest pieces of equipment exceeds the 90 dBA threshold at a residential land use (or other noise-sensitive receptors), then there may be a substantial adverse reaction.

The FTA has also developed vibration thresholds to prevent disturbances to (i.e., annoyance of) building occupants based on the frequency of a vibration event (FTA 2018). Vibrations that are equal to or exceed the vibration thresholds could result in potential disturbance to people or activities. For infrequent vibration events, such as construction, FTA recommends thresholds of 80 VdB and 83 VdB to prevent potential disturbance to residences and buildings where people normally sleep and to institutional land uses with primarily daytime use, respectively.

STATE

California Department of Transportation

The California Department of Transportation (Caltrans) has developed vibration thresholds based on PPV values to evaluate the potential impact of construction vibration on structures (Caltrans 2020). Construction vibrations that are equal to or exceed the vibration thresholds could result in potential damage to structures. For frequent intermittent vibratory sources during construction (e.g., vibratory compaction equipment), Caltrans recommends thresholds of 0.3 in/sec to prevent potential damage to older residential structures.

California Noise Control Act

Sections 46000 to 46080 of the California Health and Safety Code codify the California Noise Control Act of 1973. The Act established the Office of Noise Control under the California Department of Health Services. It requires that the Office of Noise Control adopt, in coordination with the Office of Planning and Research, guidelines for the preparation of noise elements for general plans. The most recent guidelines are contained in the California Governor's Office of Planning and Research General Plan Guidelines (OPR 2017). The document provides land use compatibility guidelines for cities and counties to use in general plans to reduce conflicts between land use and noise.

LOCAL

City of Mill Valley General Plan

The General Plan establishes the following policies and programs related to noise:

Policy N.1 Interior and Exterior Noise: Ensure that interior noise levels do not exceed 45 L_{dn} in all new residential units (single- and multi-family). Analyze residential development sites exposed to noise levels exceeding 60 L_{dn} following protocols in the most recent adopted version of the California Building Code.

Program N.1-1: Maintain a pattern of land uses that separates noise-sensitive land uses from major traffic noise sources to the extent feasible.

Program N.1-2: Use the noise contours and noise/land use compatibility standards to ensure that new development and major redevelopment meet required interior and exterior noise standards.

Program N.1-3: Do not allow noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into the project design to reduce noise levels in outdoor activity areas to 60 dBA L_{dn} or less.

Policy N.2 Roadway Noise: Reduce noise from traffic.

Program N.2-1: Use "quieter" pavement technologies that also meet other criteria established by the City for pavements when resurfacing roadways.

Program N.2-3: Control excessive exhaust noise by encouraging the enforcement of Section 27150 of the California Motor Vehicle Code.

Policy N.3 Acoustical Environment: Maintain the current quality of the acoustical environment.

Program N.3-1: Require an acoustical analysis to mitigate noise-generating projects that would cause the following criteria to be exceeded or would cause a significant adverse community response in locations where there is greater sensitivity to excess noise:

- Cause the L_{dn} at noise-sensitive uses to increase by 3 dBA or more and exceed the "normally acceptable" level.
- Cause the L_{dn} at noise-sensitive uses to increase 5 dBA or more and remain "normally acceptable."

Locations subject to this program would include but are not limited to hospitals, nursing homes, theaters, auditoriums, churches, meeting halls, schools, libraries, museums, and parks.

Program N.3-2: Ensure that all acoustical analyses required by the City:

- Are prepared by a qualified person or firm experienced in the fields of environmental noise assessment and architectural acoustics as selected or pre-approved by the City.
- Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.
- Estimate existing and projected (20-year) noise levels in terms of L_{dn} and/or the standards of the noise ordinance and compare those levels to the policies of this Noise Element.

- Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of this Noise Element. Where the noise source in question consists of intermittent single events, the report shall address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
- Describe a post-project assessment program that could be used to evaluate the effectiveness of the proposed mitigation measures.

The full cost of any such studies shall be the responsibility of the project applicant.

Policy N.4 Construction Noise: Manage noise from construction.

Program N.4-1: Implement appropriate standard noise controls for all construction projects.

Program N.4-2: Require detailed construction noise management plans.

Mill Valley Municipal Code (Noise Ordinance)

The City regulates noise through the MVMC Section 7.16. Section 7.16.090 prohibits construction activities between the hours of 6:00 p.m. and 7:00 a.m. on weekdays, or at any time on Saturday, Sunday, or a legal holiday without issuance of a special permit. The use of heavy equipment and power tools is restricted from between 8:00 a.m. and 5:00 pm, however, preparation for work on construction sites may begin at 7:00 a.m. and contractors may be on-site until 6:00 p.m. In addition, MVMC Section 7.16.090 requires contractors to prominently display a notice of the date of commencement of construction noise at least three days prior to actual commencement. Such notice shall be located on the construction site and shall be readable from the closest adjacent street.

MVMC Section 7.16.090 also includes regulations for certain types of activities and noise sources associated with residential living, suggesting noise levels for certain noise source types during specified periods of time. People during outdoor activities are allowed to generate noise levels of 70 dBA between 12:00 pm to 9:00 pm on Sundays and legal holidays.

5.6.5 Thresholds of Significance

Consistent with State CEQA Guidelines Appendix G Environmental Checklist, the project would have a significant impact if it would:

a. *Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*

b. *Generate excessive groundborne vibration or groundborne noise levels; or*

For Threshold a, the Project would result in a significant temporary noise impact if construction activities occurred outside the construction hours established in the MVMC Section 7.16.090. The MVMC does not establish noise criteria for assessing the impact of a construction project. Therefore, the FTA's general construction assessment criterion of 90 dBA 1-hour Leq at the nearest residential noise sensitive receptor is used in this analysis (FTA 2006). According to the FTA, if the combined noise level in one hour from the two noisiest pieces of equipment exceeds 90 dBA at a residential land use (or other noise sensitive receptors), then there may be a substantial adverse reaction.

The Project would result in a significant permanent noise impact if the Project operation would increase noise levels at noise-sensitive uses by 5 dBA or greater with a future noise level of less than 60 dBA L_{dn} or increase noise levels at noise-sensitive uses by 3 dBA or greater with a future noise level of 60 dBA L_{dn} and more, in accordance with General Plan Policy N.3.

For Threshold b, the FTA and Caltrans vibration impact criteria mentioned above are used to evaluate potential vibration impacts associated with implementation of the proposed Project. Vibration impacts from the Project would be considered potentially significant if they would exceed the FTA's recommended vibration thresholds of 80 VdB and 83 VdB to prevent potential disturbance to residences and buildings where people normally sleep and to institutional land uses with primarily daytime use, respectively (FTA 2013). In addition, vibration impacts from the Project would be considered significant if they would exceed the Caltrans threshold for damage to buildings of 0.3 in/sec for older residential structures (Caltrans 2020).

5.6.6 Applicable HEU SEIR Mitigation Measures

HEU SEIR Mitigation Measure 10-2

The City of Mill Valley shall impose the following standard condition of approval for all sites identified in the Housing Element Update: a Construction Noise Management Plan shall be prepared by the construction contractor and implemented prior to the start of and throughout construction to reduce noise impacts on the nearby existing land uses. The plan will rely on project-level calculations of construction noise and achievable noise level reduction. The plan will establish the procedures the contractor will take to reasonably minimize construction noise at the nearby existing land uses. Additionally, consistent with the MVMC Section 7.16.090(D), the plan would include, but not be limited to, the following measures to reduce construction noise levels as low as practical:

- Limit construction to the hours of 7:00 AM to 6:00 PM on weekdays. No noise generating construction activities shall occur on weekends or holidays.
- Limit noise from construction workers' radios to the point where they are not audible at existing residences that border the project site.
- Locate stationary noise-generating equipment and staging areas as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.
- Prohibit unnecessary idling of internal combustion engines.
- Consider temporary noise barriers during construction phases involving earth moving equipment (e.g., grading operations) where they would be effective in reducing the construction noise impact, when directly adjoining sensitive receptors. An eight-foot plywood noise barrier could reduce noise levels by at least 5 dBA.
- Notify residents adjacent to the project site of the construction schedule in writing.
- Post the project's approved construction management plan on the site, which shall include the address, project information, allowable truck route, carpooling requirements, allowable construction hours, site supervisor, and emergency contact.

5.6.7 Discussion of Impacts

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

IMPACT ANALYSIS

Construction (Temporary)

Construction of the Project would involve demolition of the existing parking lot and restrooms, construction new parking spaces, and construction of a residential building and other site improvements. As shown in the conceptual plan presented in Section 4, Project Description (see Section 4.4.1), Project construction is expected to occur over a period of approximately 21 months during 2025 and 2026 and would temporarily increase noise levels in the vicinity of the Project site.

Noise from Construction Equipment

The primary source of noise during construction would be off-road equipment activities on the Project site. Construction noise levels would vary from day to day depending on the quantity, type, and condition of the equipment being used; the type and duration of activity being performed; the distance between the noise source and the receptor; and the presence or absence of barriers. Demolition, excavation/grading, and foundation work are typically the noisiest phases of construction and would occur during the initial construction phases. The later phases of construction include activities that are typically quieter and occur within the building(s) being constructed, thereby providing a noise barrier between the construction activity and any nearby receptors.

To evaluate noise levels during Project construction, the types of construction equipment that would be used on the Project site were generated by the most recent version of the CalEEMod based on the default equipment list. As discussed in Section 5.2, Air Quality, the default construction equipment list is based on a combination of statewide and regional surveys of land use construction projects. A copy of the CalEEMod report for the Project, which summarizes the input parameters, assumptions, and outputs, is provided in Appendix C. Pile driving, which generates extreme levels of noise, would not be used during Project construction.

In accordance with guidance from the FTA (FTA 2006), construction noise impacts were evaluated by quantifying the maximum noise levels that would result from simultaneous operation of the two noisiest pieces of equipment near the perimeter of the project site closest to a sensitive receptor. As shown in Table 5.6-3, the Project's construction noise levels were estimated at the nearest noise-sensitive receptor, a single-family residence located approximately 55 feet east of the Project site boundary and approximately 130 feet east of the closest structural wall of the proposed multifamily housing building. Based on this analysis, Project construction would not generate noise levels above the 90 dBA Leq threshold at the nearest noise-sensitive receptor. This analysis conservatively did not account for the steep slope between the eastern edge of the construction area and Roque Moraes Drive, which would provide noise attenuation at the single-family residential receptor. Additionally, the noise analysis used the distance between the property boundary along Roque Moraes Drive and the nearest residential receptor (55 feet) rather than the greater distance between this receptor and the proposed housing structure (130 feet) where most of the construction noise would be generated.

Table 5.6-3. Potential Noise Impact from Project Construction Equipment

CONSTRUCTION PHASE	POTENTIAL NOISE LEVELS AT NEAREST SENSITIVE RECEPTOR (DBA LEQ)	THRESHOLD (DBA LEQ)	THRESHOLD EXCEEDED?
Site Preparation	83	90	No
Grading	82		No
Building Construction	82		No
Paving	84		No
Architectural Coating	75		No

Note: Estimated noise levels do not include implementation of any noise reduction measures.
Source. Noise Analysis Calculations, Appendix G.

In addition, HEU SEIR Mitigation Measure 10-2, which requires the preparation and implementation of a Construction Noise Management Plan to reduce noise impacts on the nearby existing land uses, will be incorporated as conditions of approval for the Project. HEU SEIR Mitigation Measure 10-2 is consistent with General Plan Policy N4, which requires detailed construction noise management plans. Implementation of Mitigation Measure 10-2 and General Plan Policy N4 will further reduce the construction noise impact. Therefore, Project construction would not generate a substantial temporary increase in ambient noise levels in the Project vicinity and this impact would be less than significant.

Noise from Construction-Related Traffic

During construction, the increased traffic flow from the transport of workers, equipment, and materials to the Project construction site would increase noise levels on local roads. As mentioned previously, doubling of the hourly traffic volume on roadway segments is typically necessary to cause a 3 dBA increase, which is considered a just-perceivable difference in noise levels. As presented in Appendix C, the Project is expected to generate approximately 1,234 one-way haul truck trips during the site preparation and grading phases. As described in Section 4, Project Description, grading and site utilities will take about four months to complete. It is conservatively assumed that all the haul truck trips would occur within two months, resulting in an average of about 31 truck trips per workday and about four haul truck trips per hour assuming an eight-hour workday. Construction trucks would reach the Project site via Hamilton Drive from the south and then exit the Project site by heading north on Hamilton Drive. As the haul truck trips to and from the Project site will use different routes and not pass the same receptor twice, the four haul truck trips per hour assumption is conservative. Based on noise level modeling using the FHWA TNM Version 2.5 model (see Appendix C), these truck trips could generate noise levels of up to approximately 51.9 dBA Leq. As discussed above, the ambient noise levels in the Project vicinity is about 55 dBA. The haul truck trips would result in less than a 3 dBA increase in ambient noise levels, making no perceptible difference in what people can hear. Consequently, the potential for construction truck trips to result in a substantial temporary increase in ambient noise levels is less than significant. Therefore, construction of the proposed Project would result in a less than significant impact related to increases in ambient noise levels in excess of local standards.

Operation (Permanent)

Noise levels near the Project site (both the Housing Site and the PSB Site) would potentially increase due to the additional vehicle trips contributed by the Project. As discussed previously, the Project would need to double the existing traffic volume on a roadway to increase the ambient noise level by 3 dBA. As reported in the 1 Hamilton Drive *Transportation Impact*

Assessment (TIA) (Parisi 2023a), existing average daily traffic counts on roadway segments in the vicinity of the Project site range from 860 to 2,100 vehicles per day. According to the TIA, the addition of approximately 50 multifamily residential units on the Housing Site would generate 396 vehicle trips per day. Vehicle trips associated with the expansion of the public parking lot on the PSB Site would be negligible and would be similar to existing conditions. Since the Project would not double the amount of traffic on nearby roadways, the Project would not result in a substantial permanent increase in ambient noise levels from Project-generated traffic trips, and this impact would be less than significant. This conclusion is consistent with the HEU SEIR, which found that the implementation of the Housing Element Update would not result in a substantial permanent increase to noise levels in the City. Therefore, operation of the proposed Project would result in a less than significant impact related to increases in ambient noise levels in excess of local standards.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not generate a substantial temporary or permanent increase in ambient noise levels in excess of applicable State or local standards or regulations. The Project would comply with HEU SEIR Mitigation Measure 10-2, which requires the preparation and approval of a Construction Noise Management Plan. The impact of the Project would be **less than significant**.

b) Generation of excessive groundborne vibration or groundborne noise levels?

IMPACT ANALYSIS

Construction

Construction can result in varying degrees of ground vibration depending on the type of equipment and activity. The primary types of equipment that could generate substantial ground vibration during Project construction and the associated vibration calculations are included in Appendix G. To evaluate the Project's potential vibration effects on nearby sensitive receptors, a buffer distance that would be needed to avoid exceeding the FTA and Caltrans construction vibration thresholds listed in Section 5.6.4 was estimated for each type of equipment. It was conservatively assumed that the equipment that could generate substantial ground vibration would be used near the Project boundaries. The estimated buffer distances for potential disturbance and building damage are summarized in Table 5.6-4 and Table 5.6-5, respectively.

As shown in Table 5.6-4, the construction equipment that would require the largest buffer distance to avoid generating vibration levels that could disturb institutional land uses with primarily daytime use is the vibratory roller. Vibration from a vibratory roller could exceed the 83 VdB threshold at institutional land uses located within 53 feet. The closest institutional land use is the Mill Valley Middle School, which is located at about 1,280 feet to the west of the Project site boundary. Therefore, construction activities would not generate excessive vibration levels that could potentially disturb the normal school operations. As nighttime work is not anticipated, vibration annoyance impacts on people within residential buildings related to nighttime construction would not occur. Therefore, construction activities would not be expected to

generate excessive vibration levels that would disturb nearby residents and institutional land uses, and this impact would be less than significant.

Table 5.6-4. Potential Vibration Disturbance during Construction

EQUIPMENT	VIBRATION THRESHOLD (VDB)	BUFFER DISTANCE TO DISTURBANCE THRESHOLD (FEET)	DISTANCE TO CLOSEST RECEPTOR (FEET)	THRESHOLD EXCEEDED?
Vibratory Roller	83	58	1,280	No
Large Bulldozer		34		No
Loaded Trucks		31		No
Small Bulldozer		4		No

Note: The following FTA threshold was used to calculate the buffer distances from construction equipment: People – Maximum vibration threshold of 83 VdB for institutional land uses from infrequent construction events.
Source: Noise and Vibration Calculations, Appendix G.

Table 5.6-5. Potential Vibration Damage to Buildings during Construction

EQUIPMENT	VIBRATION THRESHOLD (IN/SEC)	BUFFER DISTANCE TO DAMAGE THRESHOLD (FEET)	DISTANCE TO CLOSEST RECEPTOR (FEET)	THRESHOLD EXCEEDED?
Vibratory Roller	0.3	20	55	No
Large bulldozer		11		No
Loaded trucks		10		No
Small bulldozer		1		No

Note: To be conservative, the Caltrans vibration threshold of 0.3 in/sec for older residential structures was used to calculate the buffer distances from construction equipment.
Source: Noise and Vibration Calculations, Appendix G.

As shown in Table 5.6-5, the construction equipment that would require the largest buffer distance to avoid generating vibration levels that could cause damage to older residential buildings is the vibratory roller. The closest residential receptors are the single-family residences located about 55 feet to the east of the Project site, and approximately 70 feet from the area of grading, outside of the required 20-foot buffer zone. Therefore, Project construction would not generate vibration levels above the building damage thresholds at nearby sensitive receptors, and this impact would be less than significant. There are no properties listed in the Mill Valley Historic Resources Inventory Survey Report located within 25 feet of the Project site. Therefore, HEU SEIR Mitigation Measure 10-3, which requires construction vibration controls to reduce both human annoyance and the possibility of cosmetic damage, does not apply to the Project and would not be required as a condition of approval.

Operation

As a residential development, Project operations on the Housing Site would not involve equipment or activities that generate excessive groundborne vibration or groundborne noise levels. Project operations on the PSB Site would be similar to existing uses, which do not include sources of groundborne vibration or noise. Therefore, Project operation would not generate

excessive groundborne vibration in the Project vicinity and this impact would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not generate excessive groundborne noise or vibration. The impact would be **less than significant**.

5.6.8 Cumulative Impacts

Development of up to 45-50 multifamily residential units on the Housing Site was contemplated in the Housing Element Update and the impacts of this additional density was analyzed in the HEU SEIR. The HEU SEIR conducted a cumulative noise analysis by comparing the cumulative scenario (General Plan buildout) to existing conditions and the cumulative plus project (General Plan plus Housing Element Update buildout) to existing conditions, and then the relative difference between the two cumulative scenarios. The primary noise impact associated with buildout of the Housing Element Update was increases in traffic noise.

As discussed previously, an increase of 3 dBA L_{dn} is considered to be a just-noticeable difference in ambient noise. Cumulative increases in over 3 dBA L_{dn} would be considered "substantial" by the HEU SEIR. In both the cumulative and cumulative plus project scenarios, traffic noise increases were calculated to be 0.4 dBA. Therefore, although traffic noise would gradually increase over time with buildout of the Housing Element Update, the impact would not be significant. Moreover, the relative difference in cumulative traffic noise between the cumulative scenario and the cumulative plus project scenario would not be significant. Therefore, the HEU SEIR determined that traffic noise impacts resulting from implementation of the Housing Element Update would not be cumulatively considerable.

The HEU SEIR found that development of proposed housing sites could expose sensitive receptors to exterior noise levels that exceed the City's standards for non-transportation noise sources. For any discretionary projects, potential exposure of sensitive receptors from exterior noise levels would be less than cumulatively considerable based on application of discretionary review which requires an acoustic study consistent with General Plan Policy N.3 and the City's Noise Ordinance to demonstrate that stationary noise sources would not exceed City noise standards at affected noise-sensitive uses. In addition, construction of cumulative projects would comply with General Plan Policy N.4 Construction Noise, which requires the implementation of appropriate standard noise controls and the preparation of detailed construction noise management plans, as well as applicable requirements of the City's Noise Ordinance.

The proposed Project would comply with all applicable General Plan policies, the City's Noise Ordinance, and standard COA's implemented pursuant to the HEU SEIR. The Project would not have a new significant noise impact that was not analyzed in the HEU SEIR. Therefore, noise impacts of the proposed Project would not be cumulatively considerable

5.7 Public Services

5.7.1 Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts to public services. The analysis in this section evaluates whether the Project would result in physical impacts associated with the provision of new or altered public facilities or the need for new or altered public facilities which could cause significant environmental impacts. Public services discussed in this section include fire protection, police protection, and schools. Parks and recreation is addressed in Section 5.8, Recreation. A summary of applicable regulations is also provided in this section. In addition, the potential cumulative impacts of the Project in conjunction with other Housing Element Update projects in the City are evaluated.

5.7.2 Environmental Setting

FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

On October 3, 2022, the City Council approved a joint resolution with the Southern Marin Fire Protection District (SMFPD) authorizing the City Manager and Fire Chief to submit an application to the Marin Local Agency Formation Commission for consolidation of the fire departments and annexing services to the Southern Marin Fire Protection District (City of Mill Valley 2023). The application was approved and on July 11, 2023, the SMFPD hosted a consolidation ceremony at Fire Station #6 in Mill Valley. The SMFPD's operational service area is divided into three zones: Zone 1 – City of Sausalito, G.G.N.R.A. Headlands, Zone 4 – Tamalpais Valley and Homestead Valley, and Zone 9 – Alto/Strawberry Area. The SMFPD operates six stations, two of which are located within the same zone as the Project site, Zone 9 (SMFPD 2016).

POLICE PROTECTION

The Mill Valley Police Department provides police protection services to the City. The Police Department is headquartered in the PSB on the Project site. The Police Department is staffed by 22 sworn positions, including one chief, one captain, one lieutenant, four patrol sergeants, one detective sergeant, one detective / SRO, four corporals, and nine patrol officers (City of Mill Valley 2023). There are also non-sworn personnel including two parking enforcement officers, one full time and one half time community services officers, one records specialist, one senior administrative assistant, and two cadets (City of Mill Valley 2023).

SCHOOLS

The Project site is serviced by two school districts: the Mill Valley Elementary School District, which serves kindergarten through eighth grade students, and the Tamalpais Union High School District, which serves grades nine through twelve. There are various schools located within 0.5 to 0.75 miles of the Project site, primarily to the north and west. Schools to the north include Terra Marin School, Edna Maguire Elementary School, Ross Academy Montessori School, and Mill Valley Nursery School. Schools to the west include Mill Valley Middle School, Tamalpais Preschool, and Tamalpais High School.

5.7.3 Regulatory Setting

STATE

School Facilities Fee Plan

California Education Code Section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities. This fee may apply to new residential construction.

The Leroy F. Greene School Facilities Act of 1998 (SB 50) sets a maximum level of fees a developer may be required to pay to mitigate a project's impacts on school facilities. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits, and subdivisions. The provisions of SB 50 are deemed to provide full and complete mitigation of potential school facilities impacts, notwithstanding any contrary provisions in CEQA or other state or local laws (Government Code Section 65996). The fees are based on building permits. Payment of these fees would be mandatory for the Project applicant and would fully mitigate any impact upon school services generated by the Project.

LOCAL

City of Mill Valley General Plan

The General Plan establishes the following policies and programs regarding public services:

> **Policy HZ.2 Administrative and Equipment Capacity:** Maintain adequate concentration and distribution of staff, facilities, materials, and equipment to provide a timely disaster response consistent with the needs of a demographically changing community and a challenging natural environment, while recognizing the difficulties of maintaining these systems on a daily basis.
> **Policy PS.1-2:** Respond to both emergency and routine calls for service in a timely manner consistent with Police Department policy.
> **Program PS.1-6:** Incorporate crime reduction and public safety response features in the design and planning of private and public development.

5.7.4 Thresholds of Significance

Consistent with State CEQA Guidelines Appendix G Environmental Checklist, the Project would have a significant impact if it would:

a) *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

- Fire Protection,
- Police Protection, and
- Schools.

5.7.5 Discussion of Impacts

a) ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***

i) Fire Protection

ii) Police Protection

iii) Schools

IMPACT ANALYSIS

Construction

The proposed Project would include the expansion/reconfiguration of governmental facilities on the PSB Site. Specifically, the project would include expansion of the PSB parking lot, which is used by the administrative offices of the Mill Valley Police Department and Mill Valley Fire Station No. 7. The first phase of Project construction would be building police and fire department rear parking and associated security gates. The purpose of constructing this parking lot first is to ensure that ample parking is provided for police and fire services at the PSB building throughout Project construction. As such, no additional new or physically altered police or fire facilities would be required during project construction. As such, the Project would result in a less than significant impact related to the provision of or need for new or physically altered governmental facilities. The environmental impacts associated with construction of these facilities is discussed throughout this Draft EIR.

Operation

Development of up to 45-50 multifamily residential units on the Housing Site was anticipated by the City's General Plan Housing and Land Use Element Update and Zoning Amendments, and thus was analyzed in the HEU SEIR. According to the HEU SEIR, buildout of the Housing Element Update would result in a population increase of 2,659 people, with an estimated 2.30 persons per household, as suggested by data from the U.S. Department of Finance (City of Mill Valley 2023). Given this, the Project would generate approximately 115 new residents, or 4.3 percent of the projected Housing Element Update buildout.

Fire Protection

The HEU SEIR concluded that buildout of the Housing Element Update would not result in any significant impact to Fire Department services. The consolidation of the Mill Valley Fire Department and SMFPD would service approximately 40,900 people and a total area of 25.3 square miles. The increase in population generated by implementation of the Housing Element Update would be less than ten percent of this service population, and therefore no new fire protection facilities would be required in order to maintain target response times (City of Mill Valley 2023). The proposed Project would account for 4.3 percent of the total population increase resulting from implementation of the Housing Element Update. As such, the Project would not result in any new significant impact that was not analyzed and accounted for in the HEU SEIR. The impact of the proposed Project on fire protection services would be less than significant.

Police Protection

The HEU SEIR concluded that buildout of the Housing Element Update would not result in any significant impact to police protection services. The increase in population of 2,659 residents resulting from the Housing Element Update would require the addition of two officers, but no new building or extension (City of Mill Valley 2023). The proposed Project would generate a population increase of 4.3 percent of the projected population increase resulting from implementation of the Housing Element Update. As such, the proposed Project would not result in a new significant impact that was not analyzed in the HEU SEIR and would not result in the need for new or physically altered police facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives. The impact of the proposed Project on police protection services would be less than significant.

School Facilities

The HEU SEIR concluded that buildout of the Housing Element Update would not have a significant impact to school facilities. According to the HEU SEIR, both the Mill Valley Elementary School District and the Tamalpais Union High School District are operating under capacity and are able to accept additional students at all of the schools within both districts without the need to construct new schools or classrooms. The HEU SEIR estimated the projected increase in students that would result from buildout of the Housing Element Update using a factor of 0.5 elementary school students and 0.2 high school students per dwelling unit. Given this, implementation of the Housing Element Update would generate approximately 578 kindergarten through eighth grade students which would be accommodated by the Mill Valley Elementary School District, and 232 ninth through twelfth grade students which would be accommodated by the Tamalpais Union High School District (City of Mill Valley 2023). The HEU SEIR found that each school district has the capacity to accommodate the increase in students resulting from implementation of the Housing Element Update without the need to construct additional school facilities in order to meet the community's needs.

Using the same student generation factors that were analyzed in the HEU SEIR, the proposed Project would generate approximately 25 elementary school students and 10 high school students, which represents approximately 4.3 percent of the total increase in student population projected by the HEU SEIR. As such, the proposed Project would not result in a new significant impact that was not analyzed in the HEU SEIR and would not result in the need for construction or expansion of school facilities. The impact of the proposed Project on school facilities would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Development of up to 45-50 multifamily residential units on the Housing Site was analyzed in the HEU SEIR. The proposed Project would not introduce any new significant impact regarding public services that was not analyzed in the HEU SEIR and would therefore not result in the need for new or physically altered governmental facilities, including fire protection, police protection, or school facilities. The impact of the proposed Project on public services would be **less than significant.**

5.7.6 Cumulative Impacts

FIRE AND POLICE PROTECTION

The HEU SEIR concluded that implementation of the Housing Element Update, in combination with other past, present, and reasonably foreseeable cumulative development within the fire and police service areas, would result in increases in demand for fire and police protection. This increase in demand for public services could eventually result in the need to construct new or expanded fire or police protection facilities. Development within the service area of the Mill Valley Fire Department and Mill Valley Police Department is responsible for payment of impact fees as calculated by the City, which would be used to improve or expand necessary police and fire facilities. In accordance with MVMC Section 5.32.010, a reduction or waiver of impact fees may be granted for affordable housing projects that meet the requirements of Section 20.80.040I of the MVMC. As an affordable housing project which would make at least 10% of the affordable housing units available to extremely low-income households, the proposed Project is eligible for exemption of 100% of payment for any and all City licenses, fees, and taxes as described in MVMC Section 5.32.010(C). Therefore, the proposed Project would not contribute to development impact fees for fire and police protection services. However, other development within the service areas that is not exempt from payment of impact fees would be required to pay development impact fees to the City, which would be used to improve or expand fire and police protection services. The Project does not present any new impact to fire and police protection services that was not analyzed in the HEU SEIR. Given that the HEU SEIR concluded that implementation of the Housing Element Update, which includes the proposed Project, would have no impact regarding police and fire services, the proposed Project would also have no impact. In addition, all non-exempt past, present, and reasonably foreseeable development projects within the fire and police protection service areas would be required to pay development impact fees, which would be used to improve or expand fire and police protection services. Therefore, the contribution of the proposed Project to cumulative police and fire protection services impacts would not be considerable.

SCHOOL FACILITIES

The HEU SEIR concluded that implementation of the Housing Element Update, in combination with other past, present, and reasonably foreseeable development within the City, could eventually result in the need for new schools or expansion of existing schools. The HEU SEIR concluded that future housing projects and other development projects would be required to pay development impact fees to each affected school district at the time building permits are issued, in accordance with SB 50. These fees would be used to fund new school facilities, which may include new schools or additional classrooms at existing schools. Pursuant to California Government code Section 65996, payment of school impact fees is deemed to fully mitigate cumulative CEQA impacts of new development on school facilities (City of Mill Valley 2023). Therefore, the HEU SEIR concluded that the impact of housing projects included in the Housing Element Update to school facilities would not be cumulatively considerable.

Development of up to 45-50 multifamily residential units on the Housing Site was analyzed in the HEU SEIR. While projects developed pursuant to the Housing Element Update would generate new students, existing schools in the City have the capacity to accept the estimated increase in students associated with buildout of the Housing Element Update. In addition, payment of development impact fees would be required by housing projects developed pursuant to the Housing Element Update, including the Project, and other past, present, and reasonably

foreseeable future development within the City, which would fully mitigate any impacts related to school facilities. Therefore, the Project's contribution to cumulative impacts related to school facilities would not be considerable.

5.8 Recreation

5.8.1 Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts related to recreation. The analysis in this section evaluates whether the Project would result in substantial environmental impacts associated with the provision of new or physically altered recreational facilities; increase the use of existing recreational facilities such that physical deterioration of the facility would occur; or include recreational facilities or require the construction or expansion of recreational facilities which could result in an adverse environmental impact. A summary of applicable regulations is also provided in this section. In addition, the potential cumulative impacts of the Project in conjunction with other Housing Element Update sites in the area are evaluated.

5.8.2 Environmental Setting

CITY OF MILL VALLEY

The City offers 110 acres of parks, open space, and recreational facilities which includes improved parkland, natural areas, and municipal golf course (City of Mill Valley 2013). A summary of Mill Valley parks and their amenities is provided in Table 5.8-1 below.

Table 5.8-1: Mill Valley Parks

PARK	AMENITIES
Bayfront Park*	Benches, hiking/running trails, soccer field, picnic tables, large open grassy area
Blithedale Park	Hiking trail, creek access
Ernest Bloch Memorial Park	Benches, bathrooms, Item of Historical Interest
Boyle Park*	Large open grassy area, tennis courts, picnic tables, benches, bathrooms, playground, creek access, baseball diamond, BBQs
Cascade Park	Benches, creek access, hiking trail
Community Garden*	35 garden plots, bathrooms
Friends Field*	Benches, bathrooms, soccer field, baseball diamond, large open grassy area
Dog Park*	Benches, picnic tables, large open grassy area
Freeman Park*	Bench or benches, picnic tables, playground, basketball court, large open grassy area, BBQ
Mill Valley Golf Course	9-hole golf course, benches, bathrooms
Hauke Park*	Benches, picnic tables, bathrooms, playground, baseball diamond, large open grassy area
Miller Grove Park	Benches, creek access
Old Mill Park*	Benches, picnic tables, bathrooms, creek access, playground, BBQ, two group picnic areas, stage/amphitheatre
Park Terrace*	Creek access

PARK	AMENITIES
Downtown Plaza	Benches, bathrooms, café, picnic tables
Scott Highlands Park	Benches, picnic tables, playground
Mill Valley Skate Park*	Skate ramps
Sycamore Park*	Benches, picnic tables, playground, large open grassy areas

Source: City of Mill Valley, "Parks"
Note: Located within one mile of the Project site.

Eleven of the parks described above are located within one mile of the Project site. Hauke Park and Bayfront Park are situated on the same City-owned parcel as the Project site. Hauke Park is located west of the Project site, immediately across Hamilton Drive. Hauke Park includes a small playground surrounded by lawn areas and sports fields. Adjacent to Hauke Park to the south is Bayfront Meadow, and across Pickleweed Inlet to the west is Bayfront Park. Bayfront Meadow includes walking paths and supports a variety of native vegetation throughout the year. Bayfront Park is accessible from Hauke Park via a pedestrian bridge and includes expansive lawn areas, a fenced dog park, picnic tables, and sports field. Bayfront Park is part of the Bay Area Water Trail and thus also includes water access facilities. There are also various smaller parks located within one mile of the Project site, including Freeman Park, Sycamore Park, and Boyle Park.

COUNTY OF MARIN

The County owns and maintains multiple open space preserves and a trail within and adjacent to the City, which provide Mill Valley residents with significant additional recreational opportunities. County-owned open space preserves include:

- Bothin Marsh Preserve;
- Baltimore Canyon, Blithedale Summit, Camino Alto, and King Mountain Preserves;
- Horse Hill Open Space Preserve; and
- Mill Valley – Sausalito Path.

STATE AND FEDERAL

Mill Valley is surrounded by state and federal parklands on three sides, including Golden Gate National Recreation Area, Muir Woods National Monument, and Mount Tamalpais State Park.

5.8.3 Regulatory Setting

LOCAL

City of Mill Valley General Plan

The General Plan contains the following policies and programs related to recreation:

> **Policy CV.4 Public/Commercial Space and Events:** Create well-designed, accessible public and private spaces that will encourage and support community interaction and activity for all ages.
> **Program CV4-3:** Encourage new development, particularly in infill areas, to provide small plazas, pocket parks, civic spaces, and other gathering places that are available to the public to help meet recreational demands.

Policy CV.9 Parks and Cultural Facilities: Design and implement parks and recreational facilities to meet the unique and anticipated needs and interests of residents.
Program CV9.3: Integrate recreation and community facilities with other public spaces and rights-of-way (e.g., Steps, Lanes and Paths, bikeways, sidewalks, trails, bridges, and transit routes) that are easily accessible by alternative modes of transportation and can be used for exercise.

Mill Valley Municipal Code

Chapter 21.50 Dedication for Park and Recreational Purposes of the MVMC requires fees to be paid to the City by residential developers for the purpose of maintaining and improving park and recreational facilities for future inhabitants. Fees are to be used for facilities that serve the subdivision in which the development is being constructed.

5.8.4 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to parks if it would:

1. *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks;*

2. *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; and*

3. *Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.*

5.8.5 Project Design Features

The Project site is not a designated park or open space area but includes facilities that serve the nearby Hauke Park directly across the street from the Project site. Facilities on the Project site include a public parking lot and public restrooms for park visitors in the southwest corner of the housing development site. The Project would include the relocation of the existing public restrooms to along the northern edge of the PSB Site and the relocation and reconfiguration of the Hauke Park Parking Lot into two public parking lots on the PSB Site. This reconfiguration would result in a net increase in public parking spaces available to Hauke Park visitors, which is described in greater detail in Section 5.9 Transportation.

5.8.6 Discussion of Impacts

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?

IMPACT ANALYSIS

The City does not have an adopted ratio for residents to parkland acreage but offers approximately 7.94 acres of parkland per 1,000 residents. This ratio is below the 10 acres of park space per 1,000 residents recommended by the National Recreation and Parks Association; however, the City's parkland is supplemented by the abundance of other County, State, and federal open space lands in the surrounding area.

Development of the proposed Project was anticipated by and analyzed in the HEU SEIR. According to the HEU SEIR, buildout of the Housing Element Update would result in a population increase of 2,659 people, with an estimated 2.30 persons per household, as suggested by data from the U.S. Department of Finance (City of Mill Valley 2023). Given this, the Project would generate approximately 115 new residents, or 4.3 percent of the projected Housing Element Update buildout. The Project would not introduce any new impacts related to parks and recreation that were not analyzed in the HEU SEIR. Therefore, the impacts of the proposed Project related to physical impacts associated with the provision of or need for new or physically altered parks and recreational facilities are consistent with the analysis provided in the HEU SEIR. No impact would occur.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not 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. **No impact** would occur.

b) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

IMPACT ANALYSIS

Development of up to 45-50 multifamily residential units on the Housing Site was analyzed in the HEU SEIR, which concluded that the impact of the Housing Element Update to parks and recreational facilities would be less than significant. As discussed above in Impact a), the City offers approximately 7.94 acres of parkland per 1000 residents, and is surrounded by additional County, State, and federal open space lands which provide recreational opportunities for residents. The Project would involve construction of approximately 50 multi-family residential units on the housing development site across from Hauke Park, generating approximately 115 new residents, which is approximately 4.3 percent of the total estimated population increase associated with buildout of the Housing Element Update. Although the Project would include an outdoor courtyard/open space area and a community room, it is anticipated that the development of the Project would increase usage of Hauke Park and other parks in the City. However, the Project would not result in impacts to parks and recreation facilities that were not analyzed in the HEU SEIR. Therefore, the impact of the proposed Project related to the increased usage of parks and recreational facilities would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. The impact would be **less than significant**.

c) Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

IMPACT ANALYSIS

The Project would include the relocation of existing public facilities that serve Hauke Park, including restrooms and a parking lot. The existing Hauke Park Parking Lot would be relocated to the PSB Site and reconfigured into two public vehicle parking lots situated on the northern and southern side of the PSB building. The public restrooms would be relocated to the northern side of the PSB Site near the new public parking lot. These facilities would be relocated within the existing development footprint of the PSB Site, and therefore would not have an adverse physical effect on the environment. The impact would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. The impact would be **less than significant**.

5.8.7 Cumulative Impacts

The HEU SEIR concluded that implementation of the Housing Element Update, which includes development of the proposed Project, in combination with other past, present, and reasonably foreseeable development within the City, would result in an increased demand for parks and recreation facilities. This increased demand could eventually result in the need to construct new or expanded park and recreational facilities, the construction of which could result in potentially significant environmental impacts (City of Mill Valley 2023). The HEU SEIR explained that future subdivision projects included in the Housing Element Update would be required to pay fees to the City pursuant to Chapter 21.50 of the MVMC, which would be used to improve or expand existing park facilities. Therefore, the HEU SEIR concluded that the impact of housing projects included in the Housing Element Update to parks and recreation facilities would not be cumulatively considerable.

Development of up to 45-50 multifamily residential units was analyzed in the HEU SEIR. The Project would not result in any new impacts to parks and recreation facilities that were not analyzed in the HEU SEIR, and therefore, the contribution of the proposed Project to cumulative recreation impacts would not be considerable.

5.9 Transportation

5.9.1 Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts with regard to transportation. The analysis in this section evaluates whether the Project would conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities; conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b); substantially increase hazards due to a geometric design feature or incompatible uses; or result in inadequate emergency access. A summary of applicable regulations is also provided in this section. In addition, the potential cumulative impacts of the Project with other Housing Element Update sites in the area are evaluated. Information in this section is based on and adapted from a *Transportation Impact Assessment* (TIA) prepared by Parisi Transportation Consulting (Parisi) in August 2023 (Appendix H).

5.9.2 Regulatory Setting

STATE

Senate Bill 743 (2013)

Senate Bill 743 mandated a change in CEQA guidelines to utilize vehicle miles traveled (VMT) as opposed to vehicle flow or traffic congestion as a more appropriate metric for assessing impacts associated with projects, in line with goals of helping to achieve climate commitments, improving health and safety, and prioritizing co-located land uses.

REGIONAL

Plan Bay Area 2050 (2021)

In 2021, the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) adopted Plan Bay Area 2050 as the official regional long-range transportation and land use plan for the Bay Area (MTC & ABAG 2021). Strategies in this plan include encouraging land use patterns that foster shared transportation modes, lessen the share of single-occupancy work commutes, and reduce greenhouse gas emissions.

TAM Congestion Management Program (2021)

The Transportation Authority of Marin (TAM) is the congestion management agency for Marin County and develops and updates its mandated short-range Congestion Management Program (CMP) every two years to describe strategies to assess and monitor the performance of the County's transportation system, address congestion and improve performance of a multi-modal system among local jurisdictions (TAM 2021). Major developments that generate a net increase of more than 100 PM peak hour vehicle trips are subject to a CMP analysis and traffic impact study.

LOCAL

Mill Valley General Plan Mobility Element (2013)

The MV2040 General Plan Mobility Element establishes a local framework to describe "the ability to move about" in the context of existing circulation infrastructure and travel purposes in Mill Valley (City of Mill Valley 2013). The Mobility Element details the shift from promoting high

automobile service levels at the expense of transit, bicycle and pedestrian movements, to the pursuit of a balanced, multi-modal transportation system. Maintaining and implementing non-motorized transportation systems is described as a key component of facilitating growth of walking and biking as a preferred travel option. The document plans for the trend of transit capturing a larger share of daily trips through application of real-time transit data, traffic signal timing, and transit infrastructure improvements.

The General Plan includes the following policies and programs related to transportation:

> **Policy M.9 Traffic Management:** Maintain a well-functioning roadway network that provides for the safe and efficient flow of vehicular traffic.
>
> **Program M.9-7:** Maintain a motor vehicle level of service (LOS) standard of "E+" at the intersection of East Blithedale Avenue and Camino Alto. LOS E+ means an average motorist delay of between 55 and 65 seconds during the morning (AM), after school, and evening (PM) one-hour peak periods on weekdays and during peak periods on weekends.
>
> **Program M.9-8:** Maintain a motor vehicle level of service (LOS) standard of "D" at all other signalized intersections in the City of Mill Valley.
>
> **Policy M.10 Bicycle and Pedestrian Access:** Provide a consistent standard of pedestrian and bicycle access within the roadway network.
>
> **Program M.10-4:** Facilitate access for people with access and functional needs on public rights-of-way throughout the City. Continue to review all projects for access for the physically disabled and require the installation of ramps and curb cuts in accordance with Title 24 of the California Administrative Code and the Americans with Disabilities Act of 1991.
>
> **Policy M.11 Improved Pedestrian and Bicycle Network:** Establish and maintain a well-connected pedestrian and bicycle system that is accessible, easy to navigate, and comfortable for all types of users.
>
> **Program M.11-3:** Use the Bicycle and Pedestrian Master Plan as a guide in setting priorities for bicycle and pedestrian improvements that are consistent with network and facility programs and improvements for other modes of transportation.
>
> **Program M.17-9:** Provide adequate public, on-street disabled/accessible parking spaces and an accessible path of travel to adjacent homes and shops.
>
> **Program M.17-9:** Require new multi-family, mixed-use, and commercial redevelopment projects to include secure bicycle parking and facilities.

Mill Valley Bicycle and Pedestrian Plan (2017)

The Mill Valley Bicycle and Pedestrian Plan seeks to encourage active transportation to promote healthy lifestyles, reduce traffic congestion, improve air quality, and better connect local destinations (City of Mill Valley 2017). The Project is aligned with goals to create a safe and sustainable transportation network that balances the needs of pedestrians, bicyclists, motorists, and transit users. The Bicycle and Pedestrian Plan recommendations that involve facilities near the Project site include:

- Class III bicycle boulevard along Kipling Drive connecting Hauke Park to East Blithedale Avenue (0.58 miles)

- Class III bicycle route along Roque Moraes Drive between East Blithedale Avenue and Hamilton Drive (0.28 miles)

In addition to bicycle network facilities, the Bicycle and Pedestrian Plan includes recommendations for supporting infrastructure such as bike parking and wayfinding, as well as recommendations addressing existing and future bicycle programs that facilitate progress against overall plan goals. The Plan references the Mill Valley General Plan 2040 Program M.17-9 that requires new multifamily development projects to include secure bicycle parking and includes suggested guidelines for long-term and short-term bicycle parking provisions.

Mill Valley Complete Streets Policy (2013)

The *Complete Streets Policy of City of Mill Valley*, Resolution Number 2013-03, declares a policy to further ensure that Mill Valley streets provide safe and convenient travel options for all users (Mill Valley City Council 2013). Programs and infrastructure that facilitate alternative means of transportation is encouraged. The policy applies to all projects in all phases of development and encourages contextual evaluation of the transportation network to ensure travel for all ages and abilities is accommodated.

5.9.3 Environmental Setting

ROADWAY NETWORK

The following includes description of roads in the study area according to functional classification based on the Mill Valley General Plan 2040 Mobility Element, number of vehicular travel lanes, on-street parking, sidewalks, and bicycle facilities.

US Highway 101 is a major freeway that runs south/north connecting San Francisco in the south and Sonoma County to the north. The interchange at East Blithedale Avenue / Tiburon Boulevard (SR 131) serves the Project site from approximately 0.75 miles away.

East Blithedale Avenue is a two-to-four-lane arterial roadway that extends between US Highway 101 and downtown Mill Valley. The posted speed limit is 35 miles per hour (mph) in the study area corridor between US Highway 101 and Camino Alto. On-street parking is generally restricted along the roadway. Sidewalks are present on both sides of the street only between Camino Alto and Roque Moraes Drive / Lomita Drive. Recently-installed bicycle infrastructure connecting the Mill Valley–Sausalito Pathway to US Highway 101 runs along the south side of the street and part of the north side of the street between US Highway 101 and Ashford Avenue.

Roque Moraes Drive is a two-lane collector roadway connecting East Blithedale Avenue and Kipling Drive / Hamilton Drive. The roadway has a prima facie speed limit of 25 mph. On-street parking is generally available on the north side of the street between Roque Moraes Court and Kipling Drive / Hamilton Drive where the roadway width permits. Sidewalks are present on the north side of the street, and no existing bicycle facilities are present.

Kipling Drive is a two-lane collector roadway that runs between East Blithedale Avenue and Roque Moraes Drive and has a posted speed limit of 25 mph. On-street parking is available on both sides of the street between Seaver Drive / Longfellow Road and Roque Moraes Drive. Sidewalks are present on both sides of the street between Seaver Drive / Longfellow Road and Roque Moraes Drive, and no existing bicycle facilities are present.

Hamilton Drive is a two-lane collector roadway that runs along the west side of the Project site from Roque Moraes Drive to the Redwood Highway Frontage Road and has a posted speed limit of 25 mph. On-street parking is available within a short segment between Eucalyptus Knoll

Street (north) and Seaver Drive / Eucalyptus Knoll Street (south) and is otherwise restricted. The roadway transitions to a one-way street and is closed to southbound traffic between the PSB parking lot and Eucalyptus Knoll Street (north). Sidewalks are present on the east side of the street with the exception of the section between the two existing driveway entrances to the Hauke Park Main Parking Lot. A multi-use path on the west side of the street connects the Bayfront Park Pathway to Seaver Drive / Eucalyptus Knoll Street (south).

STUDY INTERSECTIONS

Eleven roadway intersections within the vicinity of the Project site were identified as study intersections for operational analysis. These intersections are listed in Table 5.9-1 along with their control type.

Table 5.9-1. Study Intersections and Control Type

INTERSECTION NUMBER	ROAD 1	ROAD 2	INTERSECTION TYPE
1	East Blithedale Avenue	Camino Alto	Signalized
2	East Blithedale Avenue	Lomita Drive / Roque Moraes Drive	Signalized
3	East Blithedale Avenue	Kipling Drive / Tower Drive	Signalized
4	Tiburon Boulevard	US Highway 101 Southbound Off-Ramp	Signalized
5	Tiburon Boulevard	US Highway 101 Northbound Off-Ramp	Signalized
6	Tiburon Boulevard	Redwood Highway Frontage Road	Signalized
7	Roque Moraes Drive	Kipling Drive / Hamilton Drive	Four-Way Stop Controlled
8	Hamilton Drive	Hauke Park Parking Lot	One-Way Stop Controlled
9	Hamilton Drive	Public Safety Building Parking Lot	One-Way Stop Controlled
10	Hamilton Drive	Seaver Drive / Eucalyptus Knoll Street	Two-Way Stop Controlled
11	Hamilton Drive	Redwood Highway Frontage Road	One-Way Stop Controlled

Source: Parisi 2023a.
*Note: both north and south entrances to the Hauke Park Main parking lot are combined for purposes of this study. The Project would include consolidation and relocation of both driveways into a single street access providing service to Project site parking, public parking, PSB parking, and fire truck access.

TRANSIT FACILITIES

The Project study area is served by Marin Transit and Golden Gate Transit. Marin Transit provides fixed-route bus service throughout Marin County; the stop at East Blithedale Avenue and Roque Moraes Drive along Route 17 is located approximately 0.35 miles from the Project site. Route 17 connects San Rafael, Mill Valley, and Sausalito, and operates daily between 7 AM and 11 PM with service intervals of approximately 30 minutes during peak weekday periods and one hour outside peak periods.

Golden Gate Transit primarily serves Mill Valley by providing commuter bus service connection to San Francisco via Route 114. Route 114 incorporates a bus stop at East Blithedale Avenue and Roque Moraes Drive, 0.35 miles from the Project site. Route 114 operates Monday through Friday with four departures from Mill Valley to San Francisco in the morning, and five returning buses from San Francisco to Mill Valley in the afternoon.

The Project site is also located 0.8 miles from the US Highway 101 at Seminary Drive southbound bus pad, and 0.9 miles from the corresponding US Highway 101 northbound bus pad. Bus stops at the US Highway 101 interchange with East Blithedale / Tiburon Boulevard are approximately

the same distance from the Project site. These bus stops serve numerous Marin Transit and Golden Gate Transit routes. However, due to the distance from the Project site they are considered outside the study area for consideration in this analysis.

Transit services in the Project vicinity are summarized in Table 5.9-2 and displayed in Figure 5.9-1.

Table 5.9-2. Transit Routes Serving the Project

LINE	SERVICE OPERATOR	ROUTE	DAY OF WEEK	SERVICE TIMES	APPROXIMATE FREQUENCY
17	Marin Transit	Downtown San Rafael to Sausalito	Weekday	7 AM 11 PM	**5** 7 AM-10 AM: Every 30 mins 10 AM – 3 PM: Every 60 mins 3 PM – 6 PM: Every 30 mins 6 PM – 11 PM: Every 60 mins
			Weekend	8 AM – 11 PM	Every 60 mins
114	Golden Gate Transit	Mill Valley Commute Bus Route to San Francisco	Weekday	Southbound: 6 AM – 8 AM	Every 30 mins
			Weekday	Northbound: 3 PM – 7 PM	Every 60 mins

Source: Marin Transit; Golden Gate Transit, schedules as of May 30, 2023.



Source: Parisi. 1 Hamilton Drive Transportation Impact Assessment. Figure 2-2. October 2023.

Figure 5.9-1. Transit Facilities in Project Vicinity

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.9-1. Transit Facilities in Project Vicinity

BICYCLE FACILITIES

Existing bicycle facilities in the Project study area include newly implemented bicycle lanes that are separated from the roadway using bollards along East Blithedale Avenue between Kipling Drive and Camino Alto, and the Mill Valley-Sausalito multi-use path, located on a paved right of way separate from the roadway network and connecting to Hauke Park. Bicycle Boulevards, designed to give bicyclist travel priority, are proposed in Mill Valley's Bicycle and Pedestrian Plan (City of Mill Valley 2017) along the Project frontage on Hamilton Drive as well as on Kipling Street and Roque Moraes Drive. On streets that are not designated as bicycle facilities, bicyclists are to share the roadway with motor vehicles as bicycling is not permitted on sidewalks in Mill Valley. Table 5.9-3 summarizes the bikeway type classification system which is used to describe existing and proposed bicycle facilities in the Project study area according to Mill Valley's Bicycle and Pedestrian Plan in Table 5.9-4. Bicycle facilities are displayed in Figure 5.9-2.

Table 5.9-3. City of Mill Valley Bicycle Facility Classification

CLASSIFICATION	DESCRIPTION
Multi-Use Paths (Class 1 Bikeway)	Paved rights of way completely separated from streets
Bicycle Lanes (Class 2 Bikeway)	On-street facilities designate for bicyclists using stripes and stencils
Bicycle Routes (Class 3 Bikeway)	Streets assigned for bicycle travel and shared with motor vehicles, designated with "sharrow" pavement markings
Bicycle Boulevards (Class 3 Bikeway Variation)	Streets with low traffic volumes and speeds, designated and designed to give bicyclist travel priority
Separated Bike Lanes (Class 4 Bikeway)	Cycle track with physical separation from motor vehicle travel lanes by use of parked cards, curbs, bollards, or planter boxes

Source: City of Mill Valley 2017 Bicycle & Pedestrian Plan.

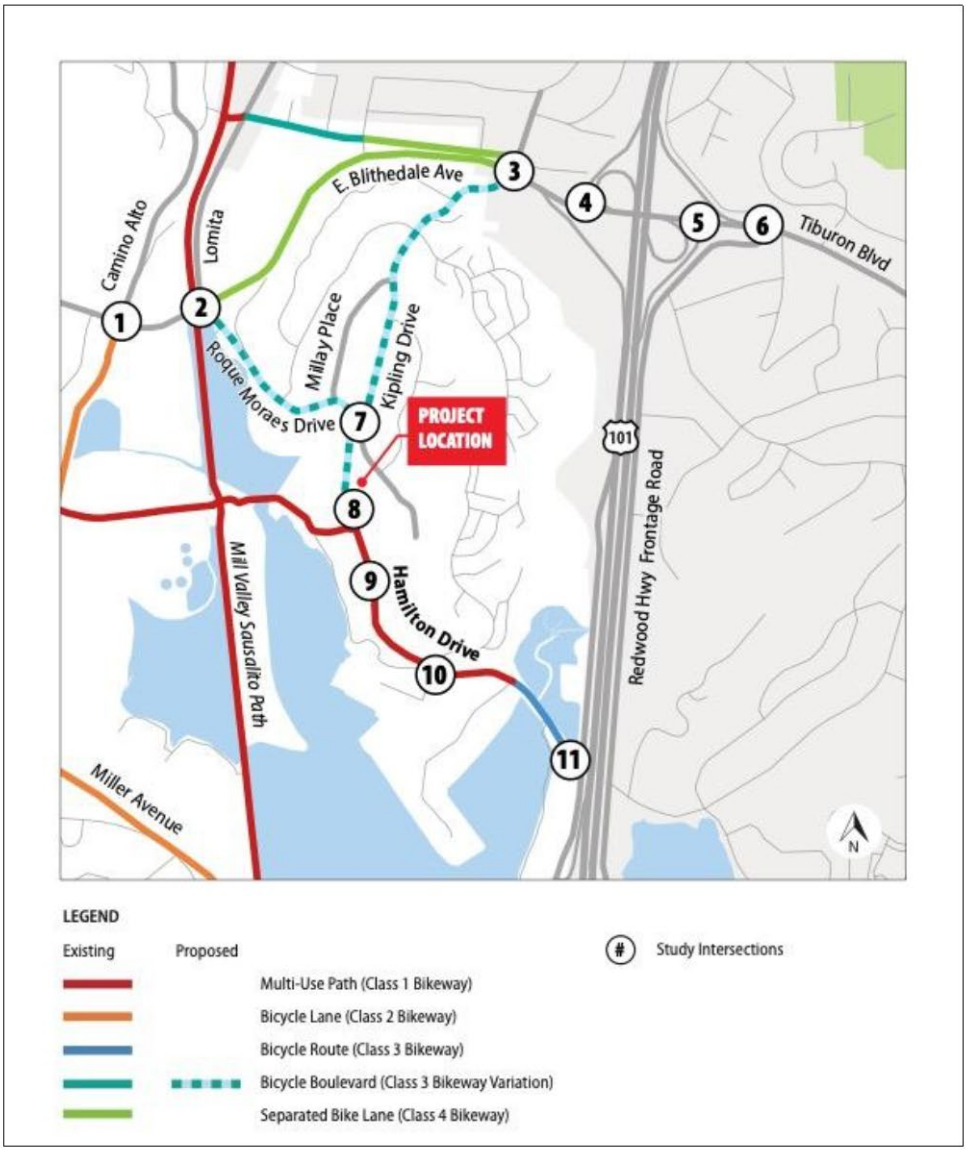
Bicycle parking at Hauke Park is available at the intersection of the Bayfront Park Pathway and Hamilton Drive, across from the PSB. There are two round tube wave-style bicycle racks with parking capacity for approximately 10 bicycles.

Table 5.9-4. Existing and Planned Bicycle Facilities in the Study Area

CIRCULATION NETWORK SEGMENT	EXISTING BICYCLE FACILITY	PLANNED BICYCLE FACILITY
Bayfront Park Pathway, from Mill Valley-Sausalito Pathway to Hamilton Drive	Multi-Use Path	--
Mill Valley-Sausalito Pathway, from City Limits (south) to Vasco Court	Multi-Use Path	--
Hamilton Drive, from Shelter Bay Avenue to Redwood Highway Frontage Road	Bicycle Route	--

CIRCULATION NETWORK SEGMENT	EXISTING BICYCLE FACILITY	PLANNED BICYCLE FACILITY
East Blithedale Avenue from Kipling Drive to Ashford Avenue	Separated Bike Lane	--
East Blithedale Avenue, Ashford Avenue to Roque Moraes Drive (Eastbound)	Separated Bike Lane	--
Kipling Drive from East Blithedale Avenue, continuing on Hamilton Drive to Redwood Highway Frontage Road	None	Bicycle Boulevard
Roque Moraes Drive from East Blithedale Avenue to Hamilton Drive	None	Bicycle Boulevard

Source: City of Mill Valley 2017



Source: Parisi. 1 Hamilton Drive Transportation Impact Assessment. Figure 2-3. October 2023.

Figure 5.9-2. Bicycle Facilities in Project Vicinity

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.9-2. Bicycle Facilities in Project Vicinity

PEDESTRIAN FACILITIES

Pedestrian facilities in the vicinity of the Project site are largely characterized by historically rural development patterns around hillside topography. Sidewalks and crosswalks are commonly provided along flat roadways or at improved locations. Marked crosswalks, pedestrian pushbuttons and pedestrian signal heads are generally available at all signalized study intersections. Unsignalized study intersections nearer to the Project site are less likely to have marked crosswalks or be connected to sidewalks.

Sidewalks are present on the north side of Roque Moraes Drive and on both sides of the street along Kipling Drive south of Seaver Drive / Longfellow Road. Sidewalks are present on the east side of Hamilton Drive with the exception of the section between the two existing driveway entrances to the Hauke Park Main Parking Lot. The intersection of Roque Moraes Drive and Kipling Drive / Hamilton Drive contains two marked crosswalks connecting the Hauke Park playground with the Kipling Drive / Roque Moraes Drive and Hamilton Drive sidewalks. Two existing pedestrian crosswalks across Hamilton Drive connect the Hauke Park Parking Lot to Hauke Park. An additional pedestrian crosswalk across Hamilton Drive further to the south connects the Mill Valley PSB with the Bayfront Park Path, providing a pedestrian connection to the Mill Valley–Sausalito Path and other destinations.

An eight-foot-wide path transitioning to hillside steps connects Hamilton Drive south of the Bayfront Community Garden to Seaver Drive over a 550-foot stretch.

VEHICLE PARKING

Parking Facilities

Parking spaces exist in parking lots and along roadways in the study area. There are four vehicle parking lots in the vicinity of the Project site, as described below:

- Hauke Park north gravel parking lot on PG&E easement: approximately 40 unmarked publicly accessible parking spaces;
- Hauke Park main parking lot: 38 marked publicly accessible spaces, including two ADA-accessible spaces and two EV charging spaces;
- Hamilton Drive parking lot: 11 marked publicly accessible spaces, including three ADA-accessible spaces; and
- PSB parking lot: 33 marked parking spaces. The lot is reserved for police and fire employees only, and the driveway is marked by signs indicating that only authorized vehicles may enter.

With the exception of the Hauke Park north gravel parking lot, which is located on a PG&E utility easement, the remaining three vehicle parking lots are owned by the City. The Hauke Park, PSB, and Hamilton Drive parking lots contain marked parking spaces. Parking spaces are unmetered in the vicinity. Parking supply for the Hauke Park north gravel parking lot is unmarked and estimated for purposes of this study.

On-street parking in the Project vicinity is unmarked and is generally restricted on the south and west sides of Roque Moraes Drive from East Blithedale Avenue to Hamilton Drive, and along Hamilton Drive from Kipling Drive to Eucalyptus Knoll Street North. Along Millay Place and Roque Moraes Drive between Kipling Drive and Keats Drive, on-street parking areas exist without curb or signed parking restrictions; due to the topography, narrow roadway, or lack of positive

identification of legal parking, determination of adequacy to accommodate on-street parking appears to be up to individual vehicle operator discretion.

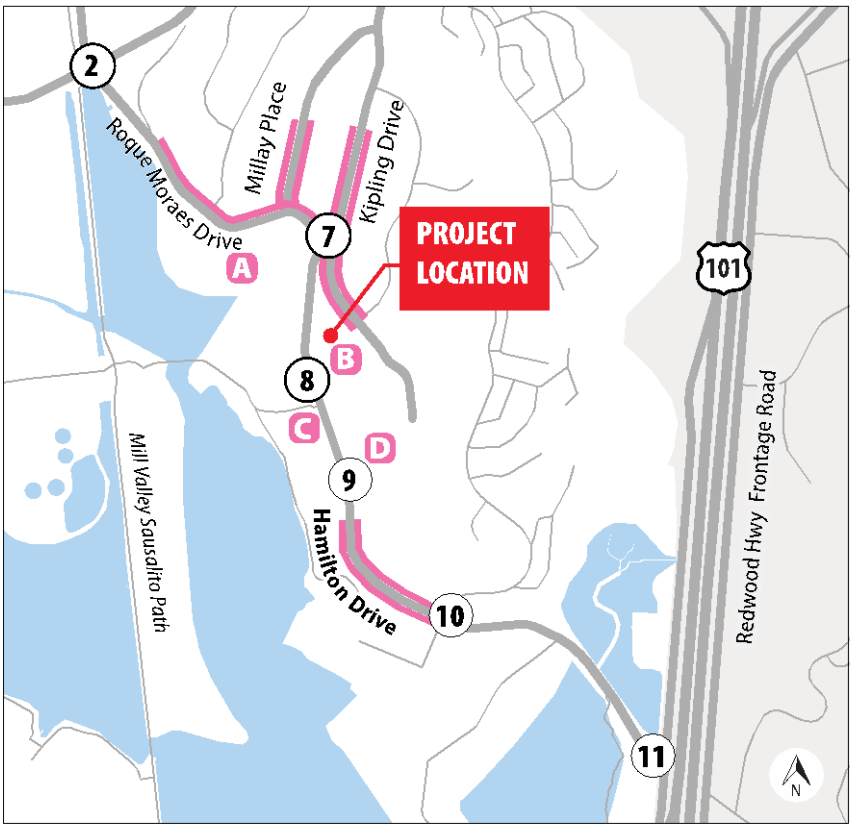
Parking Supply and Demand

Parking supply and demand analysis was conducted for the four parking lots in the study area and along five street segments in the vicinity of the Project site (Figure TRAN-3). Parking observations were conducted on a representative weekday (Thursday, May 26, 2022), Saturday (Saturday, May 28, 2022), and Saturday when soccer games were hosted at Hauke Park (Saturday, September 10, 2022). During these observations, inventory of existing parking spaces and occupancy counts were collected hourly over a ten-hour period from 10:00 AM to 8:00 PM.

The Hauke Park North Parking Lot is an unimproved gravel lot, and on-street parking is not marked to delineate specific parking spaces. Therefore, for these parking locations the existing parking supply for vehicles was estimated using best judgement. Parking in the PSB parking lot is reserved for City employees and is not available for use by the public. Overall parking supply and occupancy data collected for each supply location was averaged over the daily data collection period from 10:00 AM to 8:00 PM and summarized in Table TRAN-5.

Publicly accessible parking occupancy in the study area is lowest on a weekday, higher on Saturday, and highest on a Saturday during soccer games. On Saturday during soccer games between 10:00 AM – 12:00 PM, the number of vehicles parked in the two Hauke Park parking lots exceeded capacity, reflecting vehicles parked in a non-compliant manner, and the eight parking spots in the Hamilton Drive Parking Lot were also occupied. The Hauke Park North Gravel Parking Lot was generally half-utilized on Saturday in the early afternoon and exhibited occupancy below 25 percent on Saturday morning, evening, and throughout the day on weekdays. The Hauke Park Main Parking Lot was relatively full on Saturdays before 5:00 PM and was typically one-third to one-half occupied throughout the day on weekdays before 5:00 PM.

In general, excess on-street parking exists in the Project vicinity. Average daily occupancy rates for all street segments were below 50 percent for the measured scenarios. On-street parking utilization in the study area was observed as exceeding 50 percent capacity in only two cases (along Millay Place during the evening hours on Saturday, when 16 of an estimated 31 on-street parking spaces were occupied, and along the north side of Roque Moraes Drive between East Blithedale and Kipling Drive during Saturday soccer games when 19 of an estimated 31 on-street parking spaces were occupied). No vehicles were observed to park along Roque Moraes Drive between Kipling Drive and Keats Drive except during the Saturday with Soccer observation period, when demand for parking at the Hauke Park lots was greater than supply.



Source: Parisi. 1 Hamilton Drive Transportation Impact Assessment. Figure 3-4. October 2023.

Figure 5.9-3. Parking Supply and Occupancy Data Collection Locations

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.9-3. Parking Supply and Occupancy Data Collection Locations

Table 5.9-5. Parking Occupancy Daily Average Observation Results

		AVERAGE VEHICLES PARKED			AVERAGE OCCUPANCY			MAXIMUM OCCUPANCY		
Parking Location	**Parking Supply**	**Weekday**	**Saturday**	**Saturday Soccer**	**Weekday**	**Saturday**	**Saturday Soccer**	**Weekday**	**Saturday**	**Saturday Soccer**
Hauke Park North Gravel Lot	40[1]	5.1	9.7	27.6	13%	24%	69%	28%	55%	110%
Hauke Park Paved Parking Lot[2]	34	12.4	21.3	21.9	35%	61%	63%	56%	103%	115%
Hamilton Drive Parking Lot	8	4.2	6.2	5.9	53%	77%	74%	10%	113%	100%
PSB Parking Lot[3]	33	25.6	21.4	15.4	78%	65%	47%	88%	82%	55%
Roque Moraes Drive: East Blithedale Avenue to Kipling Drive	31	8.6	8.7	14.4	28%	28%	46%	35%	39%	61%
Roque Moraes Drive: Kipling Drive to Keats Drive	36	0.0	0.0	3.7	0%	0%	10%	0%	0%	14%
Millay Place: Roque Moraes Drive to 500 feet north on Millay Place	31	10.9	13.9	8.3	35%	45%	27%	42%	52%	35%
Kipling Drive: Roque Moraes Drive to 500 feet north on Kipling Drive	41	4.8	4.4	7.8	12%	11%	19%	15%	15%	29%
Hamilton Drive: Eucalyptus Knoll Street (north) to Seaver Drive	27	3.4	4.0	1.8	13%	15%	7%	26%	19%	15%

Source: Parisi 2023a.

Notes: 1) Parking Supply at the Hauke Park North Gravel Lot and for on-street parking is estimated. 2) ADA-accessible parking spots and EV charging parking spots are not included in these totals. 3) The Police Department Parking Lot is reserved for City employees only.

TRAFFIC DATA COLLECTION

Vehicle turning movement counts were collected for the study intersections on a representative weekday, Saturday, and Saturday when soccer games were hosted at Hauke Park in 2022. Weekday counts were conducted between the hours of 7 AM – 9 AM and 4 PM – 6 PM, while Saturday counts were conducted between 12 PM – 2 PM. These times encompass the typical AM and PM weekday commute peak hours and Saturday midday peak hour. All vehicle turning movement data in this study is therefore listed for four periods:

1. AM Peak Hour: reflects traffic during the peak morning hour, typically during the morning commute period.
2. PM Peak Hour: reflects traffic during the peak afternoon hour, typically during afternoon commute period.
3. Saturday Peak Hour: reflects traffic during the peak hour on a Saturday when soccer games are not taking place at Hauke Park.
4. Saturday with Soccer Peak Hour: reflects traffic during the peak hour on a Saturday when soccer games are being hosted at Hauke Park.

Average Daily Traffic (ADT) counts were collected over a seven-day period at key roadway segments in the immediate vicinity of the Project site and are shown in Table 5.9-6.

Table 5.9-6.Existing Average Daily Traffic Counts

		AVERAGE DAILY TRAFFIC		
Roadway Segment	**Direction**	**Average Weekday**	**Saturday**	**Saturday with Soccer**
Roque Moraes Drive west of Kipling Drive	Westbound	1,630	1,360	1,500
	Eastbound	470	420	500
	Total	**2,100**	**1,780**	**2,000**
Kipling Drive north of Roque Moraes Drive	Northbound	570	490	450
	Southbound	290	220	320
	Total	**860**	**720**	**780**
Hamilton Drive south of Roque Moraes Drive	Northbound	1,810	1,510	1,650
	Southbound	240	210	260
	Total	**2,050**	**1,720**	**1,910**
Hamilton Drive west of Seaver Drive	Westbound	1,650	1,340	1,430
	Eastbound	130	80	140
	Total	**1,780**	**1,420**	**1,580**

Source: Parisi 2023a

COLLISION HISTORY ANALYSIS

Collision analysis was performed along three roadways in the vicinity of the Project site. Data on reported collisions along Roque Moraes Drive, Kipling Drive, and Hamilton Drive for a five-year

period between January 1, 2017, and December 31, 2021 was obtained using the Statewide Integrated Traffic Records System (SWITRS).

There were six collisions in total recorded during the five-year period along the roadway sections. None of the collisions resulted in severe injury or fatality.

None of the collisions involved pedestrians, and three collisions involved people riding a bicycle. In 2019, a collision occurred due to vehicle unsafe speed along Hamilton Drive near Redwood Highway Frontage Road resulting in visible injury to a bicyclist. In a 2021 collision on Roque Moraes Drive, a vehicle sideswiped a bicyclist while making an improper passing maneuver. An additional 2021 collision was the result of a bicyclist traveling at unsafe speed, impacting a fixed object near Hamilton Drive and Shelter Bay Avenue.

LEVEL OF SERVICE METHODS

While Senate Bill 743 mandated a change in CEQA guidelines to utilize Vehicle Miles Travelled (VMT) as opposed to Level of Service (LOS), this Draft EIR still addresses LOS given the 2013 Mill Valley General Plan Mobility Element includes policies that promote high automobile service levels. LOS is a qualitative measurement that describes operating conditions and service measures experienced by vehicle roadway users. Intersection LOS is based on a weighted average vehicle stop delay at an intersection and is expressed on a scale from "A" to "F." LOS descriptions are included in Table 5.9-7 for signalized and unsignalized intersections.

Table 5.9-7. Intersection Level of Service Definitions

LEVEL OF SERVICE	DESCRIPTION OF INTERSECTION TRAFFIC CONDITIONS	AVERAGE DELAY (SECONDS PER VEHICLE)	
		Signalized	Stop-Controlled
A	LOS A represents free-flow travel with excellent levels of comfort and convenience and the freedom to maneuver–.	≤10	0 - 10
B	LOS B has stable operating conditions, but the presence of other road users causes a noticeable, though slight, reduction in comfort, convenience, and maneuvering freedom.	>10 – 20	>10 - 15
C	LOS C has stable operating conditions, but the operation of individual users is substantially affected by the interaction with others in the traffic str–am.	>20 – 35	>15 - 25
D	LOS D represents high-density, but stable flow. Users experience severe restriction in speed and freedom to maneuver, with poor levels of comfort and convenience.	>35 – 55	>25 - 35
E	LOS E represents operating conditions at or near capacity. Speeds are reduced to a low but relatively uniform value. Freedom to maneuver is difficult with users experiencing frustration and	>55 – 80	>35 - 50

LEVEL OF SERVICE	DESCRIPTION OF INTERSECTION TRAFFIC CONDITIONS	AVERAGE DELAY (SECONDS PER VEHICLE)	
		Signalized	Stop-Controlled
	poor comfort and convenience. Unstable operation is frequent, and minor disturbances in traffic flow can cause breakdown conditions.		
F	LOS F is used to define forced or breakdown conditions. This condition exists wherever the volume of traffic exceeds the capacity of the roadway. Long queues can form behind these bottleneck points with queued traffic traveling in a stop-and-go fashion.	>80	>50

Source: Highway Capacity Manual 2000.
Note: values displayed for stop-controlled intersections reflect the lengthiest average minor street approach delay.

MILL VALLEY LOS STANDARDS

The 2013 Mill Valley General Plan Mobility Element describes the application of LOS to traffic operations analysis in the City and recognizes that policies that promote high automobile service levels tend to favor vehicle mobility at the expense of transit, bicycle and pedestrian travel modes. The existing LOS standards seek to align local congestion management with the City's sustainable transportation goals and account for the needs of all modes of travel.

Acceptable automobile LOS conditions and average motorist delays during weekday and weekend peak hours for Mill Valley signalized intersections as defined in the General Plan Mobility Element are as follows:

- East Blithedale Avenue / Camino Alto: LOS E+ (delays of 65 seconds or less)
- All other signalized intersections: LOS D (delays of 55 seconds or less)

EXISTING INTERSECTION LEVEL OF SERVICE

Intersection operations analysis is evaluated for the following scenarios:

- **Existing Conditions:** Existing vehicle traffic volumes at the 11 study intersections based on traffic volumes from existing studies and counts collected in 2022.
- **Cumulative (2040) Conditions:** This cumulative scenario forecasts traffic volumes in the year 2040, based on buildout of approved, proposed, and future projects.
- **Existing Plus Project Conditions:** Project-generated traffic volumes are added to the Existing Conditions scenario to determine potential impacts of the Project compared to existing conditions.
- **Cumulative (2040) Plus Project Conditions:** Project-generated traffic volumes are added to the Cumulative Conditions scenario to determine potential impacts of the Project compared to future conditions.

Intersection operations analysis was performed following the approach contained in the *Highway Capacity Manual, 2000* (Transportation Research Board 2000). Analysis was conducted using Synchro 11 software (Trafficware) based on physical roadway network infrastructure geometry and intersection signal control.

Existing Conditions

LOS was analyzed for the four time periods reflecting "Existing Conditions," corresponding to weekday AM Peak Hour, weekday PM Peak Hour, Saturday Peak Hour and Saturday with Soccer Peak Hour traffic volumes. Synchro intersection operations analysis yields intersection LOS results for the four Existing Condition peak hours as displayed in Table TRAN-8.

The results indicate that signalized intersections in the study area operate acceptably at LOS B, C or D during all four peak periods (AM, PM, Saturday, and Saturday with Soccer). The unsignalized intersections operate acceptably at LOS A or B during all four peak periods.

Cumulative Conditions

In order to assess the Project's potential impact against anticipated local and regional growth patterns, the daily traffic volumes at study intersections were forecasted to reflect 2040 traffic conditions. This "Cumulative Conditions" scenario accounts for buildout of approved, proposed, and future development projects through the year 2040, which could influence local and regional traffic patterns. Cumulative forecasts include approved projects identified from the City of Mill Valley website, as well as future projects such as housing unit growth identified in the Draft Housing Element Update (6th Cycle, 2023-2031).

Future year 2040 traffic volume forecasting at each of the study intersections also accounts for background traffic volume increases according to the Mill Valley General Plan Circulation Element and transportation demand model inputs from the Transportation Authority of Marin. The Cumulative scenario analyzed represents future vehicle volumes and traffic conditions that would be expected under successful development of land uses identified in the General Plan in the year 2040. In general, traffic volumes were estimated to exhibit annual growth rates between 0.25 and 0.55 percent along study area roadways.

Cumulative intersection operations analysis results are displayed in Table TRAN-9. The results indicate that average delay at signalized intersections in the study area are expected to increase marginally over existing conditions due to the forecasted future increases in traffic volumes, and that all signalized intersections would continue to operate acceptably at LOS B, C or D during all four peak periods (AM, PM, Saturday, and Saturday with soccer). The unsignalized intersections would also continue to operate at LOS A or B during all four peak periods.

Table 5.9-8. Existing Intersection Peak Hour Level of Service

				AM PEAK		PM PEAK		SATURDAY PEAK		SATURDAY WITH SOCCER PEAK	
#	Road 1	Road 2	Control	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	East Blithedale Avenue	Camino Alto	Signal	35.3	D	41.5	D	34.5	C	39.0	D
2	East Blithedale Avenue	Lomita Drive / Roque Moraes Drive	Signal	31.9	C	28.8	C	30.2	C	34.0	C
3	East Blithedale Avenue	Kipling Drive / Tower Drive	Signal	15.5	B	13.9	B	11.8	B	14.4	B
4	Tiburon Boulevard	US Highway 101 Southbound Off-Ramp	Signal	24.9	C	22.2	C	23.7	C	24.1	C
5	Tiburon Boulevard	US Highway 101 Northbound Off-Ramp	Signal	12.4	B	21.0	C	31.2	C	22.2	C
6	Roque Moraes Drive	Redwood Highway Frontage Road	Signal	31.6	C	36.6	D	32.3	C	31.0	C
7	Hamilton Drive	Kipling Drive / Hamilton Drive	AWSC	8.5	A	8.4	A	8.5	A	9.6	A
8	Hamilton Drive	Hauke Park Parking Lot	OWSC	9.8	A	9.9	A	10.4	B	12.5	B
9	Hamilton Drive	Mill Valley Police Department Parking Lot	OWSC	9.6	A	9.5	A	9.5	A	10.1	B
10	Hamilton Drive	Seaver Drive / Eucalyptus Knoll Street	TWSC	10.7	B	10.5	B	10.2	B	11.3	B
11	Hamilton Drive	Redwood Highway Frontage Road	OWSC	11.3	B	11.7	B	12.2	B	13.3	B

Source: Parisi 2023a. Notes: Delay is measured in average seconds per vehicle. LOS = Level of Service. AWSC = All-way stop-controlled. TWSC = Two-way stop controlled. OWSC = One-way stop controlled. Values displayed for Signalized and AWSC intersections reflect the average delay for all vehicles approaching the intersection. Values displayed for TWSC and OWSC intersections reflect the worst minor street approach delay.

Table 5.9-9. Cumulative Intersection Peak Hour Level of Service

				AM PEAK		PM PEAK		SATURDAY PEAK		SATURDAY WITH SOCCER PEAK	
#	Road 1	Road 2	Control	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	East Blithedale Avenue	Camino Alto	Signal	39.1	D	48.9	D	37.6	D	42.5	D
2	East Blithedale Avenue	Lomita Drive / Roque Moraes Drive	Signal	33.1	C	30.1	C	31.2	C	35.9	D
3	East Blithedale Avenue	Kipling Drive / Tower Drive	Signal	17.6	B	15.5	B	12.2	B	15.2	B
4	Tiburon Boulevard	US Highway 101 Southbound Off-Ramp	Signal	27.6	C	24.1	C	24.3	C	25.8	C
5	Tiburon Boulevard	US Highway 101 Northbound Off-Ramp	Signal	13.5	B	22.8	C	37.2	D	23.9	C
6	Roque Moraes Drive	Redwood Highway Frontage Road	Signal	36.4	D	44.5	D	37.2	D	36.5	D
7	Hamilton Drive	Kipling Drive / Hamilton Drive	AWSC	8.6	A	8.5	A	8.6	A	9.9	A
8	Hamilton Drive	Hauke Park Parking Lot	OWSC	9.9	A	10.0	B	10.5	B	12.7	B
9	Hamilton Drive	Mill Valley Police Department Parking Lot	OWSC	9.7	A	9.6	A	9.5	A	10.2	B
10	Hamilton Drive	Seaver Drive / Eucalyptus Knoll Street	TWSC	10.8	B	10.6	B	10.3	B	11.5	B
11	Hamilton Drive	Redwood Highway Frontage Road	OWSC	11.7	B	12.2	B	12.8	B	14.2	B

Source: Parisi 2023a. Notes: Delay is measured in average seconds per vehicle. LOS = Level of Service. AWSC = All-way stop-controlled. TWSC = Two-way stop controlled. OWSC = One-way stop controlled. Values displayed for Signalized and AWSC intersections reflect the average delay for all vehicles approaching the intersection. Values displayed for TWSC and OWSC intersections reflect the worst minor street approach delay.

Existing Plus Project Level of Service

Project-only turning volumes were added with existing volumes to characterize existing conditions plus Project generated trips.

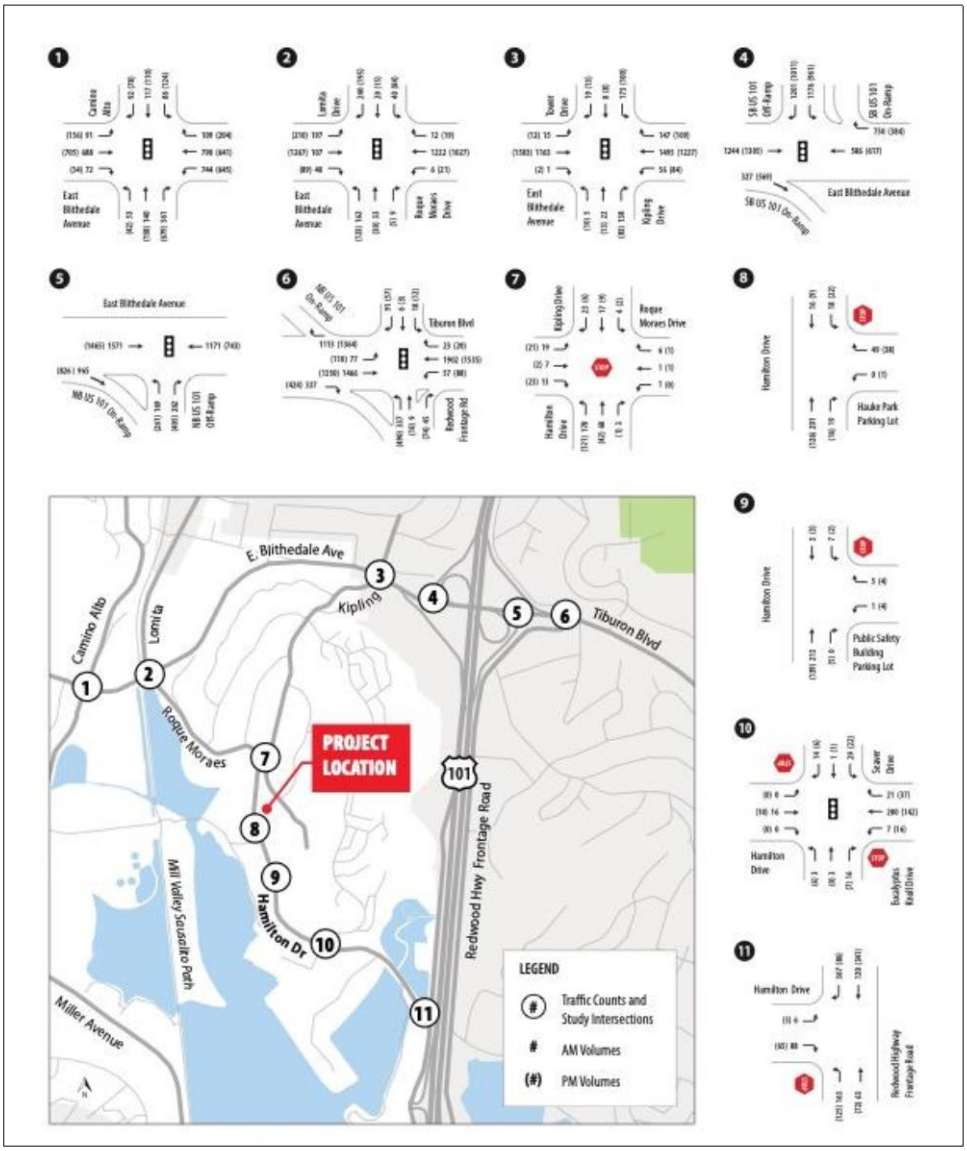
Intersection delay for existing conditions was compared against Existing Plus Project conditions. The results indicate that average vehicle delay at all intersections in the study area would be expected to increase slightly, by less than one-half second, due to the traffic generated by the Project. All signalized intersections would continue to operate at LOS B, C or D during all four peak periods (AM, PM, Saturday, and Saturday with Soccer). The unsignalized intersections would also continue to operate at LOS A or B during all four peak periods. Appendix H includes detailed inputs and outputs from Synchro for the four "Existing Plus Project" peak periods (AM, PM, Saturday, and Saturday with Soccer).

Cumulative Plus Project Level of Service

Project-only turning volumes were added with Cumulative traffic volumes to characterize future conditions in the year 2040 including Project generated trips. "Cumulative Plus Project" estimated peak hour intersection turning movement volumes are shown in Figure TRAN-4 and Figure TRAN-5.

"Cumulative Plus Project" LOS analysis results for weekday AM and PM peak hours and results for Saturday and Saturday with Soccer peak hours are displayed in Table TRAN-10 and Table TRAN-11.

Intersection delay for Cumulative conditions was compared against Cumulative Plus Project conditions. The results indicate that average delay at all intersections in the study area would be expected to increase slightly, by less than one-half second, due to the traffic generated by the Project. All signalized intersections would continue to operate at LOS B, C or D during all four peak periods (AM, PM, Saturday, and Saturday with Soccer). The unsignalized intersections would also continue to operate at LOS A or B during all four peak periods.



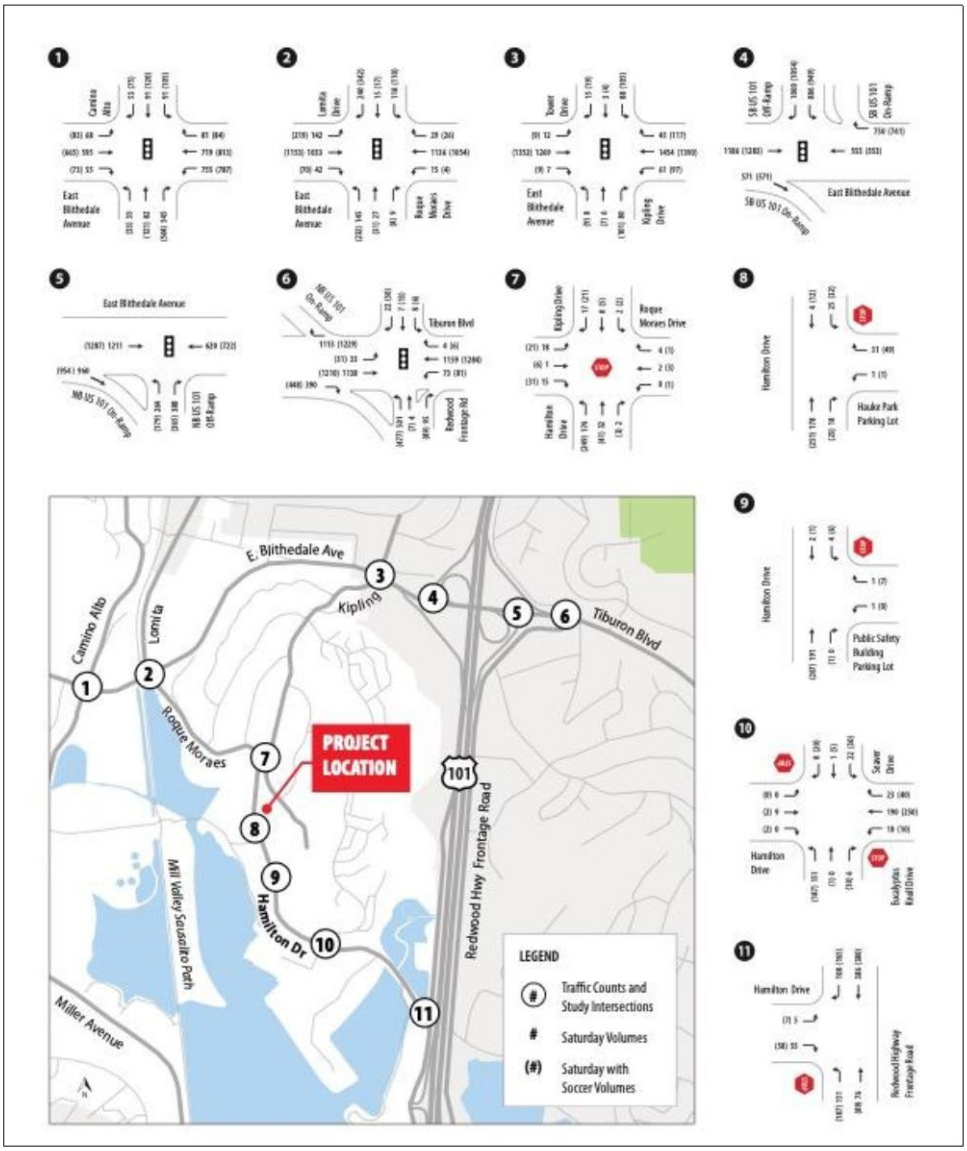
Source: Parisi. 1 Hamilton Drive Transportation Impact Assessment. Figure 5-3. October 2023.

Figure 5.9-4. Cumulative Plus Project Peak Hour Vehicle Volumes AM & PM

wra Environmental Consultants

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.9-4. Cumulative Plus Project Peak Hour Vehicle Volumes AM & PM



Source: Parisi. 1 Hamilton Drive Transportation Impact Assessment. Figure 5-4. October 2023.

Figure 5.9-5. Cumulative Plus Project Peak Hour Vehicle Volumes Saturday & Sunday

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 5.9-5. Cumulative Plus Project Peak Hour Vehicle Saturday & Sunday with Soccer

Table 5.9-10. Cumulative and Cumulative Plus Project Intersection LOS – AM & PM Peak Hour

				AM PEAK				PM PEAK			
				Cumulative		Cumulative Plus Project		Cumulative		Cumulative Plus Project	
#	Road 1	Road 2	Control	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	East Blithedale Avenue	Camino Alto	Signal	39.1	D	39.3	D	48.9	D	49.4	D
2	East Blithedale Avenue	Lomita Drive / Roque Moraes Drive	Signal	33.1	C	33.4	C	30.1	C	30.3	D
3	East Blithedale Avenue	Kipling Drive / Tower Drive	Signal	17.6	B	17.6	B	15.5	B	16.5	B
4	Tiburon Boulevard	US Highway 101 Southbound Off-Ramp	Signal	27.6	C	27.9	C	24.1	C	23.9	C
5	Tiburon Boulevard	US Highway 101 Northbound Off-Ramp	Signal	13.5	B	13.5	B	22.8	C	22.8	C
6	Roque Moraes Drive	Redwood Highway Frontage Road	Signal	36.4	D	36.4	D	44.5	D	44.7	D
7	Hamilton Drive	Kipling Drive / Hamilton Drive	AWSC	8.6	A	8.8	A	8.5	A	8.7	A
8	Hamilton Drive	Hauke Park Parking Lot	OWSC	9.9	A	10.2	B	10.0	B	10.3	B
9	Hamilton Drive	Mill Valley Police Department Parking Lot	OWSC	9.7	A	9.7	A	9.6	A	9.7	A
10	Hamilton Drive	Seaver Drive / Eucalyptus Knoll Street	TWSC	10.8	B	10.8	B	10.6	B	10.7	B
11	Hamilton Drive	Redwood Highway Frontage Road	OWSC	11.7	B	11.7	B	12.2	B	12.2	B

Source: Parisi 2023a. Notes: Delay is measured in average seconds per vehicle. LOS = Level of Service. AWSC = All-way stop-controlled. TWSC = Two-way stop controlled. OWSC = One-way stop controlled. Values displayed for Signalized and AWSC intersections reflect the average delay for all vehicles approaching the intersection. Values displayed for TWSC and OWSC intersections reflect the worst minor street approach delay.

Table 5.9-11. Cumulative and Cumulative Plus Project Intersection LOS – Saturday & Saturday with Soccer Peak Hour

				SATURDAY PEAK				SATURDAY WITH SOCCER PEAK			
				Cumulative		Cumulative Plus Project		Cumulative		Cumulative Plus Project	
#	Road 1	Road 2	Control	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	East Blithedale Avenue	Camino Alto	Signal	37.6	D	37.7	D	42.5	D	42.6	D
2	East Blithedale Avenue	Lomita Drive / Roque Moraes Drive	Signal	31.2	C	31.4	C	35.9	D	36.1	D
3	East Blithedale Avenue	Kipling Drive / Tower Drive	Signal	12.2	B	12.5	B	15.2	B	15.5	B
4	Tiburon Boulevard	US Highway 101 Southbound Off-Ramp	Signal	24.3	C	24.3	C	25.8	C	25.9	C
5	Tiburon Boulevard	US Highway 101 Northbound Off-Ramp	Signal	37.2	D	37.1	D	23.9	C	23.8	C
6	Roque Moraes Drive	Redwood Highway Frontage Road	Signal	37.2	D	37.2	D	36.5	D	36.5	D
7	Hamilton Drive	Kipling Drive / Hamilton Drive	AWSC	8.6	A	8.7	A	9.9	A	10.2	B
8	Hamilton Drive	Hauke Park Parking Lot	OWSC	10.5	B	10.7	B	12.7	B	13.4	B
9	Hamilton Drive	Mill Valley Police Department Parking Lot	OWSC	9.5	A	9.6	A	10.2	B	10.3	B
10	Hamilton Drive	Seaver Drive / Eucalyptus Knoll Street	TWSC	10.3	B	10.4	B	11.5	B	11.6	B
11	Hamilton Drive	Redwood Highway Frontage Road	OWSC	12.8	B	12.8	B	14.2	B	14.3	B

Source: Parisi 2023a. Notes: Delay is measured in average seconds per vehicle. LOS = Level of Service. AWSC = All-way stop-controlled. TWSC = Two-way stop controlled. OWSC = One-way stop controlled. Values displayed for Signalized and AWSC intersections reflect the average delay for all vehicles approaching the intersection. Values displayed for TWSC and OWSC intersections reflect the worst minor street approach delay.

5.9.4 Project Design Features

PARKING FACILITIES

The Project would include the construction of 63 vehicle parking spaces on the first-floor podium level of the housing building for residential use. This is five parking spaces less than the estimated maximum overnight parking demand, 69 spaces, generated by the Project (Parisi 2023a). The Project would also include the relocation of the Hauke Park Parking Lot into existing parking facilities, including 34 regular vehicle parking spaces, two ADA-accessible spaces, and two electric vehicle spaces, to a reconfigured Hauke Park / PSB Parking Lot. Project plans include reconfiguring and expanding the existing PSB parking lot to accommodate up to 50 vehicle parking spaces including relocated ADA-accessible and electric vehicle charging facilities. This rearrangement would result in an overall increase of parking accessible to the public by approximately 12 regular parking spaces, to a total of approximately 50 parking spaces.

The residential characteristics of the Project and the daytime public use of Hauke Park are complimentary land uses in terms of parking demand. A parking survey conducted by Parisi for the existing Hauke Park Parking Lot indicated an opposite time-based parking demand effect compared to anticipated residential time-of-day use. The periods of high public parking demand for Hauke Park occur during daytime hours, and parking lot occupancy drops to below 20 percent in the evening hours on both weekdays and weekends. However, demand for parking spaces generated by residential development would be highest during the overnight hours between 12 AM and 5 AM. Parking analysis results indicate that during the overnight period when residential parking demand is highest, there would be an estimated shortfall of five parking spaces in the first-floor parking lot underneath Project residences. At this same time, at least 40 unoccupied and publicly available parking spaces in the upgraded Hauke Park / PSB Public Parking Lot would be available to meet residential parking demand. During Saturdays when soccer games are being hosted at Hauke Park, which would represent the highest overall parking demand hours for all land uses combined, there would still be over 10 parking spaces empty in the Hauke Park / PSB Parking Lot (Parisi 2023a). As such, the parking spaces being constructed as part of the Project will be sufficient to meet Project generated residential and public parking demand.

PEDESTRIAN FACILITIES

Crosswalks adjacent to the Project site are shown in Figure 5.9-6. The Project would consolidate the two existing Hauke Park Parking Lot entrances into a relocated driveway serving the reconfigured Hauke Park Parking Lot and the Project parking lot underneath the residences. The Project would install continuous sidewalk on Hamilton Drive along the Project frontage, including new ADA-compliant curb ramps for Crosswalk 1 and Crosswalk 2 on the east side of Hamilton Drive. This configuration would have an increased offset from the proposed driveway entrance to the southern pedestrian crosswalk across Hamilton Drive, which would result in greater (improved) reaction time for motorists exiting the Project driveway and public parking lot to yield to pedestrians crossing Hamilton Drive. Further south, Crosswalk 3 between the PSB building and the Hamilton Drive Parking Lot and the Bayfront Park Pathway would also remain in place.

The Project would include pedestrian facility safety upgrades to the three existing crosswalks across Hamilton Drive between the Project site and Hauke Park. Safety features would include updated high-visibility crosswalk markings, advanced pavement warning markings, and reflective crossing warning signs (Parisi 2023a).

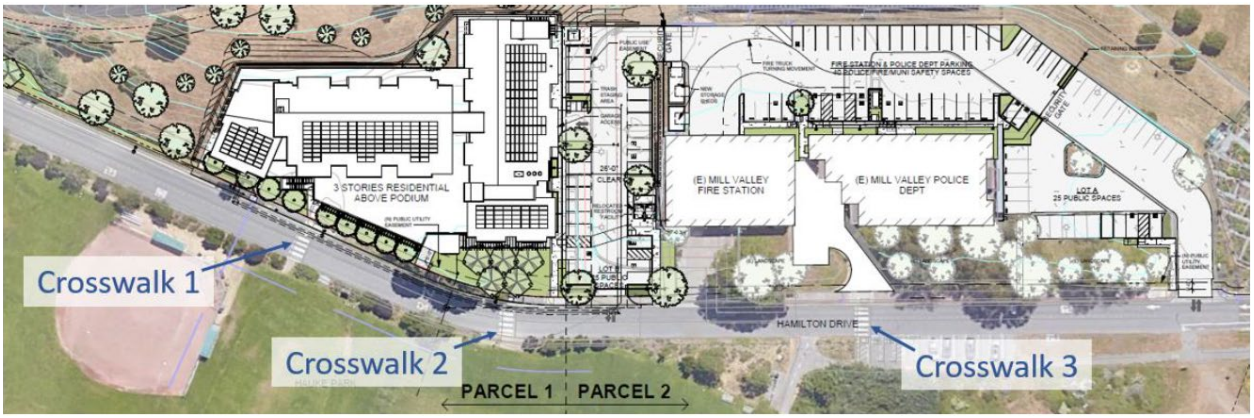


Figure 5.9-6. Crosswalks Adjacent to the Project Site

BICYCLE FACILITIES

The Mill Valley General Plan Mobility Element Program M.17-9 suggests requiring new multifamily development projects to include secure bicycle parking. Though City parking standards have not been modified to include this requirement in the municipal code, the Mill Valley Bicycle and Pedestrian Plan includes recommended guidelines for bicycle parking associated with new development. These guidelines recommend that a minimum of one bicycle parking space that is located in a covered and secure area be included for every five dwelling units of a multifamily residential development. The Project would meet this guideline by providing at least 10 bicycle parking spaces.

Current Project plans include 28 on-site bicycle parking spaces within an inside secure bicycle storage and repair room, accessible from the building lobby. Additionally, outside bicycle racks would provide parking for three bicycles near the lobby entrance. This exceeds the recommended bicycle parking provision in the Mill Valley Bicycle and Pedestrian Plan and would encourage more future resident and visitor trips to be made by bicycle.

SAFETY FEATURES

In order to construct the housing building, a portion of the building would be cut into the hillside behind the existing Hauke Park parking lot west of and downhill from Roque Moraes Drive. As a conservative safety precaution to protect vehicles from veering off of Roque Moraes Drive into the housing building, a guardrail would be installed along Roque Moraes Drive above the Housing Site. The proposed northern extent of the guardrail would be approximately located across from the driveway entrance to 149 Roque Moraes Drive, and the southern extent of the guardrail would be approximately located south of the driveway of 179 Roque Moraes Drive (Parisi 2023b).The guardrail would also protect the housing building from potential damage from vehicles that could occur if there were no guardrail, which is the current condition.

CONSTRUCTION MANAGEMENT PLAN

As part of Project Design Review, a Construction Management Plan (CMP) must be prepared and submitted to the City for review and approval. The CMP is required to contain information and protocols related to transportation, including delivery truck routes, construction truck driver training, parking, and road closures. The CMP must also identify all staging areas, loading and unloading areas, and other job site features. A preliminary CMP has been prepared by the Project

architect and shall be refined following selection of a construction contractor. The CMP would be approved by the City prior to issuance of building permits for construction activity.

CONSTRUCTION TRUCK ACCESS

Construction truck access to the Project site from the public roadway network would be provided via fence and gate off of Hamilton Drive. According to the Project's preliminary Construction Management Plan (to be further refined after selection of a construction contractor, and prior to issuance of a building permit), trucks would access the Project site from the south by turning onto Hamilton Drive from the Redwood Highway Frontage Road. Trucks exiting the site would be required to turn north onto Hamilton Drive, west onto Roque Moraes, and east onto East Blithedale Avenue to access the US Highway 101 access ramps. Contractors operating construction trucks would be instructed of the required haul route. Construction truck route alternatives accounting for roadway width, driveway entrances, existing traffic patterns, and other characteristics were evaluated as part of the TIA. It was determined that the proposed construction truck haul routes would utilize roadways with sufficient travel width, eliminate incoming and exiting trucks utilizing the same travel path, and minimize potential truck conflicts with other roadway users and neighborhood driveway entrances.

Due to the lack of on-site space, construction trucks would be staged offsite while waiting to enter the Project site. In consultation with the City's Department of Public Works, the Project would be required to identify staging locations that are at least 200 feet from residences, schools, and other sensitive receptors before drivers are notified by radio that they are allowed to enter the Project site. Fire apparatus access to the rear station entrance must be maintained throughout construction phases.

Construction traffic effects on the circulation network would include temporary capacity reduction on the streets in the study area due to construction vehicle turning movements or delayed truck starts at signalized intersections. Based on the forecast trips associated with construction activities, this addition of truck trips is not estimated to adversely impact the traffic operations or emergency access of the roadway network.

CONSTRUCTION TRUCK TRIP GENERATION

Construction phases were assessed to determine activities that would generate the highest volumes of truck traffic accessing the site. The temporary construction traffic generation and travel patterns were evaluated to determine whether construction traffic would adversely affect the existing transportation system and surrounding neighborhoods.

Each phase of construction would generate differing numbers of delivery trucks and worker trips. It was determined that the highest number of truck trips would be generated during the phases associated with export of removed base material. Base material export would take place shortly after the start of construction Phase 3 for an estimated 40 working days (Parisi 2023a).

It is estimated that a total of 9,451 cubic yards of base material from the field would be exported from the site during those 40 days. Assuming a dump truck capacity of 14 cubic yards per truckload, an estimated 675 truckloads would travel to and from the Project site during this period. As each truckload would account for two total trips (one inbound and one outbound) over a 40-day period, and assuming relatively even distribution of trucks throughout base material

export activities and eight working hours of each workday, this would result in an average of 17 truckloads and 34 truck trips per day, or 2.1 truckloads and 4.2 truck trips per hour.

The number of trips would be higher or lower on some days and during different hours. As a standard City requirement, on-site crews would be required to either park on-site or park at a remote location such as the Manzanita Park & Ride and carpool to the worksite. The Project contractor shall arrange staging areas which would allow some parking on-site. Based on a maximum crew size of 12 and assuming vehicle occupancy of three workers traveling per vehicle from the remote parking location, this would equate to an additional four arriving vehicle trips to the Project site in the morning and four departing vehicle trips in the afternoon. The worker trips would take place outside of the hours of construction truck trips, as crew instructions are to arrive prior to 8 AM and depart after 5 PM.

The highest frequency of daily truck trips for the Project would occur during 40 days of base material export, when an average of 4.2 truck trips per hour would access the Project site. During these peak traffic generating periods of the Project, up to an additional four worker passenger vehicle trips would take place in the morning and afternoon each day. The number of truck and passenger vehicle trips added to the roadway network by the Project is not anticipated to substantially impact neighborhood traffic operations.

As described above, the Project would implement procedures contained in an approved CMP as a Standard COA for the Project. These procedures would include construction truck driver training to address the safe movement of vehicles at the site. Construction activity would be required to make every effort to not obstruct the vehicle travel lanes on Hamilton Drive, nor the sidewalk on the east side of Hamilton Drive from the PSB to Roque Moraes Drive, and to park all construction-related vehicles on-site or in approved staging areas included in the CMP. Parking on site for workers would be limited, and individuals would carpool to site from an identified off-site parking location.

PROJECT VEHICLE TRIP GENERATION ANALYSIS

Vehicle trips generated by the Project were estimated using the *Institute of Transportation Engineers (ITE) Trip Generation M^{an}ual, 11th edition*, which provides trip generation rates for a variety of land use types (ITE 2021). The Trip Generation Manual describes the land use type "Multifamily Housing (Low-Rise)" (ITE Land Use Code 220) as a building containing two or three floors of housing units, and "Multifamily Housing (Mid-Rise)" (ITE Land Use Code 221) as a building that has between four and 10 floors of living space. As trip generation rates are higher for "Multifamily Housing (Low-Rise)," and this description most appropriately fits the Project plans, which contain three floors of living space, trip generation rates for "Multifamily Housing (Low-Rise)" were determined to represent the proposed Project land use and were selected for this analysis.

For the purposes of this analysis, estimated trip generation is conservatively based on market rate multifamily housing trip generation rates. These results should be interpreted as a very conservative scenario and likely to overestimate Project-generated trips.

As the Project site is currently utilized as a parking lot, and parking relocation is part of the Project, this analysis determines that the housing units would not displace existing uses, and no

existing use trip credits were applied to the Project trip generation estimates. Trip generation rates account for trips made by all residents and are listed in Table TRAN-12.

The Trip Generation Manual does not list Saturday trip generation rates for the Multifamily Housing (Low-Rise) land use. Analysis of other residential land use categories such as Single-Family Detached Housing and Multifamily Housing (Mid-Rise) determines that Saturday daily and Saturday peak hour trip generation is commensurate with weekday daily and PM peak hour trip generation rates. Hence, this study applies weekday daily and PM peak hour trip generation rates for Saturday daily and Saturday peak hour Project trip generation.

ITE lists residential trip generation rates as either an average rate over the range of dwelling units, or as a best fit regression equation. For Multifamily Housing (Low-Rise), trip generation rates are higher when applying the best fit regression equation for a development with 50 dwelling units compared to the average rate. This study conservatively applies the best fit regression equation for daily, AM peak, and PM peak trip generation.

Table 5.9-12. Project Vehicle Trip Generation Rates

			DAILY	AM PEAK HOUR			PM AND SATURDAY PEAK HOUR		
Land Use	Source	Units	Rate	Rate	% In	% Out	Rate	% In	% Out
Multifamily Housing (Low-Rise) (ITE 220)	ITE 220	DU	7.92	0.76	24%	76%	0.84	63%	37%

Source: ITE 2021. Rates based on regression equations applied for 50 DU as follows, where T=trips, and x=DU: Daily: T=6.41x+75.31. AM Peak Hour: T=0.31x+22.85. PM Peak Hour: T=0.43x+20.55.

Based on the Project development plans for up to 50 DU and daily trip generation rate of 7.92 trips per DU, the Project would generate a maximum of 396 trips per day, as displayed in Table TRAN-13. Of these, up to 38 vehicle trips would be expected to occur during the AM peak hour and a maximum of 42 trips during the PM peak hour.

Table 5.9-13. Project Vehicle Trip Generation

			DAILY	AM PEAK HOUR			PM AND SATURDAY PEAK HOUR		
Scenario	Quantity	Units	Trips	Trips	In	Out	Trips	In	Out
Project	50	DU	396	38	9	29	42	26	16

Source: Parisi 2023a.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Project trip distribution through study area gateways was estimated based on existing traffic patterns on roadways in the study area, access to activity centers and other land uses along the study roadway network, and with consideration for Project operational influences such as weekend soccer games and other events at Hauke Park. Vehicle trip distribution gateways were identified for the Project study area, and trips were assigned to gateways based on trip distribution patterns (Table TRAN-14).

Table 5.9-14. Project Vehicle Trip Distribution Across Study Area Gateways

	AM PEAK HOUR	PM PEAK HOUR	SATURDAY PEAK HOUR
Study Area Gateway	**Trip %**	**Trip %**	**Trip %**
US Highway 101 north of Tiburon Boulevard	35%	34%	34%
US Highway 101 south of Tiburon Boulevard	20%	13%	20%
Tiburon Boulevard east of US Highway 101	8%	13%	8%
Redwood Highway Frontage Road	2%	5%	3%
Lomita Drive north of East Blithedale Avenue	7%	8%	5%
Camino Alto south of East Blithedale Avenue	13%	14%	15%
East Blithedale Avenue west of Camino Alto	15%	13%	15%

Source: Parisi 2023a

Trip route consideration was made for the one-way directional restriction on Hamilton Drive south of the existing PSB parking lot entrance. As a result, all vehicle trips would be expected to exit the Project site northward along Hamilton Drive toward the intersection with Roque Moraes drive. A majority of vehicle trips originating from the US Highway 101, Tiburon Boulevard, or Redwood Highway Frontage Road origins enter the Project site from the south, accessing Hamilton Drive from Redwood Highway Frontage Road, and a smaller proportion of trips from these origins enter the Project site from the north, according to average gateway trip route duration estimates for each peak hour time period.

5.9.5 Thresholds of Significance

Consistent with State CEQA Guidelines Appendix G Environmental Checklist, the Project would have a significant impact if it would:

a. *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;*

b. *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);*

c. *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or,*

d. *Result in inadequate emergency access.*

5.9.6 Discussion of Impacts

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

IMPACT ANALYSIS

Transportation aspects of land use projects are shaped by adopted plans and policies at various levels of government and agencies. These plans and policies are consulted as part of the TIA to evaluate against applied principles and efforts to mitigate environmental effects. As discussed in

Section 3.17.3 Regulatory Setting, various State, regional, and local plans and policies pertaining to transportation are applicable in the Project area. An analysis of the Project's consistency with applicable plans and policies related to transportation is provided below.

State: Senate Bill 743 (2013)

Senate Bill 743 mandated a change in CEQA guidelines to utilize VMT as opposed to vehicle flow or traffic congestion as a more appropriate metric for assessing impacts associated with projects, in line with goals of helping to achieve climate commitments, improving health and safety, and prioritizing co-located land uses. This Project ensures compliance with CEQA guidelines by following the California OPR Technical Advisory in its VMT analysis.

Regional: Plan Bay Area 2050 (2021)

In 2021, the MTC and ABAG adopted Plan Bay Area 2050 as the official regional long-range transportation and land use plan for the Bay Area. Strategies in this plan include encouraging land use patterns that foster shared transportation modes, lessen the share of single-occupancy work commutes, and reduce greenhouse gas emissions. The Project's provision of affordable multifamily housing with access to transit is in line with the emission reduction objectives of Plan Bay Area 2050.

Regional: TAM Congestion Management Program (2021)

The TAM is the congestion management agency for Marin County and develops and updates its mandated short-range CMP every two years to describe strategies to assess and monitor the performance of the county's transportation system, address congestion and improve performance of a multi-modal system among local jurisdictions. Major developments that generate a net increase of more than 100 PM peak hour vehicle trips are subject to a CMP analysis and traffic impact study. As shown in Table TRAN-13, the Project would generate 26 total PM peak hour trips, and a CMP analysis is not required.

Local: Mill Valley Bicycle and Pedestrian Plan (2017)

The Mill Valley Bicycle and Pedestrian Plan seeks to encourage active transportation to promote healthy lifestyles, reduce traffic congestion, improve air quality, and better connect local destinations. The Project is aligned with goals to create a safe and sustainable transportation network that balances the needs of pedestrians, bicyclists, motorists, and transit users.

The proposed Project would establish a primary land use near the bicycle circulation network and be generally consistent with the tenants of the Bicycle and Pedestrian Plan. In addition, the proposed Project would include pedestrian safety improvements as recommended in the TIA prepared by Parisi. Improvement Recommendation 1: Pedestrian Safety Upgrades would be incorporated into Project design and would include pedestrian safety upgrades to the three crosswalks along Hamilton Drive between the Project site and Hauke Park. Upgrades would include high-visibility crosswalk markings, advanced pavement warning markings, and reflective crossing warning signs, in accordance with the City standard in place at the time of development.

Local: Mill Valley Complete Streets Policy (2013)

The Complete Streets Policy, Resolution Number 2013-03, declares a policy to further ensure that Mill Valley streets provide safe and convenient travel options for all users (Mill Valley City Council 2013). Any off-site improvements initiated by the proposed Project would be in accordance with City requirements and would facilitate provision of infrastructure and programs that encourage alternative means of transportation, are sensitive to local context, and follow the implementation

consultation and consistency framework which is consistent with the principles contained in the Complete Streets Policy.

Local: MV2040 General Plan Mobility Element (2013)

The MV2040 General Plan Mobility Element establishes a local framework to describe "the ability to move about" in the context of existing circulation infrastructure and travel purposes in Mill Valley (City of Mill Valley 2013). The Mobility Element details the shift from promoting high automobile service levels at the expense of transit, bicycle, and pedestrian movements, to the pursuit of a balanced, multi-modal transportation system. Maintaining and implementing non-motorized transportation systems is described as a key component of facilitating growth of walking and biking as a preferred travel option. The document plans for the trend of transit capturing a larger share of daily trips through application of real-time transit data, traffic signal timing, and transit infrastructure improvements.

The Project proposal aligns with multiple goals of the Mobility Element, including supporting compact development that encourages alternative modes of transportation, providing immediate walk and bike access to the established Bayfront Park and Mill Valley-Sausalito Paths, providing parking that can be shared between multiple users, and being located less than 0.5 miles from transit stops that provide access to Marin County and San Francisco.

Mobility Element LOS Standards

Results of the Existing Plus Project LOS analysis indicate that average vehicle delay at all study intersections would increase slightly due to Project operation. However, all signalized intersections would continue to operate at LOS B, C, or D and unsignalized intersections would continue to operate at LOS A or B. Therefore, Project generated traffic would not create intersection delays which would be inconsistent with LOS standards identified in the General Plan Mobility Element. Additionally, a Construction Management Plan, would be implemented to manage local impacts of construction-generated vehicle activity. This plan would ensure that intersections in the Project area continue to operate at acceptable LOS standards during construction per the General Plan Mobility Element. Therefore, the proposed Project would be consistent with the general plan, and the impact would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, the impact of the proposed Project would be **less than significant**.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

IMPACT ANALYSIS

VMT Analysis Methods

Based on CEQA Guidelines Section 15064.3, Subdivision (b), vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. As the City has not yet established VMT significance thresholds for CEQA analysis, thresholds consistent with

the OPR Technical Advisory were applied to the Project, which account for local geographic and land use considerations.

The first step in conducting a VMT analysis is to compare a Project against VMT screening thresholds. In Technical Advisory, the OPR includes guidelines for agencies to establish VMT screening thresholds to facilitate rapid identification of projects that are expected to cause a less-than-significant impact. If projects meet any of the screening criteria, they are considered to be "screened-out," and it is presumed that VMT impacts for the project would be less-than significant, and a detailed VMT analysis is not required for transportation CEQA analysis purposes. The following screening thresholds are applied:

- Small projects: projects that generate fewer than 110 vehicle trips per day;
- Projects located in low-VMT generating areas: residential and office projects located in areas with average VMT less than 15 percent below the existing County average;
- Projects near transit stations: projects within ½ mile of high-quality transit (either a rail station, or a bus stop with service at least every 15 minutes during the AM and PM peak periods);
- Affordable residential development: projects containing 100 percent affordable residential development; and
- Local-serving retail projects: projects consisting of less than 30,000 square feet of development and determined by the City to be local-serving.

If none of the screening thresholds are met, a detailed VMT analysis is undertaken. As the Project consists of residential land use development only, the following threshold of significance for the detailed VMT analysis is applied:

- For residential projects, a proposed project that exceeds a project generated level of 15 percent below existing County average home-based VMT per resident may indicate a significant transportation impact.

VMT Screening Assessment

Research has demonstrated that affordable housing projects in infill locations reduces VMT by shortening commutes through improved employment proximity to housing. OPR suggests that residential development projects consisting of 100 percent affordable housing units in infill locations may be presumed to result in less than significant impacts.

The Project includes development of up to 50 housing units, all of which would be made affordable to low-income and very low-income households according to median income limits established by the U.S. Department of Housing and Urban Development. The Project is located within the developed area of Mill Valley and not on an urban growth boundary and would be considered infill development. On this basis, the Project would meet the affordable housing VMT screening criteria and is presumed to result in a less than significant transportation impact on the basis of VMT. The Project would be consistent with CEQA Guidelines Section 15064.3, Subdivision (b).

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The VMT screening assessment determined that the Project meets the screening criterion for affordable housing. Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). The impact would be **less than significant**.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

IMPACT ANALYSIS

Construction

As described above in Section 5.9.4, Project Design Features, a preliminary CMP has been prepared for the Project and would be refined and implemented during construction. This plan includes measures to manage local impacts of construction-generated vehicle traffic and measures to maintain safety for vehicles traveling along roads adjacent to the Project site. Implementation of the CMP would ensure that Project construction activities would not increase hazards due to geometric design features and/or incompatible uses. The impact would be less than significant.

Operation

The Project would include changes to the existing Hauke Park Parking Lot and vehicle entrances. A reconfigured design would consolidate vehicle access to a single public parking lot and access to first-floor resident parking under the Project residences. Safety considerations for driveway entrance alterations including geometric design would be accounted for during the engineering phase and are subject to approval through the City permit process.

Motorist sight distances at the Project driveway were evaluated according to sight distance criteria contained in the Caltrans Highway Design Manual (Caltrans 2019). For urban driveway minor street approaches, criteria for stopping sight distance applies. Stopping sight distance is the minimum sight distance needed to allow a driver traveling at the design speed of the major roadway to see an obstacle ahead and decelerate to avoid a collision. Applying a design speed of 25 mph along Hamilton Drive, the minimum sight distance required is 150 feet. Vehicles traveling northbound toward the proposed Project driveway have clear sight lines of over 500 feet, and vehicles traveling southbound toward the proposed Project driveway have clear sight lines of over 200 feet. As such, required sight lines for the Project driveway are determined to be sufficient. The Project includes pedestrian safety upgrades to the three crosswalks along Hamilton Drive, as recommended by the TIA.

The Project would not alter the roadway width along Hamilton Drive. The Project is near other residential uses. Vehicle trips generated by the Project would be primarily personal vehicle trips similar to existing uses along the roadway, and do not introduce or present an incompatible transportation use.

As the Project is not incompatible with existing surrounding residential land uses, sight distances approaching the Project driveway are adequate, and off-site road geometric design alterations would not increase hazards, the Project results in a less-than-significant CEQA impact.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would not substantially increase hazards due to a geometric design feature or incompatible use. The impact would be **less than significant**.

d) Result in inadequate emergency access?

IMPACT ANALYSIS

Emergency access requirements applicable to the Project are included in the City's Fire Code, which adopts the California Fire Code with amendments, and is contained in the MVMC Section 15.04.120.

Aerial fire apparatus access roads require 26 feet in unobstructed width, though an exception for driveways serving fewer than five structures may reduce the required unobstructed width to 16 feet. Primary emergency access to the Project site is from Hamilton Drive, and secondary access is from the drive aisle of the reconfigured Hauke Park/PSB parking lot. Fire apparatus access to the Project site shall be included in the fire safety plan and undergo review and approval from the Fire Department.

Primary fire apparatus path of travel from the Fire Station garage onto Hamilton Drive upon an emergency event would be from the front garage entrance. The Project would also accommodate emergency vehicle access to the rear Fire Station garage entrance within the Project boundary. Project plans indicate the reconfigured Hauke Park/PSB parking lot would contain sufficient width for fire apparatus access and through travel. Fire apparatus access through the drive aisles of the reconfigured Hauke Park/PSB parking lot would be limited and not intended for emergency access. Public parking lot utilization of the reconfigured Hauke Park/PSB parking lot drive aisles would not present a conflict with the intended fire apparatus use of these drive aisles.

Vehicle volumes in the year 2040 including additional vehicle trips generated by the Project are estimated in the "Cumulative Plus Project" scenario. Analysis of this scenario indicate that the Project would not result in additional emergency response vehicle delay. Potential impacts to roadway emergency access during construction would be addressed through the construction traffic control plan, which would be reviewed and approved by appropriate City departments.

Since adequate emergency access is required as part of the Fire Code of the City and Project plans would be reviewed by local fire officials as part of design review, the Project would have a less-than-significant CEQA impact with respect to emergency access.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would not result in inadequate emergency access. The impact would be **less than significant**.

5.9.7 Cumulative Impacts

As discussed above, the proposed Project would have a less-than-significant impact with respect to conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, the Project would have a less-than-significant cumulative impact with respect to this issue when other projected growth and development in the vicinity is considered.

In accordance with the Office of Planning and Research (OPR) Technical Advisory, metrics such as VMT per capita (as OPR recommends for use on residential projects), cannot be summed because they employ a denominator. 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 impact. Accordingly, a finding of a less-than-significant project impact would imply a less-than-significant cumulative impact, and vice versa. As detailed in the VMT analysis discussed above, the proposed Project is screened out from further VMT analysis because it would develop 100 percent affordable housing at an infill location and is thus presumed to have a less-than-significant impact with respect to VMT. Therefore, the Project would also result in a less-than-significant cumulative VMT impact and would not be considered cumulatively considerable.

The proposed Project would not contribute to any cumulative impact concerning transportation hazards involving geometric design or incompatible uses. The Project is compatible with existing surrounding residential land uses, sight distances approaching the Project driveway are adequate, and the proposed off-site road geometric design alterations would not increase hazards. The Project's impact would not be considered cumulatively considerable.

The proposed Project would not contribute to any cumulative impact concerning emergency access as it would allow for sufficient fire apparatus access and through travel per the discussion above. Vehicle volumes in the year 2040, including additional vehicle trips generated by the Project, indicate that the Project would not result in additional emergency response vehicle delay. The plans for both the proposed Project and other future projects within the City would be reviewed by local fire officials as part of the normal design review process. Thus, the Project's less-than-significant impact would not be considered cumulatively considerable.

5.10 Utilities and Service Systems

5.10.1 Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts with regard to utilities and service systems. The analysis in this section evaluates whether the Project would require new or expanded utility systems, whether there are sufficient water supplies available to serve the Project during dry years, whether the Project would exceed existing wastewater treatment provider capacities or generate solid waste in excess capacities, and whether the Project would comply with all solid waste reduction statutes and regulations. A summary of applicable regulations is also provided in this section. In addition, the potential cumulative impacts of the Project in conjunction with other Housing Element Update projects in the area are evaluated.

5.10.2 Environmental Setting

WATER AND GROUNDWATER

Water Supply

Water is supplied to the Project site by the Marin Municipal Water District (MMWD). MMWD also services the incorporated cities and towns of San Rafael, Fairfax, San Anselmo, Ross, Larkspur, Corte Madera, Tiburon, Belvedere and Sausalito, and some unincorporated areas of Marin County, encompassing a population of approximately 191,269 people (City of Mill Valley 2023). Approximately 75 percent of the MMWD's water supply comes from rainfall on the Mt. Tamalpais watershed and the hills of west Marin, which flow into the MMWD's seven reservoirs. The MMWD also supplements its water supply with water from the Sonoma County Water Agency, which comes from the Russian River system in Sonoma County (Marin Water 2022). To treat this supply, MMWD operates three water treatment plants, including the Bon Tempe Treatment Plant, the San Geronimo Treatment Plant, and the Ignacio Treatment Facility (City of Mill Valley 2023). Some recycled water is also used for non-potable uses including landscape irrigation, cooling towers, car washes, and toilet flushing.

The *2020 Urban Water Management Plan* states that the MMWD does not pump groundwater and does not plan to use groundwater as a supply source in the near future (MMWD 2021). Sonoma County Water Agency obtains a portion of its supply from the Santa Rosa Plain Subbasin of the Santa Rosa Valley Basin, which is primarily used as a drought period supply or when Russian River supplies are constrained (DWR 2019). Groundwater made up less than two percent of the agency's supply in 2015 and is projected to comprise three percent of the agency's supply through 2045 in normal year conditions. It is not possible to determine the specific amount of groundwater that is supplied to MMWD from Sonoma County Water Agency, but it is assumed to be proportionate to the overall percentage of groundwater used by the agency (MMWD 2021). The Department of Water Resources, in its 2019 evaluation of California groundwater basins, determined that the Santa Rosa Subbasin is not in a condition of critical overdraft (DWR 2019).

Water Demand

According to the HEU SEIR, water use within MMWD's service area is mainly attributed to residential use. Between 2016 and 2020, 54 percent of water use was associated with single family residential accounts and 12 percent of water use was associated with multifamily residential accounts (MMWD 2021). Other uses include commercial accounts (10%), landscape

accounts (5.5%), and institutional/governmental (5.3%). Between 2011 and 2013, the total and per capita water use within the service area increased, and then declined from 2014 to 2016. This decline was likely due to historic drought conditions, mandatory state-wide restrictions in urban water use, and local drought response. Since then, total and per capita water use has remained below pre-2014 through 2016 levels, with an increase in usage beginning in 2017. In 2020, potable and raw water residential use was 128 gallons per capita per day (MMWD 2021).

WASTEWATER AND SEWER FACILITIES

Wastewater services in Mill Valley are provided by the Sewerage Agency of Southern Marin (SASM). The SASM is a Joint Powers Agency founded in 1979 and is made up of six member agencies, including the City of Mill Valley. Each member agency owns, operates, and maintains a sanitary sewer system which carries wastewater to the wastewater treatment plant. Water treated at the plant flows through several treatment units to remove pollutants and organic materials before it is disinfected and pumped six miles to Tiburon for deep water discharge into the San Francisco Bay. Some of the processed wastewater is reclaimed and used for landscape irrigation (City of Mill Valley 2022).

The SASM Mill Valley Sewage Treatment Plant is located approximately 0.25 miles west of the Project site. According to the *General Plan Housing and Land Use Element Update and Zoning Amendments,* the wastewater treatment plant has a facility capacity of between 3.6 million gallons per day (gpd) for average dry weather flow and 24.7 million gpd for peak hour wet weather flow. The influent pump station has a capacity of 32.8 million gpd; however, when flows exceed 24.7 million gpd, excess flows are diverted to equalization basins to store for treatment after the event. The wastewater treatment plant is in the process of being updated. The first phase in plant improvements has been completed and the second phase is now in progress. There are no plans for upgrades that would increase the capacity of the plant (City of Mill Valley 2022).

According to MarinMap Viewer, a Geographic Information System for Marin County, a MMWD drainage easement runs horizontally across the Housing Site between the southern border of the site and the City's PSB (County of Marin 2022). There are storm water pipes near the southeastern corner of the Project site that come from across Roque Moraes Drive to the east down onto the PSB parcel and stop short of the solar panels. There are three catch basins along these pipes.

SOLID WASTE AND RECYCLING

Waste, recycle, and compost collection services are provided by Mill Valley Refuse Service (MVRS), which offers a variety of residential and commercial services to Mill Valley, Corte Madera, Tiburon, Belvedere, and surrounding unincorporated areas. MVRS residential service includes weekly refuse and compost collection and weekly service for recycling through a dual-stream system (paper is collected one week and bottles and cans collected the other) (City of Mill Valley 2022). MVRS also offers residential customers free, curbside pickup of approved hazardous waste such as: batteries, latex paint, motor oil, oil filters, fluorescent light bulbs, non-empty aerosol cans, computers and monitors, televisions, and microwave ovens. Hazardous waste may also be dropped off for free at the Marin Household Hazardous Waste Facility in San Rafael (MVRS 2023).

Solid waste and compost materials collected by MVRS are landfilled at the Redwood Landfill in Novato and recycled materials are hauled to Marin Sanitary Service in San Rafael. The Redwood Landfill is a fully permitted Class III disposal site and is used for over 95 percent of the County's solid waste disposal. A survey in March 2021 deemed that the Redwood Landfill had an estimated 4,615,000 tons of remaining capacity (City of Mill Valley 2022). According to the MV2040 General Plan, between 2005 and 2010, the City reduced solid waste going to the landfill by 31 percent.

5.10.3 Regulatory Setting

WATER AND GROUNDWATER

State Regional Water Quality Control Board

In May 2006, the SWRCB adopted the Statewide General Waste Discharge Requirements (Statewide WDR) for all public sanitary sewer systems that are greater than one mile in length and that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in California. The Statewide WDR requires that public agencies managing applicable sewer systems acquire an online account from the SWRCB and report all sanitary sewer overflows online, and also mandates the development and implementation of a Sewer System Management Plan (SSMP). The intent of the SSMP is to describe agency strategies for effective management of wastewater collection systems to meet the requirements of the Statewide WDR.

On December 6, 2022 the SWRCB adopted the Statewide Sanitary Sewer Systems General Waste Discharge Requirements Order Reissuance (Dean, Granquist & Thorne 2022). The new Statewide WDR mainly addresses reporting and other requirements in response to sanitary sewer overflows. Some of the key requirements adopted in the new Statewide WDR include:

- Expanded regulation to protect waters of the State,
- Planning requirements to address climate change impacts on specific sewer systems,
- Requirements for coordinated interagency response to sanitary spills and overflows, and
- Reduction in the frequency of SSMP updates, local audits, and lateral spill reporting.

The new Statewide WDR went into effect in June 2023.

State Urban Water Management Planning Act

The State Urban Water Management Planning Act was established in 1983 by Assembly Bill 797. This law requires water suppliers providing water for municipal purposes either directly or indirectly to over 3,000 customers or supplying more than 3,000 acre-feet of water per year, to prepare and submit an Urban Water Management Plan (UWMP) to the California Department of Water Resources (DWR). The UWMP must be reviewed, updated, and submitted for approval every five years.

Marin Municipal Water District Urban Water Management Plan

The MMWD has developed an UWMP to assess projected water demand and supply reliability and inform water shortage contingency planning and demand management programs (MMWD 2021). The UWMP is required by the UWMP Act and must be updated and submitted to the DWR, the California State Library, and any city or county within which the supplier provides water every five years. The UWMP describes and quantifies current and projected demands through the year 2045 and includes a Water Shortage Contingency Plan (WSCP) in one of the

chapters. The WSCP ensures that the MMWD has in place the necessary resources and management responses to address water supply shortages and interruptions, should they occur.

City of Mill Valley General Plan

The General Plan establishes the following policies and programs that address water supply:

> **Policy NE.3** Water Quality, System Supply, and Integrity: Improve water quality and expand and diversify water supply.
>
> **Program NE.3-1:** Work with MMWD to optimize storage, transmission, and distribution capacities and efficiencies and to minimize water outages due to drought, emergencies, or other disasters.
>
> **Program NE.3-6:** Continue to work with the County of Marin and other agencies to implement the Marin County Stormwater Pollution Prevention Program (MCSTOPP) and the National Pollutant Discharge Elimination System (NPDES) Permit that require watershed-based regional water quality standards and urban run-off management and reduction best practices and standards for all new development and redevelopment.
>
> **Policy NE.4** Conservation of Water Resources: Improve water quality by capturing source pollution, sedimentation, and run-off on public and private properties and allow for conservation of water resources through rainwater storage and greywater systems.
>
> **Program NE.4-2:** Reduce water consumption in the community by:
>
> - Partnering with MMWD to highlight the existence of rebates for the installation of indoor and outdoor water efficiency fixtures and appliances, and promoting existing and proven water conservation measures through educational programs and other initiatives;
> - Partnering with MMWD, conservation organizations, installers, and manufacturers to promote the installation of greywater systems and rainwater catchment;
> - Exploring incentives for promoting the installation of greywater systems and/or water efficient landscaping at commercial and residential properties;
> - Requiring water efficiency audits at point of sale for commercial and residential properties;
> - Adopting a retrofit program to encourage or require installation of water conservation measures in existing businesses and homes;
> - Consistent with upgrades to the SASM wastewater treatment facility to provide advanced wastewater treatment and supply, requiring dual plumbing for use of recycled water for new commercial and/or residential development; and
> - Using bay-friendly landscaping and gardening guidelines to address lot coverage standards and increase the use of pervious paving for driveways, patios, walkways, and other hardscape features.
>
> **Program NE.4-5:** Work with the MMWD to establish and promote incentives for water conservation.

WASTEWATER

Wastewater Treatment Plant Master Plan

A Wastewater Treatment Plan Master Plan (WTMP) was prepared for SASM in 2014. The purpose of the WTMP is to develop a "road map" for the next 25 years of wastewater treatment plant improvements, including a list of necessary projects, an implementation schedule, and cost estimates (SASM 2014). The first phase of the WTMP implementation began in 2018 with the primary goal of ensuring reliable treatment of wastewater and compliance with all regional, State, and federal regulations. The first phase of improvements has been completed and the second phase is now in progress (City of Mill Valley 2022).

Sewer System Management Plan

The Mill Valley Sewer System Management Plan (SSMP) was adopted in December 2019 to comply with the SWRCB's Order No. 2006-0003-DWQ, which required all public wastewater collection system agencies in California with greater than one mile of sewers to be regulated under General Waste Discharge Requirements (City of Mill Valley 2019). The goals of the SSMP, as designated by the Statewide WDR, are to provide a plan to properly manage, operate, and maintain all parts of its wastewater collection system in order to reduce and prevent sanitary sewer overflows, and mitigate any spills that occur. The City has also established its own goals for the SSMP, which include:

- To provide adequate capacity to convey peak flows to the SASM wastewater treatment plant,
- To respond quickly and respectfully to public notifications of sanitary sewer overflows or other collection system problems,
- To collect complete and accurate information regarding overflows for reporting to the appropriate regulatory agencies, and
- To provide a safe working environment for City employees.

Mill Valley General Plan

The General Plan establishes the following policies, and programs related to wastewater:

> **Program NE.3-3:** In conjunction with the SASM Board, assess the SASM treatment plant to attain greater efficiency, including advanced wastewater treatment capacity for water recycling and reuse on public and private properties.
>
> **Program NE.3-4:** Continue to take actions to reduce inflow and infiltration ("I&I") in Mill Valley's sanitary sewer collection system to reduce spills to the bay during rain events.
>
> **Program NE.3-5:** Continue to implement the sewer lateral evaluation and replacement program and consider the implementation of a point-of-sale sewer audit.
>
> **Policy NE.4** Conservation of Water Resources: Promote the increased use of pervious paving, rainwater storage, and greywater systems to improve water quality and conserve potable water.
>
> **Policy HZ.2** Administrative and Equipment Capacity: Maintain adequate concentration and distribution of staff, facilities, materials, and equipment to provide a timely disaster response consistent with the needs of a demographically changing community and ad challenging natural environment, while recognizing the difficulties of maintaining these systems on a daily basis.

Mill Valley Municipal Code

The MVMC addresses sewers in Chapters 17.04, 17.06, 17.07, and 17.08. Chapter 17.04 discusses construction and installation requirements, Chapter 17.06 addresses urban runoff pollution

prevention, Chapter 17.07 establishes regulatory fees for clean stormwater activities, and Chapter 17.08 addresses deposition of sludge and foreign materials in sewer systems.

SOLID WASTE

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) requires every city, town, and county in California to prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan identifying how each jurisdiction will meet mandatory State waste diversion goals. The purpose of AB 939 is to "reduce, recycle, and re-use solid waste generated in the State to the maximum extent feasible."

California Integrated Waste Management Board Model Ordinance

Pursuant to the California Integrated Waste Management Act, the California Solid Waste Re-use and Recycling Access Act of 1991 (Section 42900-42911 of the Public Resources Code) was passed. The 1991 Act requires the California Integrated Waste Management Board to draft a "model ordinance" relating to adequate areas for collecting and loading recyclable materials in development projects.

The model ordinance is used as the basis for imposing recycling conditions on new development projects and existing projects that increase floor areas by 30 percent or more. The ordinance requires that any new development project to include "adequate, accessible, and convenient areas for collecting and loading recyclable materials."

Marin County Hazardous and Solid Waste Joint Powers Authority

The Marin Hazardous and Solid Waste Joint Powers Authority (JPA) provides hazardous waste collection, recycling, and disposal information to ensure compliance with State recycling mandates. The JPA is administered by the County's Department of Public Works / Waste Management. The purpose of the JPA is to ensure Marin's compliance with the California Integrated Waste Management Act and its waste reduction mandates. The JPA posted a 62.3 percent diversion rate for Marin in 2000, which was above the State's 50 percent diversion mandate. A 71 percent diversion rate was achieved in 2002, followed by 75 percent in 2014 and 66 percent in 2018 (City of Mill Valley 2022).

City of Mill Valley General Plan

The General Plan establishes the following policy related to solid waste management:

> **Policy CL.5** Recycling and Waste Management: Reduce the volume of the waste stream by encouraging recycling and composting and moving toward Zero Waste objectives that minimize or eliminate waste sent to landfills.

Mill Valley Municipal Code

The Mill Valley Municipal Code (MVMC) addresses integrated waste management in chapter 7.04: Garbage. Sections 7.04.030 through 7.04.160 describe City regulations concerning solid waste and recycling collection, collection subscriptions, and self-hauling.

5.10.4 Thresholds of Significance

Consistent with State CEQA Guidelines Appendix G Environmental Checklist, the Project would have a significant impact if it would:

d. *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;*

e. *Require water services outside the available water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;*

f. *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;*

g. *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; or,*

h. *Conflict with any federal, state, and local management and reduction statutes and regulations related to solid waste?*

5.10.5 Applicable HEU SEIR Mitigation Measures

HEU SEIR Mitigation Measure 14-1

The City of Mill Valley shall impose the following standard condition of approval for all sites identified in the Housing Element Update that are proposed prior to approval of an updated MMWD Urban Water Management Plan, shall be required to obtain verification from MMWD prior to approval of planning applications that adequate water supplies exist to support the project.

5.10.6 Discussion of Impacts

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

IMPACT ANALYSIS

Development of up to 45-50 multifamily residential units on the Housing Site was analyzed in the HEU SEIR. The Project site is within an existing service area for existing water, wastewater, storm drainage, electric power, and natural gas facilities. The Project would require minor extension of utility facilities, such as water and wastewater pipelines, in order to connect proposed new facilities for the housing building and relocated public restrooms with existing utilities. Construction and expansion of utility facilities would be subject to General Plan policies related to the provision of adequate utility services, as well as the Mill Valley Municipal Code. Any necessary utility facilities would be installed in accordance with State, local, and federal requirements and would not result in an impact beyond those already identified throughout the HEU SEIR. The impact would remain less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects. The impact would be **less than significant**.

b) Would the project require water services outside the available water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

IMPACT ANALYSIS

Development of up to 45-50 multifamily residential units on the Housing Site was analyzed in the HEU SEIR. The HEU SEIR found that implementation of the Housing Element Update would result in development of 1,156 new residential units, which could generate approximately 2,659 new residents. Residential per capita potable and raw water use in 2020 was 128 gallons per capita per day and adjusted potable water use (excluding recycled water system backup) was 125 gallons per capita per day (MMWD 2021). Using the 125 gallons per capita per day water demand factor, new residents generated by implementation of the Housing Element Update would result in an increased demand of approximately 332,000 gallons per day (City of Mill Valley 2023). The proposed Project would generate approximately 115 new residents, which would cause an increase in water demand of approximately 14,300 gallons per day. This increase in water demand which would account for around 4.3 percent of anticipated increase in water demand associated with the Housing Element Update buildout. The relocated public restrooms on the PSB Site would not generate a substantial change in water demand.

The HEU SEIR determined that MMWD is projected to have sufficient water supplies to meet projected demands for its service area in normal years, single dry years, and multiple dry years through 2045 using ABAG 2040 population projections. In an extreme drought scenario, where supplies would drop to below 14,000 acre-feet per year by 2025, there would be a supply shortfall of approximately 2,700 acre-feet per year in 2025 (City of Mill Valley 2022). In addition, the ABAG's current Regional Housing Needs Allocation (RHNA) would result in significantly more residential units in MMWD's service area than were accounted for in the *2020 Urban Water Management Plan* (City of Mill Valley 2022). The HEU SEIR required that the City implement HEU SEIR Mitigation Measure 14-1 as a COA for all projects that are proposed to be developed prior to approval of an updated MMWD UWMP. The proposed Project would comply with this COA to ensure that sufficient water supplies are available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. The impact would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project shall be required to obtain verification from MMWD prior to approval of planning applications that adequate water supplies exist to support the Project, as identified in Mitigation Measure 14-1 pf the HEU SEIR. With compliance with this COA, the Project would ensure that

adequate water supplies exist to support the Project in normal, dry, and multiple dry years. The impact would be **less than significant**.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

IMPACT ANALYSIS

Development of up to 45-50 multifamily residential units on the Housing Site analyzed in the HEU SEIR. The HEU SEIR found that the additional 1,156 dwelling units generated by implementation of the Housing Element Update would result in an increase in wastewater generation of 219,640 gallons per day, based on a generation rate of 190 gallons per dwelling unit per day (City of Mill Valley 2022). Given this, the proposed Project would generate approximately 9,500 gallons of wastewater per day, approximately 4.3 percent of the projected increase in wastewater generation that would result from implementation of the Housing Element Update. The HEU SEIR concluded that wastewater connections for individual projects would not result in significant impacts and would be subject to General Plan goals, policies, and programs related to the provision of adequate wastewater services and facilities. The relocated public restrooms on the PSB Site would not cause a substantial change in demand for wastewater treatment services.

The proposed Project site is located within the SASM service area and would require minor expansion of wastewater connection facilities from the proposed housing building and relocated public restrooms to existing facilities. Construction of required connections would not result in a significant impact beyond those identified throughout the HEU SEIR. The impact would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not result in a determination by the wastewater treatment provider which serves the Project that it does not have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. The impact would be **less than significant**.

d) Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

IMPACT ANALYSIS

Development of up to 45-50 multifamily residential units on the Housing Site was analyzed in the HEU SEIR. The HEU SEIR found that implementation of the Housing Element Update would have no impact regarding excess generation of solid waste. The HEU SEIR concluded that development facilitated by the Housing Element Update would allow for an increase in the number of units allowed on each Housing Site, and therefore would increase solid waste generation of what was considered in the General Plan and would increase demand for waste and recycling services from

the MVRS. The Redwood Landfill had a remaining capacity of 4,615,000 tons in March 2021 and is permitted to accept 2,310 tons of materials daily (Waste Management 2023). The landfill is planned to be expanded and the MVRS has indicated that growth facilitated by the Housing Element Update would be accommodated (City of Mill Valley 2023). The impact would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not generate solid waste in excess of State or local standards, or in excess capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. The impact would be **less than significant**.

e) Would the project conflict with any federal, state, and local management and reduction statutes and regulations related to solid waste?

IMPACT ANALYSIS

Development of up to 45-50 multifamily residential units on the Housing Site was analyzed in the HEU SEIR. The HEU SEIR found that implementation of the Housing Element Update would comply with all federal, State, and local waste reduction goals. The City continues to implement the SRRE which is included in the County's Integrated Waste Management Plan, which ensures compliance with AB 939. The Redwood Landfill was issued a Solid Waste Facility permit in 2019 with an estimated closure date of 2036; however, plans to expand the landfill are underway. The landfill meets all federal, State, and local requirements for landfill management and is regulated by the SWQCB, BAAQMD, CalRecycle, and Marin County Environmental Health Services Division (Waste Management 2023).

The proposed Project would comply with all local requirements pertaining to solid waste reduction and disposal. The Project would not conflict with any General Plan goals or policies focused on waste reduction. Materials from Project construction would be recycled to the extent feasible. The impact would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would not conflict with any federal, State, or local management and reduction statutes and regulations related to solid waste. The impact would be **less than significant**.

5.10 Cumulative Impacts

WATER

Cumulative impacts to water utilities from planned residential development in the City were analyzed in the HEU SEIR. The HEU SEIR concluded that the additional water demand resulting from implementation of the Housing Element Update could trigger the need for additional water

supplies, which may require water infrastructure construction projects that could result in significant impacts. MMWD is in the process of conducting a Strategic Water Supply Assessment to inform its update to the *2020 Urban Water Management Plan.* The water supply assessment will evaluate MMWD's current baseline water supply and evaluate the impact of potential future water management alternatives that could improve long term water supply resiliency. Upon completion of this assessment, MMWD will update the Urban Water Management Plan to reflect the ABAG's 6th Cycle Housing Element RHNA numbers and to ensure that sufficient water supplies will exist to serve the increase in residential development throughout the MMWD's service area (City of Mill Valley 2022).

The need and type of new water service infrastructure that would be required to serve cumulative development will be unknown until the Urban Water Management Plan is updated. In accordance with CEQA Guidelines Section 15145, the HEU SEIR determined that evaluation of cumulative water supply impacts was too speculative to draw a conclusion, and the issue was not discussed further. MMWD would be required to comply with CEQA prior to approval and construction of any water infrastructure project that they determine will be necessary to continue to serve planned residential development within the service area (City of Mill Valley 2022).

The proposed Project would not introduce any new significant water supply impact that was not analyzed in the HEU SEIR. Therefore, the Project contribution to cumulative water utilities impacts would not be cumulatively considerable.

WASTEWATER

Cumulative impacts to wastewater utilities from planned residential development in the City were analyzed in the HEU SEIR. The HEU SEIR concluded that the increase in wastewater generation that would result from buildout of the Housing Element Update would require the need for increased wastewater conveyance capacity to the SASM. However, the wastewater treatment plant has undergone numerous recent upgrades and rehabilitation of existing infrastructure to ensure reliable treatment of wastewater and compliance with State and regional water quality requirements (City of Mill Valley 2022). The SASM and City have worked together over the past several years to address and clarify annual calculations and control the number of dwelling units provided by each of the six member agencies. The collection system or treatment plant capacity have not been identified as a constraint to future development for the Housing Element Update but will likely be an issue in future Housing Element updates, based on the RHNA unit mandate.

The City has approximately 1,900 equivalent dwelling units in reserved sewer capacity at the sewer treatment plant, which would cover the increase in dwelling units that would result from implementation of the Housing Element Update. Furthermore, the SASM wastewater treatment plant Director / General Manager for the City stated that the plant can handle the additional flow of wastewater generated by the anticipated units considering current water usage practices and conservation requirements (City of Mill Valley 2022). The proposed Project would not introduce other cumulative impacts that were not analyzed in the HEU SEIR and the Project's contribution to cumulative wastewater utility impacts would not be cumulatively considerable.

SOLID WASTE

Cumulative impacts related to solid waste services from planned residential development in the City were analyzed in the HEU SEIR. The HEU SEIR concluded that implementation of the Housing

Element Update and anticipated growth projected in surrounding areas would result in an increased demand for solid waste collection, disposal, and related facilities. The MVRS has indicated that it has capacity to serve new potential housing in the cities which it serves, including Mill Valley. Cumulative development in the service area may accelerate the need for expanded landfill capacity. As discussed in previous sections, the Redwood Landfill is planned for expansion that would increase its organic processing capacity and capability by 60 percent. The HEU SEIR concluded that any expansion that may be necessary due to cumulative development beyond the planned Redwood Landfill expansion would be speculative, and the Housing Element Update's contribution to cumulative impacts would not be cumulatively considerable.

The proposed Project would not introduce any new significant impact to solid waste utilities that was not analyzed in the HEU SEIR. Therefore, the Project's contribution to cumulative solid waste impacts would not be cumulatively considerable.

6.0 EFFECTS DETERMINED NOT TO BE SIGNIFICANT

The proposed Project was concluded to have no potentially significant impact with respect to the environmental issue categories discussed below in the Initial Study that was prepared for the Project and which is included as Appendix A to this Draft EIR. CEQA allows a lead agency to limit the detail of discussion of environmental effects that are not potentially significant (PRC Section 21100, CCR Section 15128). Accordingly, these issue areas are not addressed further in this Draft EIR.

Table 5.10-1. Summary of Environmental Impacts Determined to Not be Significant

ISSUE AREA AND SUMMARY OF EFFECTS DETERMINED TO NOT BE SIGNIFICANT
AESTHETICS
The Initial Study determined that the proposed Project would have no impact related to scenic resources within a State scenic highway due to the fact that there are no designated or eligible State scenic highways within the Project area.
AGRICULTURE AND FORESTRY RESOURCES
The Initial Study determined that the proposed Project would have no impact related to agriculture and forestry resources because there is no farmland, forest land, or timberland located in the Project area. Therefore, the Project would not conflict with any zoning for agriculture or forestry resources and would not convert any important agriculture and forestry resources to non-agricultural uses.
ENERGY
The Initial Study found that the proposed Project would have a less than significant impact related to wasteful, inefficient, or unnecessary consumption of energy resources because Project construction and operation activities would comply with all applicable standards and regulations pertaining to the use of energy resources. The Project would comply with all applicable provisions of the Mill Valley Climate Action Plan, which is the local plan pertaining to energy use and efficiency. Therefore, the Initial Study found that the Project would have no impact related to conflicts with any State or local plan for renewable energy or energy efficiency.
GREENHOUSE GAS EMISSIONS
The Initial Study found that the proposed Project would have a less than significant impact related to the generation of greenhouse gas emissions. CEQA requires agencies in California to analyze GHG impacts by evaluating whether a proposed project would make a "cumulatively considerable" contribution to the significant cumulative impact on climate change. The impacts of the Project were evaluated in accordance with the BAAQMD's recommended thresholds of significance for GHG emissions, which are intended to assist public agencies in determining whether proposed projects would result in a cumulatively considerable contribution to global climate change. The BAAQMD's GHG thresholds for land use projects include two options, which include: 1. Projects must include the following design elements: • Projects must not include natural gas appliances or natural gas plumbing, and must not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines. • Projects must achieve compliance with EV requirements in the most recently adopted version of CALGreen Tier 2. In addition, projects must 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: 15 percent below the existing VMT per capita for residential projects.

2. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

Because the City has not adopted a Climate Action Plan that meets the criteria under State CEQA Guideline Section 15183.5(b), the Project was evaluated for consistency with Option 1 above. The Project would be required to implement HEU SEIR Mitigation 9-1, which states that "Applicants for all new individual development projects proposed to implement the 6th Cycle Housing Element and for which applications are deemed complete by the City prior to the City adopting an updated, qualified climate action plan, incorporate the project design performance standards identified in items "a" and "b":

a) No permanent natural gas infrastructure shall be permitted as part of the improvement plans for individual development projects. Individual projects shall be all electric; and

b) Electric vehicle infrastructure (e.g., electric vehicle parking spaces, charging station infrastructure, chargers, etc.) consistent with CALGreen Tier 2 mandatory standards in effect at the time individual building permits are issued shall be installed in all individual development projects."

Consistent with HEU SEIR Mitigation Measure 9-1, the Project would not include any natural gas uses, and would include EV infrastructure consistent with the most recently adopted version of CALGreen Tier 2. As summarized above under Energy, the Initial Study found that the Project would not result in any wasteful, inefficient, or unnecessary energy use. As described in Section 5.9, Transportation, of this Draft EIR, the Project meets affordable housing VMT screening criteria, and would therefore result in a less-than-significant impact related to VMT.

For these reasons, the proposed Project meets all applicable criteria for Option 1 of the BAAQMD's thresholds of significance for GHG emissions from land use projects. Therefore, the Initial Study determined that the impact of the Project related to generation of GHG emissions would be less than significant. The Initial Study also determined that the Project would have no impact related to conflicts with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As discussed previously, the City has not yet adopted a Climate Action Plan that meets the under State CEQA Guideline Section 15183.5(b). The thresholds of significance for GHG emissions recommended in the BAAQMD CEQA guidelines are designed to ensure that an individual project would do its "fair share" in achieving the State's GHG emissions reduction goals, which is consistent with the goals of the 2022 Scoping Plan for the City's Climate Action Plan. As discussed above, the Project is designed in accordance with HEU SEIR Mitigation Measure 9-1 and would incorporate all four design elements identified in the BAAQMD GHG thresholds of significance. Therefore, the Initial Study determined that the Project would not conflict with the 2022 Scoping Plan, and this impact would be less than significant.

HAZARDS AND HAZARDOUS MATERIALS

The Initial Study found that the proposed Project would have no impact regarding the use of hazardous materials or release of hazardous emissions within one quarter mile of an existing or proposed school because there are no schools located within one quarter mile of the Project site. The Project would also have no impact regarding safety hazards due to proximity to a public airport because the Project site is not within two miles of a public airport or public use airport. The Project is not located on or within a quarter mile of a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and therefore, no potential hazards would occur from this impact.

ISSUE AREA AND SUMMARY OF EFFECTS DETERMINED TO NOT BE SIGNIFICANT
The Initial Study found that the proposed Project would have a less than significant impact related to the routine transport, use, or disposal of hazardous materials. Project construction would involve the use and transport of typical construction-related hazardous materials, which may pose significant hazard to the public or environment if not handled properly. Construction activities would be required to adhere to federal and State regulations related to the use, transport, storage, and disposal of hazardous materials, including California Occupational Safety and Health Administration (OSHA) requirements, Resource Conservation and Recovery Act (RCRA) requirements, and U.S. Department of Transportation regulations. In addition, the Project contractor would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) which would list the hazardous materials proposed for use during construction and describe spill response and control measures, equipment inspections, equipment storage, and protocols for responding immediately to spills. Compliance with all applicable federal and State regulations would reduce the Project's impacts related to the use of hazardous materials to a less than significant level. The Initial Study found that the Project would have a less than significant impact related to interference with an adopted emergency response plan or emergency evacuation plan. Hamilton Drive and Roque Moraes Drive are designated as primary and secondary evacuation routes by the City, respectively. In addition, Hamilton Drive is frequently used by emergency police and fire vehicles dispatched from the PSB. Emergency response times along these two routes could be temporarily impacted by Project construction activities. The Project would avoid obstruction of these two routes whenever feasible to avoid impacts to evacuation and emergency response. As described in Section 5.9, Transportation, a CMP shall be finalized prior to Project construction, which would ensure adequate access for emergency vehicles and evacuations. The Initial Study found that the proposed Project would have a less than significant impact regarding hazards related to wildland fires. The Project site is located within the Wildland Urban Interface (WUI) zone as designated by the Marin Fire Department. The WUI designation indicates that the Project site may indirectly expose Project residents and structures to a significant risk of wildland fire hazards. A Vegetation Management Plan (VMP) has been prepared for the Project to properly maintain the remaining mature trees on-site following Project construction with selective pruning and removal of all dead material per firewise standards. Future planting would include fire resistant, irrigated shrubs and trees per the specific recommendations for each of the Home Ignition Zones identified in the VMP. Long term vegetation maintenance would include various management activities as stipulated in the Project VMP. With adherence to the VMP and other applicable regulations regarding fuel management within the WUI, Project impacts would be less than significant. The Initial Study found that the proposed Project would have a potentially significant impact related to the upset and release of hazardous materials into the environment due to the presence of NOA on the Project site. These impacts were further discussed and characterized in Section 5.2, Air Quality, of this Draft EIR.
HYDROLOGY AND WATER QUALITY
The Initial Study found that the proposed Project would result in less than significant impacts related to hydrology and water quality. Potential impacts related to chemical releases during construction would be reduced to a less than significant level with adherence to requirements of the NPDES Construction General Permit and Small MS4 General Permit, which require the preparation and implementation of a SWPPP and Stormwater Control Plan (SCP), along with other requirements. The Project would result in a less than significant impact regarding groundwater usage and recharge because the Project site is not located within a designated groundwater basin and would not rely on groundwater supplies during operation. Some dewatering could be required during construction depending on the depths of excavations and depth to groundwater at the time, however, this dewatering would be temporary, would be limited to the areas of the excavation, and would focus on the uppermost shallow groundwater zone. Furthermore, bioretention areas and swales proposed on the

ISSUE AREA AND SUMMARY OF EFFECTS DETERMINED TO NOT BE SIGNIFICANT
Project site would allow infiltration of precipitation and recharge of groundwater, reducing potential recharge impacts from the increase in impervious surface area. The Initial Study found that the Project would result in a less than significant impact related to alteration of drainage patterns. The Project would alter the existing drainage pattern of the site, however compliance with the Construction General Permit and Small MS4 General Permit would ensure that substantial erosion or siltation would not occur. Hydromodification management procedures required by the Small MS4 General Permit would also ensure that the volume and rate of stormwater runoff would not exceed existing conditions. As such, flooding impacts associated with changes in drainage patterns would be less than significant. According to the Federal Emergency Management Agency (FEMA), the Project is not located within a 100-year flood hazard zone, and therefore no impact would occur related to redirection of flood flows. In addition, the Project is not located in a tsunami or seiche zone, and therefore the impact of the Project related to pollutant releases in flood hazard, tsunami, or seiche zones would be less than significant. The Initial Study found that the Project would not conflict with the applicable water quality control plan for the Project site, which is the Basin Plan. The State Water Board and Regional Water Board enforce compliance with the water quality objectives of the Basin Plan through the issuance of NPDES permits. The Project would comply with NPDES permit requirements and would not conflict with the beneficial uses of surface waters identified in the Basin Plan. Therefore, compliance with NPDES permit requirements would ensure that the Project would result in less-than-significant impacts related to conflicting with or obstructing implementation of the Basin Plan.
LAND USE AND PLANNING
The Initial Study found that the proposed Project would have no impact related to physical division of an established community. The Project site is located near residential, public facility, and recreational areas, and is currently developed with a public parking lot and public restroom facility, as well as the City's PSB. No residential neighborhoods would by physically divided as a result of Project construction or operation. The Project would result in a less than significant impact regarding confliction with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The Project would rezone the Housing Site from Open Area (O-A) to Multi-Family Residential Bayfront (RM-B), which would allow the development of multifamily housing on the site consistent with the MFR-2 land use designation which permits densities of up to 29 dwelling units/acre. The Housing Element Update has already amended the land use designation of the Housing Site from Community Facility (C-F) to Multi-Family Residential (MRF-2) to accommodate the proposed Project. The Project's proposed alterations to the PSB Site would be consistent with the existing zoning and land use designation. The Project has been designed to be compliant with City land use policies and regulations and would not conflict with any City land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect.
MINERAL RESOURCES
The Initial Study found that the proposed Project would have no impact regarding mineral resources because there are no mineral resource sites located within the vicinity of the Project site. The Mill Valley General Plan does not identify the Project area as a locally important mineral resource site.
NOISE
The Initial Study found that the proposed Project would have no impact regarding exposure of persons residing or working in the project area to excessive noise levels due to proximity to a public airport. The Project site is not located within the vicinity of a public or private airport or within the bounds of an airport land use plan.

ISSUE AREA AND SUMMARY OF EFFECTS DETERMINED TO NOT BE SIGNIFICANT
POPULATION AND HOUSING
The Initial Study found that the proposed Project would result in a less than significant impact regarding potential to generate substantial unplanned population growth in an area. The development of up to 50 multifamily housing units on the Housing Site was considered in the City's Housing Element Update and was analyzed in the HEU SEIR. Therefore, the development of approximately 50 units on the Housing Site would not result in substantial unplanned population growth that was not already considered in the City's Housing Element Update. One of the Project objectives is to help the City meet its RHNA housing goal as assigned by ABAG. As such, the induced population growth that would occur from the Project would not constitute substantial unplanned growth. The Project would have no impact regarding the displacement of persons or housing. There is no existing housing on the Project site, and therefore construction of the Project would not displace any housing or require the need for housing elsewhere.
WILDFIRE
The Initial Study found that the proposed Project would have a less than significant impact regarding impairment of an adopted emergency response plan or emergency evacuation plan. Hamilton Drive is a designated primary evacuation route and is frequently used by emergency service vehicles dispatched from the PSB. The Project would be required to obtain a Road Impact Permit from the City if lane or road closures are required, traffic will be delayed, or parking spots need to be reserved. In order to obtain a Road Impact Permit, a Traffic Control Plan for the Project must be approved by the City. These measures would ensure that impacts to Hamilton Drive would be accounted for and managed to allow for evacuation and emergency vehicle access, including public access to and from the PSB, during Project construction. Additional discussion of this issue is presented in Section 5.9, Transportation, of the EIR. The Initial Study found that the proposed Project would have a less than significant impact related to exacerbation of wildfire risks due to slope, prevailing winds, or other factors which would expose Project occupants to hazards related to wildfire. The Project is not located in a designated FHSZ but is located within the WUI. Project construction could temporarily increase fire risk due to the presence of fuels needed for construction equipment on site and sparks that could be generated from equipment. The WUI designation does indicate that the Project site may indirectly expose Project residents and structures to a significant risk of wildland fire hazards. The HEU SEIR notes that new construction associated with the proposed housing sites within the WUI or within or adjacent to "Very High" or "High" fire hazards severity zones would be subject to the California Fire Code, which includes safety measures to minimize the threat of fire, including ignition-resistant construction with exterior walls of noncombustible or ignition-resistant material from the surface of the ground to the roof system and sealing any gaps around doors, windows, eaves, and vents to prevent intrusion by flame or embers. Fire sprinklers would be required in residential developments pursuant to the Title 15 (Chapter 15.04) the Mill Valley City Code. Construction would also be required to meet CBC requirements, including CCR Title 24, Part 2, which includes specific requirements related to exterior wildfire exposure. In addition, the Board of Forestry, via CCR Title 14, sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent loss of structures or life by reducing wildfire hazards. As described above in Hazards and Hazardous Materials, a VMP for the Project shall be prepared and implemented in order to properly maintain on-site vegetation per firewise standards. The VMP would include provisions related to long term vegetation maintenance which would reduce risks associated with the uncontrolled spread of wildfire. In addition, any fire ignition at the Project site would be extinguished immediately due to the close proximity of Fire Station 7, which is located on the same parcel as the Project site. With adherence to the VMP and other applicable regulations regarding fuel management within the WUI, Project impacts would be less than significant.

ISSUE AREA AND SUMMARY OF EFFECTS DETERMINED TO NOT BE SIGNIFICANT

The Initial Study found that the proposed Project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. The Project is located in an urbanized area and would be able to utilize, for the most part, existing infrastructure and utility facilities. If new or expanded utilities are required to serve the Project site, they would be installed in accordance with proper standards for the type of facility to be constructed.

The Initial Study found that the proposed Project would result in a less than significant impact related to exposure of people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The Project site is located within the WUI and, therefore, development of the Project could result in exposure of people or structures to risk as a result of post-fire slope instability or drainage changes. The Project would be required to comply with applicable regulations and policies related to flooding, drainage patterns, and landslides which would reduce risks to the extent feasible. Therefore, the Project could expose people or structures to some risk as a result of runoff, post-fire slope instability, or drainage changes; however, these impacts would be less than significant.

7.0 ALTERNATIVES

7.1 CEQA Requirements

Section 15126.6(a) of the CEQA Guidelines states, "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparable merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which 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."

Section 15126.6(b) of the CEQA Guidelines further requires that the analysis of alternatives focus on those alternatives capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of project objectives or would be more costly. Section 15126.6(d) states that the EIR must 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 proposed project, these significant effects must be disclosed, but may be discussed in less detail than the significant effects of the proposed project.

7.1.1 Streamlining for Infill Projects

As described in Section 1, Introduction, of this Draft EIR, the proposed Project qualifies for infill project streamlining under CEQA Guidelines Section 15183.3. CEQA Guidelines Section 15183.3 (e) states that, *"The analysis of alternatives in an infill EIR need not address alternative locations, densities, or building intensities."* As such, in accordance with CEQA Guidelines Section 15183.3(e), this Draft EIR will not evaluate the potential impacts of constructing the Project in an alternative location. Nonetheless, Section 7.3 below, Alternative Considered but Rejected, describes recent City analysis of alternative sites that could be developed with affordable housing. To inform preparation of the Housing Element Update, the City conducted a potential housing sites inventory analysis, which evaluated the potential of City-owned parcels and other tax-exempt properties within the City to be developed with affordable multifamily housing. Only four sites were deemed feasible for near-term housing development. The Project site was identified as the most practical option and therefore, development of the Project site was evaluated in the HEU SEIR.

7.2 Project Objectives and Significant Effects

7.2.1 Project Objectives

The CEQA Guidelines require that alternatives must be able to meet most of the basic objectives of the project as well as avoid or substantially lessen any of the significant effects of the project. The objectives of the proposed Project are:

- To implement MV2040 General Plan Goal No. 2, to "encourage the continued diversity of housing, income levels and lifestyles within the community", and Mill Valley Housing Element 2023-2031 Program No. 10, which includes consideration of building multi-family affordable rental housing Project at the 1 Hamilton Drive site.
- To provide new affordable housing units to meet the current and future housing needs of the community with very low, low, and affordable workforce incomes, including households with special needs.
- To provide affordable housing because of its positive impacts on diversity, equity and inclusion.
- To provide affordable housing because of its positive impact on families with more diverse economic backgrounds, joining Mill Valley schools and contributing to the community.
- To provide affordable housing near services, parks and schools.
- To affirm the City's commitment to satisfying its Regional Housing Needs Assessment (RHNA) goals. The Project site is part of the City's sites inventory for the 2023-2031 Housing Element update.
- To construct a financially viable, 100% affordable housing project with at least 40 units, and up to 50 multi-family rental units at the 1 Hamilton Drive site by partnering with a non-profit affordable housing developer for the construction and ongoing management of the housing facility.
- To maintain availability of and access to at least 38 public parking spaces and a public restroom facility adjacent to Hauke Park.

7.2.2 Significant Impacts of the Project

The proposed Project would not result in any significant and unavoidable impacts. Impacts associated with the following topics would be significant without implementation of mitigation measures but would be reduced to a less than significant level with implementation of mitigation measures contained in this EIR.

- Air Quality,
- Biological Resources,
- Cultural and Tribal Cultural Resources,
- Geology and Soils,
- Greenhouse Gas Emissions,
- Noise, and
- Utilities and Service Systems.

7.3 Alternatives Considered but Rejected

Section 15126.6(c) of the CEQA guidelines states, "The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination...Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts."

To inform preparation of the Housing Element Update, approximately 75 parcels of land owned by the City were analyzed for the purpose of identifying a short list of parcels suitable for

potential affordable housing development. All other identifiable property tax-exempt parcels located within City limits (e.g., owned by Marin Open Space, MMWD, religious organizations, etc.) were also included in this analysis (The Housing Workshop 2021a). The purpose of this analysis was to identify City-owned or other tax-exempt parcels that could be developed with affordable housing, and to identify any parcels that could be potentially monetized by the City to private parties to raise local funds that could help subsidize affordable housing projects. Among the City-owned parcels, four sites were identified for further analysis, including: the PSB/Hauke Park Parking Lot (1 Hamilton Drive, Project site), Boyle Park Tennis Court Area, a portion of Edgewood (aka Mill Valley Reservoir), and a portion of Mill Valley Golf Course along Vista Linda Drive.

These sites were chosen taking into consideration the parcel size, degree of slope, recreation/open space designation, and environmental constraints, which rendered many of the subject parcels infeasible for multifamily affordable housing development. A scenario for constructing affordable housing at each of the three sites, aside from the proposed Project site, was evaluated as described below.

- **Boyle Park Tennis Court Area:** Boyle Park includes five public recreational tennis courts along East Blithedale Avenue. As part of the above-referenced analysis, this tennis court area was identified as the best area to create a sufficiently sized and shaped parcel in an established residential neighborhood. Although the site is not in a floodplain or floodway, the existing tennis courts are located next to a creek and sensitive wetlands, and the project would need to be designed carefully to allow for a buffer around the sensitive areas. As part of evaluating city-owned sites, the City Council determined that the removal or displacement of active recreation should be avoided, if possible.
- **Portion of Edgewood (Mill Valley Reservoir):** The Edgewood parcel encompasses over four acres, with some areas containing steep slopes. The parcel is currently used as an informal open space area but has not been improved as a public park. Based on topographic map review, it is estimated that an approximately one-acre portion of the parcel with feasible slope could support housing development. Aside from slope constraints, another development constraint is that the site was deeded by the MMWD to the City in 1967, with a covenant in the recorded deed that the site be maintained by the City and used as a park. Given the deed restriction recorded on the property, City Council determined that this site should be considered in the longer term, by removing the covenant for a portion of the parcel through an agreement with MMWD to allow affordable housing to be built on the site. As a means of further implementation, the 2023-2031 Housing Element Update includes a housing program (#10) to further pursue and evaluate this site for housing.
- **Portion of Mill Valley Municipal Golf Course:** A portion of the Mill Valley Municipal Golf Course's greenway buffering along Vista Linda Drive was identified as a site suitable for affordable housing development. The 45-acre, nine-hole golf course was purchased by the City from a private owner in the 1930s and has been operated by the City since then but has reportedly suffered operating losses in recent years. Construction of affordable housing on this site would potentially impact the adjacent golf course, and any significant changes in use status of the golf course would require a separate analysis. As part of evaluating city-owned sites, the City Council determined that the removal or displacement of active recreation should be avoided, if possible.

Based upon the above-referenced considerations (e.g., parcel size, existing use, slope, environmental constraints), portions of city-owned land at Boyle Park, Mill Valley Reservoir and Mill Valley Golf Course were rejected by the City Council for near-term housing development, and the 1 Hamilton site was identified as a City-owned site of sufficient size with limited environmental constraints. While development at the 1 Hamilton Drive site would not remove or displace active recreation uses, additional analysis was required to evaluate the effects of relocating the existing public parking lot and public restrooms on the site (The Housing Workshop 2021b)(Mill Valley City Council 6/21/21 Meeting Staff Report).

An alternative in which the City would partner with a different affordable housing developer to construct affordable housing on the project site was also considered but ultimately rejected. Partnering with a different housing developer may have resulted in a different building configuration and/or unit yield, which could have resulted in different environmental impacts. Based on prior analysis by the Housing Workshop and input from EAH Housing, it is likely that a different developer would utilize the same project area that is proposed by the Project to reduce cost associated with retaining walls, soil disturbance and cut into the hillside. In 2021, the City issued a request for qualifications for affordable housing developers interested in building at least 40 units on the proposed 1 Hamilton Drive site, and at that time, the City only received one proposal, from EAH Housing. Therefore, an alternative in which the City would partner with a different housing developer, rather than EAH, was deemed unfeasible.

7.4 Alternatives Considered

The following alternatives were selected to be evaluated in comparison to the proposed Project:

- Alternative 1: No Project
- Alternative 2: Reduced Density
- Alternative 3: Reduced Parking

A description and analysis of each selected alternative is provided in the following sections.

7.4.1 Alternative 1: No Project

CEQA Guidelines section 15126.6 (e) requires that a “No Project” alternative be evaluated along with its impacts. The “No Project” alternative analysis must discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. For this Project, there are two scenarios which might occur under the No Project Alternative. A No Project scenario resulting from a different developer is described above in Section 6.3, Alternatives Considered but Rejected. A No Project scenario resulting from no change in existing conditions is further described and analyzed below.

ALTERNATIVE 1 DESCRIPTION

Under the No Project Alternative (Alternative 1), the Project site would not be re-zoned for residential uses and would thus continue to be zoned “Open Area,” which is inconsistent with the site’s General Plan land use designation for multifamily housing. Alternative 1 would result in the continuation of existing conditions and uses of the Housing Site and PSB Site. The existing public parking lot, public restrooms, and EV charging station would continue to exist on the Housing Site. The PSB parking areas would not be reconfigured. No housing units would be developed at the Project site under this Alternative.

ALTERNATIVE 1 ATTAINMENT OF PROJECT OBJECTIVES

The No Project Alternative does not satisfy the Project objectives to construct affordable housing to accommodate the City's growing affordable housing needs. Moreover, this Alternative would not contribute towards the City's ability to meet the housing unit target established by the 6th cycle RHNA as required by State law and would therefore conflict with the implementation of General Plan Housing Element and the objectives of the HEU SEIR.

ALTERNATIVE 1 IMPACTS COMPARISON

Aesthetics

Under the No Project Alternative, no demolition of existing facilities, grading, or development would occur on the Project site and the existing aesthetics characteristics would remain unchanged. Alternative 1 would have no impact on scenic vistas and no impact on the existing visual character or quality of public views of the site and its surroundings. Similar to the proposed Project, under this Alternative, there would be no impact to scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway. Under Alternative 1 there would be no new sources of light or glare on the site, and therefore this Alternative would result in no impact, as compared to the Project's less than significant impact related to light and glare. While the proposed Project's aesthetic impacts would be less than significant, impacts to aesthetics under the No Build Alternative would be less compared to the proposed Project.

Air Quality

Under the No Project Alternative, no demolition, grading, or construction would occur on the Project site. In addition, no air pollutant emissions related to grading would be generated under this Alternative. Similar to the proposed Project, Alternative 1 would not conflict with or obstruct implementation of the applicable air quality plan or result in a cumulatively considerable net increase in any criteria air pollutant for which the region is in nonattainment, and the associated impacts would be less than significant. The proposed Project could potentially expose sensitive receptors to substantial pollutant concentrations during construction. However, these potentially significant impacts related to naturally occurring asbestos (NOA) and fugitive dust emissions during Project construction would be reduced to a less than significant level after mitigation, whereas this impact would not occur under Alternative 1. The Project would result in a less than significant impact related to other emissions (such as those leading to odors) because the Project would require the use of diesel-fueled heavy equipment during construction, which would generate temporary odors that would dissipate quickly. Under the No Project Alternative, no impact related to other emissions, such as those leading to odors, would occur.

Biological Resources

Because the Project site would not be developed under Alternative 1, no demolition, grading, or development would occur and no trees or vegetation would be removed from the site. Thus, similar to the proposed Project, the No Project Alternative would have no impacts related to riparian habitat or other sensitive natural communities, State or federally protected wetlands, movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors and would not conflict with any adopted Habitat Conservation Plan or Natural Community Conservation Plan. Under this Alternative, there would be no impact to special-status species or any local policies or ordinances protecting biological resources, such a as a tree preservation policy or ordinance, compared to the Project's less than

significant impact with mitigation incorporated. Therefore, while the proposed Project's significant biological resources impacts can be mitigated to less than significant levels, impacts to biological resources under the No Project Alternative would be less compared to the proposed Project.

Cultural and Tribal Cultural Resources

Under Alternative 1, no demolition or ground-disturbing activities would occur at the Project site. Since no demolition or ground-disturbing activities would occur, this Alternative would result in no impacts to historical resources, archaeological resources, and human remains, compared to the Project's less than significant impact with mitigation related to historical resources, archaeological resources, human remains, and tribal cultural resources. While the proposed Project's significant cultural resources impacts can be mitigated to less than significant levels, impacts to unknown cultural resources under the No Project Alternative would be less compared to the proposed Project.

Geology and Soils

The Project site would still be subjected to ground shaking and related hazards under both Alternative 1 and the proposed Project. However, under Alternative 1, no construction would occur on site and no residents would occupy the site. Therefore, under this Alternative, the risk of loss, injury, or death involving ground shaking and related seismic hazards would be less than the proposed Project's less than significant impacts with mitigation incorporated. No impacts related to soil erosion or loss of topsoil would occur under Alternative 1 because no grading or excavation would occur on-site. The Project's impacts related to soil erosion and loss of topsoil would be less than significant. Since no grading or ground-disturbing activities would take place under Alternative 1, no impact to paleontological resources could occur during excavation, as compared to the proposed Project's less than significant impact with mitigation incorporated. While the Project's significant geology and soils impact can be completely mitigated and reduced to less than significant levels, geology and soils impacts associated with the No Project Alternative would be less compared to the proposed Project.

Noise

No demolition, grading, or construction would occur under Alternative 1. Construction and operational noise impacts associated with the proposed Project were found to be less than significant, whereas no noise impacts would occur under Alternative 1. The impact of Alternative 1 would be less than the proposed Project.

Public Services

Under Alternative 1, no development would occur on the Project site and the existing conditions would be preserved. The proposed Project would have a less than significant impact associated with the provision of or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, whereas there would be no impact under Alternative 1. No new residents would be generated under this Alternative and therefore the demand for or use of public services, including fire protection, police protection, and school facilities would not increase. As such, Alternative 1 would have no impact associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental effects. The impact of Alternative 1 would be less than the proposed Project.

Recreation

Under Alternative 1, no development would occur on the Project site and the existing conditions would be preserved. The proposed Project would have a less than significant impact associated with the provision of new or physically altered parks or recreational facilities or the need for new or physically altered facilities, the construction of which could cause significant environmental impacts, whereas there would be no impact under Alternative 1. No new residents would be generated under this Alternative and therefore the demand for or use of parks and recreational facilities would not increase. As such, the No Project Alternative would have no impact related to increasing the use of existing parks and recreational facilities such that substantial physical deterioration of the facility would occur, as compared to the Project's less than significant impact. The proposed Project would relocate the existing public facilities on the Project site that are intended to serve visitors of Hauke Park, which would result in some impacts to the environment. The Project would have a less than significant impact related to including recreational facilities or requiring the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Under Alternative 1, no relocation of facilities would occur and there would be no associated impact. Overall, the No Project Alternative would reduce the Project's less than significant impacts on parks and recreational facilities.

Transportation

Under Alternative 1, no development would occur on the Project site and existing conditions would be preserved. The proposed Project would have a less than significant impact related to conflicts with a program, plan, or ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, whereas no impact would occur under Alternative 1. The proposed Project would also result in less than significant impacts associated with CEQA Guidelines Section 15064.3(b), which pertains to VMT impacts, whereas the No Project Alternative would result in no impact. The No Project Alternative would also result in no impact related to hazards caused by geometric design features and emergency access, whereas the proposed Project would result in less than significant impacts. Overall, the No Project Alternative would reduce the Project's less than significant impacts related to transportation.

Utilities and Service Systems

Under Alternative 1, no development would occur on the Project site and the existing conditions would be preserved. The proposed Project would result in less than significant impacts related to the relocation or construction of new or expanded facilities, water supply, wastewater treatment capacity, solid waste, and conflicts with statutes and regulations related to solid waste, whereas the No Project Alternative would result in no impact. No connections to existing facilities would need to be constructed under Alternative 1. There would be no increase in demand for water, wastewater, or solid waste utilities, and therefore no impact would occur. Alternative 1 would not generate any waste, and therefore no conflicts with statutes or regulations related to solid waste would occur. Overall, Alternative 1 would reduce the Project's less than significant impacts related to utilities.

7.4.2 Alternative 2: Reduced Density

For this Project, two reduced density scenarios were evaluated based on public comment/interest in a reduced density scenario and input from EAH Housing to address feasibility. The Reduced Density Alternative (Alternative 2) assumes that the reduction in density and unit count results in a smaller scale building and footprint. Construction on the PSB Site would remain the same as the proposed Project under both scenarios.

ALTERNATIVE 2 DESCRIPTION

The Reduced Density Alternative was selected to evaluate the comparative environmental benefits of constructing a project at the same site location with fewer units. Both scenarios propose to relocate the existing public parking and restroom facilities and construct a podium-style multifamily building with the ground floor serving as a parking garage, similar to the proposed Project.

There are various ways in which the building footprint could be constructed for a reduced density alternative. Two scenarios have been analyzed to address public comments and interest in reducing the number of units for the proposed Project and/or massing of the proposed residential building for the Project. These scenarios further analyze the potential environmental impacts of such an alternative. Both scenarios would require the same amount of tree removal as the proposed Project, and similar levels of landscaping.

Reduced Height Scenario

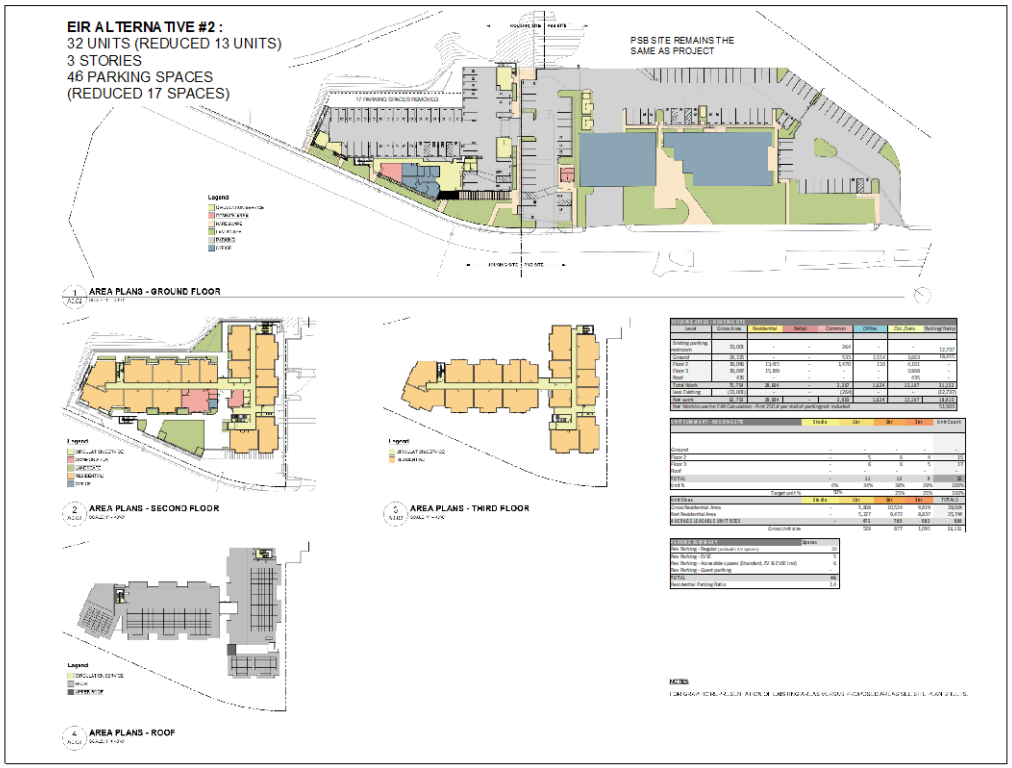
The Reduced Height Scenario proposes 32 DU, as compared to the 50 DU included in the proposed Project, which would reduce the height of the housing building from four to three stories (Figure 7-1). Parking would also be reduced to 46 parking spaces while maintaining a residential parking ratio of 1.4 spaces per DU due to the reduced unit count. This scenario assumes the reduction of unit count through the elimination of the top floor of the proposed housing building design and the elimination of a row of underground parking that would otherwise be excavated into the hillside.

For purposes of this analysis, this scenario results in an approximately 36 percent decrease in residential units compared to the proposed Project. Under this Reduced Height Scenario, 17 tandem parking spaces along the eastern side of the residential parking area under the housing building would be eliminated from the proposed Project plans. The elimination of these spaces would reduce the amount of necessary cut into the hillslope. Under this scenario, the total net floor area (excluding parking) of development on the Housing Site would be approximately 51,500 sf, as compared to the Project's proposal of approximately 65,000 sf. The FAR for the Reduced Height Scenario would be 0.68 as compared to the proposed Project's FAR of 0.85.

East Wing Elimination Scenario

The East Wing Elimination Scenario proposes 34 DU, as compared to the 50 units included in the proposed Project by eliminating the eastern wing of the building therefore reducing the amount of required excavation (Figure 7-2). Parking would also be reduced to 39 parking spaces which would reduce the residential parking ratio to 1.1 spaces per DU, as compared to the proposed Project's ratio of 1.4 spaces per DU.

For purposes of this analysis, this scenario would result in an approximately 32 percent decrease in residential units compared to the proposed Project. Under this scenario, 17 tandem parking spaces along the eastern side of the residential parking area under the housing building would be eliminated from the proposed Project plans. In addition, the elimination of the entire eastern wing of the proposed housing building would eliminate seven additional parking spaces under this Scenario. The elimination of the entire eastern wing would reduce the amount of necessary cut into the hillslope. Under this scenario, the total net floor area of development on the Housing Site would be 54,800 sf, as compared to the Project's proposal of approximately 65,000 sf. The FAR for this scenario would be 0.72 as compared to the proposed Project's FAR of 0.85.



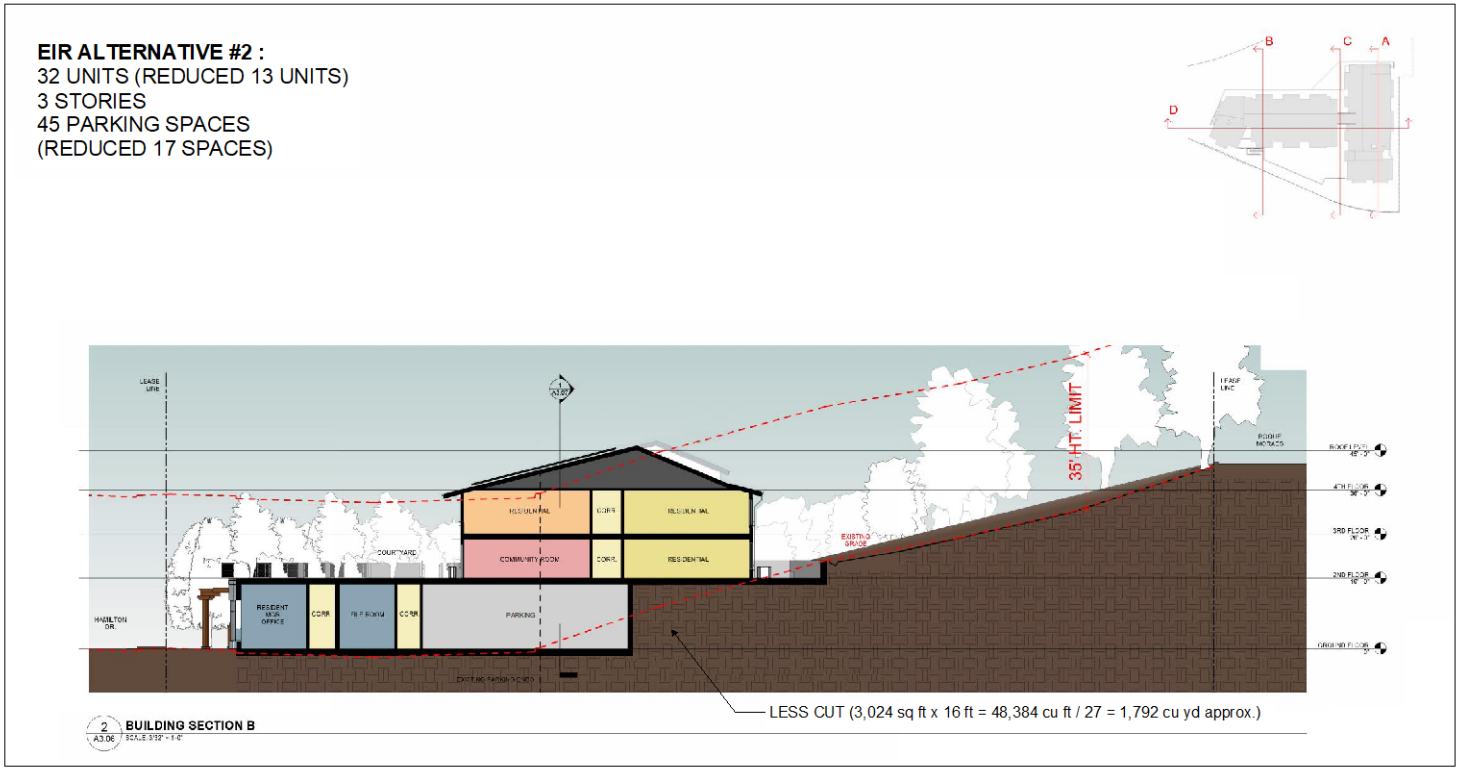
Source: Van Meter Williams Pollack LLP. 1 Hamilton Drive Area Plans, page A0.02. August 2023.

Figure 7-1. Alternative 2 Conceptual Plans: Reduced Height Scenario

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

wra Environmental Consultants

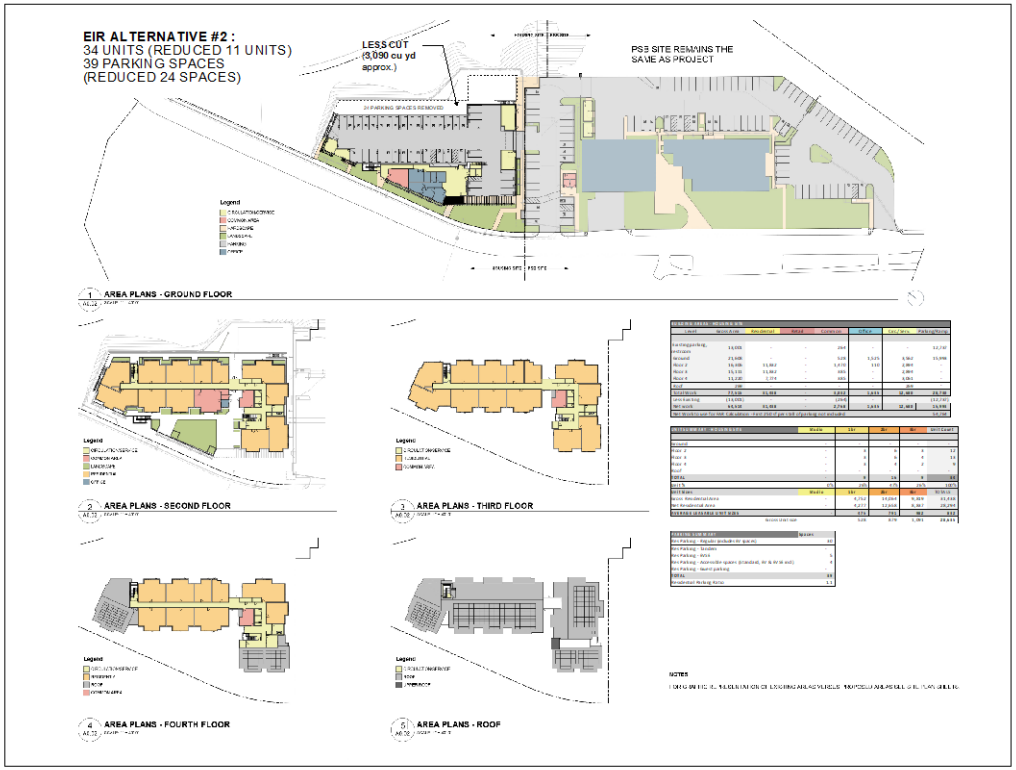
Figure 7-1. Alternative 2 Conceptual Plans: Reduced Height Scenario



Source: Van Meter Williams Pollack LLP. 1 Hamilton Drive Area Plans, page A3.06. August 2023.

Figure 7-1. Alternative 2 Conceptual Plans: Reduced Height Scenario *(continued)*

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

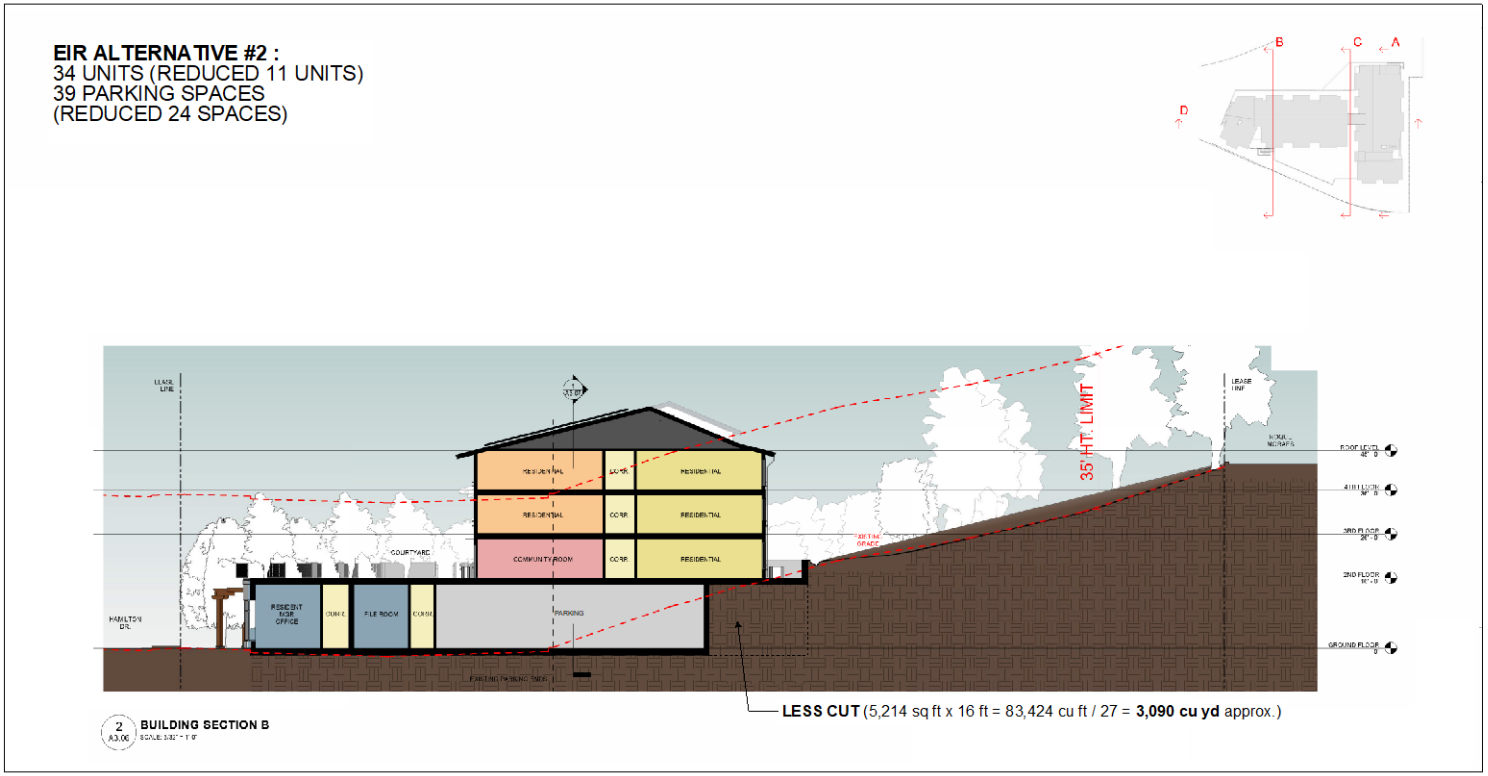


Source: Van Meter Williams Pollack LLP. 1 Hamilton Drive Area Plans, page A0.02. August 2023.

Figure 7-2. Alternative 2 Conceptual Plans: East Wing Elimination Scenario

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 7-2. Alternative 2 Conceptual Plans: East Wing Elimination Scenario



Source: Van Meter Williams Pollack LLP. 1 Hamilton Drive Area Plans, page A3.06. August 2023.

Figure 7-2. Alternative 2 Conceptual Plans: East Wing Elimination Scenario

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

ALTERNATIVE 2 ATTAINMENT OF PROJECT OBJECTIVES

As Alternative 2 proposes 32-34 DU on the Housing Site, this Alternative would not meet the Project's objectives to build a 40–50-unit 100% affordable housing project on the Housing Site. As described in the HEU SEIR, the City's 6th cycle RHNA target is 865 residential units. Development of a smaller number of affordable residential housing units on the Project site would inhibit the City's ability to meet the Housing Element Update objective of meeting the RHNA target with the recommended "buffer" of at least 15 percent above the RHNA target and would require that these additional units be accommodated elsewhere in the City.

Significantly, Alternative 2 jeopardizes the financial feasibility of the Project and thereby eliminates this alternative's ability to satisfy any of the Project objectives. The City's previous feasibility analysis conducted by the Housing Workshop supports EAH Housing's assumptions that building 100% affordable housing on the Project site is not economically feasible below 40-45 units because, at a smaller scale, the property does not produce sufficient income to cover operating expenses or allow sufficient debt leverage (a bank loan). There are fixed baseline operating expenses, including items such as property staffing and property insurance. The income produced by rents after operating expenses are paid for is called net operating income (NOI), which is used to leverage debt in the form of a bank loan. For financial feasibility, the bank loan needs to cover a minimum of approximately 15% of the total development costs.

The smaller the bank loan, the more funding must be provided by government sources. Each government funding source has caps on funding on a per unit basis and/or per project basis. Most of these funding sources are competitive and have their own regulatory agreements.

Income, often referred to as cash flow from the property, is what is left after operating expenses and debt payments are made. The cash flow is restricted by the State, in which the cash flow can only be used for specified uses such as repayment of deferred developer fee, repayment of soft loans from the government, or for property reserves.

A simplified example to demonstrate the concept is provided in Table 7-1.

Table 7-1. Example of Financial Analysis Feasibility

	20 UNITS	30 UNITS	40 UNITS	50 UNITS
Rent Collected ($1000 per month)	$240,000	$360,000	$480,000	$600,000
Salaries	$150,000	$150,000	$150,000	$150,000
NOI	$90,000	$210,000	$330,000	$450,000
Annual Supportable Debt Payment	$78,261	$182,609	$286,957	$391,304
Income (Cash Flow)	$11,739	$27,391	$43,043	$58,696
Bank Loan*	$13,833,586	$32,278,368	$50,723,150	$69,167,932

*Assumes DSRC 1.15, 30-year loan at 4.25 percent

ALTERNATIVE 2 IMPACTS COMPARISON

This analysis identifies potential impacts associated with the Reduced Density Alternative and compares them with the impacts of the proposed Project. The environmental effects of this alternative as compared to the proposed Project are summarized by topic area below.

Aesthetics

The Reduced Density Alternative would reduce the number of residential units as compared to the proposed Project, which would reduce the overall mass of the proposed housing building. The Reduced Height Scenario would remove the fourth floor and would further reduce the proposed Project's less than significant impacts on scenic vistas. While the elimination of the fourth floor would reduce the height to three stories, this scenario would still require a Building Height Waiver as it would still exceed the 35-foot height limit which is the maximum allowable building height in the RM-B zoning district. A request for a FAR Waiver would still be required. Impacts on scenic vistas under the East Wing Elimination Scenario would remain the same as the building height would not change from the proposed Project plans, and therefore the impact on scenic vistas would remain less than significant under this scenario. Impacts to light and glare under Alternative 2 would be reduced as compared to the proposed Project due to the reduction in height and/or mass of the housing building under both scenarios. Therefore, impacts related to aesthetics would be less under the Reduced Density Alternative than under the proposed Project, but would remain less-than-significant, like the proposed Project.

Similar to the proposed Project, both scenarios would include rezoning of the Housing Site from O-A (Open Area) to RM-B (Multi-Family Residential – Bayfront). Therefore, impacts related to aesthetics would be less under the Reduced Density Alternative than under the proposed Project, however the impacts would remain less-than-significant, like the proposed Project.

Air Quality

Air quality impacts during construction would be slightly less under the Reduced Density Alternative compared to the proposed Project because this Alternative involves less development, including less excavation (estimated 1,800 CY reduction in grading for the Reduced Height Scenario and 3,000 CY for the East Wing Elimination Scenario) and therefore fewer truck trips to export grading off haul, resulting in fewer emissions during construction. Similar to the proposed Project, neither scenario under this Alternative would conflict with an applicable air quality plan or result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment. The Reduced Density Alternative would reduce impacts associated with naturally occurring asbestos (NOA) that is present on the Project site, because development plans under this Alternative would avoid disturbing some of the area underlain by serpentine rock where NOA is most likely present on-site. However, implementation of an asbestos dust mitigation plan (ADMP) would still be necessary under this Alternative in order to reduce impacts to a less-than-significant level. Therefore, both the Project and the Reduced Density Alternative would have a less than significant impact with mitigation incorporated related to exposing sensitive receptors to substantial pollutant concentrations.

Long-term operational air quality impacts from stationary emissions would also be slightly less under this Alternative compared to the proposed Project because the Alternative involves fewer residential units, thus resulting in less electricity consumption, vehicle travel, and associated air pollution than the Project. However, both scenarios under this Alternative would provide less residential units, and therefore fewer affordable housing opportunities for low-income employees

working in Mill Valley, resulting in more demand for housing elsewhere, likely in areas further from employment centers. As such, the Reduced Density Alternative would result in increased long-term vehicle emissions associated with worker commute, as compared to the proposed Project. Impacts associated with other emissions (such as those leading to odors) affecting a substantial number of people would be less than significant for both the Project and the Reduced Density Alternative.

Biological Resources

Similar to the proposed Project, the Reduced Density Alternative would result in development of the proposed Housing Site and redevelopment of the PSB Site with a similar building footprint. This Alternative would reduce the amount of grading (below the podium) and site preparation on the Housing Site but would still require the removal of existing vegetation located on the Project site. Both scenarios of the Reduced Density Alternative would require removal of the same 44 trees. Similar to the proposed Project, construction activities including vegetation and tree removal could impact special-status plant species and nesting birds on-site, if they are present. These impacts could be mitigated to a less than significant level by implementing the mitigation measures contained in Section 5.3 of this Draft EIR. Overall impacts to biological resources under Alternative 2 would remain less than significant with mitigation incorporated and would be similar to the proposed Project.

Cultural and Tribal Cultural Resources

Under the Reduced Density Alternative, potential impacts to cultural and tribal cultural resources would be slightly reduced due to the reduction of cut into the hillslope which could potentially impact buried archaeological resources. However, should the site contain unknown archaeological resources, or unknown human remains, implementation of this Alternative would result in similar cultural resource impacts compared to the proposed Project. These impacts could be mitigated to a less than significant level via the mitigation measures contained in Section 5.4 of this Draft EIR. Impacts to tribal cultural resources under this Alternative would be similar to the proposed Project but could be mitigated to a less than significant level by implementing the mitigation measures contained in Section 5.4 of this Draft EIR. Overall impacts related to cultural and tribal cultural resources would be less under the Reduced Density Alternative than under the proposed Project, but would remain less than significant, like the proposed Project.

Geology and Soils

The Project site would be subjected to ground shaking and related hazards under both the Reduced Density Alternative and the proposed Project. Similar to the proposed Project, impacts associated with ground shaking and faulting, unstable soils, and expansive soils would be reduced to a less than significant level by implementing the mitigation measures contained in Section 5.5 of this Draft EIR. Impacts related to soil erosion and loss of topsoil would be reduced under this Alternative as compared to the proposed Project, because this Alternative would involve less earthwork on-site. Both the Project and the Reduced Density Alternative would have a less than significant impact with mitigation incorporated related to soil erosion by implementing the mitigation measures contained in Section 5.5 of this Draft EIR. Similar to the proposed Project, Alternative 2 would have no impact related to soils incapable of supporting the use of septic tanks or other wastewater disposal systems. Potential impacts to paleontological resources under Alternative 2 would potentially be less than the proposed Project due to reduced grading and excavation, but similar to the proposed Project, these impacts could be mitigated to a less than significant level with the implementation of mitigation measures described in Section 5.5 of this Draft EIR.

Noise

The reduction in square footage of the housing building associated with the Reduced Density Alternative would not substantially change the noise impacts associated with the Project. Similar to the proposed Project, this Alternative would be required to comply with HEU SEIR Mitigation Measure 1-2, which would require the preparation and implementation of a construction noise management plan, which would result in less than significant construction noise impacts. Therefore, although this Alternative would require less earthwork on the Housing Site, this Alternative would still result in less than significant impacts related to construction noise, similar to the proposed Project. Also similar to the proposed Project, this Alternative would result in less than significant operational noise impacts. Under both the Project and Reduced Density Alternative, construction equipment would not generate excessive vibration levels that could potentially disturb institutional land uses or older residential buildings near the Project site, which would result in a less than significant vibration impact. Noise impacts under Alternative 2 would be similar to impacts of the proposed Project.

Public Services

The Reduced Density Alternative would generate fewer new residents than the proposed Project and would therefore result in a smaller increase in demand for public services such as police protection, fire protection, and school facilities, as compared to the proposed Project. Therefore, the impact of the Reduced Density Alternative on public services would be less than the proposed Project, but would remain less than significant, the same as the proposed Project.

Recreation

The reduction in residential units under the Reduced Density Alternative would result in fewer new residents as compared to the proposed Project so it would result in a smaller increase the demand for and use of parks and recreational facilities within the City. Similar to the proposed Project, this Alternative would have a less than significant impact associated with the provision of new or physically altered parks or recreational facilities or the need for new or physically altered facilities, the construction of which could cause significant environmental impacts. Also similar to the proposed Project, this Alternative would have a less than significant impact related to increasing the use of existing parks and recreational facilities such that substantial physical deterioration of the facility would occur. The proposed Project would relocate the existing public facilities on the Project site that are intended to serve visitors of Hauke Park, which would be relocated to an already developed area on the north side of the PSB. The Project would have a less than significant impact related to the provision of recreational facilities or requiring the construction or expansion of recreational facilities which might have an adverse physical effect on the environment, which would be the same under Alternative 3, as construction on the PSB Site would not change. Overall, this Alternative would have a lesser impact on parks and recreational facilities than the proposed Project, but the impact would remain less than significant, the same as the proposed Project.

Transportation

Compared to the proposed Project, the Reduced Density Alternative would result in fewer vehicle trips during construction. The reduced amount of grading would require fewer off-haul trips and the reduced mass of the housing building would require fewer trips to bring materials to the Housing Site. The long-term operation of the Reduced Density Alternative would also result in fewer vehicle trips to and from the Housing Site during the AM, PM, and Saturday peak hours due to the reduction in residential units. As such, the potential impacts associated with LOS

standards defined in the City's General Plan would be less under the Reduced Density Alternative as compared to the proposed Project. Therefore, similar to the proposed Project, the Reduced Density Alternative would have a less than significant impact related to conflicts with programs, plans, ordinances, or policies addressing the circulation system. The proposed Project would result in a less than significant impact related to CEQA Guidelines Section 15064.3(b), which pertains to VMT. The Draft EIR determined that the proposed Project meets VMT screening thresholds for affordable housing development and therefore would be presumed to have less than significant VMT impacts. The Reduced Density Alternative would also meet the affordable housing screening criteria and would therefore result in less than significant VMT impacts. Similar to the proposed Project, the Reduced Density Alternative would result in less than significant impacts associated with hazards caused by geometric design features and emergency access. A CMP would be prepared for the Reduced Density Alternative which would include measures to maintain vehicle safety and emergency vehicle access during construction. Operational impacts associated with hazards caused by geometric design features and emergency access would remain less than significant, the same as the proposed Project.

Utilities and Service Systems

The Reduced Density Alternative would require the same connections to existing water, wastewater, and storm water drainage infrastructure as the proposed Project, and therefore would result in a less than significant impact associated with the construction of new or expanded facilities, the same as the proposed Project. The increase in demand for water services and wastewater treatment services would be smaller than the increase in demand associated with the proposed Project due to the fewer number of residential units proposed; however, the impact to water supply and wastewater treatment capacity would remain less than significant, the same as the proposed Project. Alternative 2 would also generate a similar amount of construction and demolition waste as the proposed Project, as demolition of the existing facilities on the Housing Site would still be required. However, Alternative 2 would generate less waste than the proposed Project during operation due to the reduction in residential units, and therefore the impact would remain less than significant. Similar to the proposed Project, the Reduced Density Alternative would comply with all federal, State, and local requirements pertaining to waste disposal and would not conflict with any regulations related to solid waste. Overall, the Reduced Density Alternative would have a lesser impact related to utilities than the proposed Project, but the impact would remain less than significant, the same as the proposed Project.

7.4.3 Alternative 3: Reduced Parking

ALTERNATIVE 3 DESCRIPTION

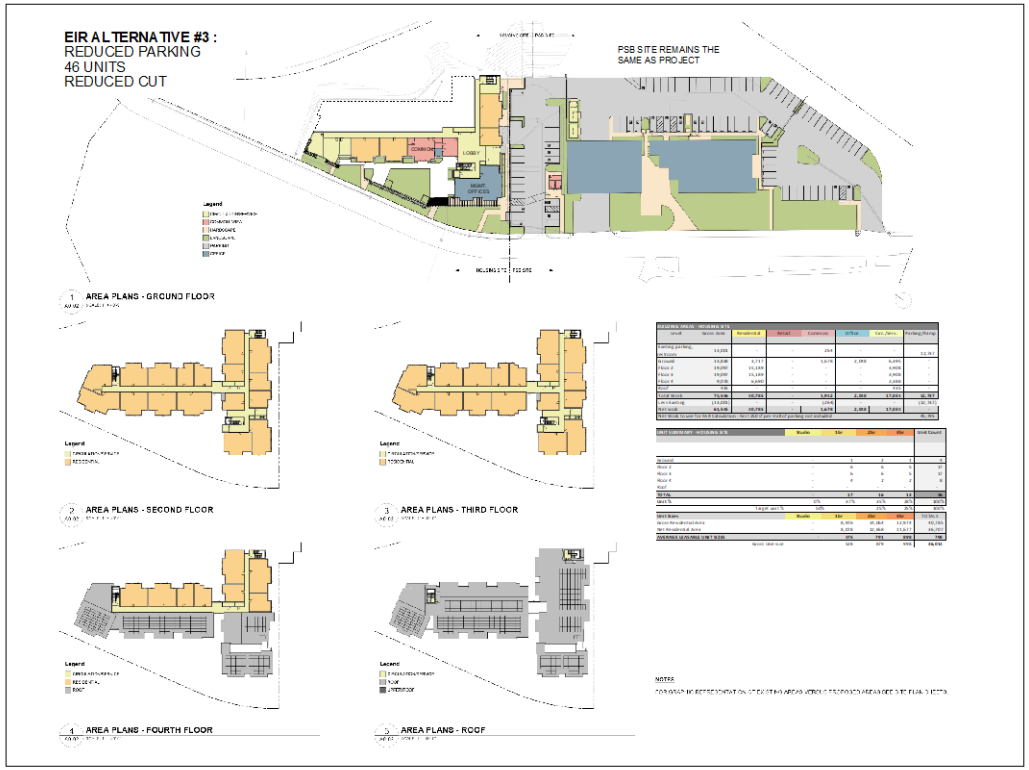
The Reduced Parking Alternative (Alternative 3) was selected to evaluate the comparative environmental benefits of constructing a project involving only the residential multifamily housing and no dedicated residential parking on the Housing Site. A reduced parking scenario was selected rather than no parking due to neighborhood concerns about residential parking impacting the availability of public parking along the street and PSB public parking lot. EAH Housing also indicated interest in providing some dedicated surface parking for residents, as opposed to zero designated residential parking spaces.

Alternative 3 would be located on the same site as the proposed Project and would reconfigure the PSB parking lot similar to the proposed Project. However, under this Alternative, proposed

parking Lot B (on the north side of the PSB) would be designated and reserved for residential parking (as opposed to public parking under the proposed Project) and Lot A would be designated for public parking. The public restrooms would be relocated in the same location as the proposed Project. This Alternative would maintain a residential parking ratio of 0.55 designated residential parking spaces per dwelling unit.

Also similar to the proposed Project, this Alternative would include construction of approximately 50 multifamily residential units on the Housing Site (46 are shown in the conceptual design for Alternative 3). However, this Alternative would not provide residential parking on the ground floor of the housing building. Instead, the ground floor of the building would include the administrative offices, residential common areas, building mechanical and support facilities, private open space courtyard for residents, and the three stories above would contain multifamily rental units (Figure 7-3). Construction on the PSB Site would remain the same as the proposed Project.

Under the Reduced Parking Alternative, the amount of necessary cut into the hillslope and the building footprint would be reduced by approximately 3,700 cubic yards as compared to the proposed Project. Under this Alternative, the total net floor area of development on the Housing Site would be 61,500 sf, as compared to the proposed Project's net floor area of 65,000 sf due to the elimination of the parking garage. The FAR for Alternative 3 would be 0.81 as compared to the proposed Project's FAR of 0.85. The Reduced Parking Alternative would involve the same amount of tree removal as the proposed Project with the removal of 44 trees, as well as similar levels of landscaping.

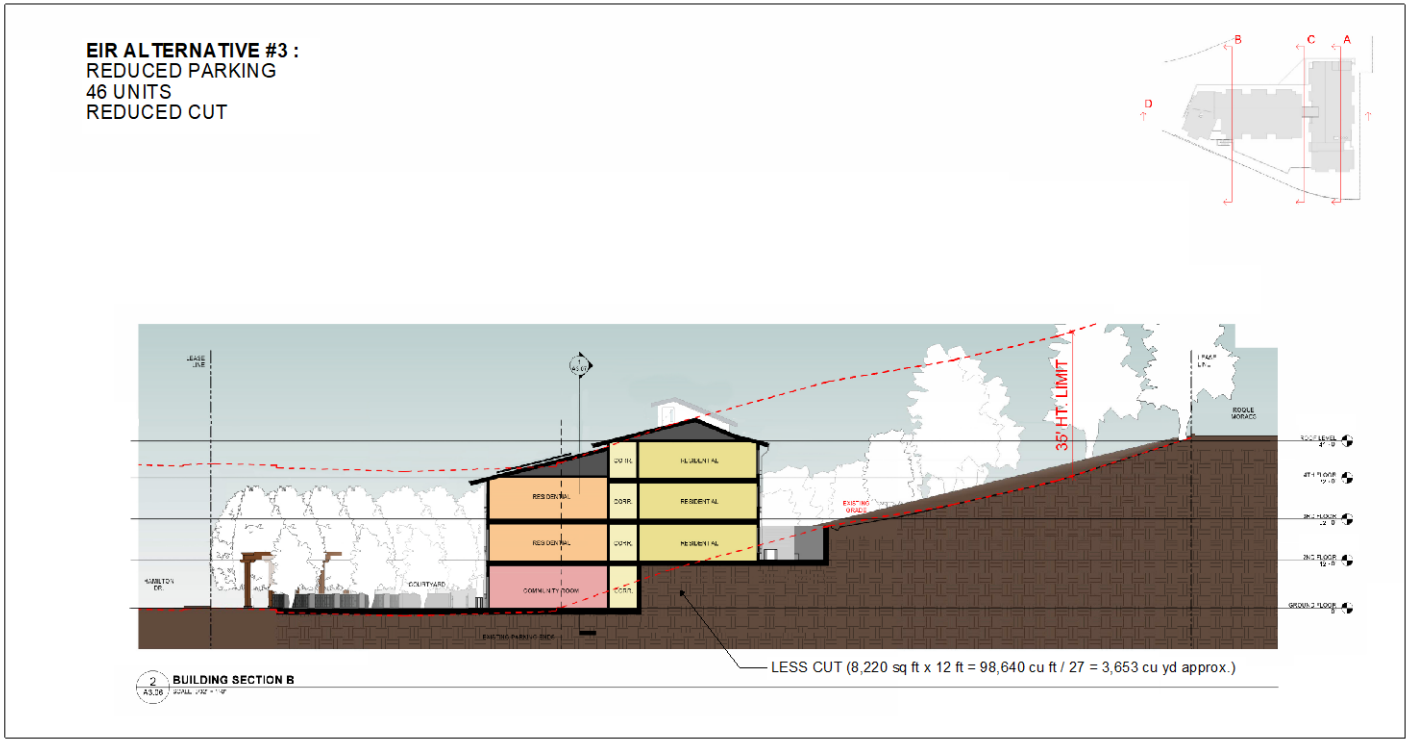


Source: Van Meter Williams Pollack LLP. 1 Hamilton Drive Area Plans, page A0.02. August 2023.

Figure 7-3. Alternative 3 Conceptual Plans: Reduced Parking

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

Figure 7-3. Alternative 3 Conceptual Plans: Reduced Parking



Source: Van Meter Williams Pollack LLP. 1 Hamilton Drive Area Plans, page A0.02. August 2023.

Figure 7-3. Alternative 3 Conceptual Plans: Reduced Parking *(continued)*

1 Hamilton Drive Affordable Housing Development
Mill Valley, California

ALTERNATIVE 3 ATTAINMENT OF PROJECT OBJECTIVES

Removing the podium building associated with the parking garage reduces the overall construction costs for the proposed Project, while also maintaining the maximum unit count to support property operations and project feasibility. However, Alternative 3 would only partially meet the objectives of the proposed Project. Under this Alternative, approximately 50 affordable residential rental units would be constructed on the Project site, which would satisfy Project objectives related to providing affordable housing. However, this Alternative would not include designated residential parking spaces on the Housing Site. Approximately 25 designated residential parking spaces would be provided in the proposed Lot B on the northern side of the PSB. Residents of the proposed housing building would also be allowed to utilize nearby street parking. This Alternative, however, would conflict with the Project objective to maintain the availability of 38 public parking spaces adjacent to Hauke Park, because it would instead provide 25 public parking spaces which would constitute a net reduction in public parking. Although Lot A of the reconfigured PSB lot would still be available to the public, these 25 parking spaces are farther away from Hauke Park. In addition, the City has received several public comments expressing concern about the removal of public parking spaces impacting Hauke and Bayfront Park visitors because the parking could be used by residents of the proposed housing development.

ALTERNATIVE 3 IMPACTS COMPARISON

Aesthetics

The Reduced Parking Alternative would result in a slightly reduced FAR and reduced height of the housing building, as compared to the proposed Project. A reduction in building height and mass would further reduce the proposed Project's less than significant impacts to scenic vistas. Similar to the proposed Project, this Alternative would include rezoning of the Housing Site from O-A (Open Area) to RM-B (Multi-Family Residential – Bayfront). Under this Alternative, requests for Building Height and FAR Waivers would still be required. Impacts to light and glare under Alternative 3 would be reduced as compared to the proposed Project due to the reduction in height and mass of the housing building. Therefore, impacts related to aesthetics would be less under the Reduced Parking Alternative than under the proposed Project, but would remain less-than-significant, like the proposed Project.

Air Quality

Air quality impacts during construction would be slightly less under the Reduced Parking Alternative compared to the proposed Project because this Alternative involves less development. Specifically, the Reduced Density Alternative would reduce the amount of cut into the hillslope by 3,700 cubic yards as compared to the proposed Project. Elimination of the parking garage from the housing development would also substantially reduce the amount of concrete and other building materials required for construction and would therefore reduce construction-generated air pollutants. Similar to the proposed Project, this Alternative would not conflict with an applicable air quality plan or result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment. This Alternative would likely reduce impacts associated with naturally occurring asbestos (NOA) that is present on the Project site, because development plans under this Alternative would avoid disturbing some of the area underlain by serpentine rock where NOA is most likely present on-site. However, implementation of an asbestos dust mitigation plan (ADMP) would still be necessary under this Alternative in order to reduce impacts to a less-than-significant level. Therefore, both the Project and the Reduced

Parking Alternative would have a less than significant impact with mitigation incorporated related to exposing sensitive receptors to substantial pollutant concentrations. Long-term operational air quality impacts under Alternative 3 would be similar to impacts of the proposed Project. Impacts associated with other emissions (such as those leading to odors) affecting a substantial number of people would be less than significant for both the Project and the Reduced Parking Alternative.

Biological Resources

Similar to the proposed Project, the Reduced Parking Alternative would result in development of the proposed Housing Site and redevelopment of the PSB Site with a similar building footprint. This Alternative would reduce the amount of grading and site preparation on the Housing Site but would still require the removal of existing vegetation located on the Project site. Under this Alternative, the same 44 trees would be removed. Similar to the proposed Project, construction activities including vegetation and tree removal could impact special-status plant species and nesting birds on-site, if they are present. These impacts could be mitigated to a less than significant level by implementing the mitigation measures described in Section 5.3 Overall impacts to biological resources under Alternative 3 would remain less than significant with mitigation incorporated, similar to the proposed Project.

Cultural and Tribal Cultural Resources

Under the Reduced Parking Alternative, potential impacts to cultural and tribal cultural resources would be slightly reduced due to the reduction of cut into the hillslope which could potentially impact buried archaeological resources. However, should the Project site contain unknown archaeological resources, or unknown human remains, implementation of this Alternative would result in similar cultural resources impacts as the proposed Project. These impacts could be mitigated to a less than significant level via the mitigation measures described in Section 5.4. Impacts to tribal cultural resources under Alternative 3 would be similar to the proposed Project but could be mitigated to a less than significant level by implementing the mitigation measures described in Section 5.4 of this Draft EIR. Overall impacts related to cultural and tribal cultural resources would be less under the Reduced Parking Alternative than under the proposed Project, but would remain less than significant, like the proposed Project.

Geology and Soils

The Project site would be subjected to ground shaking and related hazards under both the Reduced Parking Alternative and the proposed Project. Similar to the proposed Project, impacts associated with ground shaking and faulting, unstable soils, and expansive soils would be reduced to a less than significant level by implementing the mitigation measures described in Section 5.5. Impacts related to soil erosion and loss of topsoil would be reduced under Alternative 3 as compared to the proposed Project, because this Alternative would involve less earthwork on-site. Both the Project and the Reduced Parking Alternative would have a less than significant impact with mitigation incorporated related to soil erosion by implementing the mitigation measures described in Section 5.5 of this Draft EIR. Similar to the proposed Project, Alternative 3 would have no impact related to soils incapable of supporting the use of septic tanks or other wastewater disposal systems. Potential impacts to paleontological resources under Alternative 3 would potentially be less than the proposed Project due to reduced grading and excavation, but similar to the proposed Project, these impacts could be mitigated to a less than significant level with the implementation of mitigation measures described in Section 5.5 of this Draft EIR.

Noise

The reduction in building area associated with the Reduced Parking Alternative would not substantially change the noise impacts associated with the Project. Similar to the proposed Project, this Alternative would be required to comply with HEU SEIR Mitigation Measure 1-2, which would require the preparation and implementation of a construction noise management plan, which would result in less than significant construction noise impacts. Therefore, although Alternative 3 would require less earthwork on the Housing Site, this Alternative would still result in less than significant impacts related to construction noise, similar to the proposed Project. Also similar to the proposed Project, this Alternative would result in less than significant operational noise impacts. Under both the Project and Reduced Parking Alternative, construction equipment would not generate excessive vibration levels that could potentially disturb institutional land uses or older residential buildings near the Project site, which would result in a less than significant vibration impact. Noise impacts under Alternative 3 would be similar to impacts of the proposed Project.

Public Services

The Reduced Parking Alternative would generate a similar number of residents as the proposed Project and would therefore result in a similar increase in demand for public services such as police protection, fire protection, and school facilities, as compared to the proposed Project. Therefore, the impact of the Reduced Density Alternative on public services would remain less than significant, the same as the proposed Project.

Recreation

The Reduced Parking Alternative would generate a similar number of residents and therefore generate a similar increase in use of recreational facilities as the proposed Project. Both the proposed Project and Reduced Parking Alternative would relocate the existing public facilities that are intended to serve visitors of Hauke and Bayfront Park, from the Housing Site to the PSB Site. However, because the surface parking lot on the north side of the PSB (Lot B) would be dedicated to residents of the housing building, this Alternative would result in a net reduction in available public parking for park users. Additionally, the Reduced Parking Alternative would provide fewer parking spaces dedicated for residents of the proposed housing building, thus likely resulting in an increased use of street parking in the area by residents and guests of residents and reducing its availability for park users. Although this Alternative would reduce the amount of available dedicated public parking for potential users of Hauke and Bayfront Parks, parking is not considered an environmental issue pursuant to CEQA. Both the Alternative and the proposed Project would have a less than significant impact related to the provision of recreational facilities or requiring the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Transportation

Compared to the proposed Project, the Reduced Parking Alternative would result in fewer vehicle trips during construction. The reduced amount of grading would require fewer off-haul trips and the reduced mass of the housing building and elimination of the concrete parking garage would require fewer trips to bring materials to the Housing Site. During operation, the Reduced Parking Alternative would result in similar numbers of vehicle trips to and from the Housing Site during the AM, PM, and Saturday peak hours. As such, the potential impacts associated with LOS standards defined in the City's General Plan would be the same under the Reduced Parking Alternative as compared to the proposed Project. Therefore, similar to the proposed Project, the

Reduced Density Alternative would have a less than significant impact related to conflicts with programs, plans, ordinances, or policies addressing the circulation system.

The proposed Project would result in a less than significant impact related to CEQA Guidelines Section 15064.3(b), which pertains to VMT. The Draft EIR determined that the proposed Project meets VMT screening thresholds for affordable housing development and therefore would be presumed to have less than significant VMT impacts. The Reduced Density Alternative would also meet the affordable housing screening criteria and would therefore result in less than significant VMT impacts. Similar to the proposed Project, the Reduced Density Alternative would result in less than significant impacts associated with hazards caused by geometric design features and emergency access. A CMP would be prepared for the Reduced Density Alternative which would include measures to maintain vehicle safety and emergency vehicle access during construction. Operational impacts associated with hazards caused by geometric design features and emergency access would remain less than significant, the same as the proposed Project.

Utilities and Service Systems

The Reduced Parking Alternative would require the same connections to existing water, wastewater, and storm water drainage infrastructure as the proposed Project, and therefore would result in a less than significant impact associated with the construction of new or expanded facilities, the same as the proposed Project. The increase in demand for water services and wastewater treatment services would be similar to the increase in demand associated with the proposed Project because the same number of residential units would be provided. Therefore, the impact to water supply and wastewater treatment capacity would remain less than significant, the same as the proposed Project. Alternative 3 would also generate a similar amount of construction and demolition waste as the proposed Project, as demolition of the existing facilities on the Housing Site would still be required. Alternative 3 would generate a similar amount of waste as the proposed Project during operation because the same number of residential units would be provided, and therefore the impact would remain less than significant. Similar to the proposed Project, the Reduced Parking Alternative would comply with all federal, State, and local requirements pertaining to waste disposal and would not conflict with any regulations related to solid waste. Overall impacts associated with utilities would be similar to impacts associated with the proposed Project and would be less than significant.

7.5 Environmentally Superior Alternative

In addition to the discussion and comparison of impacts of the proposed Project and the alternatives, Section 15126.6 of the CEQA Guidelines requires that an “environmentally superior” alternative be selected and the reasons for such a selection disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the least amount of significant environmental impacts. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of the project applicant. Section 15126.6(e)(2) of the CEQA Guidelines also requires that if the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on the analysis provided in the above sections and in the Alternatives Comparison 2, it has been determined that Alternative 1: No Project would be the environmentally superior alternative. Of the other “build” alternatives, Alternative 3: No Parking would be the environmentally superior alternative.

Table 7-2 below presents a comparison of the impacts associated with the proposed Project and each of the alternatives. Table 7-3 below presents a comparison of the ability of the proposed Project and each of the alternatives to achieve the Project objectives discussed in Section 4, Project Description.

Table 7-2. Alternatives Comparison - Impacts

IMPACT AREA	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced Density	Alternative 3: Reduced Parking
5.1 AESTHETICS				
a) Would the project have a substantial adverse effect on a scenic vista?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*
b) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*
c) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*
5.2 AIR QUALITY				
a) Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*

IMPACT AREA	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced Density	Alternative 3: Reduced Parking
c) Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*
d) Would the project result in other emissions (such as those leading to odors) affecting a substantial number of people?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
5.3 BIOLOGICAL RESOURCES				
a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*
b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	No Impact	No Impact *Similar to proposed Project*	No Impact *Similar to proposed Project*	No Impact *Similar to proposed Project*
c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact	No Impact *Similar to proposed Project*	No Impact *Similar to proposed Project*	No Impact *Similar to proposed Project*

IMPACT AREA	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced Density	Alternative 3: Reduced Parking
d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	No Impact	No Impact *Similar to proposed Project*	No Impact *Similar to proposed Project*	No Impact *Similar to proposed Project*
e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*
f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact	No Impact *Similar to proposed Project*	No Impact *Similar to proposed Project*	No Impact *Similar to proposed Project*
5.4 CULTURAL AND TRIBAL CULTURAL RESOURCES				
a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*
b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*

IMPACT AREA	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced Density	Alternative 3: Reduced Parking
c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*
d) Would the project Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*

5.5 GEOLOGY AND SOILS				
a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*
ii) Strong seismic ground shaking?	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*
iii) Seismic-related ground failure, including liquefaction?	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*
iv) Landslides?	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*

a) Result in substantial soil erosion or the loss of topsoil?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*
b) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*
c) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*	Less than Significant Impact with Mitigation Incorporated *Similar to proposed Project*
d) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No Impact	No Impact *Similar to proposed Project*	No Impact *Similar to proposed Project*	No Impact *Similar to proposed Project*
e) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than Significant Impact with Mitigation Incorporated	No Impact *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*	Less than Significant Impact with Mitigation Incorporated *Less than proposed Project*

5.6 NOISE				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
b) Generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Less than Significant Impact	No impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
5.7 PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of 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:				
i) Fire Protection?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*
ii) Police Protection?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*

iii) Schools?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*
5.8 RECREATION				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered parks, need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
b) 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?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *More than proposed Project*
c) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
5.9 TRANSPORTATION				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Less than proposed Project*

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
d) Result in inadequate emergency access?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
5.10 UTILITIES				
a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*
b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*
c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*
d) Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than Significant Impact	No Impact *Less than proposed Project*	Less than Significant Impact *Similar to proposed Project*	Less than Significant Impact *Similar to proposed Project*

Table 7-3. Alternatives Comparison – Ability to Meet Basic Objectives of the Project

PROJECT OBJECTIVE	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced Density	Alternative 3: Reduced Parking
To implement MV2040 General Plan Goal No. 2, to "encourage the continued diversity of housing, income levels and lifestyles within the community", and Mill Valley Housing Element 2023-2031 Program No. 10, which includes consideration of building multi-family affordable rental housing Project at the 1 Hamilton Drive site.	Yes	No	Yes, but to a lesser extent	Yes
To provide new affordable housing units to meet the current and future housing needs of the community with very low, low, and affordable workforce incomes, including households with special needs.	Yes	No	Yes, but to a lesser extent	Yes
To provide affordable housing because of its positive impacts on diversity, equity and inclusion.	Yes	No	Yes, but to a lesser extent	Yes
To provide affordable housing because of its positive impact on families with more diverse economic backgrounds, joining Mill Valley schools and contributing to the community.	Yes	No	Yes, but to a lesser extent	Yes
To provide affordable housing near services, parks and schools.	Yes	No	Yes, but to a lesser extent	Yes
To affirm the City's commitment to satisfying its Regional Housing Needs Assessment (RHNA) goals. The Project site is part of the City's sites inventory for the 2023-2031 Housing Element update.	Yes	No	No	Yes

PROJECT OBJECTIVE	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced Density	Alternative 3: Reduced Parking
To construct a 100% affordable housing Project with at least 40 units and up to 50 multi-family rental units at the 1 Hamilton site that is financially feasible by partnering with a non-profit affordable housing developer for the construction and on-going management of the housing facility.	Yes	No	No	Yes
To maintain availability of and access to 38 public parking spaces and restroom facilities adjacent to Hauke Park.	Yes	Yes	Yes	No

8.0 OTHER CEQA CONSIDERATIONS

CEQA Guidelines section 15126.2(e) requires an EIR to include a discussion of the growth inducing impacts of a project. Growth inducement refers to the likelihood that a proposed project will foster growth in the surrounding area, either directly or indirectly.

As discussed in Section 1, Introduction, this EIR is serving as an "infill EIR" pursuant to CEQA Guidelines section 15183.3(e). Per this section, infill EIRs do not need to identify growth inducing impacts. The HEU SEIR did evaluate the growth inducing impact of the growth included in the City's Housing Element Update, which included the placement of 50 affordable multi-family housing units at the Project site and concluded that full buildout of the development considered in the Housing Element Update would not directly or indirectly induce substantial unplanned population growth (City of Mill Valley, 2023a).

8.1 Significant Irreversible Changes

8.1.1 CEQA Requirements

CEQA Guidelines section 15126.2(d) requires a discussion of significant and irreversible changes that would be caused by the Project if implemented. The use of non-renewable resources during the initial and continued phases of the Project may be irreversible, since a large commitment of such resources makes removal or nonuse in the future unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with implementation of some development projects. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

8.1.2 Effects of the Proposed Project

Resources that would be permanently and continually consumed by implementation of the proposed Project include water, electricity, and fossil fuels; however, the amount and rate of consumption of these resources would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources, or resource consumption that would not otherwise occur in other locations. Project construction activities, though analyzed in the applicable sections of this Draft EIR, would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels for automobiles and construction equipment. With respect to the operational activities associated with the proposed Project's implementation, compliance with all applicable building codes, as well as EIR mitigation measures, would ensure that all natural resources are conserved to the maximum extent practicable.

Section 15126.2(d) of the CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with proposed projects. During the Project construction phase, construction equipment and materials would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. Once constructed, the completed housing development and public restrooms would use and store small quantities of chemicals typical in residences, such as household cleaning solutions, paints and thinners, and motor fuel (e.g., motor vehicles and lawn mowers). These

materials are regulated through a series of federal, State, and local laws and regulations. Compliance with these existing requirements would ensure that the Project's potential to cause significant irreversible environmental damage from an accident or upset of hazardous materials would be less than significant.

8.2 Significant Unavoidable Impacts

8.2.1 CEQA Requirements

A significant adverse unavoidable environmental impact is a significant adverse impact that cannot be reduced to a less than significant level through the implementation of mitigation measures. In some cases, adequate mitigation for a significant and unavoidable impact cannot be assured because implementation of that mitigation is outside the jurisdiction of the lead agency. CEQA Guidelines Section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a project.

CEQA Guidelines section 15093(a) requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable." CEQA Guidelines Section 15093(b) states that, "when the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record."

8.2.2 Significant and Unavoidable Impacts of the Proposed Project

The impacts of the proposed Project have been evaluated throughout the various sections of this Draft EIR and are summarized in Table 2-1. The Project would have significant impacts with respect to Air Quality (exposing sensitive receptors to substantial pollutant concentrations), Biological Resources (potential adverse effect on special-status species; potential to conflict with local policies); Cultural Resources (potential substantial adverse change in the significance of an archaeological resource; potential to disturb human remains); Tribal Cultural Resources (potential substantial adverse change in the significance of a tribal cultural resource); Geology and Soils (potential substantial adverse effects involving seismic/geologic hazards; potential soil erosion; potential soil instability; expansive soil; potential destruction of paleontological resources); Greenhouse Gas Emissions (potential greenhouse gas emission generation); Noise (substantial temporary noise increase during construction); and Utilities and Service Systems (potential to require water beyond available supplies).

As discussed throughout the various impact analyses in this Draft EIR, the proposed Project would be required to implement a series of mitigation measures to address the Project's adverse impacts within each of these environmental issue categories. With the implementation of these mitigation measures, which are also presented in Table 2-1, all of the Project's potentially significant impacts would be reduced to a less-than-significant level. Therefore, the Project would not result in any significant and unavoidable environmental impacts and no statement of overriding considerations is necessary in order for the City to approve the Project.

9.0 SOURCES AND REPORT PREPARERS

9.1 Sources

ENVIRONMENTAL SETTING

[City of Mill Valley 2013] City of Mill Valley. 2013. Mill Valley General Plan MV 2040. Adopted by the Mill Valley City Council October 7, 2013. https://www.cityofmillvalley.org/518/MV2040-General-Plan.

PROJECT DESCRIPTION

[Adobe Associates, Inc. 2022] Adobe Associates, Inc. 2022. Preliminary Grading Quantities, 1 Hamilton Drive, Mill Valley, CA. Santa Rosa.

[City of Mill Valley 2023a] City of Mill Valley. 2023. Housing Element Update 6th Cycle 2023-2031. Accessed September 29, 2023. https://www.cityofmillvalley.org/748/Housing-Element-Update-2023-2031.

[City of Mill Valley 2013] City of Mill Valley. 2013. Mill Valley General Plan MV 2040. Adopted by the Mill Valley City Council October 7, 2013. https://www.cityofmillvalley.org/518/MV2040-General-Plan.

AESTHETICS

[CDF 2022] California Department of Finance. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2022. Accessed November 14, 2022. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housingestimates-for-cities-counties-and-the-state-2020-2022/

[WRA 2022] WRA, Inc. 2022. 1 Hamilton Drive Arborist Report. WRA, Inc: San Rafael.

AIR QUALITY

[BAAQMD 2019] Bay Area Air Quality Management District. 2017. Final 2017 Clean Air Plan: Spare the Air, Cool the Climate. Accessed April 19, 2023. https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en

[BAAQMD 2023] Bay Area Air Quality Management District. 2023. Stationary Source Screening Map. Accessed June 28, 2023. https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3

[Caltrans 2022] California Department of Transportation. 2022. Traffic Census Program. Accessed May 23, 2022. https://dot.ca.gov/programs/traffic-operations/census

[CARB 2005] California Air Resources Board. 2005. Air Quality and Land Use Handbook: A Community Health Perspective. Accessed October 18, 2023. https://www.aqmd.gov/docs/default-source/ceqa/handbook/california-air-resources-board-air-quality-and-land-use-handbook-a-community-health-perspective.pdf

[CARB 2016] California Air Resources Board. 2016. Ambient Air Quality Standards. Accessed October 18, 2023. https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf

[DieselNet 2023]. DieselNet. 2023. United States: Nonroad Diesel Engines. Last modified March 2023. Accessed October 18, 2023. https://dieselnet.com/standards/us/nonroad.php

[OEHHA 2015] Office of Environmental Health Hazard Assessment. 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.

[USEPA 2023] United States Environmental Protection Agency. 2023. Accessed October 19, 2023. https://www.epa.gov/criteria-air-pollutants#:~:text=The%20Clean%20Air%20Act%20requires,known%20as%20%22%20criteria%20air%20pollutants.

BIOLOGICAL RESOURCES

[Beir and Loe 1992] Beir, P., and S. Loe. 1992. *A Checklist for Evaluating Impacts to Wildlife Movement Corridors*. Wildlife Society Bulletin 20(4):434-440.

[CDFG 1994] California Department of Fish and Game. 1994. *A Field Guide to Lake and Streambed Alteration Agreements*, Sections 1600-1607. Environmental Services Division, California Department of Fish and Wildlife, Sacramento, California.

[CDFW 2018] California Department of Fish and Wildlife. 2018. *Protocols for Surveying and Evaluating Impacts to Rare Native Plant Populations and Natural Communities*. State of California, California Natural Resources Agency, Department of Fish and Wildlife, Sacramento, California, March 20.

[CDFW 2023a] California Department of Fish and Wildlife. 2023a. California Natural Community List. Biogeographic Data Branch. Vegetation Classification and Mapping Program, Sacramento, California.

[CDFW 2023b] California Department of Fish and Wildlife. 2023b. California Natural Diversity Database. Biogeographic Data Branch. Vegetation Classification and Mapping Program, Sacramento, California. Accessed July 2023 at https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

[CDFW 2023c] California Department of Fish and Wildlife. 2023c. Biogeographic Information and Observation System. Biogeographic Data Branch. Sacramento, California. Accessed July 2023. https://wildlife.ca.gov/Data/BIOS.

[CalTrans 2010]. California Department of Transportation. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration. Accessed July 2023. https://www.wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC.

[CAL-IPC 2022] California Invasive Plant Council. 2022. Cal-IPC Online Inventory. Accessed July 2023 at https://www.cal-ipc.org/plants/inventory/.

[CNPS 2001] California Native Plant Society. 2001. *CNPS Botanical Survey Guidelines*. California Native Plant Society, Sacramento, CA. Accessed June 2023.

[CNPS 2023] California Native Plant Society. 2023. *A Manual of California Vegetation*, Online Edition. Accessed July 2023. http://vegetation.cnps.org.

[CSRL 2023] California Soil Resource Lab. 2023. SoilWeb. Accessed June 2023. http://casoilresource.lawr.ucdavis.edu/.

[CCH1 2023] Consortium of California Herbaria 1. 2023. CCH1: Featuring California Vascular Plant Data from the Consortium of California Herbaria and Other Sources. Data provided by the Consortium of California Herbaria. Accessed July 2023. http://ucjeps.berkeley.edu/consortium/.

[CCH2 2023] Consortium of California Herbaria 2. 2023. CCH2 Portal. Accessed July 2023. http://cch2.org/portal/index.php.

[Cornell Lab of Ornithology 2023] Cornell Lab of Ornithology. 2023. eBird: An online database of bird distribution and abundance. Ithaca, NY. Accessed July 2023. http://www.ebird.org.

[Environmental Laboratory 1987] Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Department of the Army, Waterways Experiment Station, Technical Report Y-87-1, Vicksburg, Mississippi.

[Google Earth 2023] Google Earth. 2023. Aerial Imagery 1985-2023. Accessed July 2023.

[Hilty et al. 2019] Hilty, J. A., Lidicker Jr., W., and Merenlende, A. 2019. Corridor Ecology: Linking Landscapes for Biodiversity Conservation. Second Edition. Island Press.

[Holland 1986] Holland, R. F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California.* State of California, the Resources Agency, Department of Fish and Game, Sacramento, CA.

[Jepson Flora Project 2023] Jepson Flora Project (eds.). 2023. Jepson eFlora. Accessed August 2023. https://ucjeps.berkeley.edu/eflora/.

[NETR 2023] Nationwide Environmental Title Research. 2023. Historic Aerials. https://historicaerials.com/viewer.

[SFEI 2017] San Francisco Estuary Institute. 2017. California Aquatic Resource Inventory (CARI) Version 0.3. Accessed August 2023. https://www.sfei.org/data/california-aquatic-resource-inventory-cari-version-03-gis-data#sthash.9SjW0wBH.dpbs.

[Shuford and Gardali 2008]. Shuford, W. D., and Gardali, eds. 2008. *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California.* Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

[Soulé and Terbough 1999] Soulé, M., and Terbough, J. 1999. *Conserving nature at regional and continental scales – a scientific program for North America*. BioScience 49(10):809-817.

[SWRCB 2019] State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, May 14, 2019.

[Stebbins 2003] Stebbins, R. C. 2003. *A Field Guide to Western Reptiles and Amphibians*, third edition. Houghton Mifflin Company, Boston, MA and New York, NY.

[Thomson et al. 2016] Thomspon, R. C., A. N. Wright, and H. B. Shaffer. 2016. *California amphibian and reptile species of special concern*. Co-published by the California Department of Fish and Wildlife and University of California Press, Oakland, California.

[Corps 2008] U.S. Army Corps of Engineers. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0). Page 135. U.S. Army Engineer Research and Development Center, ERD/EL TR-08-28, Vicksburg, Mississippi.

[USFWS 1996] U.S. Fish and Wildlife Service. 1996. *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants*. Sacramento Fish and Wildlife Office, Sacramento, CA. September.

[USFWS 2023a] U.S. Fish and Wildlife Service. 2023. National Wetlands Inventory. Accessed July 2023. http://www.fws.gov/nwi.

[USFWS 2023b] U.S. Fish and Wildlife Service. 2023b. Information for Planning and Consultation. Accessed July 2023. https://ecos.fws.gov/ipac/.

[USGS 2021] U.S. Geological Survey. 2021. San Rafael Quadrangle, California. 7.5-minute topographic map.

[USGS 2023] U.S. Geological Survey. 2023. Bay Area Geologic Map. Google Earth File. Accessed July 2023. https://earthquake.usgs.gov/education/geologicmaps/kml/geology.kmz.

[Van Meter Williams Pollack 2023] Van Meter Williams Pollack. 2023. "Vegetation Management Plan." Entitlement Set. 1 Hamilton Drive, EAH Housing, Mill Valley California. L0.1, L0.2, L1.1.

[WRA 2023] WRA, Inc. 2023. *Biological Technical Resources Report, 1 Hamilton Drive Project, Mill Valley, Marin County, California.* WRA, Inc: San Rafael.

CULTURAL AND TRIBAL CULTURAL RESOURCES

[Barrett 1908] Barret, S. 1908. Map of the Territory of the Pomo Linguistic Stock and the Adjacent Territories of Other Linguistic Stocks Showing Dialectic Subdivisions and Village Sites. Scale 1:320,000. The University Press, Berkeley, California. Bancroft Library, University of California, Berkeley.

[Bartelink 2006] Bartelink, E. 2006. Resource Intensification in Pre-Contact Central California: A Bioarchaeological Perspective on Diet and Health Patterns among Hunter-Gatherers from the Lower Sacramento Valley and San Francisco Bay. Ph.D. dissertation, Department of Anthropology, Texas A&M University, College Station.

[Beck and Haase 974) Beck, W. & Haase, Y. 1974. Historical Atlas of California. University of Oklahoma Press, Norman.

[Bickel 1978] Bickel, P. 1978. Changing Sea Levels along the California coast. Anthropological Implications. *Journal of California Anthropology* 5(1):6-20.

[Collier and Thalman 1996] Collier, M. & Thalman, S. 1996. Interviews with Tom Smith and Maria Copa: Isabel Kell's Ethnographic Notes on the Coast Miwok Indians of Marin and Southern Sonoma Counties, California. *Miwok Archaeological Preserve of Marin Occasional Paper*, No. 6. Miwok Archaeological Preserve of Marin, San Rafael, California.

[Cook and Heizer 1968] Cook, S. & Heizer, R. 1968. Relationships among Houses, Settlement Areas, and Population in Aboriginal California. In *Settlement Archaeology*, edited by K. C. Chang. National Press Books, Palo Alto, California.

[DeBaker, Helmer, & Osterlye 2023] 2023. Archaeological Resources Inventory for the One Hamilton Drive Affordable Housing Development Project, Marin County, California. Far Western Anthropological Research Group, Inc.: Davis.

[Erlandson et al. 2007] Erlandson, J., Torben, R., Jones, T., & Porcasi, J. 2007. One if by Land, Two if by Sea: Who Were the First Californians? In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn Klar, pp. 53-62. AltaMira Press, Walnut Creek, California.

[Federated Indians of Graton Rancheria 2023] Federated Indians of Graton Rancheria. 2023. Federated Indians of Graton Rancheria Coast Miwok and Southern Pomo. Accessed April 2023. https://gratonrancheria.com/culture/history/.

[Georke 2007] Georke, B. 2007. *Chief Marin: Leader, Rebel, and Legend*. Heyday Books, Berkeley, California.

[Greengo 1951] Greengo, R. 1951. *Molluscan Studies in California Shell Middens*. Reports of the University of California Archaeological Survey 13. University of California, Berkeley.

[Haynes 2002] Haynes, G. 2002. *The Early Settlement of North America: The Clovis Era.* Cambridge University Press, Cambridge, England.

[Hoffman 1862] Hoffman, O. 1862. *Reports of Land Cases Determined in the United States District Court for the Northern District of California.* Numa Hubert, San Francisco.

[Jones et al. 2002] Jones, T., Fitzgerald, R., Kennet, D., Miksicek, C., Fagan, J., Sharp, J., & Erlandson, J. 2002. The Cross Creek Site (CA-SLO-1797) and Its Implications for New World Colonization. *American Antiquity* 67(2):213-230.

[Kelly 1978] Kelly, I. 1978. Coastal Miwok. In *California*, edited by Robert F. Heizer, pp. 414-425. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

[Kroeber 1925] Kroeber, A. 1925. *Handbook of the Indians of California.* Bureau of American Ethnology Bulletin 78. Smithsonian Institution, Washington, DC. Reprinted by Dover Publications, New York, 1976.

[Lightfoot 1997] Lightfoot, K. 1997. Cultural Construction of Coastal Landscape: A Middle Holocene Perspective from San Francisco Bay. In *Archaeology of the California Coast During the Middle Holocene,* edited by Jon M. Erlandson and Michael A. Glassow, pp. 129-142. Perspectives in California Archaeology 4. Institute of Archaeology, University of California, Los Angeles.

[Lightfoot and Luby 2002] Lightfoot, K. & Luby, E. 2002. Late Holocene in the San Francisco Bay Area: Temporal Trends in the Use and Abandonment of Shell Mounds in the East Bay. In *Catalysts to Complexity: Late Holocene Societies of the California Coast,* edited by Jon M. Erlandson and Terry L. Jones, pp. 263-281. Perspectives in California Archaeology 6. Cotsen Institute of Archaeology, University of California, Los Angeles.

[Lillard et al. 1939] Lillard, J., Heizer, R., & Fenenga, F. 1939. *An Introduction to the Archaeology of Central California.* Sacramento Junior College Department of Anthropology Bulletin 2. Board of Education of the Sacramento City Unified School District, Sacramento, California.

[Luby 2004] Luby, E. 2004. Shellmounds and Mortuary Behavior in the San Francisco Bay Area. *North American Archaeologist* 25:1-33.

[Luby and Gruber 1999] Luby, E. & Gruber, M. 1999. The Dead Must be Fed: Symbolic Meanings of the Shellmounds of the San Francisco Bay Area. Cambridge Archaeological Journal 9:95-108.

[Meyer and Rosenthal 1995] Meyer, J. and Rosenthal, J. 1995. *Archaeological Investigations at the Crazy Creek Sites, CA-LAK-1682 and CA-LAK-1683, Lake County, California.* Anthropological Studies Center, Sonoma State University, Rohner Park, California. Prepared for Winzler and Kelly, Consulting Engineers, Santa Rosa, California.

[Milliken et al. 2007] Milliken, R., Fitzgerald, R., Hylkema, M., Origer, T., Groza, R., Wiberg, R.,

Leventhal, A., Bieling, D., Gottsfield, A., Gillette, D., Bellefemine, V., Strother, E., Cartier, R., and Fredrickson, D. Punctuated Culture Change in the San Francisco Bay Area. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn Klar, pp. 99–124. Altamira Press, Walnut Creek, California.

[Milliken 2009] Milliken, R. 2009. Ethnohistory and Ethnogeography of the Coast Miwok and Their Neighbors, 1978-1840. Archaeological/Historical Consultant, prepared for National Park Service, Golden Gate NRA Cultural Resources and Museum Management Division, San Francisco, California.

[Milliken 2010] Milliken, R. 2010. *The Contact-Period Native California Community Distribution Model: A Dynamic Digital Atlas and Wiki Encyclopedia.* Far Western Anthropological Research Group, Inc., Davis, California. Submitted to the California Department of Transportation, District 6, Fresno.

[Moratto 2002] Morrato, M. 2002. Culture History of the New Melones Reservoir Area, Calaveras and Tuolumne Counties, California. In *Essays in California Archaeology: A Memoir to Franklin Fenenga,* edited by William J. Wallace and Francis A. Riddell, pp. 25-54. Contributions to the University of California Archaeological Research Facility 60. University of California, Berkeley.

[Reed 1923] Reed, W. 1923. *History of Sacramento County California with Biographical Sketches of the Leading Men and Women of the County who Have been Identified with its Growth and Development from the Early Days to the Present*. Historic Record Company, Los Angeles, California.

[Rondeau et al. 2007] Rondeau, M., Cassidy, J., and Jones, T. 2007. Colonization Technologies: Fluted Projectile Points and the San Clemente Island Woodworking/Microblade Complex. In *California Prehistory: Colonization, Culture, and Complexity,* edited by Terry L. Jones and Kathryn Klar, pp. 63-70. AltaMira Press, Walnut Creek, California.

[Simons 1992] Simons, D. 1992. Prehistoric Mammal Exploitation in the San Francisco Bay Area. In *Essays on the Prehistory of Maritime California,* edited by Terry L. Jones, pp. 73-104. Center for Archaeological Research at Davis Publication 10. University of California, Davis.

[Slaymaker 1982] Slaymaker, C. 1982. *A Model for the Study of Coast Miwok Ethnogeography.* Ph.D. dissertation, Anthropology Department, University of California, Davis.

GEOLOGY AND SOILS

[AEASSC] Alfred E. Alquist Seismic Safety Commission. 2023. Publications. Accessed August 9, 2023. https://ssc.ca.gov/forms_pubs/.

[Blake, Graymer, and Jones 2000] Blake, M.C. Jr., Graymer, R. W., & Jones, D. L. 2000. Geologic Map of Parts of Marin, San Francisco, Alameda, Contra Costa, and Sonoma Counties, California.

[CDC 2023] California Department of Conservation. 2023. Alquist-Priolo Earthquake Fault Zones. Accessed August 9, 2023. https://www.conservation.ca.gov/cgs/alquist-priolo.

[County of Marin 2022] County of Marin. 2022. MarinMap Viewer. Accessed August 9, 2023. https://www.marinmap.org/dnn/default.aspx.

[Herzog 1985] Donald Heroz & Associates, Inc. 1985. Report, Geotechnical Investigation, 18-Acre Parcel, Seaver Valley and Sycamore Avenue, Mill Valley, California. Report No. 1921.1-0-1. Mill Valley.

[Krazan 2023] Krazan & Associates, Inc. 2023. Geotechnical Engineering/Geologic Hazards Investigation Proposed Multi-Family Residential Development 1 Hamilton Drive Mill Valley, California. Krazan & Associates, Inc.: Pleasanton.

[Youd et al. 2002] Youd, T. L., Hansen, C. M., Bartlett, and F. Steven. 2002. Revised multilinear regression equations for prediction of lateral spread displacement. ASCE Journal of Geotechnical and Geoenvironmental Engineering. 128(12): pp. 1007-1017.

NOISE

[Salter 1998] Charles M. Salter Associates, Inc. 1998. Acoustics – Architecture, Engineering, the Environment, William Stout Publishers.

[FHWA 2018] Federal Highway Administration. 2018. *Techniques for Reviewing Noise Analyses and Associated Noise Reports.*

[FTA 2018] Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual, FTA Report No.0123, September.

[City of Mill Valley 2013] City of Mill Valley. 2013. Mill Valley General Plan MV 2040. Adopted by the Mill Valley City Council October 7, 2013. https://www.cityofmillvalley.org/518/MV2040-General-Plan.

[FTA 2006] Federal Transit Administration, Office of Planning and Environment. 2006. Transit Noise and Vibration Impact Assessment. FTA-VA-90-1003-06.

[Caltrans 2020] California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual.*

[OPR 2017] California Office of Planning and Research. 2017. State of California General Plan Guidelines.

[City of Mill Valley 2023b] City of Mill Valley. 2023. Draft Subsequent EIR City of Mill Valley 2023-2031 General Plan Housing and Land Use Element Update and Zoning Amendments. Accessed July 25, 2023. https://www.cityofmillvalley.org/DocumentCenter/View/5735/City-of-Mill-Valley_Public-Review-DSEIR_sm?bidId=

[Parisi 2023a] Parisi Transportation Consulting – A Division of Parametrix. 2023a. 1 Hamilton Drive Transportation Impact Assessment. Berkeley.

PUBLIC SERVICES

[City of Mill Valley 2023b] City of Mill Valley. 2023. Draft Subsequent EIR City of Mill Valley 2023-2031 General Plan Housing and Land Use Element Update and Zoning Amendments. Accessed July 26, 2023. https://www.cityofmillvalley.org/748/Housing-Element-Update-2023-2031

[SMFPD 2016] Southern Marin Fire Protection District. 2016. Fire & Emergency Services Strategic Plan. Accessed July 26, 2023. https://www.smfd.org/home/showpublisheddocument/2138/637752512592400000

RECREATION

[City of Mill Valley "Parks"] City of Mill Valley. N.d. Parks. Accessed July 25, 2023. https://www.cityofmillvalley.org/699/Parks.

[City of Mill Valley 2013] City of Mill Valley. 2013. Mill Valley General Plan MV 2040. Adopted by the Mill Valley City Council October 7, 2013. https://www.cityofmillvalley.org/518/MV2040-General-Plan.

[City of Mill Valley 2023b] City of Mill Valley. 2023. Draft Subsequent EIR City of Mill Valley 2023-2031 General Plan Housing and Land Use Element Update and Zoning Amendments. Accessed July 25, 2023. https://www.cityofmillvalley.org/DocumentCenter/View/5735/City-of-Mill-Valley_Public-Review-DSEIR_sm?bidId=

TRANSPORTATION

[Caltrans 2019] California Department of Transportation. 2019. Highway Design Manual, Seventh Edition.

[City of Mill Valley 2017] City of Mill Valley. 2017. 2017 Bicycle & Pedestrian Plan. Accessed May 15, 2023. https://www.millvalleylibrary.org/783/Bicycle-and-Pedestrian-Transportation.

[City of Mill Valley 2013] City of Mill Valley. 2013. Mill Valley General Plan MV 2040. Adopted by the Mill Valley City Council October 7, 2013. https://www.cityofmillvalley.org/518/MV2040-General-Plan.

[ITE 2021] Institute of Transportation Engineers. 2021. Trip Generation Manual, 11th edition.

[Mill Valley City Council 2013] Mill Valley City Council. Complete Streets Policy of City of Mill Valley Resolution. Filed January 2013.

[Parisi 2023a] Parisi Transportation Consulting – A Division of Parametrix. 2023a. 1 Hamilton Drive Transportation Impact Assessment. Berkeley.

[Parisi 2023b] Parisi Transportation Consulting – A Division of Parametrix. 2023b. Technical Memorandum: Proposed Guardrail Extent along Roque Moraes Drive Above 1 Hamilton Project. Berkeley.

[Transportation Research Board 2000] Transportation Research Board. 2000. Highway Capacity Manual 2000.

UTILITIES AND SERVICE SYSTEMS

[City of Mill Valley 2023b] City of Mill Valley. 2023. Draft Subsequent EIR City of Mill Valley 2023-2031 General Plan Housing and Land Use Element Update and Zoning Amendments. Accessed July 25, 2023. https://www.cityofmillvalley.org/DocumentCenter/View/5735/City-of-Mill-Valley_Public-Review-DSEIR_sm?bidId=

[City of Mill Valley 2019] City of Mill Valley. 2019. Sewer System Management Plan. Accessed August 1, 2023. https://www.cityofmillvalley.org/DocumentCenter/View/989/Sewer-System-Management-Plan-PDF

[County of Marin 2023] County of Marin. 2023. MarinMap Map Viewer. Accessed August 1, 2023. https://www.marinmap.org/Html5Viewer/Index.html?viewer=smmdataviewer

[Dean, Granquist, & Thorne 2022] Dean, J., Granquist, N., & Thorne, M. 2022. State water board adopts new sanitary sewer systems waste discharge requirements. JD Supra, LLC. Accessed August 2, 2023. https://www.jdsupra.com/legalnews/state-water-board-adopts-new-sanitary-1723523/

[DWR 2019] Department of Water Resources. 2019 Sustainable Groundwater Management Act 2019 Basin Prioritization, State of California. Accessed October 16, 2023. https://water.ca.gov/programs/groundwater-management/basin-prioritization.

[Marin Water 2022] Marin Water. 2022. Water Watch. Accessed November 17, 2022. https://www.marinwater.org/waterwatch

[MVRS 2023] Mill Valley Refuse Service. 2023. Residential Hazardous Waste Service. Accessed August 1, 2023 at https://www.millvalleyrefuse.com/residential/residential-hazardous-waste/

[PG&E 2021] Pacific Gas & Electric. 2021. Local Capacity Area Substation List. Accessed August 2, 2023. https://www.pge.com/pge_global/common/pdfs/for-our-business-partners/energy-supply/standard-contracts-for-multiple-facilities-pursuant-to-ab-1613/lcr-substation-list.pdf

[SASM 2014] Sewerage Agency of Southern Marin. 2014. Wastewater Treatment Master Plan. Accessed August 2, 2023. https://www.millvalleylibrary.org/459/Master-Plan

[Waste Management 2023] Waste Management. 2023. Redwood Landfill – About Us. Accessed August 1, 2023. https://redwoodlandfill.wm.com/about-us/index.jsp

ALTERNATIVES

[The Housing Workshop 2021a] The Housing Workshop. 2021. Analysis of Tax-Exempt Sites for Affordable Housing Development. Memorandum.

[The Housing Workshop 2021b] The Housing Workshop. 2021. Financial Analysis of Example Affordable Housing Projects. Memorandum.

9.2 Report Preparers

9.2.1 Lead Agency

CITY OF MILL VALLEY

Patrick Kelly, Director of Planning and Building

Danielle Staude, Principal Planner

Steven Ross, Senior Planner

Inder Khalsa, Attorney

9.2.2 EAH Housing Team

EAH HOUSING

Bianca Neumann, Director of Business Development

VAN METER WILLIAMS POLLACK LLP

Rick Williams, Partner/Architect & Urban Designer

Giselle Alcazar, Architect

9.2.3 Consultant Team

WRA, INC.

Planning Team

Rob Carnachan, Senior Environmental Planner, Project Manager

Geoffrey Reilly, Senior Environmental Planner

Liv Niederer, Assistant Environmental Planner

Biology Team

Hope Kingma, Principal, Principal-in-Charge

Tommy Dryer, Biologist

Scott Batiuk, Biologist

Neal Jander, GIS Analyst

Carla Angulo, Arborist

BASELINE ENVIRONMENTAL CONSULTING (AIR QUALITY, GREENHOUSE GAS EMISSIONS, HYDROLOGY, NOISE)

Patrick Sutton, Principal Environmental Engineer

Yilian Tian, Environmental Engineer

PARISI TRANSPORTATION CONSULTING – A DIVISION OF PARAMETRIX (TRANSPORTATION)

David Parisi, Principal

Jimmy Jessup, Engineer III

FAR WESTERN ANTHROPOLOGICAL RESEARCH GROUP (CULTURAL AND TRIBAL CULTURAL RESOURCES)

Cassidy DeBaker, Principal

Montse Osterlye, Senior Archaeologist

Elliot Helmer