The Village at Corte Madera Expansion Project
Draft Environmental Impact Report
State Clearinghouse Number: 2016102061

Town of Corte Madera
300 Tamalpais Drive
Corte Madera, CA 94925

July 12, 2017
This page is intentionally left blank
## Table of Contents

1. Introduction and Summary 1-1
   1.1 California Environmental Quality Act ................................................................. 1-1
   1.2 Background ........................................................................................................... 1-1
       1.2.1 The Village at Corte Madera ................................................................. 1-1
       1.2.2 Gravel Lot ............................................................................................... 1-1
   1.3 Public Involvement and Scoping Process ............................................................. 1-1
   1.4 Areas of Controversy and Key Environmental Issues ......................................... 1-2
   1.5 Summary of Impacts and Mitigation Measures ..................................................... 1-3

2. Project Description 2-1
   2.1 Project Location .................................................................................................. 2-1
   2.2 Project Objectives ............................................................................................... 2-1
   2.3 Existing Conditions ............................................................................................. 2-1
       2.3.1 The Village at Corte Madera ................................................................. 2-1
       2.3.2 Gravel Lot ............................................................................................... 2-2
   2.4 Project Characteristics ....................................................................................... 2-2
       2.4.1 General Plan Amendment and Rezoning .............................................. 2-2
       2.4.2 Restoration Hardware Building ............................................................. 2-2
       2.4.3 Parking Lot Improvements ...................................................................... 2-4
       2.4.4 Gravel Lot Improvements ....................................................................... 2-4
       2.4.5 East Entry Plaza Improvements .............................................................. 2-5
       2.4.6 Utility Improvements and Services ............................................................ 2-5
   2.5 Construction ....................................................................................................... 2-6
       2.5.1 Grading and Excavation .......................................................................... 2-6
       2.5.2 Staging Areas ......................................................................................... 2-6
       2.5.3 Construction Schedule ............................................................................ 2-6
   2.6 Agency Approvals ............................................................................................... 2-7
       2.6.1 Town of Corte Madera ........................................................................... 2-7
       2.6.2 Other Agency Approvals .......................................................................... 2-8
       2.6.3 References .............................................................................................. 2-8

3. Environmental Analysis 3-1
   Scope of Analysis ....................................................................................................... 3-1
   Significance Determinations ....................................................................................... 3-2
   Cumulative Scenario .................................................................................................. 3-2
   Approach to Cumulative Impact Analysis .................................................................. 3-2
   3.1 Aesthetics and Visual Resources ................................................................. 3.1-1
       3.1.1 Setting ...................................................................................................... 3.1-1
       3.1.2 Regulatory Framework ............................................................................ 3.1-3
       3.1.3 Evaluation Criteria and Significance Thresholds .................................... 3.1-6
3.4 Cultural, Paleontological, and Tribal Cultural Resources ........................................................................................................... 3.4-1

3.4.1 Setting ............................................................................................................................. 3.4-1
3.4.2 Regulatory Framework ................................................................................................... 3.4-2
3.4.3 Evaluation Criteria and Significance Thresholds .......................................................... 3.4-6
3.4.4 Areas of No Impact ........................................................................................................ 3.4-7
3.4.5 Approach to Analysis .................................................................................................... 3.4-8
3.4.6 Impacts and Mitigation Measures .................................................................................. 3.4-9
3.4.7 References ..................................................................................................................... 3.4-12

3.5 Geology and Soils ............................................................................................................. 3.5-1

3.5.1 Setting ............................................................................................................................. 3.5-1
3.5.2 Regulatory Framework ................................................................................................... 3.5-4
3.5.3 Evaluation Criteria and Significance Thresholds .......................................................... 3.5-6
3.5.4 Areas of No Impact ........................................................................................................ 3.5-8
3.5.5 Approach to Analysis .................................................................................................... 3.5-8
3.5.6 Impacts and Mitigation Measures .................................................................................. 3.5-8
3.5.7 References ..................................................................................................................... 3.5-12

3.6 Greenhouse Gas Emissions ............................................................................................. 3.6-1

3.6.1 Setting ............................................................................................................................. 3.6-1
3.6.2 Regulatory Framework ................................................................................................... 3.6-2
3.6.3 Evaluation Criteria and Significance Thresholds .......................................................... 3.6-7
3.6.4 Approach to Analysis .................................................................................................... 3.6-7
3.6.5 Impacts and Mitigation Measures .................................................................................. 3.6-9
3.6.6 References ..................................................................................................................... 3.6-13

3.7 Hazards and Hazardous Materials .................................................................................. 3.7-1

3.7.1 Setting ............................................................................................................................. 3.7-1
3.7.2 Regulatory Framework ................................................................................................... 3.7-2
3.7.3 Evaluation Criteria and Significance Thresholds .......................................................... 3.7-5
3.7.4 Areas of No Impact ........................................................................................................ 3.7-7
### Table of Contents

- **3.7** Hydrology and Water Quality .......................................................................................... 3.8-1
  - 3.7.1 Setting .......................................................................................................................... 3.8-1
  - 3.7.2 Regulatory Framework ............................................................................................... 3.8-4
  - 3.7.3 Evaluation Criteria and Significance Thresholds ......................................................... 3.8-7
  - 3.7.4 Areas of No Impact ....................................................................................................... 3.8-8
  - 3.7.5 Approach to Analysis .................................................................................................... 3.8-9
  - 3.7.6 Impacts and Mitigation Measures .................................................................................. 3.8-9
  - 3.7.7 References .................................................................................................................... 3.8-10

- **3.8** Land Use and Planning ................................................................................................... 3.9-1
  - 3.8.1 Setting .......................................................................................................................... 3.9-1
  - 3.8.2 Regulatory Framework ............................................................................................... 3.9-2
  - 3.8.3 Evaluation Criteria and Significance Thresholds ......................................................... 3.9-5
  - 3.8.4 Areas of No Impact ....................................................................................................... 3.9-5
  - 3.8.5 Approach to Analysis .................................................................................................... 3.9-6
  - 3.8.6 Impacts and Mitigation Measures .................................................................................. 3.9-6
  - 3.8.7 References .................................................................................................................... 3.9-8

- **3.9** Noise .................................................................................................................................. 3.10-1
  - 3.9.1 Setting .......................................................................................................................... 3.10-1
  - 3.9.2 Regulatory Framework ............................................................................................... 3.10-4
  - 3.9.3 Evaluation Criteria and Significance Thresholds ......................................................... 3.10-6
  - 3.9.4 Areas of No Impact ....................................................................................................... 3.10-8
  - 3.9.5 Approach to Analysis .................................................................................................... 3.10-8
  - 3.9.6 Impacts and Mitigation Measures .................................................................................. 3.10-9
  - 3.9.7 References .................................................................................................................... 3.10-13

- **3.10** Public Services and Recreation ...................................................................................... 3.11-1
  - 3.10.1 Setting .......................................................................................................................... 3.11-1
  - 3.10.2 Regulatory Framework ............................................................................................... 3.11-2
  - 3.10.3 Evaluation Criteria and Significance Thresholds ......................................................... 3.11-4
  - 3.10.4 Areas of No Impact ....................................................................................................... 3.11-7
  - 3.10.5 Approach to Analysis .................................................................................................... 3.11-8
  - 3.10.6 Impacts and Mitigation Measures .................................................................................. 3.11-9
  - 3.10.7 References .................................................................................................................... 3.11-8

- **3.11** Transportation and Traffic ............................................................................................ 3.12-1
  - 3.11.1 Setting .......................................................................................................................... 3.12-1
  - 3.11.2 Regulatory Framework ............................................................................................... 3.12-6
  - 3.11.3 Evaluation Criteria and Significance Thresholds ......................................................... 3.12-8
  - 3.11.4 Areas of No Impact ....................................................................................................... 3.12-9
  - 3.11.5 Approach to Analysis .................................................................................................... 3.12-9
  - 3.11.6 Impacts and Mitigation Measures .................................................................................. 3.12-12
  - 3.11.7 References .................................................................................................................... 3.12-23

- **3.12** Utilities and Service Systems ......................................................................................... 3.13-1
  - 3.12.1 Setting .......................................................................................................................... 3.13-1
  - 3.12.3 Evaluation Criteria and Significance Thresholds ......................................................... 3.13-4
  - 3.12.4 Areas of No Impact ....................................................................................................... 3.13-5
  - 3.12.5 Impacts and Mitigation Measures .................................................................................. 3.13-6
  - 3.12.6 References .................................................................................................................... 3.13-10
4. Alternatives Description and Analysis 4-1
   4.1 Introduction ............................................................................................................. 4-1
   4.1.1 Alternative 1 - No Project Alternative ............................................................. 4-1
   4.1.2 Alternative 2 - Structured Parking ................................................................. 4-3
   4.2 Alternatives Considered but not Carried Forward in this EIR ............................... 4-13
      4.2.1 Alternative Location ..................................................................................... 4-14
      4.2.2 Restore Gravel Lot to Marsh/Wetlands ....................................................... 4-14
      4.2.3 Place Restoration Hardware Building on Gravel Lot ................................... 4-14
      4.2.4 Structured Parking with Ground-level Retail ............................................... 4-14
      4.2.5 Mixed-Use (Affordable and Senior Housing) ............................................... 4-15

5. Other CEQA-required Sections 5-1
   5.1 Effects Found not to be Significant ...................................................................... 5-1
      5.1.1 Agriculture and Forest Resources ................................................................. 5-1
      5.1.2 Mineral Resources ........................................................................................ 5-1
      5.1.3 Population and Housing ................................................................................ 5-1
   5.2 Energy Resources ................................................................................................... 5-2
   5.3 Significant Unavoidable Effects ........................................................................... 5-3
   5.4 Significant Irreversible Environmental Changes ................................................... 5-3
   5.5 Growth-inducing Impacts of the Project .............................................................. 5-4
   5.6 Environmentally Superior Alternative ............................................................... 5-4

6. List of Preparers 6-1
   6.1 Town of Corte Madera .......................................................................................... 6-1
   6.2 GHD Inc. ............................................................................................................. 6-1
   6.3 Subconsultants .................................................................................................... 6-1
      6.3.1 Fehr & Peers (Traffic) .................................................................................. 6-1
      6.3.2 Paleontology .................................................................................................. 6-1
      6.3.3 Illingworth & Rodkin (Noise) ........................................................................ 6-1
      6.3.4 Visual Simulations ........................................................................................ 6-1
      6.3.5 Olofson Environmental (Biological Resources) ........................................... 6-1
      6.3.6 Sonoma State University Anthropological Studies Center .......................... 6-1

Table Index

Table 1-1 Key Environmental Issues to be Addressed in EIR ........................................ 1-3
Table 1-2 Impact and Mitigation Summary ...................................................................... 1-4
Table 3-1 Projects Considered for Cumulative Impacts .................................................. 3-3
Table 3.1-1 Evaluation Criteria and Significance Thresholds .......................................... 3.1-7
Table 3.1-2 Summary of Impacts – Aesthetics ................................................................ 3.1-9
Table 3.2-1 Ambient Air Quality Standards and Attainment Designations ...................... 3.2-4
Table 3.2-2 Ambient Air Quality Monitoring Summary .................................................. 3.2-5
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2-3</td>
<td>BAAQMD Recommended Thresholds of Significance</td>
</tr>
<tr>
<td>3.2-4</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.2-5</td>
<td>Summary of Impacts – Air Quality</td>
</tr>
<tr>
<td>3.3-1</td>
<td>Special-status Wildlife with Moderate or High Potential for Occurrence within or in Immediate Vicinity of Project Site</td>
</tr>
<tr>
<td>3.3-2</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.3-3</td>
<td>Summary of Impacts – Biological Resources</td>
</tr>
<tr>
<td>3.4-1</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.4-2</td>
<td>Summary of Impacts – Cultural Resources</td>
</tr>
<tr>
<td>3.5-1</td>
<td>Active Faults near Corte Madera</td>
</tr>
<tr>
<td>3.5-2</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.5-3</td>
<td>Summary of Impacts – Geology and Soils</td>
</tr>
<tr>
<td>3.6-1</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.6-2</td>
<td>Summary of Impacts – Greenhouse Gas</td>
</tr>
<tr>
<td>3.6-3</td>
<td>Annual Project Greenhouse Gas Emissions</td>
</tr>
<tr>
<td>3.6-4</td>
<td>Annual Project Greenhouse Gas Emissions Mitigated</td>
</tr>
<tr>
<td>3.7-1</td>
<td>Federal Laws and Regulations Related to Hazardous Materials Management</td>
</tr>
<tr>
<td>3.7-2</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.7-3</td>
<td>Summary of Impacts – Hazards and Hazardous Materials</td>
</tr>
<tr>
<td>3.8-1</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.8-2</td>
<td>Summary of Impacts – Hydrology and Water Quality</td>
</tr>
<tr>
<td>3.9-1</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.9-2</td>
<td>Summary of Impacts – Land Use and Planning</td>
</tr>
<tr>
<td>3.10-1</td>
<td>Definition of Acoustical Terms</td>
</tr>
<tr>
<td>3.10-2</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.10-3</td>
<td>Summary of Impacts – Noise</td>
</tr>
<tr>
<td>3.10-4</td>
<td>Peak Construction Noise Levels (dBA, Leq)</td>
</tr>
<tr>
<td>3.11-1</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.11-2</td>
<td>Summary of Impacts – Public Services and Recreation</td>
</tr>
<tr>
<td>3.12-1</td>
<td>Existing Intersection LOS and Delay</td>
</tr>
<tr>
<td>3.12-2</td>
<td>Existing Freeway Segment LOS and Delay</td>
</tr>
<tr>
<td>3.12-3</td>
<td>Transit Service Summary</td>
</tr>
<tr>
<td>3.12-4</td>
<td>Evaluation Criteria and Significance Thresholds</td>
</tr>
<tr>
<td>3.12-5</td>
<td>Signalized Intersection Level of Service Criteria</td>
</tr>
<tr>
<td>3.12-6</td>
<td>Unsignalized Intersection Level of Service Criteria</td>
</tr>
<tr>
<td>3.12-7</td>
<td>Driveway Count and Trip Generation</td>
</tr>
</tbody>
</table>
Table of Contents

Table 3.12-8 Freeway Segment Level of Service Criteria ................................................. 3.12-12
Table 3.12-9 Summary of Impacts – Transportation and Traffic .......................................... 3.12-12
Table 3.12-10 Existing Plus Project Intersection LOS and Delay ........................................ 3.12-14
Table 3.12-11 Cumulative Plus Project Freeway Segment LOS and Delay ...................... 3.12-21
Table 3.12-12 Cumulative Plus Project Intersection LOS and Delay ................................ 3.12-23
Table 3.13-1 Evaluation Criteria and Significance Thresholds ............................................ 3.13-4
Table 3.13-2 Summary of Impacts – Utilities ................................................................. 3.13-6
Table 3.13-3 Landfill Capacity Summary ............................................................................. 3.13-9
Table 4-1 Alternatives Analysis Matrix ............................................................................. 4-4

Figure Index

Figure 2-1 Project Location ................................................................................................. 2-9
Figure 2-2 Site Plan ............................................................................................................. 2-11
Figure 2-3 Building Site Plan ............................................................................................. 2-13
Figure 2-4a Exterior Elevations ......................................................................................... 2-15
Figure 2-4b Exterior Elevations ......................................................................................... 2-17
Figure 2-5 Gravel Lot Improvements ............................................................................... 2-19
Figure 2-6 Construction Staging Areas ............................................................................. 2-21
Figure 3-1 Cumulative Projects Location ........................................................................... 3-5
Figure 3.1-1 Visual Simulation Vantage points ................................................................. 3.1-15
Figure 3.1-2a Viewpoint 1 (Existing) ............................................................................... 3.1-17
Figure 3.1-2b Viewpoint 1 (Proposed Building) ................................................................. 3.1-19
Figure 3.1-3a Viewpoint 2 (Existing Gravel Lot) ............................................................... 3.1-21
Figure 3.1-3b Viewpoint 2 (Proposed Gravel Lot Improvements) ...................................... 3.1-23
Figure 3.1-4a Viewpoint 3 (Existing Gravel Lot) ............................................................... 3.1-25
Figure 3.1-4b Viewpoint 3 (Proposed Building and Gravel Lot Improvements) ................... 3.1-27
Figure 3.3-1 Biological Communities of Gravel Lot Parcel ............................................. 3.3-33
Figure 3.12-1 Study Area and Intersections ..................................................................... 3.12-25
Figure 3.12-2 Trip Distribution ......................................................................................... 3.12-27
Appendix Index

Appendix A – Notice of Preparation and Scoping Letters
Appendix B – Project Plans
Appendix C1 – Biological Resources Assessment
Appendix C2 – Review of BRA for Proposed Development at The Village at Corte Madera
Appendix D1 – Geotechnical Report - The Village
Appendix D2 – Geotechnical Report – Gravel Lot
Appendix E – CalEEMod
Appendix F – Noise and Vibrational Analysis
Appendix G – Transportation Impact Study
This page is intentionally left blank
1. Introduction and Summary

The Town of Corte Madera has received an application from Corte Madera Village, LLC and Restoration Hardware, as co-applicants, for the “2016 Restoration Hardware Expansion” (Project) located in the Town of Corte Madera, Marin County. The California Environmental Quality Act (CEQA) requires that discretionary decisions by public agencies be subject to environmental review. The Project is subject to the provisions of the CEQA because it will result in a physical change in the environment and involves the issuance of discretionary approvals, permits, and entitlements. The Town of Corte Madera will serve as the lead agency for CEQA compliance because it is the public agency which has the principal responsibility for approving the Project.

1.1 California Environmental Quality Act

The Town of Corte Madera has prepared this Draft Environmental Impact Report (EIR) for the Project to satisfy the requirements of CEQA. This Draft EIR is an informational document to be considered by each applicable public agency prior to its approval or disapproval of the Project. The purpose of the Draft EIR is to provide public agencies and the public in general with detailed information about the effects which the proposed Project may have on the environment; to list ways in which the significant effects of the Project might be minimized; and to indicate alternatives to the Project. Environmental effects of the Project that must be addressed include the significant effects of the Project, growth-inducing effects of the Project, and significant cumulative effects of past, present, and reasonably anticipated future projects.

1.2 Background

1.2.1 The Village at Corte Madera

In January 1984 the Planning Commission and the Town Council approved a Preliminary Plan and Precise Plan to allow construction of The Village Shopping Center (The Village). The Preliminary Plan allowed up to 434,000 square feet of retail and office development at what is now the shopping center. Over the years improvements and expansions have occurred at The Village typical of similar regional shopping centers. In 2012 the Preliminary Plan was amended to expand the Nordstrom and Macy’s stores. The expansion at Macy’s was not constructed; the Nordstrom expansion was completed in 2014. The Village comprises three parcels: the parcel on which Nordstrom is located; the parcel on which Macy’s is located; and the middle parcel that comprises the remainder of The Village.

1.2.2 Gravel Lot

In 1995 the Town acquired title to the gravel lot. The purpose of the acquisition was for public parking. The gravel lot was subsequently improved to include public vehicular parking, landscaping, drainage facilities, and ancillary features. The Shoreline Parking Facility Maintenance District was created in 1996 to fund maintenance of the lot and includes the three parcels that currently comprise The Village.

1.3 Public Involvement and Scoping Process

In October 2014 through January 2015, Restoration Hardware (RH) and Corte Madera Village LLC (CMV) met with various Town of Corte Madera staff to discuss the Project’s initial concept design. On
February 9, 2015, RH and CMV also provided a presentation of the Project at the Corte Madera Community Foundation and received community input. Following these initial meetings, RH and CMV submitted applications to the Town on June 19, 2015 and soon after held several progress meetings with Town staff to receive input on these preliminary applications. Based on the Town’s input, RH and CMV updated and resubmitted the applications on August 21, 2015. After submitting the revised applications, RH and CMV presented the Project to the Flood Control Board meeting on September 14, 2015; the Beautification Committee on September 23, 2015; and the Chamber of Commerce on October 6, 2015. On October 22, 2015, RH and CMV held an open house event for the community at the existing Restoration Hardware Store at The Village to present the Project and receive public input.

Based on comments received from the community and Town staff, RH and CMV again revised and resubmitted the Project applications on December 20, 2016. The primary changes included in the resubmittal were a reduction in the size of the proposed building by approximately 7,000 square feet, a reduction in height by 6 feet, the addition of a café, and changes in the design elements to complement the surrounding views. It is the December 20, 2016, Project applications that are the subject of this EIR. Please refer to the Chapter 2, Project Description, for a detailed description of the proposed Project.

On October 25, 2016, the Town of Corte Madera sent a Notice of Preparation (NOP) of an EIR to Responsible Agencies, Trustee Agencies, the Office of Planning and Research, and neighboring property owners. A copy of the NOP was posted on the Town’s website and is included in Appendix A of this Draft EIR.

The NOP solicited guidance from public agencies and the public in general as to the scope and content of the environmental information to be included in the EIR. A 37-day EIR scoping period began October 25, 2016 and ended November 30, 2016. A public scoping meeting was held on November 17, 2016 at the Town Hall Council Chambers, 300 Tamalpais Drive, Corte Madera. Five people signed into the meeting, several of whom spoke on the Project. Nineteen comment letters were received during the scoping period. These letters, as well as two additional letters received outside the scoping period, are included in Appendix A of this Draft EIR.

### 1.4 Areas of Controversy and Key Environmental Issues

The public scoping process identified a number of key environmental issues to be addressed in the EIR. These issues are listed in Table 1-1, Key Issues to be Addressed in EIR, which provides references to the chapter and sections of the Draft EIR in which each issue is addressed.
<table>
<thead>
<tr>
<th>Issue</th>
<th>Chapter / Section of EIR where Issue is Evaluated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential impacts to aesthetics</td>
<td>3.1 Aesthetics</td>
</tr>
<tr>
<td>Potential impacts from gravel lot improvements</td>
<td></td>
</tr>
<tr>
<td>Potential impacts to, and mitigation for, wetlands</td>
<td>3.3 Biological Resources</td>
</tr>
<tr>
<td>Potential impacts from lighting at gravel lot on wildlife</td>
<td></td>
</tr>
<tr>
<td>Potential impacts to transition zone at gravel lot</td>
<td></td>
</tr>
<tr>
<td>Potential impacts to wildlife</td>
<td></td>
</tr>
<tr>
<td>Potential impacts from paving gravel lot</td>
<td></td>
</tr>
<tr>
<td>Potential impacts to tribal cultural resources</td>
<td>3.4 Cultural, Paleo, &amp; Tribal Resources</td>
</tr>
<tr>
<td>Potential impacts to greenhouse gas emissions</td>
<td>3.6 Greenhouse Gas Emissions</td>
</tr>
<tr>
<td>Potential impacts to water quality in Shorebird Marsh from gravel lot</td>
<td>3.8 Hydrology and Water Quality</td>
</tr>
<tr>
<td>Impacts from paving the gravel lot</td>
<td></td>
</tr>
<tr>
<td>Potential impacts from noise pollution</td>
<td>3.10 Noise</td>
</tr>
<tr>
<td>Potential impacts to pedestrian safety</td>
<td></td>
</tr>
<tr>
<td>Potential impacts from vehicle miles traveled</td>
<td>3.12 Transportation</td>
</tr>
<tr>
<td>Potential impacts from turning movement conflicts</td>
<td></td>
</tr>
<tr>
<td>Alternatives to consider</td>
<td>4 Alternatives</td>
</tr>
</tbody>
</table>

### 1.5 Summary of Impacts and Mitigation Measures

Table 1-2, Impact and Mitigation Summary, identifies, by environmental topic, the Project impacts and proposed mitigation measures. Impact significance is shown in the table below as follows:

- No Impact (NI)
- Less-than-Significant Impact (LS)
- Less-than-Significant Impact after Mitigation Incorporated (LSM)
- Significant and Unavoidable Impact with No Feasible Mitigation Available (SU)
- Significant and Unavoidable Impact after Mitigation Incorporated (SUM)

Additional information about the impacts and mitigation measures can be found in Chapter 3, Sections 3.1 through 3.13, of this Draft EIR.
### Table 1-2 Impact and Mitigation Summary

<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Impact Significance</th>
<th>Proposed Mitigation Measure(s)</th>
<th>Impact after Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aesthetics and Visual Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AES-1: Would the project have a substantial adverse effect on a scenic vista?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>AES-2: Would the project substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>AES-3: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td>Significant</td>
<td>AES-1 Reduce Nighttime Lighting</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>C-AES-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to visual resources?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Air Quality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>AQ-2: Would the project violate an air quality standard or contribute substantially to an existing or projected air quality violation, or 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td>Significant</td>
<td>AQ-2 Implement BAAQMD Basic Construction Measures</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Impact Significance</td>
<td>Proposed Mitigation Measure(s)</td>
<td>Impact after Mitigation</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>C-AQ-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to air quality?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Biological Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| BIO-1: 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 Wildlife or U.S. Fish and Wildlife Service? | Significant         | BIO-1a: Protect Salt Marsh Harvest Mouse  
BIO-1b: Protect Nesting Raptors and Migratory Birds  
AES-1: Reduce Nighttime Lighting  
HWQ-1: Manage Stormwater during Construction  
HWQ-2: Manage Construction Dewatering Discharges  
HWQ-3: Implement Post-construction Stormwater Requirements | Less than Significant |
<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Impact Significance</th>
<th>Proposed Mitigation Measure(s)</th>
<th>Impact after Mitigation</th>
</tr>
</thead>
</table>
| **BIO-2:** Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | Significant        | BIO-1a: Protect Salt Marsh Harvest Mouse  
AQ-2: Implement BAAQMD Basic Construction Measures  
HWQ-1: Manage Stormwater during Construction  
HWQ-2: Manage Construction Dewatering Discharges  
HWQ-3: Implement Post-construction Stormwater Requirements | Less than Significant |
| **BIO-3:** Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | Significant        | AQ-2: Implement BAAQMD Basic Construction Measures  
HWQ-1: Manage Stormwater during Construction  
HWQ-2: Manage Construction Dewatering Discharges  
HWQ-3: Implement Post-construction Stormwater Requirements | Less than Significant |
<p>| <strong>BIO-4:</strong> 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? | Significant        | BIO-1b: Protect Nesting Raptors and Migratory Birds | Less than Significant |</p>
<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Impact Significance</th>
<th>Proposed Mitigation Measure(s)</th>
<th>Impact after Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td>Significant</td>
<td>BIO-5a: Comply with General Plan Policies regarding Non-native Species</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>C-BIO-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to biological resources?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Cultural, Paleontological, and Tribal Cultural Resources

| CR-1: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | Significant | CR-1: Minimize Impacts to Unknown Archaeological Resources | Less than Significant |
| CR-3: Would the project cause a substantial adverse change in the significance of a tribal cultural resource? | Significant | CR-3: Minimize Impacts to Unknown Tribal Cultural Resources | Less than Significant |
| C-CR-1: Would the project result in a cumulatively considerable contribution to a cumulative impact? | Less than Significant | No mitigation is needed | N/A |

### Geology and Soils

<p>| GEO-1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving strong seismic ground shaking? | Significant | GEO-1: Reduce Geologic Hazards through Design and Construction Measures | Less than Significant |
| GEO-2: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving seismic-related ground failure, including liquefaction? | Significant | GEO-1: Reduce Geologic Hazards through Design and Construction Measures | Less than Significant |</p>
<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Impact Significance</th>
<th>Proposed Mitigation Measure(s)</th>
<th>Impact after Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO-3: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving landslides?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>GEO-4: Would the project result in substantial soil erosion or the loss of topsoil?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>GEO-5: Would the project 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?</td>
<td>Significant</td>
<td>GEO-1: Reduce Geologic Hazards through Design and Construction Measures</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>GEO-6: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>C-GEO-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to geology and soils?</td>
<td>No Impact</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Greenhouse Gas Emissions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>Significant</td>
<td>GHG-1 Reduce Greenhouse Gas Emissions</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>GHG-2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>C-GHG-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to greenhouse gas emissions?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Impact Significance</td>
<td>Proposed Mitigation Measure(s)</td>
<td>Impact after Mitigation</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td><strong>Hazards and Hazardous Materials</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAZ-1: Would the project create a</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>significant hazard to the public or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>environment through the routine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transport, use or disposal of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hazardous materials, or through</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reasonably foreseeable upset and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>accident conditions involving the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>release of hazardous materials into</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the environment?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C-HAZ-1: Would the project result in</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>a cumulatively considerable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>contribution to a significant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cumulative impact related to hazards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or hazardous materials?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hydrology and Water Quality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HWQ-1: Would the project violate any</td>
<td>Significant</td>
<td>HWQ-1: Manage Stormwater during Construction</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>water quality standards or waste</td>
<td></td>
<td>HWQ-2: Manage Construction Dewatering Discharges</td>
<td></td>
</tr>
<tr>
<td>discharge requirements, or alter the</td>
<td></td>
<td>HWQ-3: Implement Post-construction Stormwater Requirements</td>
<td></td>
</tr>
<tr>
<td>existing drainage patterns, rate, or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>amount of surface runoff in a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>manner which would result in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>substantial erosion or siltation,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>flooding, or exceedance of the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>capacity of stormwater drainage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>systems?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HWQ-2: Would the project substantially</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>deplete groundwater supplies or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interfere substantially with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>groundwater recharge?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HWQ-3: Would the project provide</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>additional sources of polluted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>runoff, or otherwise substantially</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>degrade water quality?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Impact Significance</td>
<td>Proposed Mitigation Measure(s)</td>
<td>Impact after Mitigation</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------</td>
<td>--------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>HWQ-4: Would the project expose people or structures to a significant risk involving flooding, or place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
<td>Significant</td>
<td>HWQ-4: Provisions for Flood Hazard Reduction</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>HWQ-5: Would the project expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>HWQ-6: Would the project expose people or structures to flooding as a result of the failure of a levee or dam?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>C-HWQ-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to hydrology and water quality?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Land Use and Planning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LU-1: Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>C-LU-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to land use?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Noise</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOI-1: Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>Significant</td>
<td>NO-1 Comply with Corte Madera General Plan Policies</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Impact Significance</td>
<td>Proposed Mitigation Measure(s)</td>
<td>Impact after Mitigation</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>-------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>NOI-2: Would the project result in exposure of persons to or generation of excessive groundborne vibration or noise levels?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>NOI-3: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>NOI-4: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the Project?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>C-NOI-1: Would the project plus cumulative projects result in a cumulatively considerable contribution to cumulative impacts related to noise?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Public Services and Recreation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSR-1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for the following public services: fire protection, police protection, schools, parks, and/or other public facilities?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Impact Significance</td>
<td>Proposed Mitigation Measure(s)</td>
<td>Impact after Mitigation</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>PSR-2: 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, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>C-PSR-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to public services and recreational resources?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Transportation and Traffic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR-1: Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the vehicular circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>TR-2: Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Impact Significance</td>
<td>Proposed Mitigation Measure(s)</td>
<td>Impact after Mitigation</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>TR-3: Would the project substantially increase hazards due to a design feature</td>
<td>Significant</td>
<td>TR-3a: Reduce Traffic Hazards during Construction</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>(e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm</td>
<td></td>
<td>TR-3b: Redirect Bay Trail Users during Construction</td>
<td></td>
</tr>
<tr>
<td>equipment)?</td>
<td></td>
<td>TR-3c: Manage Parking during Construction</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TR-3d: Improve Pedestrian Safety</td>
<td></td>
</tr>
<tr>
<td>TR-4: Would the project result in inadequate emergency access?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>TR-5: Would the project conflict with adopted policies, plans, or programs regarding</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>public transit, bicycle, or pedestrian facilities, or otherwise decrease the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>performance or safety of such facilities?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C-TR-1: Would the project result in a cumulatively considerable contribution to a</td>
<td>Significant</td>
<td>C-TR-1: Fair Share Contribution to Intersection Improvements</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>significant cumulative impact related to transportation?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Utilities and Service Systems</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UT-1: Would the project exceed wastewater treatment requirements of the applicable</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>Regional Water Quality Control Board?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UT-2: Would the project have sufficient water supplies available to serve the</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>project from existing entitlements and resources or are new or expanded entitlements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>needed?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Impact Significance</td>
<td>Proposed Mitigation Measure(s)</td>
<td>Impact after Mitigation</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>--------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>UT-3: 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?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>UT-4: Would the project be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
<tr>
<td>C-UT-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to utilities?</td>
<td>Less than Significant</td>
<td>No mitigation is needed</td>
<td>N/A</td>
</tr>
</tbody>
</table>
2. **Project Description**

2.1 **Project Location**

The Village at Corte Madera Expansion Project (Project) is located within, and adjacent to, the existing Village at Corte Madera (The Village) regional shopping center. The Village is located at 1618 Redwood Highway, in the Town of Corte Madera, Marin County (refer to Figure 2-1 Project Location). The Village is bounded by Redwood Highway to the north, east, and south, and Highway 101 to the west. Project improvements would occur within The Village, owned by Corte Madera Village, LLC, and at a gravel lot located across Redwood Highway and owned by the Town of Corte Madera (refer to Figure 2-2 Site Plan). As used in this EIR, the “Project site” refers to the area within The Village to be disturbed by Project construction, as well as the gravel lot across Redwood Highway.

Nearby land uses and features include U.S. 101, Town Center Corte Madera, and commercial and office uses to the west; Redwood Highway and marshlands to the north and east; and commercial and office uses to the south. San Francisco Bay lies east of the Project site. The San Francisco Bay Trail runs along Redwood Highway to the east of the Project site and at the frontage of the gravel lot.

2.2 **Project Objectives**

The following are the Project objectives:

- Expand The Village by 46,000 square feet, consistent with the Town of Corte Madera General Plan 2009, with a commercial space inclusive of a cafe and roof-top scenery loft.
- Improve the gravel parking lot across Redwood Highway by paving, landscaping, and lighting the area using low-impact development elements to promote a more convenient and safe use that is consistent with the existing uses of the gravel lot.
- Build a retail space large enough to operate as a design gallery, rather than a regular retail store.
- Promote the community's economic development and enhance the Town's tax base by supporting the continued evolution and relevance of The Village to provide a first-class shopping and dining experience.
- Allow the Town to retain ownership of the gravel lot, while eliminating costs associated with liability, maintenance, security, and potential required future improvements.

2.3 **Existing Conditions**

2.3.1 **The Village at Corte Madera**

The Village is an open-air shopping center with approximately 2,000 square feet of space devoted to shopping center management offices and 473,217 square feet devoted to retail uses, including restaurants and coffee shops. Existing retail establishments include Restoration Hardware, Nordstrom, Macy's, Williams-Sonoma, Apple Store, and other retail uses. The existing Restoration Hardware Store currently occupies approximately 8,815 square feet within The Village. There are 1,773 parking spaces in the existing lots within The Village.
2.3.2  Gravel Lot

In 1996 the Town obtained title to the 5.14-acre parcel that includes the gravel lot. The portion of the gravel lot that is improved for informal parking encompasses 3.81 acres. An agreement between the Town and the owners of The Village indicates the site had been and would continue to be “used for parking purposes.” Since 1996, the gravel lot has been used for overflow parking for customers of The Village, staging for nearby construction projects, and periodic community events such as Avon Walk for Breast Cancer, Ragnar Relay, Centennial Fireworks, Circus Vargas, and Marin General Hospital Gala. During the holiday season (generally from late November through December) the gravel parking lot is marked with travel lanes and is often fully occupied, accommodating up to 445 vehicles.

Currently, the gravel lot is improved with 10 handicapped parking spaces, with the remainder of the lot providing informal, unstriped parking. The Bay Trail and landscaping improvements are located along the Redwood Highway frontage. Multiple drain inlets spaced throughout the gravel lot connect to a piped storm drain system that discharges to the waters immediately surrounding the site via two outfalls, one on the west side and one on the east side of the parcel. During November and December three generator lights are used to provide safety lighting for holiday shoppers. The generators are on from sunset to 10:00 or 11:00 pm, depending on store closing times. One of the three generator lights is owned by The Village and parked on the gravel lot year-round but is typically used only in November and December. A pedestrian crosswalk across Redwood Highway connects the gravel lot with The Village parking lot.

2.4  Project Characteristics

The Project includes a general plan amendment and rezoning of the gravel lot parcel, a lot-line adjustment between Nordstrom’s lot and center lot, construction and operation of an approximately 46,000 square-foot Restoration Hardware building, and improvements to the existing parking lot, the gravel lot, the east entry plaza, and utilities (refer to Figure 2-2).

2.4.1  General Plan Amendment and Rezoning

The General Plan land use designation for The Village, including the proposed location of the new building, is Mixed-Use Region-Serving Commercial. The General Plan land use designation for the gravel lot is Wetlands and Marshlands. The Applicant has submitted an application to amend the General Plan to change the designation of the gravel lot to the same designation as the shopping center: Mixed-Use Region-Serving Commercial.

The Village is currently zoned as Regional Shopping (C-2) District, with a Baylands Risk Zone and Natural Habitat (BRNH) Overlay District. The gravel lot is currently zoned as Parks, Open Space and Natural Habitat (POS) District, with a BRNH Overlay District. The Applicant has submitted an application to the Town to rezone the underlying zoning district of the gravel lot from POS District to C-2 District. No change is proposed to the overlay district.

2.4.2  Restoration Hardware Building

The Applicant proposes to build a stand-alone Restoration Hardware building of approximately 46,000 square feet to be located on the east side of The Village in an area of existing parking (refer to Figure 2-3 Building Site Plan). The building would have two levels plus an open-air roof-top courtyard
surrounding an enclosed scenery loft (refer to Figures 2-4a and 2-4b Exterior Elevations). The building footprint would be approximately 25,000 square feet at ground level. The ground level would include approximately 5,800 square feet of cafe space that would seat up to 150 patrons. The second floor would be approximately 17,000 square feet. The roof-top level would be approximately 4,000 square feet, of which the scenery loft, enclosed by glass and steel, would comprise approximately 3,100 square feet. The massing of the building is "stepped" in that each level is smaller than the level below. This can be seen in Figures 2-4a and 2-4b. An elevator and staircase would serve all three levels.

The top of the elevator tower and roof ridge of the scenery loft, would be 46 feet from finished grade. The courtyard outside the scenery loft would have an exterior parapet wall. The top of the parapet of the second floor would be 33 feet and 9 inches from finished grade. For comparison, the highest peak of the roof of the adjacent existing Village building is 34 feet above finished graded and the highest peak at Nordstrom building is 46 feet above finished grade.

Because the site is within the 100-year flood plain as defined by FEMA, flood-proofing elements following FEMA standards, would be incorporated into the building. The base of the building would have upturned concrete walls poured in conjunction with the concrete foundation. The upturned walls would extend to an elevation equal to or greater than the FEMA base flood elevation of one foot above existing grade, as required by the Town’s Municipal Code (CMC Chapter 16.10). The cement plaster finish proposed for the building’s exterior would be applied to this concrete wall, matching the color and texture of the framed walls above. As a result, the wall’s “waterproofing assembly” would not be readily apparent. The protection method for the doors and windows at the ground level would utilize an aluminum barrier system. Jamb-mounted C channels would be integrated into the building permanently allowing aluminum panels, and any secondary support bollards for wider openings, to be installed prior to a potential flood.

Because of the underlying bay mud, and depth to bedrock which varies from 75 to 95 feet, the building would require a deep foundation system, floating foundation, or other specialized design determined to be appropriate for the site conditions. During final design the Applicant would coordinate with the Town to design a foundation acceptable to the Town Engineer.

After the new building is occupied, Restoration Hardware would vacate the space it currently occupies at The Village. The space would then be leased to a different retail tenant, who is anticipated to conduct retail operations in a similar manner to those now conducted by Restoration Hardware.

**Operation of the Building**

The Restoration Hardware store would operate during the same hours as The Village, with the cafe closing within one hour after the store closes. The building, landscaping, and parking lot would be maintained as needed.

Annual energy use of the building is anticipated to include approximately 940 MWh of electricity and 4,800 therms of natural gas. This is based on energy use of existing similar-sized Restoration Hardware facilities. In the event of a power outage, the building will require a back-up generator. A small amount of diesel would be used each month for testing the emergency back-up generator.

Water use, including irrigation, is anticipated to be 5.5 million gallons per year; wastewater generation is estimated to be 3.4 million gallons per year.
Eleven new flow-through planters, encompassing approximately 3,395 square feet, would collect stormwater and convey it to the existing storm drain system at The Village (refer to Appendix B Project Plans, Sheets C2 and C5, for additional detail). The retail store and cafe would employ approximately 118 employees. There would be up to 95 employees per day normally, and 100 employees per day during the holiday season.

### 2.4.3 Parking Lot Improvements

Improvements would be made to portions of the existing parking lot at The Village as shown on Figure 2-2 Site Plan. Improvements include reconfiguration and restriping of existing narrow compact parking spaces with uniform 8.5-foot spaces and installation of associated curb islands and small landscaped areas. Two of the four cut-through aisles located midway down the two main entries off Redwood Highway would be removed and replaced with new parking spaces. Construction of the new building and the parking lot improvements would result in a net decrease of 166 parking spaces in the existing parking lot.

Drought tolerant landscape improvements would be installed, including approximately 21 24-inch box trees. Bicycle parking would be provided near the new building within the landscape islands.

### 2.4.4 Gravel Lot Improvements

As part of the Project, the Applicant would enter into a development agreement with the Town of Corte Madera whereby the Town and Applicant would establish the rights and obligations for use of the gravel lot for parking for The Village including improvements and maintenance. The Town would record a nonexclusive public parking easement on the parcel. Community events, similar to those described above under section 2.3 Existing Conditions would continue to be allowed. Of the 5.14-acre lot, 3.81 acres is currently disturbed, and 3.29 acres of that would be improved.

The gravel lot would be paved and striped to accommodate up to 455 parking spaces. Drought tolerant landscaping, including approximately 56 trees, would be installed in planters. Approximately 34 lighting poles, 20 feet tall, would be installed. The lighting would be energy-efficient and shielded, conforming to “dark sky” requirements. Refer to Figure 2-5 Gravel Lot Improvements, for additional detail.

All stormwater would be captured on site and treated, prior to discharge to the existing storm drain system. Approximately 3,400 square feet of bioretention rain gardens and 2,300 square feet of flow-through planter would be installed to collect and treat stormwater runoff. The bioretention features would tie in to the existing storm drain system beneath Redwood Highway and adjacent to the gravel lot. After leaving the bioretention features and entering the existing storm drain, stormwater would drain to adjacent waters through the existing outfall structures, with no changes to the outfall configuration.

The Bay Trail runs between Redwood Highway and the gravel lot for approximately 580 feet. In two locations the Bay Trail crosses the entrances to the gravel lot. Although no changes are proposed to the main Bay Trail, the entrances to the gravel lot would be reconstructed. Therefore users of the Bay Trail, where it crosses the entrances, would need to be re-routed during construction.
Optional Fence

This EIR evaluates a Project option that includes a chain link fence between the gravel lot and the marsh. If installed, the fence would be four feet tall, vinyl-coated either black or green, and include two access gates for use by the Town. The fence would be constructed three feet back from the new curb, allowing for two feet of vehicle overhang. The majority of the fence would be constructed within the existing footprint of the gravel lot, as the gravel lot improvements have a slightly smaller footprint than the existing disturbed area. The exception is on the east side of the lot where the distance between the curb and the limits of the existing gravel surface decreases to two feet in some areas. On the east side, therefore, the fence would be installed one foot beyond the existing gravel. Although some vegetation could be disturbed during installation of the fence, no clearing of vegetation would occur.

2.4.5 East Entry Plaza Improvements

Improvements would be made at the existing east entry plaza, located northeast of the existing Gap store. Existing landscape and hardscape would be removed and replaced with new paving and other hardscape, drought tolerant landscaping and trees, lighting, and amenities that could include a water fountain, and street furniture to transition between the exterior common areas of the shopping center and the new building. The plaza comprises approximately 8,000 square feet.

2.4.6 Utility Improvements and Services

Water Service

Water service is provided to The Village by Marin Municipal Water District (MMWD). Water service would be connected to the new building for potable use, fire sprinklers, and irrigation and extended to the gravel lot for irrigation and a new fire hydrant. Water service to the building would connect to an existing 12-inch water line that runs along the east side of The Village, beneath the mall ring road. The existing water line is about 50 feet from the proposed building site. Water service at the gravel lot would connect to an existing water line immediately south of the gravel lot beneath Redwood Highway.

Sanitary Sewer

Sanitary sewer service is provided to The Village by Corte Madera Sanitary District No. 2. An existing sanitary sewer line runs along the west side of The Village adjacent to the buildings. To extend service to the new building, a new sewer line would run from the west side, through the center of The Village, to the new building on the east side. The length of this line would be approximately 570 feet.

Electrical, Natural Gas, and Telecommunications Services

Electrical and natural gas service is provided to The Village by Pacific Gas & Electric. Telecommunications service is provided by AT&T. Connections to the new building would be made from existing electrical vault and gas and telecom lines located on the northwestern portion of The Village property between Nordstrom and the Cheesecake Factory. Utilities would be extended to the new building within a single trench approximately 500 feet long. The electrical line would extend an additional 100 feet to a new transformer to be installed in the parking lot adjacent to the new building. Electrical service would be extended to the gravel lot from an existing vault at the northwest side of Nordstrom, with a length of about 490 feet.
2.5 Construction

2.5.1 Grading and Excavation

A level building pad would be created for the new building. Export of up to 2,000 cubic yards of material, and import of up to 3,000 cubic yards of material would occur for the building. To the extent possible, excavated dirt would be reused on site which would reduce the need for off hauling.

Improvements to the existing parking lot would remove up to 200 cubic yards of pavement and hardscape. This material would either be pulverized and reused on site as base material or exported.

Construction at the gravel lot would remove the existing gravel and compact the soil. If feasible, excavated gravel would be used for the base at that gravel lot or the building pad, otherwise up to 2,500 cubic yards of material would be exported for recycling. Site grading would be limited to that necessary to direct drainage to treatment facilities. No import of material would be required.

Improvements at the east entry plaza would remove up to 250 cubic yards of pavement and hardscape. This material would either be pulverized and reused on site as base material or exported.

Utility trenches would be excavated to bring services to the new building and the gravel lot. The trenches would vary from two to five feet wide and five to ten feet deep. Excavated dirt would be returned to the trenches to cover the utilities.

Approximately 62 trees would be removed to accommodate the new building, existing parking lot improvements, and east entry plaza improvements. Due to their size, these trees are exempt from the permit requirements of the Town’s Municipal Code (CMC Chapter 15.50 Trees). No trees would be removed at the gravel lot.

Construction waste, such as the asphalt removed for the building pad, would be recycled to the extent feasible. Dewatering may be required during excavation, and, if so, would be pumped to the storm drain.

2.5.2 Staging Areas

Staging would occur in two places: within the existing parking lot to the east of the new building, and on a portion of the gravel lot (see Figure 2-6 Construction Staging Areas). The staging areas would be used for contractor parking and supply and equipment storage. To access the staging area east of the proposed new building, two temporary access points would be created for construction vehicles to move directly from Redwood Highway to the staging area. After construction, the temporary access points would be restored to pre-project conditions, including curb and gutter, soil grade, landscaping, irrigation, and signage.

2.5.3 Construction Schedule

There are two construction schedule scenarios analyzed in this EIR, one that is 11.5 months and one that is 22 months. The shorter schedule would include two months for site preparation for the Restoration Hardware building, followed by 9.5 months of concurrent construction of the new building, utilities, gravel lot improvements, east entry plaza improvements, and existing parking lot improvements. The longer construction schedule would include four months for gravel lot improvements, followed by four months of site preparation at The Village. This would be followed by 10
to 14 months of construction of the building, east entry plaza improvements, and existing parking lot improvements. Therefore, construction could occur for as little as 11.5 months or up to 22 months. Construction is expected to begin in Spring 2018.

2.6 Agency Approvals

2.6.1 Town of Corte Madera

The Project will require the following approvals and permits from the Town of Corte Madera:

General Plan Amendment: change land use designation of gravel lot from Wetlands and Marshlands to Mixed-Use Region-Serving Commercial.

Rezoning: change zoning of gravel lot from Parks, Open Space and Natural Habitat to C-2 Regional Shopping (with BRNH Overlay District remaining in place).

Zoning Code Amendment: allow parking spaces at improved gravel lot to be used to meet The Village’s parking requirements.

Preliminary Plan Amendment: for retail expansion and improvements to the gravel lot.

Precise Plan: for retail expansion and improvements to the gravel lot.

Design Review: for retail expansion and improvements to the gravel lot.

Conditional Use Permit: for a cafe within the C-2 Regional Shopping District zone.

Development Agreement: to improve and maintain the gravel lot and establish rights and obligations to use the lot as parking for The Village.

Lot Line Adjustment: adjust lot line between Nordstrom and Village parcels to maintain required setbacks for new building.

Sign Permit: for retail expansion.

Stormwater Permit: review for compliance with Provision E.12 of the State Water Resources Control Board under the Phase II National Pollutant Discharge Elimination System Municipal Stormwater Permit.

Floodplain Development Permit: for placement of a structure within a Special Flood Hazard Area as defined by FEMA.

Grading and Drainage Permit: for removal and placement of soil and rock at the Project site.

Erosion and Sediment Control Permit: for earthwork during the rainy season (October 15th through April 15th).

Sanitary Sewer Permit: to provide sanitary sewer service to the building.

Encroachment Permit: for improvements within the public right-of-way for sidewalk and driveway improvements related to the gravel lot and temporary access points to the staging area from Redwood Highway.

Building Permit: for the Restoration Hardware building.
2.6.2 Other Agency Approvals

The following lists potentially applicable permits, consultations, and approvals needed for the Project. This EIR is intended to apply to all Project approvals necessary or desirable to implement the Project.

Marin Municipal Water District: to provide water service to the building.

Bay Area Air Quality Management District: Authority to Construct and Permit to Operate for an emergency stand-by generator.

2.6.3 References


Corte Madera Village and Restoration Hardware. 2016. Application Submittals: Major Design Review; Development Review; Environmental Assessment Checklist; Amendment to General Plan; Preliminary Plan; Precise Plan; Amendment to Zoning Ordinance. December.

LEGEND

☆ Project Location
This page is intentionally left blank
This page is intentionally left blank
Source: Elevations provided by Kimley Horn, April 2017

West Elevation

North Elevation

Figure 2-4a

Exterior Elevations

Village at Corte Madera Expansion
Draft EIR

Job Number 11110674
Revision Date May 2017
This page is intentionally left blank
This page is intentionally left blank
3. **Environmental Analysis**

This Draft EIR analyzes the potential effects of the proposed Project on the environmental under the applicable environmental resource topics listed in the CEQA Guidelines Appendix G Initial Study Checklist. Three resource topics (agricultural & forest resources, housing & population, and mineral resources) have been identified as not applying to the Project, and are further discussed in Chapter 5 Other CEQA Required Sections, under “Effects Found not to be Significant.”

**Scope of Analysis**

Each environmental resource area potentially impacted by the Project is addressed in its own section, numbered as follows:

- 3.1 Aesthetics and Visual Resources
- 3.2 Air Quality
- 3.3 Biological Resources
- 3.4 Cultural, Paleontological, and Tribal Cultural Resources
- 3.5 Geology and Soils
- 3.6 Greenhouse Gas Emissions
- 3.7 Hazards and Hazardous Materials
- 3.8 Hydrology and Water Quality
- 3.9 Land Use and Planning
- 3.10 Noise
- 3.11 Public Services and Recreation
- 3.12 Transportation and Traffic
- 3.13 Utilities and Service Systems

Each section of Chapter 3 contains the following elements:

**Setting.** This subsection presents a description of the existing physical environmental conditions in the project area with respect to each resource area at an appropriate level of detail to understand the impact analysis. It describes existing conditions and provides a baseline by which to compare the potential impacts of the project.

**Regulatory Framework.** This subsection provides a brief discussion of federal, State, and local regulations and policies that are relevant to the resource.

**Significance Thresholds.** This subsection provides the significance thresholds for evaluation of environmental impacts.

**Approach to Analysis.** This subsection discusses the approach to the analysis, technical reports prepared, modelling that may have been used, and other pertinent information that supports the analysis.

**Impacts and Mitigation Measures.** This subsection evaluates the potential for the project to significantly affect the physical environment described in the setting. Potential impacts are identified and
characterized, and where feasible, mitigation measures are identified to avoid or reduce significant impacts to a less-than-significant level.

**Cumulative Impacts and Mitigation Measures.** Cumulative impacts are discussed in each environmental resource section following the description of the project-level impacts and mitigation measures. The cumulative impact analysis is based on the same setting, regulatory framework, and significance thresholds presented in each resource topic section. Additional mitigation measures are identified if the analysis determines that the project’s contribution to an adverse cumulative impact would be cumulatively considerable and, therefore, significant.

**Significance Determinations**

The significance thresholds for each environmental resource topic are presented in each section of Chapter 3. For the impact analyses, the following categories are used to identify impact significance:

**No Impact.** This determination is made if a resource is absent or if a resource exists within the project area, but there is no potential that the project could affect the resource.

**Less-than-Significant Impact.** This determination applies if there is a potential for some limited impact on a resource, but the impact is not significant under the significance threshold.

**Less-than-Significant Impact after Mitigation Incorporated.** This determination applies if there is the potential for a substantial adverse impact in accordance with the significance threshold, but mitigation is available to reduce the impact to a less-than-significant level.

**Significant and Unavoidable Impact with no Feasible Mitigation Available.** This determination applies to impacts that are significant, and there appears to be no feasible mitigation available to reduce the impact to a less-than-significant level.

**Significant and Unavoidable Impact after Mitigation Incorporated.** This determination applies to impacts that are significant, and mitigation has been incorporated, but the mitigation does not reduce the impact to less than significant and there appears to be no additional feasible mitigation available to reduce the impact to a less-than-significant level.

**Cumulative Scenario**

CEQA requires the discussion of cumulative impacts. Cumulative impacts are defined as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15355). Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time.

The cumulative impact analysis for each environmental resource topic is described in the appropriate subsections of this Chapter, following the description of Project impacts and mitigation measures. Also is he geographic area considered for each environmental resource topic is defined in the cumulative impact analysis in each subsection of this Chapter.

**Approach to Cumulative Impact Analysis**

Two approaches to cumulative impact analysis are discussed in CEQA Guidelines Section 15130(b). The first approach utilizes a list of past, present, and probable future projects producing related or cumulative impacts. The second approach utilizes a summary of projections contained in an adopted
local, regional or state-wide plan, such as a general plan or related planning document, or in an adopted or certified environmental document, which describes or evaluates conditions contributing to cumulative effects.

For this EIR, the cumulative project scenario has been identified using both the summary of projections approach, specifically using the Town of Corte Madera General Plan 2009, and the list approach.

The following is a list of past, present, and probable future projects that may produce related or cumulative impacts, including their anticipated construction schedules.

Figure 3-1, Location of Projects Considered in the Cumulative Analysis, shows the location of the cumulative projects.

### Table 3-1 Projects Considered for Cumulative Impacts

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Address</th>
<th>Description</th>
<th>Anticipated Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Village at Corte Madera – Center Court Improvements</td>
<td>1618 Redwood Highway</td>
<td>Remove existing clock tower structure Add kiosks to central court area</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unknown, Could overlap with Project</td>
</tr>
<tr>
<td>2. Corte Madera Inn</td>
<td>56 Madera Boulevard</td>
<td>GPA, Rezoning, Design Review demolition of existing hotel (110-room) and construction of new hotel (187-room)</td>
<td>Unknown, could overlap with Project</td>
</tr>
<tr>
<td>3. Budget Inn</td>
<td>706 Meadowseet Drive</td>
<td>Exterior remodel, garage conversion, parking, landscaping</td>
<td>Unknown, could overlap with Project</td>
</tr>
<tr>
<td>4. Office/ Retail Building</td>
<td>200 Nellen Avenue</td>
<td>New two-story office/retail building to replace existing used car dealership</td>
<td>Unknown, could overlap with Project</td>
</tr>
<tr>
<td>5. Marin Montessori School</td>
<td>5200 Paradise Drive</td>
<td>GPA, Rezoning, Conditional Use Permit Amendment, Design Review demolition of existing classroom, construction of new classroom buildings</td>
<td>Unknown, could overlap with Project</td>
</tr>
<tr>
<td>Project Name</td>
<td>Address</td>
<td>Description</td>
<td>Anticipated Construction</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>6. Marin Country Day School</td>
<td>5221 Paradise Drive</td>
<td>GPA, Rezoning, Conditional Use Permit Amendment, Design Review creek restoration, two new classroom buildings, performing arts center modifications and modifications to the existing parking lot</td>
<td>Unknown, could overlap with Project</td>
</tr>
<tr>
<td>7. Townhome Development</td>
<td>1421 and 1425 Casa Buena Drive</td>
<td>16-unit development and associated infrastructure</td>
<td>Unknown, could overlap with Project</td>
</tr>
<tr>
<td>8. Nugget Market</td>
<td>5627 Paradise Drive</td>
<td>Exterior remodel, outdoor seating, roof</td>
<td>Unknown, could overlap with Project</td>
</tr>
<tr>
<td>9. Redwood Highway Pathway (Bay Trail) Repaving</td>
<td>San Clemente to Wornum Drive</td>
<td>Repave, realign, and widen existing trail, install shoulder, replace header board, add signage/ striping, remove/prune trees,</td>
<td>Summer/ Fall 2017</td>
</tr>
</tbody>
</table>

Note: The Project is expected to be under construction during 2018, 2019, and 2020.
LEGEND

- Project Location
1. Village at Corte Madera Center Court Improvements
2. Corte Madera Inn
3. Budget Inn
4. Office/Retail Building
5. Marin Montessori School
6. Marin Country Day School
7. Townhome Development
8. Nugget Market
9. Redwood Highway Pathway Repaving

Figure 3-1
Location of Cumulative Projects

Village at Corte Madera Expansion
Draft EIR

Location of Cumulative Projects

GHD

2235 Mercury Way Suite 150 Santa Rosa California 95407 USA  T 1 707 523 1010  F 1 707 527 6679  W www.ghd.com

May 2017

N 11110674

SR Fulton Road Widening 04-Technical Work 1 - Environmental Figures InDesign
Cumulative Projects Locations.indd  May 2, 2017 10:50 AM

G:\11110674\SR Fulton Road Widening\04-Technical Work\1 - Environmental\Figures\InDesign\Cumulative Projects Locations.indd  May 2, 2017 10:50 AM
3.1 Aesthetics and Visual Resources

This section provides a description of the existing visual character in the Project area and evaluates changes that would result from implementation of the proposed Project.

The following subject is related to aesthetics, but is evaluated in another section of this EIR:

- Issues related to zoning, such as height restrictions, are discussed in Section 3.09, Land Use and Planning.

3.1.1 Setting

Concepts and Terminology

Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public’s experience and appreciation of the environment. Depending on the extent to which a project’s presence would alter the visual character and quality of the environment, a visual or aesthetic impact may occur. Familiarity with the following terms and concepts will aid the reader in understanding the content of this chapter.

Visual character, visual quality, and visual sensitivity are terms used throughout the analysis, and are defined below.

Visual Character

Visual character is a general description of the visual attributes of a particular land use setting and the unique set of landscape features. The purpose of defining the visual character of an area is to provide the context within which the visual quality of a particular site or locale is most likely to be perceived by the viewing public. For urban areas, visual character is typically described on the neighborhood level or in terms of areas with common land use, intensity of development, socioeconomic conditions, and/or landscaping and urban design features. For natural and open space settings, visual character is most commonly described in terms of areas with common landscape attributes (e.g., landform, vegetation, water features).

Visual Quality

Visual quality is defined as the overall visual impression or attractiveness of a site or locale as determined by its aesthetic qualities (such as color, variety, vividness, coherence, uniqueness, harmony, and pattern). Natural and built features combine to form perspectives with varying degrees of visual quality, which is rated in this analysis as low, moderate, and high, as follows:

Low: The location is lacking in natural or cultural visual resource amenities typical of the region. A site with low visual quality will have aesthetic elements that are relatively unappealing and perceptibly uncharacteristic of the surrounding area.

Moderate: The location is typical or characteristic of the region’s natural or cultural visual amenities. A site with moderate visual quality maintains the visual character of the surrounding area, with aesthetic elements that do not stand out as either contributing to or detracting from the visual character of an area.
**High:** The location has visual resources that are unique or exemplary of the region’s natural or cultural scenic amenities. A site with high visual quality is likely to stand out as particularly appealing and makes a notable positive contribution to the visual character of an area.

**Visual Sensitivity**

Visual sensitivity is the overall measure of a site’s susceptibility to adverse visual changes. Visual sensitivity is rated as high, moderate, or low and is determined based on the combined factors of visual quality, viewer types and volumes, and visual exposure. For example, significant adverse impacts are typically unlikely in a setting with low visual sensitivity.

**Affected Viewers and Exposure Conditions**

Affected viewers and exposure conditions address the variables that affect viewers and their visual exposure. The identification of viewer types and volumes describes the type and quantity of potentially affected viewers within the area. Land uses that derive value from the quality of their settings are considered potentially sensitive to changes in visual conditions. Sensitive viewers are those who have a strong stake or interest in the quality of the landscape and have a greater level of concern towards changes that degrade or detract from the visual character of an area. Examples of viewers with elevated concern for visual quality include recreationists, pedestrians, and tourists.

**Regional Visual Character**

As stated within the Town’s General Plan, scenic resources are among the Town’s important community assets. Scenic viewsheds include the open ridge tops of Mt. Tamalpais and the bayside wetlands of the San Francisco Bay that surround and encompass the Town. Town character is a blend of contrasts, from rolling hillsides to open waterways and marshlands of the adjoining San Francisco Bay (Corte Madera 2009).

**Local Visual Character and Visual Sensitivity**

The Project site is located within, and adjacent to, The Village. Surrounding land uses include Shorebird Marsh (a managed stormwater retention basin) to the north; the Golden Gate Bridge, Highway and Transportation District (GGBHTD) parcel, the Corte Madera Marsh Ecological Reserve, and San Francisco Bay to the east; and commercial and office uses to the south and west. Highway 101 runs along the west side of The Village.

The visual character of the Project site and surrounding vicinity generally consists of a mix of articulated commercial storefronts, paved and landscaped parking lots, landscaped roadways, open water and marshlands, and a vegetated levee parallel to a section of Redwood Highway. Vertical elements of the Project site and surrounding vicinity include traffic signals, streetlights, roadway signs, vehicle and pedestrian circulation, landscaping trees of various heights, parking lot light poles, and existing Village stores.

The Village open-air shopping center is located on total of 31.70 acres. More than 12 acres of the site are devoted to paved parking and interior roadways. Existing Village buildings occupy 473,217 square feet of the Project site, and are aggregated on the west side of the area. The buildings are largely arranged in an angled pattern with second stories set back or ‘stepped’, resulting in reduced building
massing with the bulk of the buildings behind sloped roofs or other architecturally-interesting façade treatments. The development pattern at The Village has visual interest and multiple focal points.

The highest peak at The Village is 34 feet above finished grade, except for the Nordstrom building which extends to 46 feet above finished grade. The Village buildings employ multiple materials and colors in neutral tones that are compatible with the Town’s visual character. The Village has moderate to high visual quality.

Potentially affected viewers include users of the Shorebird Marsh, Bay Trail and/or Redwood Highway. Exposure conditions include travel to or from the Project site, and use of the Bay Trail (in the Shorebird Marsh or along Redwood Highway). Motorists on Redwood Highway are not considered sensitive viewers. However, users and visitors of the Shorebird Marsh, trails around the GGBHTD parcel, and Bay Trail are sensitive viewers. Therefore, The Village has moderate to high visual sensitivity.

The gravel lot is located adjacent to The Village, the Shorebird Marsh, and the GGBHTD parcel. During November and December, and at other times as needed, three generator lights are used to provide safety lighting for holiday shoppers. The generators are on from sunset to 10:00 or 11:00 p.m., depending on store closing times. The visual character of the gravel lot consists of a flat, grey expanse largely devoid of substantive vertical elements; therefore, the site has low visual quality.

Potentially affected viewers of the existing gravel lot include visitors to the site, and users of the Bay Trail (in the Shorebird Marsh or along Redwood Highway), Highway 101, and Redwood Highway. The lot is surrounded on three sides by a coyote brush vegetation community which partially obstructs view of the site. Exposure conditions include travel to or from the Project site, and use of the Bay Trail. Motorists on Redwood Highway and Highway 101 are not considered sensitive viewers. However, users and visitors of the Shorebird Marsh, trails around the GGBHTD parcel, and Bay Trail are sensitive viewers. Therefore, the gravel lot has moderate to high visual sensitivity.

### 3.1.2 Regulatory Framework

#### Federal

There are no federal plans, policies, regulations, or laws related to aesthetic, scenic, or visual resources applicable to this Project.

#### State

**California Scenic Highway Program**

Sections 260 through 263 of the State Streets and Highways Code establish the California Scenic Highways Program and require local government agencies to take the following actions to protect the scenic appearance of any designated scenic corridors: regulate land use and density of development; provide detailed land and site planning; prohibit off-site outdoor advertising and control on-site outdoor advertising; pay careful attention to and control earthmoving and landscaping; and scrutinize the design and appearance of structures and equipment.

**Nighttime Sky – Title 24 Outdoor Lighting Standards**

The California legislature passed a bill in 2001 requiring the California Energy Commission (CEC) to adopt energy efficiency standards for outdoor lighting for both the public and private sectors. The CEC
adopted changes to Title 24, parts 1 and 6, Building Energy Efficiency Standards, which included changes to the requirements for outdoor lighting for residential and non-residential development. The standards regulate lighting characteristics such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off.

Regional and Local

Corte Madera Zoning Code

The Zoning Ordinance for Corte Madera is the primary tool for implementing the policies of the General Plan, and sets forth physical development standards and criteria for the Town.

Underlying Zoning District

The Village is zoned Regional Shopping (C-2) District. In the C-2 District, no structure shall exceed 35 feet in height. Exceptions to the height limit include towers, spires, cupolas, elevator penthouses, water tanks, monuments, scenery lofts, and necessary mechanical appurtenances covering not more than ten percent of the ground area covered by the structure and not 10 feet more than the height limit for the district.

The gravel lot is zoned as Parks, Open Space and Natural Habitat (POS) District. The POS District is used for all public facilities and public service installations used primarily for open space, for publicly or privately owned areas used for the preservation or restoration of a natural habitat, or for public parks, playgrounds and other types of public recreation facilities. According to Section 18.16.215, Wetland Buffers, for areas designated as wetlands and marshland in the General Plan, a buffer of at least 100 feet in width is required between any such areas and adjacent uses. (Corte Madera Zoning Ordinance 1994).

Overlay Zoning District

Both The Village and the gravel lot are also subject to the Baylands Risk Zone and Natural Habitat (BRNH) Overlay District. The BRNH Overlay District is one of several “Special Purpose Overlay Districts” in the zoning ordnance that are governed by a set of common regulations. The general provisions for Special Purpose Overlay Districts state that the purpose of the overlay zones is to “establish for certain areas of the town a level of planning and development policy that is consistent with the general plan, but is sufficiently flexible to allow deviations from the standards and regulations of the underlying specific zoning district to encourage a more creative approach to land development…” (CMC 18.18.005). These regulations provide that uses will be regulated by the underlying district and that development standards such as height and setback may be modified from the underlying district by setting standards in a Preliminary or Precise Plan. (Corte Madera Zoning Ordinance 1994).

Existing Preliminary Plan and Precise Plan

The Village is in the Baylands Risk Zone and Natural Habitat Overlay District which requires that development be regulated by Preliminary and Precise Plans approved subject to the standards and procedures of the Planned Development Overlay District ordinance.

The Town Council approved the original Preliminary Plan for The Village in 1981 (Resolution No 2021). Subsequent amendments were adopted in 1983 and 1984. In 2012 the Town Council approved the
most recent Preliminary Plan (Resolution No 3685) which included an expansion of Macy's and Nordstrom (Macy's never applied for a Precise Plan Amendment; the approval has expired).

The 2012 Preliminary Plan for The Village requires minimum lot sizes of 10,000 square feet, a maximum non-residential FAR\(^1\) of 0.47, and a maximum height limit of 46 feet above finished grade.

**Corte Madera Design Review Ordinance**

The Town of Corte Madera’s Design Review Ordinance is contained in Section 18.30 (Design Review) of the Town’s Zoning Code. The purpose of the Design Review ordinance includes preserving the natural beauty of the town's site and setting; to prevent the destruction of trees and natural vegetation and the excessive and unsightly grading of hillsides; and to preserve natural landforms and ridgelines.

**Corte Madera General Plan Goals and Policies**

The following are the goals, policies, and implementing programs from the *Town of Corte Madera General Plan 2009* that relate to visual resources and are applicable to the Project.

**Goal LU-4** Strong and vibrant commercial and office centers that serve local and regional needs.

Policy LU-4.5 Protect natural values of open space and habitat areas while promoting recreational and related uses that are compatible with resource protection.

*Implementation Program LU-4.5.a: Non-Residential Designs*

Require that non-residential projects be designed to convey a high level of quality and distinctive neighborhood character in accordance with the Community Design Element of the General Plan. Once adopted, require compliance with the Town’s Design Guidelines for nonresidential development.

**Goal CD-1** Community design that recognizes the environmental, aesthetic and social benefits of the natural scenic qualities of Corte Madera.

Policy CD-1.2 Require residential, non-residential and infrastructure design that respects natural areas and ecosystems within Corte Madera.

*Implementation Program CD-1.2.a: Natural Site Design*

Apply the following site planning and design provisions in the Design Guidelines:

- Discourage development that would have detrimental effects on ridgelines.
- Encourage hillside development to follow the natural slope of the landform.
- Require development in the vicinity of creeks, wetlands, or the Bay to respect the natural integrity of those areas.
- Encourage the use of building materials that incorporate natural visual elements of the project’s particular environment.

---

\(^1\) Floor area ratio (FAR) refers to the ratio of square footage of building area to the size of the site. Therefore, an FAR of 0.47 on a 1-acre site (43,560 square feet) would allow a building square footage of 20,473 square feet.
Policy CD-1.5  Preserve the value of the community’s night sky and avoid unnecessary light and glare from signage, building and landscape illumination, or other sources of outdoor lighting.

**Goal CD-4**  Innovative non-residential designs that incorporate appropriate size and scale of development.

Policy CD-4.2  Encourage non-residential development to utilize a unified or consistent design theme, particularly when involving multiple structures as part of one project. Thematic and stylistic diversity may be allowed when the overall project design achieves a harmonious effect.

Policy CD-4.3  New construction or remodeling actions at The Village and Town Center regional shopping centers shall be given special consideration to ensure exceptionally high quality design, to support mixed-use development proposals, and in providing flexibility to developers to meet particular market needs.

**Implementation Program CD-4.3.a: Shopping Center Design**

The Design Guidelines shall incorporate special site planning and architectural criteria for the shopping centers that allow flexibility in design approaches while ensuring an exceptionally high design quality, in accordance with the Town’s Green Building Guidelines, particularly in support of those projects providing mixed land uses.

Design proposals for The Village and Town Center shall recognize the unique site characteristics and qualities of each center, utilize architectural styles and approaches that provide consistency with overall established design themes at the malls. The Design Manuals required by the original approvals for the shopping centers shall be updated from time to time through the Design Review Permit approval process. Remodeling projects that are consistent with the approved Design Manuals and which are not visible from outside the respective shopping centers and which do not appreciably increase on-site parking demand may be allowed without Design Review applications.

Policy CD-4.4  Discourage the use of corporate architecture that is incompatible with the design character of the project site or area, or which is inconsistent with the Design Guidelines.

Policy CD-4.6  Control the extent of non-residential visual bulk in new construction.

Policy CD-4.8  Ensure that new non-residential construction conforms to the desired design character of the Town.

### 3.1.3 Evaluation Criteria and Significance Thresholds

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.1-1, Evaluation Criteria and Significance Thresholds, are used to determine if the Project would have a significant effect related to aesthetics and lighting.
Table 3.1-1 Evaluation Criteria and Significance Thresholds

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project have a substantial adverse effect on a scenic vista?</td>
<td>Major alteration of a view from a scenic vista or major obstruction in viewed area</td>
<td>CEQA Guidelines Appendix G, Checklist Item I (a)</td>
</tr>
<tr>
<td></td>
<td>towards a scenic vista</td>
<td></td>
</tr>
<tr>
<td>Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?</td>
<td>Affect a scenic resource within 200 feet of a roadway designated as scenic by Caltrans</td>
<td>CEQA Guidelines Appendix G, Checklist Item I (b)</td>
</tr>
<tr>
<td>Would the project substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>High visual contrast or change as defined in Section 3.1.5 (Approach to Analysis)</td>
<td>CEQA Guidelines Appendix G, Checklist Item I (c)</td>
</tr>
<tr>
<td>Would the project create a new source of substantial light or glare which would adversely affect day or night-time views in the area?</td>
<td>Non-compliance with the Town’s General Plan Policy CD-1.5</td>
<td>CEQA Guidelines Appendix G, Checklist Item I (d) General Plan Policies CD-1.5</td>
</tr>
</tbody>
</table>

3.1.4 Areas of No Impact

As explained below, the proposed Project would not result in impacts related to one of the aesthetics evaluation criteria listed in Table 3.1-1, Evaluation Criteria and Significance Thresholds. For the reasons presented below, the following evaluation criterion is not applicable to the Project or results in a finding of no impact:

Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

The California Scenic Highway Program includes a list of officially designated and eligible State Scenic Highways. According to the California Scenic Highway Mapping System, there are no officially designated State Scenic Highways in Marin County (Caltrans 2017). The Project would have no impact on scenic resources visible from a State Scenic Highway.

3.1.5 Approach to Analysis

The approach to evaluating the effect of the proposed Project under the CEQA significance criteria is discussed below:

Scenic Vistas

This evaluation is applicable to Project features that would be located on or disrupt access to a scenic vista, or result in significant visual changes within its viewshed. Scenic vistas are viewpoints that
provide expansive views of a highly valued landscape. Scenic vistas may be officially recognized or designated, or they may be informal in nature (e.g., mountain peaks, expansive views). The General Plan was reviewed to determine scenic vistas in the Project area.

**Visual Quality**

Visual quality or visual character impacts are assessed by estimating the amount of visual change introduced by a project's components, the degree to which visual changes may be visible to surrounding viewer groups, and the general sensitivity of viewer groups to landscape alterations. As such, visual changes are always considered in the context of a site or locale's visual sensitivity (as described in the setting). Visual changes are assessed from publicly-accessible or neighborhood viewpoints and measured by two factors:

**Visual Contrast** would be significant if it results in regraded landforms, alteration or elimination of ridgelines, and changes introduced by a project that result in landscape colors, textures, and scale of visual components that are inconsistent with the natural surroundings (changes to form, line, color, texture, and scale in the landscape);

**Degradation of Visual Quality** would be considered significant if a project severely alters or displaces specific scenic resources composed of striking landform features, aesthetic water bodies, mature stands of native/cultural trees (e.g., historic hedgerows), or historic structures.

These factors were used to evaluate the extent and scale of visual quality alterations relative to the Project improvements.

To aid in the analysis of visual impacts, simulations have been developed showing the existing condition and then the site with the proposed Project in place from publicly-accessible views. These simulations were produced from accurately scaled, three-dimensional computer models of the proposed improvements. Simulation photos were taken with a “normal” camera lens setting (roughly 50 mm or 40 degree horizontal angle of view) at about five feet in height to approximate the sense of scale that would be experienced by viewers in the field.

Figure 3.1-1, Visual Simulation Vantage Points, provides a viewpoint location map of photos taken at the Project site and Figures 3.1-2a through 3.1-4b provide photos and simulations of the Project site. Viewpoint 1 looks west towards the Project site from the trail adjacent to the GGBHTD parcel. Viewpoint 2 looks southeast towards the Project site from the Shorebird Marsh parking lot in the direction of the proposed gravel lot improvements. Viewpoint 3 looks south from the trail adjacent to the GGBHTD parcel towards the Project’s proposed gravel lot improvements.

As noted in Chapter 2 Project Description, Section 2.4.4, Gravel Lot Improvements, a Project option includes a chain link fence between the gravel lot and the marsh. If installed, the fence would be four feet tall, vinyl-coated either black or green, and include two access gates for use by the Town. The majority of the fence, if constructed, would be located within the existing footprint of the gravel lot, and it is not anticipated that clearing of vegetation would occur for fence installation. Because a vinyl-coated fence would partially screen the proposed gravel lot improvements, the visual simulations of the proposed gravel lot improvements do not include a fence.
Light and Glare

This evaluation is applicable to Project components that require substantial nighttime lighting or that would include highly reflective surfaces that would create a new source of substantial glare from the sun.

3.1.6 Impacts and Mitigation Measures

Table 3.1-2, Summary of Impacts – Aesthetics, provides a summary of potential impacts from the Project.

**Table 3.1-2 Summary of Impacts – Aesthetics**

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>AES-1: Would the project have a substantial adverse effect on a scenic vista?</td>
<td>LS</td>
</tr>
<tr>
<td>AES-2: Would the project substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>LS</td>
</tr>
<tr>
<td>AES-3: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td>LSM</td>
</tr>
<tr>
<td>C-AES-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to visual resources?</td>
<td>LS</td>
</tr>
</tbody>
</table>

Notes: LS = Less than Significant
       LSM = Less than Significant with Mitigation

**Impact AES-1: Would the project have a substantial adverse effect on a scenic vista?**

Analysis: *Less than Significant*

Although the General Plan does not designate specific scenic resources as ‘scenic vistas’, it does identify the open ridge tops of Mt. Tamalpais and the bayside wetlands of the San Francisco Bay as scenic viewsheds and part of the Town’s scenic resources. Therefore, scenic vistas in the Project area are identified as Mt. Tamalpais, the nearby Corte Madera Ridge (which tops Christmas Tree Hill), Shorebird Marsh and the GGBHTD parcel. Mt. Tamalpais is visible from the proposed Restoration Hardware building site when looking west through the center court of the mall. Mt. Tamalpais also is visible from the northern portion of Redwood Highway, the gravel lot, and the Bay Trail. Corte Madera Ridge is visible from Redwood Highway, the gravel lot, and the Bay Trail. Therefore, impacts related to views of Mt. Tamalpais and Corte Madera Ridge are evaluated in this section. Public views of Shorebird Marsh and GGBHTD parcel would not be blocked by the Project improvements.

Visual simulation Figures 3.1-2a and 3.1-2b are from Viewpoint 1. The Restoration Hardware building would block portions of Christmas Tree Hill from this viewpoint, as compared to the existing views. However, the proposed building would not block views of Mt. Tamalpais or Corte Madera Ridge.

Visual simulation Figures 3.1-4a and 3.1-4b are from Viewpoint 3. As shown in Figure 3.1-4b, the proposed Restoration Hardware building is partially visible above
the existing tree line. The Restoration Hardware building would not block the views of Mt. Tamalpais or Corte Madera Ridge from Viewpoint 3.

Visual simulations of the proposed gravel lot improvements from Viewpoints 2 and 3 are shown in Figure 3.1-3a through Figure 3.1-4b. The gravel lot improvements would consist mainly of paving an existing gravel lot, installation of 34 20-foot tall lighting poles, installation of landscaping, and installation of bioretention features. As shown in the figures, the gravel lot improvements would result in the addition of light poles to the views. The figures also show the addition of cars and other vehicles with the proposed gravel lot improvements; however, cars and other vehicles currently utilize the existing gravel lot. The gravel lot improvements would not obstruct the views of Mt. Tamalpais or Corte Madera Ridge.

Impacts to scenic vistas would be less than significant.

Mitigation: No mitigation is needed.

Impact AES-2: Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Analysis: Less than Significant

The proposed Restoration Hardware Building and associated improvements are located at and adjacent to existing commercial and paved parking; the visual environment is predominated by commercial buildings, paved ground, and landscaping. As identified in Section 3.1.1, Setting, The Village has moderate to high visual quality and moderate to high visual sensitivity.

The proposed gravel lot improvements are located adjacent to The Village, the Shorebird Marsh, and the GGBHTD parcel. As identified in Section 3.1.1, Setting, the gravel lot has low visual quality and moderate to high overall visual sensitivity.

Short-range views onto the proposed Restoration Hardware building site from the west (Highway 101) are limited because of existing Village buildings. The gravel lot is visible from Highway 101, but views of the lot are partially obscured by existing vegetation. Similarly, the gravel lot is visible from the north (e.g., Shorebird Marsh parking lot), but is partially obscured by existing vegetation. The Project site is most visible from the east, on Redwood Highway and the Bay Trail. From Redwood Highway, the views of the Project site are mostly unobstructed. Landscaping trees along both sides of Redwood Highway and within The Village parking lot provide occasional visual obstruction of the Project site.

Although portions of The Village are visible at a distance from the Golden Gate Ferry Larkspur Terminal and from the southeast, long-range views onto the Restoration Hardware site are largely obscured by distance, topography, and intervening buildings. The gravel lot is not visible from a distance from any direction.

Evaluation of each of the impact factors, as identified in Section 3.1.5, is provided below.
Visual Contrast

The Project would result in construction of a new Restoration Hardware building, improvements to the existing parking lot, improvements to the East Entry Plaza, and improvements to the existing gravel lot.

Improvements to the existing gravel lot include paving the lot, and installing 34 lighting poles and drought tolerant landscaping. As shown in Figures 3.1-3a through 3.1-4b, the gravel lot improvements visible from public viewing points consist of well-spaced light poles. Although the 20-foot tall light poles would extend above the existing vegetation, they do not result in a substantial change to the landscape texture or colors. The gravel lot improvements would not result in a substantial contrast with the visual character of the Project area.

The top of the elevator tower and roof ridge of the scenery loft, would be 46 feet from finished grade. The courtyard outside the scenery loft would have an exterior parapet wall. The top of the parapet of the second floor would be 33 feet and 9 inches from finished grade. For comparison, the highest peak of the roof of the adjacent existing Village building is 34 feet above finished graded and the highest peak at Nordstrom building is 46 feet above finished grade. The height of the Restoration Hardware would be similar to Nordstrom’s and in overall scale to existing Village buildings.

The massing of the new Restoration Hardware building is “stepped” in that each level is smaller than the level below. This can be seen in Project Description Figures 2-4a and 2-4b. The proposed building design includes a highly articulated exterior, with varying wall heights, pedestrian-scale windows, window treatments that provide visual breaks in the façade, and high-quality exterior light fixtures. Project design includes an open-air rooftop courtyard surrounding an enclosed scenery loft. As shown in Figure 3.1-2b, the rooftop garden vegetation would further soften and screen the top edge of the building and increase visual blending with the surrounding environment. In addition, landscape trees would provide vegetative screening of the buildings. The building would not be “box-like” or “corporate” in appearance. The building would provide multiple focal points from different vantage points, including from viewers within The Village and viewers from the Bay Trail.

The Project would modify existing focal points by adding landscaping and hardscape features to delineate pedestrian entrances and pathways, and add building entries and windows that focus and organize views into the property.

In addition, the Restoration Hardware building would use high quality materials, emphasizing highly durable and maintainable cement plaster in neutral tones, canvas drapes and swags in charcoal tones, and metal roofing that harmonize with existing Village buildings. The Restoration Hardware building maintains and enhances the existing pattern of transitions in height and setbacks from adjacent properties, thereby maintaining the existing design character of the rest of the shopping center and the surrounding area. The building is not visually intrusive to views from publicly accessible viewpoints.
The Project includes improvements to the East Entry Plaza. Existing landscape and hardscape would be removed and replaced with new paving and other hardscape, drought tolerant landscaping and trees, lighting, and amenities that could include a water fountain, and street furniture to transition between the exterior common areas of the shopping center to the new building. The East Entry Plaza improvements would not introduce adverse visual contrast.

Improvements to the existing paved parking lot would include reconfiguration and restriping of existing narrow compact parking spaces with uniform 8.5-foot spaces and installation of associated curb islands and small landscaped areas. Improvements would occur within the existing lot and would increase areas of landscaping that minimize visual impacts.

The Project would not result in a significant adverse visual contrast with the surrounding environment.

Degradation of Visual Quality

No trees would be removed at the gravel lot. Approximately 62 landscaping trees would be removed to accommodate the new building, existing parking lot improvements, and East Entry Plaza improvements. The landscaping trees to be removed include bottlebrush, Monterey pines, and pepper. Trees requiring consideration under the Town’s Municipal Code (CMC Chapter 15.50 Trees), and therefore subject to permit, include those with a single trunk circumference of at least 50 inches (or multi-stemmed trees having an aggregate circumference of 120 inches) measured 4.5 feet above grade. Due to their small size, the trees to be removed are exempt from the permit requirements of the Municipal Code (CMC Chapter 15.50 Trees).

Although some trees would be removed at the Project site, significant tree planting would occur as part of the Project. As described in Chapter 2, Project Description, approximately 21 24-inch box trees would be planted as part of the parking lot improvements, 56 trees would be planted within the gravel lot, and additional trees would be planted at the East Entry Plaza. Therefore, the Project would plant more than 77 trees within the Project site. The Project would not remove any mature stands of native or cultural trees. Furthermore, the Project would not remove any historic structures. Therefore, the Project would not result in a substantial degradation of visual quality in the Project area.

Conclusion

The Project would not result in a substantial visual contrast, or degradation of visual quality. Therefore, the Project would result in a less-than-significant impact.

Mitigation: No mitigation is needed.

Impact AES-3: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Analysis: Significant
The building would use plaster, canvas, and painted metal, which are not highly-reflective materials. The building would include glass windows, but would largely screen the windows with canvas drapes and swags, and vegetation. The building would not include large, uninterrupted expanses of window areas. Therefore, the Project would not result in significant glare that would affect daytime or nighttime views.

Approximately 34 lighting poles, 20 feet tall, would be installed as part of the gravel lot improvements. The lighting would be energy-efficient and shielded. Refer to Figure 2-5, Gravel Lot Improvements, for the location of the lighting poles. In addition, the building’s architectural details and gardens will be illuminated at night, with shielded lanterns on the exterior sides of the building and other low-level lighting that is not expected to create glare or light pollution impacts to off-site areas.

The Project is required to comply with General Plan policy CD-1.5, which requires preserving the value of the community’s night sky and avoiding unnecessary light and glare from signage, building and landscape illumination, or other sources of outdoor lighting.

However, the Town of Corte Madera does not have a nighttime lighting ordinance and specifications for night sky compliance are not identified by the Project applicant. Therefore, this could be a significant impact.

Mitigation: **Measure AES-1: Reduce Nighttime Lighting**

The Applicant shall ensure that:

- Skyward-casting lighting shall be prohibited for any new parking lot lighting.
- Over-lighting shall be prevented and full-cut off fixtures shall be used to minimize light pollution and trespass in the parking lots. Lighting within the gravel lot improvements area shall be directed and/or shielded away from Shorebird Marsh and other adjacent land uses (excepting for Redwood Highway).
- Lighting for exterior locations shall be designed primarily for public safety and shall not result in unnecessary glare beyond the project boundary.
- Whenever possible, lighting for pathways shall be low path lighting.
- Motion sensors shall be used where possible to lessen unnecessary lighting.
- Use of separate circuits shall be implemented where feasible to allow peripheral lighting to be turned off.

After Mitigation: *Less than Significant with Mitigation.*

Mitigation Measure AES-1 Would ensure the Project implements known measures that reduce or prevent unnecessary nighttime lighting, and spill of light onto adjacent properties.
Impact C-AES-1: Would the Project result in a cumulatively considerable contribution to cumulative impacts related to visual resources?

Analysis:  *Less than Significant*

The geographic scope for the analysis of cumulative impacts on visual resources consists of the Project site and the immediate vicinity around the site. Refer to Section 3, Environmental Analysis, Table 3-1, Projects Considered for Cumulative Analysis, and Figure 3.1-1, Location of Cumulative Projects, for a summary of the cumulative projects.

Only one of the cumulative projects listed in Table 3-1, the Corte Madera Inn Rebuild, would potentially have overlapping impacts with the Project, in that both projects would be visible from motorists on Highway 101. However, Highway 101 motorists are not considered sensitive viewers, and the Project would be only slightly visible from Highway 101. Therefore, the cumulative impact would be less than significant.

Mitigation:  No mitigation is needed.

### 3.1.7 References


This page is intentionally left blank
PHOTO NOTES: existing view was shot prior to removal of center clock tower. An existing parking lot light pole can be seen in the center of photo, rising above ridgeline.
Viewpoint 1 – from Trail Adjacent to Marsh
Viewpoint 2 – from Shorebird Marsh Parking Lot
This page is intentionally left blank
Viewpoint 2 – from Shorebird Marsh Parking Lot

Extent of Gravel Lot
Figure 3.1-4a
Village at Corte Madera Expansion
2235 Mercury Way Suite 150 Santa Rosa California 95407 USA
T 1 707 523 1010  F 1 707 527 8679  W www.ghd.com
Draft EIR

Viewpoint 3 – from Trail Adjacent to Marsh

Extent of Gravel Lot
This page is intentionally left blank
Viewpoint 3 – from Trail Adjacent to Marsh
3.2 Air Quality

This section evaluates potential environmental impacts related to air quality during construction and operation of the Project. The impacts and mitigation section establishes thresholds of significance, evaluates potential air quality impacts, and identifies the significance of these impacts.

The following subject is related to air quality, but is evaluated in another section of this EIR:

- Impacts to greenhouse gas emissions are addressed in Section 3.6, Greenhouse Gas Emissions.

3.2.1 Setting

San Francisco Bay Area Air Basin

The Project site is located in Marin County, which is within the San Francisco Bay Area Air Basin (Air Basin). Ambient concentrations of air pollutants in the Project area are a product of the quantity of pollutants emitted by local sources and the atmosphere’s ability to transport and dilute such emissions. Natural factors that affect air quality and pollutant transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight.

The Project site is located in the “Marin County Basins” subregion of the Air Basin. Marin County 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. Most of Marin’s population lives in the eastern part of the county, in small, sheltered valleys. These valleys act like a series of miniature air basins.

Although there are a few mountains above 1500 feet, most of the terrain is only 800 to 1000 feet high, which usually is not high enough to block the marine layer. Wind speeds are highest along the west coast of Marin, averaging about 8 to 10 miles per hour. The complex terrain in central Marin creates sufficient friction to slow the air flow. At Hamilton Air Force Base, in Novato, the annual average wind speeds are only 5 mph. 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. For example, San Rafael experiences average maximum summer temperatures in the low-80’s and average minimum winter temperatures in the low-40’s. Inland towns such as Kentfield experience average maximum temperatures that are two degrees cooler in the winter and two degrees warmer in the summer.

Air pollution potential is highest in eastern Marin County, where most of population is located in semi-sheltered valleys. In the southeast, the influence of marine air keeps pollution levels low. As development moves further north, there is greater potential for air pollution to build up because the valleys are more sheltered from the sea breeze. While Marin County does not have many polluting industries, the air quality on its eastern side — especially along the U.S. 101 corridor — may be affected by emissions from increasing motor vehicle use within and through the county. (BAAQMD 2017a)
Criteria Air Pollutants and Effect

The California Air Resources Board (ARB) and the U.S. Environmental Protection Agency (EPA) currently focus on the following air pollutants as indicators of ambient air quality: ozone, carbon monoxide (CO); nitrogen dioxide (NO₂), sulfur dioxide (SO₂); lead (pb), and particulate matter (PM). Because these are the most prevalent air pollutants known to be deleterious to human health and extensive health-effects criteria documents are available, they are commonly referred to as criteria air pollutants. The Project region is in attainment for lead and sulfur dioxide, and therefore, lead and sulfur dioxide are not further discussed.

**Ozone**

Ground-level ozone is the principal component of smog. Ozone is not directly emitted into the atmosphere, but instead forms through a photochemical reaction of reactive organic gases (ROG) and nitrogen oxides, which are known as ozone precursors. Ozone levels are highest from late spring through autumn when precursor emissions are high and meteorological conditions are warm and stagnant. Motor vehicles create the majority of ROG and nitrogen oxide emissions in the Marin County Basins sub-region. Exposure to levels of ozone above current State or federal standards can lead to human health effects such as lung inflammation and tissue damage and impaired lung functioning. Ozone exposure is also associated with symptoms such as coughing, chest tightness, shortness of breath, and the worsening of asthma symptoms (BAAQMD 2017a). The greatest risk for harmful health effects belongs to outdoor workers, athletes, children and others who spend greater amounts of time outdoors during periods of high ozone levels (during summer) or PM (during winter) levels (e.g., “Spare the Air” days).

**Carbon Monoxide (CO)**

CO is a non-reactive pollutant that is toxic, invisible, and odorless. It is formed by the incomplete combustion of fuels. The largest sources of CO emissions are motor vehicles, wood stoves, and fireplaces. Unlike ozone, CO is directly emitted to the atmosphere. The highest CO concentrations occur during the nighttime and early mornings in late fall and winter. CO levels are strongly influenced by meteorological factors such as wind speed and atmospheric stability. The health threat from elevated ambient levels of CO is most serious for those who suffer from heart disease, like angina, clogged arteries, or congestive heart failure. For a person with heart disease, a single exposure to CO at relatively low levels may cause chest pain and reduce that person’s ability to exercise; repeated exposures may contribute to other cardiovascular effects. High levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

**Nitrogen Dioxide (NO₂)**

Nitrogen dioxide is an essential ingredient in the formation of ground-level ozone pollution. NO₂ is one of the nitrogen oxides emitted from high-temperature combustion processes, such as those occurring in trucks, cars, and power plants. Home heaters and gas stoves also produce NO₂ in indoor settings. Besides causing adverse health effects, NO₂ is responsible for the visibility-reducing reddish-brown tinge seen in smoggy air in California. NO₂ is a reactive, oxidizing gas capable of damaging cells lining
the respiratory tract. Studies suggest that NO\textsubscript{2} exposure can increase the risk of acute and chronic respiratory disease.

**Suspended and Inhalable Particulate Matter**

Particulate matter is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust. Particles 10 microns or less in diameter are defined as “respirable particulate matter” or “PM\textsubscript{10}.” Fine particles are 2.5 microns or less in diameter (PM\textsubscript{2.5}) and, while also respirable, can contribute significantly to regional haze and reduction of visibility. Inhalable particulates come from smoke, dust, aerosols, and metallic oxides. Although particulates are found naturally in the air, most particulate matter found in the study area is emitted either directly or indirectly by motor vehicles, industry, construction, agricultural activities, and wind erosion of disturbed areas. Most PM\textsubscript{2.5} is comprised of combustion products such as smoke. Extended exposure to PM can increase the risk of chronic respiratory disease (BAAQMD 2017a). PM exposure is also associated with increased risk of premature deaths, especially in the elderly and people with pre-existing cardiopulmonary disease. In children, studies have shown associations between PM exposure and reduced lung function and increased respiratory symptoms and illnesses.

**Toxic Air Contaminants**

Toxic air contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer or serious illness) and include, but are not limited to, the criteria air pollutants listed above. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level. The identification, regulation and monitoring of TACs is relatively new compared to that for criteria air pollutants that have established ambient air quality standards. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an ambient air quality standard or emission-based threshold.

Diesel Particulate Matter (DPM), which is a component of diesel exhaust, is the predominant TAC in urban air with the potential to cause cancer. A 10-year research program (ARB 1998) demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. It is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). According to the ARB, diesel exhaust is a complex mixture of gases, vapors and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the ARB, and are listed as carcinogens either under the State's Proposition 65 or under the federal Hazardous Air Pollutants program.

TACs are measured for their increased cancer risk and non-cancer risk on sensitive receptors. Sensitive receptors are locations where an identifiable subset of the general population (children, asthmatics, the elderly, and the chronically ill) that is at greater risk than the general population to the
effects of air pollutants are likely to be exposed. These locations include residences, schools, playgrounds, childcare centers, retirement homes, hospitals, and medical clinics.

**Air Quality Standards and Existing Conditions**

Table 3.2-1, summarizes the California Ambient Air Quality Standards (CAAQS or State standards) and National Ambient Air Quality Standards (NAAQS or federal standards), and the attainment designations of the Air Basin. The Air Basin is currently designated as non-attainment for the State standards for 8-hour and 1-hour ozone, 24-hour and annual PM$_{10}$, and annual PM$_{2.5}$, as well as for the federal 8-hour ozone and 24-hour PM$_{2.5}$ standards.

**Table 3.2-1 Ambient Air Quality Standards and Attainment Designations**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>California Standards</th>
<th>California Attainment Designation</th>
<th>Federal Standards</th>
<th>Federal Attainment Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone</td>
<td>8-hour</td>
<td>0.070 ppm (137 µg/m$^3$)</td>
<td>Non-attainment</td>
<td>0.075 ppm (147 µg/m$^3$)</td>
<td>Non-attainment</td>
</tr>
<tr>
<td></td>
<td>1-hour</td>
<td>0.09 ppm (180 µg/m$^3$)</td>
<td>Non-attainment</td>
<td>None</td>
<td>—</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>1-hour</td>
<td>20 ppm (23 mg/m$^3$)</td>
<td>Attainment</td>
<td>35 ppm (40 mg/m$^3$)</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td>8-hour</td>
<td>9.0 ppm (10 mg/m$^3$)</td>
<td>Attainment</td>
<td>9 ppm (10 mg/m$^3$)</td>
<td>Attainment</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>1-hour</td>
<td>0.18 ppm (339 µg/m$^3$)</td>
<td>Attainment</td>
<td>0.100 ppm</td>
<td>Unclassified</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>0.030 ppm (57 µg/m$^3$)</td>
<td>—</td>
<td>0.053 ppm (100 µg/m$^3$)</td>
<td>Attainment</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>1-hour</td>
<td>0.25 ppm (655 µg/m$^3$)</td>
<td>Attainment</td>
<td>0.075 ppm (196 µg/m$^3$)</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td>24-hour</td>
<td>0.04 ppm (105 µg/m$^3$)</td>
<td>Attainment</td>
<td>0.14 ppm (365 µg/m$^3$)</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>None</td>
<td>—</td>
<td>0.030 ppm (80 µg/m$^3$)</td>
<td>Attainment</td>
</tr>
<tr>
<td>Respirable Particulate Matter (PM$_{10}$)</td>
<td>24-hour</td>
<td>50 µg/m$^3$</td>
<td>Non-attainment</td>
<td>150 µg/m$^3$</td>
<td>Unclassified</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>20 µg/m$^3$</td>
<td>Non-attainment</td>
<td>None</td>
<td>—</td>
</tr>
<tr>
<td>Fine Particulate Matter (PM$_{2.5}$)</td>
<td>24-hour</td>
<td>None</td>
<td>—</td>
<td>35 µg/m$^3$</td>
<td>Non-attainment</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>12 µg/m$^3$</td>
<td>Non-attainment</td>
<td>12 µg/m$^3$</td>
<td>Attainment/ Unclassified</td>
</tr>
</tbody>
</table>

Source: BAAQMD 2017b

Notes: ppm = parts per million  
mg/m$^3$ = milligrams per cubic meter  
µg/m$^3$ = micrograms per cubic meter
The 4th Street San Rafael ambient air quality monitoring station is located approximately 3 miles north of the Project site, and is the monitoring station closest to the Project site. Table 3.2-2 reports data from the San Rafael station for those air pollutants for which the area is in non-attainment, measured over the three most recent years in which data was available (2013 to 2015). In recent years, measured air pollutants concentrations at the San Rafael monitoring station have exceeded the federal standard for PM$_{2.5}$.

### Table 3.2-2 Ambient Air Quality Monitoring Summary

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>Metric</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>Ozone$^1$</td>
<td>1-Hour</td>
<td>Max 1 Hour (ppm)</td>
<td>0.081</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Days &gt; CAAQS (0.09 ppm)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>8-Hour</td>
<td>Max 8 Hour (ppm)</td>
<td>0.069</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Days &gt; NAAQS (0.070 ppm)</td>
<td>0</td>
</tr>
<tr>
<td>Respirable Particulate Matter (PM$_{10}$)</td>
<td>24-Hour$^1$</td>
<td>Max 24 Hour (µg/m$^3$)</td>
<td>54.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Est. Days &gt; CAAQS (50 µg/m$^3$)</td>
<td>5.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Days &gt; NAAQS (150 µg/m$^3$)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>Annual Average (µg/m$^3$)</td>
<td>15.6</td>
</tr>
<tr>
<td>Fine Particulate Matter (PM$_{2.5}$)</td>
<td>24-Hour$^2$</td>
<td>Max 24 Hour (µg/m$^3$)</td>
<td>44.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Days &gt; NAAQS (35 µg/m$^3$)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Annual$^2$</td>
<td>Annual Average (µg/m$^3$)</td>
<td>10.7</td>
</tr>
</tbody>
</table>

Source: ARB 2017

Notes: 1. State measurements  
2. National measurements  
D.V. = design value  
mg/m$^3$ = milligrams per cubic meter  
ppm = parts per million

### 3.2.2 Regulatory Framework

The federal Clean Air Act of 1977 governs air quality in the U.S. In addition to being subject to federal requirements, air quality in California also is governed by more stringent regulations under the California Clean Air Act. At the federal level, the U.S. EPA administers the Clean Air Act. The California Clean Air Act is administered by the ARB and by the Air Quality Management Districts at the regional and local levels. The Bay Area Air Quality Management District (BAAQMD) regulates air quality at the regional level, which includes Marin County.

#### Federal

**Federal Clean Air Act**

At the federal level, the U.S. EPA is responsible for enforcing the federal Clean Air Act, which establishes the NAAQS. The U.S. EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. The U.S. EPA has jurisdiction over emission sources and establishes various emission standards, including those for vehicles sold in states other than California.
State and Regional

California Clean Air Act

The California Clean Air Act is administered by the ARB at the state level, and by the BAAQMD at the regional level (described below). In California, the ARB, which is part of the California Environmental Protection Agency, is responsible for meeting the State requirements of the federal Clean Air Act, administering the California Clean Air Act, and establishing the State standards. The California Clean Air Act, as amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the California Ambient Air Quality Standards. The ARB regulates mobile air pollution sources, such as motor vehicles. It is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. The ARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level.

Bay Area Air Quality Management District

The BAAQMD is the regional agency responsible for air quality regulation within the San Francisco Bay Area Air Basin, regulating air quality through planning and review activities. The BAAQMD has permit authority over most types of stationary emission sources and can require stationary sources to obtain permits, impose emission limits, set fuel or material specifications, or establish operational limits to reduce air emissions. The BAAQMD’s responsibilities include operating an air quality monitoring network as well as awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other activities.

To protect public health, BAAQMD has adopted plans to achieve ambient air quality standards. BAAQMD must continuously monitor its progress in implementing attainment plans and must periodically report to ARB and the U.S. EPA. It must also periodically revise its attainment plans to reflect new conditions and requirements.

CEQA Air Quality Guidelines

The BAAQMD publishes the CEQA Air Quality Guidelines to assist lead agencies in evaluating air quality impacts of projects and plans undergoing CEQA review in the Bay Area. The original Air Quality Guidelines were published in 1999. The CEQA Air Quality Guidelines were updated in June 2010 to include new recommended thresholds of significance (2010 Thresholds) adopted by the BAAQMD Governing Board. The BAAQMD’s Air Quality Guidelines were further updated in May 2017 to address the California Supreme Court’s 2015 opinion in California Building Industry Association vs. Bay Area Air Quality Management District, 62 Cal.4th 369. The BAAQMD’s recommended thresholds of significance are provided in Table 3.2-3.
Table 3.2-3 BAAQMD Recommended Thresholds of Significance

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Construction-Related</th>
<th>Operational Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROG</td>
<td>54 lbs/day&lt;sup&gt;1&lt;/sup&gt;</td>
<td>54 lbs/day&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>54 lbs/day&lt;sup&gt;1&lt;/sup&gt;</td>
<td>54 lbs/day&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt; (exhaust)</td>
<td>82 lbs/day&lt;sup&gt;1&lt;/sup&gt;</td>
<td>82 lbs/day&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt; (exhaust)</td>
<td>54 lbs/day&lt;sup&gt;1&lt;/sup&gt;</td>
<td>54 lbs/day&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10/PM&lt;sub&gt;2.5&lt;/sub&gt;&lt;/sub&gt; (fugitive dust)</td>
<td>Best Management Practices</td>
<td>None</td>
</tr>
<tr>
<td>Local CO</td>
<td>None</td>
<td>9.0 ppm (8-hour average), 20.0 ppm (1-hour average)</td>
</tr>
<tr>
<td>Risk and Hazards for New Sources and Receptors (individual project)</td>
<td>Same as Operational Thresholds&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of &gt;10.0 in a million Increased non-cancer risk of &gt; 1.0 Hazard Index (Chronic or Acute) Ambient PM&lt;sub&gt;2.5&lt;/sub&gt; increase: &gt; 0.3 μg/m³ annual average Zone of Influence: 1,000-foot radius from property line of source or receptor</td>
</tr>
<tr>
<td>Risk and Hazards for New Sources and Receptors (cumulative)</td>
<td>Same as Operational Thresholds&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Compliance with Qualified Community Risk Reduction Plan OR Cancer: &gt; 100 in a million (from all local sources) Non-cancer: &gt; 10.0 Hazard Index (from all local sources) (Chronic) PM&lt;sub&gt;2.5&lt;/sub&gt;: &gt; 0.8 μg/m³ annual average (from all local sources) Zone of Influence: 1,000-foot radius from property line of source or receptor</td>
</tr>
<tr>
<td>Odors</td>
<td>None</td>
<td>5 confirmed complaints per year averaged over three years</td>
</tr>
</tbody>
</table>

Note: 1. Average daily emissions threshold. 2. The BAAQMD recommends that for construction projects that are less than one-year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

The Best Management Practices (BMPs) used as the BAAQMD’s performance-measure threshold of significance for construction-generated dust are contained in the Air Quality Guidelines and are listed below for reference:

- 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;

Source: BAAQMD 2017a
• All visible mud or dirt tracked-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 shall be prohibited;
• All vehicle speeds on unpaved areas shall be limited to 15 miles per hour.
• All paving shall be completed as soon as possible after trenching work is finished;
• Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points;
• All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified 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 Town 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.

2017 Clean Air Plan: Spare the Air-Cool the Climate

In April 2017, BAAQMD adopted the 2017 Clean Air Plan, *Spare the Air-Cool the Climate* (2017 Plan) (BAAQMD 2017c). The 2017 Plan focuses on two closely-related goals: protecting public health and protecting the climate. The 2017 Plan is a multi-pollutant air quality plan addressing four categories of air pollutants:
• Ground-level ozone and the key ozone precursor pollutants (reactive organic gases and NOₓ), as required by State law;
• Particulate matter, primarily PM₂.₅, as well as the precursors to secondary PM₂.₅;
• Toxic air contaminants; and
• Greenhouse gases.

For air quality, the 2017 Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan. In addition, the 2017 Plan builds upon and enhances the BAAQMD’s efforts to reduce emissions of PM₂.₅ and TACs. The 2017 Plan contains 85 individual control measures in nine economic sectors: stationary (industrial) sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants.

These control strategy measures are primarily policy-level and would be implemented by BAAQMD, the Metropolitan Transportation Commission, and the Association of Bay Area Governments (examples: establishing new emission limits on stationary sources, requiring new control measures on industrial facilities, implementing public education programs, promoting trip reduction programs, etc.).

*Corte Madera General Plan Goals and Policies*

The following are the goals, policies, and implementation programs from the *Town of Corte Madera General Plan 2009* that relate to air quality and are applicable to the Project.
**Goal RCS-10**  
**Attainment of Air Quality standards in the San Francisco Bay Air Basin**

Policy RCS-10.1 Reduce the potential for air quality impact of new development and redevelopment by requiring pedestrian, bicycle, and transit oriented features.

*Implementation Program RCS – 10.1.a: Air Quality Improvements*

Require developers to implement strategies to reduce or avoid potential air quality impacts, including:

- Encouraging or providing incentives for use of public transportation and carpooling.
- Locating residential or mixed-use development in proximity to public transit, employment centers and shopping.

Policy RCS-10.2 Encourage new development and redevelopment of existing sites that will locate mixed land uses near employment and commercial service centers in order to reduce vehicular air pollution.

Policy RCS-10.3 Require the incorporation of air quality mitigation measures for development projects.

*Implementation Program RCS–10.3.c: Construction Dust Control*

As a condition of approval for discretionary projects, require dust control measures consistent with the “Feasible Control Measures for Construction Emissions of PM10” of the BAAQMD CEQA Guidelines or its successor document.

*Implementation Program RCS–10.3.e: Construction Equipment Control*

As a condition of approval, require emission control measures for construction equipment that are appropriate to the specifics of the project and as recommended by the BAAQMD. Considerations in determining appropriate control measures may include factors including, but not limited to, length of time of construction and proximity to sensitive receptors.

### 3.2.3 Evaluation Criteria and Significance Thresholds

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.2-4 are used to determine if the Project would have a significant effect related to air quality.
<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>Conflict with 2017 Clean Air Plan</td>
<td>CEQA Guidelines Appendix G, Checklist Item III (a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2017 BAAQMD CEQA Air Quality Guidelines, Table 2-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bay Area 2017 Clean Air Plan</td>
</tr>
<tr>
<td>Would the project violate any air quality standard or contribute substantially to any existing or projected air quality violation?</td>
<td>Non-compliance with BAAQMD recommended Basic Construction Measures</td>
<td>CEQA Guidelines Appendix G, Checklist Items III (b)</td>
</tr>
<tr>
<td></td>
<td>Exceed BAAQMD CEQA thresholds of operational carbon monoxide</td>
<td>2017 BAAQMD CEQA Air Quality Guidelines, Tables 2-1 and 8-1, Sections 3.3 and 6.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General Plan Implementation Program RCS – 10.3.c and 10.3.e</td>
</tr>
<tr>
<td>Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td>Exceed BAAQMD CEQA thresholds of significance for criteria air pollutants and precursors</td>
<td>CEQA Guidelines Appendix G, Checklist Items III (c)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2017 BAAQMD CEQA Air Quality Guidelines, Tables 2-1 and 3-1, Sections 3.3, 3.5, and 4.1</td>
</tr>
<tr>
<td>Would the project expose sensitive receptors to substantial pollutant concentrations?</td>
<td>Exceed BAAQMD CEQA individual project thresholds of significance for risks and hazards for new sources and receptors</td>
<td>CEQA Guidelines Appendix G, Checklist Item III (d)</td>
</tr>
<tr>
<td></td>
<td>Exceed BAAQMD CEQA cumulative thresholds of significance for risks and hazards for new sources and receptors</td>
<td>2017 BAAQMD CEQA Air Quality Guidelines, Table 2-1, Section 5</td>
</tr>
</tbody>
</table>
### 3.2.4 Areas of No Impact

As explained below, the proposed Project would not result in impacts related to one of the air quality evaluation criteria listed in Table 3.2-3 (Evaluation Criteria and Significance Thresholds). For the reasons presented below, the following evaluation criterion has a finding of no impact:

**Would the project create objectionable odors affecting a substantial number of people?**

Implementation of the Project would not result in any major sources of odor. The Project is not one of the common types of facilities known to produce odors (i.e., landfill, coffee roaster, wastewater treatment facility, etc.). Minor odors from the use of equipment during construction activities would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. In addition, operation of the Project would not result in locating sensitive receptors near an existing odor source. No impact would occur.

### 3.2.5 Approach to Analysis

**Use of BAAQMD Thresholds**

The air quality analysis in this EIR utilizes the thresholds of significance, screening criteria and levels, and impact assessment methodologies presented in the BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017a).

The BAAQMD developed screening criteria and screening levels to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant air quality impacts. Screening criteria and screening levels are provided for the following air pollutant impact categories:

- Operational criteria air pollutants and precursors
- Operational community risk and hazard impacts
- Carbon monoxide impacts
- Construction-generated criteria air pollutants and precursors
- Construction-related community risk and hazard impacts

As provided by the BAAQMD’s CEQA Air Quality Guidelines (BAAQMD 2017a), if the Project meets the screening criteria for an impact category, and is consistent with the methodology used to develop

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project create objectionable odors affecting a substantial number of people?</td>
<td>Creation of a new odor source near existing sensitive receptors</td>
<td>CEQA Guidelines Appendix G, Checklist Item III (e)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2017 BAAQMD CEQA Air Quality Guidelines, Tables 2-1, 3-3. Section 7.1</td>
</tr>
</tbody>
</table>
the screening criteria, then its air quality impact for that category may be considered less than significant.

### 3.2.6 Impacts and Mitigation Measures

Table 3.2-5 provides a summary of potential impacts from the Project.

**Table 3.2-5 Summary of Impacts – Air Quality**

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>LS</td>
</tr>
<tr>
<td>AQ-2: Would the project violate an air quality standard or contribute substantially to an existing or projected air quality violation, or 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td>LSM</td>
</tr>
<tr>
<td>AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?</td>
<td>LS</td>
</tr>
<tr>
<td>C-AQ-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to air quality?</td>
<td>LS</td>
</tr>
</tbody>
</table>

Notes: LS = Less than Significant  
LSM = Less than Significant with Mitigation

**Impact AQ-1:** Would the project conflict with or obstruct implementation of the applicable air quality plan?

**Analysis:** *Less than Significant*

Per the BAAQMD Air Quality CEQA Guidelines, the BAAQMD considers a project consistent with the Clean Air Plan if it:

1. Can be concluded that a project supports the primary goals of the Plan (by showing that the project would not result in significant and unavoidable air quality impacts);
2. Includes applicable control measures from the Plan, and;
3. Does not disrupt or hinder implementation of any Plan control measure.

An evaluation of each of these three criteria is provided below.

The primary goals of the 2017 Plan are to protect air quality, public health, and the climate. As shown in Impacts AQ-2 and AQ-C-1, the Project would not result in a violation of any criteria air pollutant standard (State or federal air quality standards), contribute substantially to an existing or projected air quality violation, or 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors). As shown in Impact AQ-3, the Project would not expose sensitive
receptors to substantial pollutant concentrations; therefore, the Project would not conflict with the primary goals of the 2017 Plan.

The 2017 Plan includes 85 control measures in nine economic sectors: 1) stationary sources; 2) transportation (mobile) sources; 3) energy; 4) buildings; 5) agriculture; 6) natural and working lands; 7) waste management; 8) water; and 9) super-GHG pollutants. The control measures are not directly applicable to the Project. In addition, the Project would not disrupt or hinder implementation of any control measure.

As shown above, the Project would not create a localized violation of State or federal air quality standards, significantly contribute to cumulative non-attainment pollutant violations, or expose sensitive receptors to substantial pollutant concentrations. Therefore, the Project would support the primary goals of the 2017 Plan. Furthermore, the control measures in the 2017 Plan are not applicable to the Project, and the Project would not conflict with or obstruct implementation of the 2017 Plan. The Project’s potential to conflict with the Clean Air Plan would be less than significant.

Mitigation: No mitigation is needed.

Impact AQ-2: Would the project violate an air quality standard or contribute substantially to an existing or projected air quality violation, or 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Analysis: Significant

Potential violations of an air quality standard (State or federal standards) include the potential to emit fugitive dust (PM$_{10}$/PM$_{2.5}$) during earth-disturbing construction activities, and CO emissions during Project operation. Operational CO hotspots (localized violations of the State or federal CO standard) are related to increases in on-road vehicle congestion. These potential impacts are localized in nature, occurring near the emissions source.

In addition, non-attainment pollutants of concern for the Air Basin are PM$_{10}$, PM$_{2.5}$, and ozone. This pollution is largely a cumulative impact, in that individual projects are rarely sufficient in size to result in non-attainment of the State or federal standards. Instead, a project’s individual emissions may contribute to cumulative adverse air quality impacts. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project’s individual emissions would be cumulatively considerable. If a project exceeds the identified ‘regional’ significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region’s existing air quality conditions (BAAQMD 2017a).
Construction

Construction activities associated with development activities contemplated by the Project would include demolition of existing paving, grading, building construction, and paving. Generally, the most substantial air pollutant emissions would be dust generated from site grading. The BAAQMD has identified fugitive dust from construction activities as a source of localized PM$_{10}$/PM$_{2.5}$. If uncontrolled, these emissions could lead to both health and nuisance impacts.

BAAQMD does not recommend a numerical threshold for fugitive dust from project construction. Instead, BAAQMD bases the determination of significance for fugitive dust on a consideration of the control measures to be implemented. If the basic construction measures recommended by BAAQMD are implemented for a project, then fugitive dust emissions during construction are not considered significant. As identified in Section 3.2.2, Regulatory Framework, General Plan Implementation Program RCS – 10.3.c requires, as a condition of approval, that dust control measures recommended by the BAAQMD CEQA Guidelines (or its successor document) be implemented. If the Project does not adhere to the construction BMPs recommended by BAAQMD, then the Project may result in substantial levels of construction-generated dust. The potential impact to air quality is considered significant.

Project construction would also result in regional air pollutant and precursor emissions from equipment exhaust and worker trips to the Project site. The BAAQMD’s 2017 Air Quality Guidelines provides screening criteria for determining if a Project could potentially result in significant construction-phase impacts from criteria pollutants and precursors. Construction of the Project would result in a less than significant impact to air quality if the following screening criteria are met:

1. The Project is below the applicable screening level size shown in Table 1 [of the BAAQMD 2017 CEQA Air Quality Guidelines].
2. All Basic Construction Mitigation Measures (also known as BMPs) are included in the Project design and implemented during construction.
3. Construction-related activities would not include any of the following:
   a) Demolition activities inconsistent with District Regulation 11, Rule 2: Asbestos Demolition, Renovation and Manufacturing;
   b) Simultaneous occurrence of more than two construction phases;
   c) Simultaneous construction of more than one land use type;
   d) Extensive site preparation; or
   e) Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

The applicable construction criteria pollutant and precursor screening level is 277,000 square feet of regional shopping center. At a proposed 46,000 square feet
of facilities, the Project would be less than the BAAQMD’s construction criteria pollutant and precursor screening level.

Demolition activities would require consistency with all applicable regulatory requirements. It is not anticipated that the Project would involve the simultaneous occurrence of more than two construction phases, does not include more than one land-use type. The Project would not involve extensive site preparation or material transport, in that it is anticipated that the Project would transport up to 7,700 cubic yards of materials.

However, if the Project does not adhere to the basic construction measures recommended by BAAQMD, then the Project may result in significant construction-phase impacts from criteria pollutants and precursors. The potential impact to air quality is considered significant.

**Operation**

**Carbon Monoxide:**

Localized high levels of CO (CO hotspot) are associated with traffic congestion and idling or slow-moving vehicles. BAAQMD recommends a screening analysis to determine if a Project has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is not necessary.

The Project would result in a less than significant impact to air quality for local CO if all of the following screening criteria are met:

- The Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans; or
- The Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; or
- The Project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Section 3.12, Transportation and Traffic, contains analysis of the Project’s traffic impacts at Project-affected intersections. As identified in Section 3.12, The Transportation Authority of Marin (TAM) is the congestion management agency for Marin County, and prepares the applicable Congestion Management Plan. Impact TR-2 contains an evaluation of the Project’s potential to conflict with the applicable congestion management Plan. As demonstrated in Impact TR-2, the Project would not conflict with an applicable congestion management program. As shown in the Section 3.12, 14 intersections were included in the Project’s traffic impact analysis. The Project-affected intersections are not located within urban canyons and do not have substantial limitations to vertical or horizontal mixing. Of the Project-affected intersections, the intersection of Northbound U.S. 101 Ramp/Tamalpais Drive is
estimated to have the highest existing peak-hour traffic volume. Northbound U.S. 101 Ramp/Tamalpais Drive is estimated to handle less than 4,600 vehicles during the Cumulative Plus Project PM peak-hour, which is substantially less than the BAAQMD’s screening criteria of 44,000 vehicles per hour. Therefore, the Project would not exceed any of the BAAQMD’s screening criteria for CO hotspot analysis, and would not cause a violation of the State or federal CO air quality standard or have a considerable contribution to an existing or projected air quality violation.

Regional Criteria Pollutants and Ozone Precursors:

The BAAQMD developed screening levels to help determine when detailed analysis is necessary to determine significance for operational criteria pollutant and precursor emissions. The screening levels represent the size of development by land use type at which BAAQMD’s regional emissions thresholds of significance for ROG, NOx, PM_{10}, and PM_{2.5} would not be exceeded. The BAAQMD identifies an operational screening size of 99,000 square feet for a regional shopping center land use. In comparison, the Project would result in operation of 46,000 square feet of retail at an existing regional shopping center. The Project’s land use would be less than the BAAQMD’s screening size for operational criteria pollutant and precursor generation. Therefore, the Project would not exceed the BAAQMD’s operational screening criteria for criteria pollutants and precursor thresholds. The impact would be less than significant.

Mitigation:

**Measure AQ-2: Implement BAAQMD Basic Construction Measures**

The following BAAQMD basic construction measures shall be incorporated into the construction contract specifications for the Project and shall be implemented during construction:

- 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 or shall have at least two feet of freeboard;
- All visible mud or dirt tracked-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 shall be prohibited;
- All vehicle speeds on unpaved areas shall be limited to 15 miles per hour;
- All paving shall be completed as soon as possible after trenching work is finished;
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points;
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked
by a certified 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 regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to ensure compliance with applicable regulations.

After Mitigation: Less than Significant

Implementation of Mitigation Measure AQ-2, Implement BAAQMD Basic Construction Measures, would reduce the generation of localized fugitive dust ($\text{PM}_{10}/\text{PM}_{2.5}$) during construction to a less-than-significant level by requiring compliance with BAAQMD recommended basic construction mitigation measures, consistent with General Plan Implementation Program RCS–10.3.c.

Impact AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Analysis: Less than Significant

Sensitive receptors are defined by the BAAQMD as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. The BAAQMD’s 2017 Air Quality Guidelines recommend assessing community risk and hazards within a 1,000-foot-radius ‘zone of influence’ from the property line of the emission source.

The sensitive receptor nearest to the proposed gravel lot improvements would be approximately 1,100 feet west of the gravel lot. The sensitive receptor nearest to the proposed new building would be located more than 1,250 feet west of the proposed building. Therefore, the nearest potential receptors are outside the BAAQMD’s recommended zone of influence.

Construction

The majority of heavy diesel equipment usage would occur during the grading phase of construction. All Project construction activity would occur more than 1,000 feet from the nearest location of sensitive receptors. Therefore, the receptor is outside of the 1,000-foot zone of influence recommended by the BAAQMD and the Project would result in a less than significant impact. Because the Project would be located more than 1,000 feet from the nearest location of sensitive receptors, Project construction would not substantially contribute to a cumulative exposure to the sensitive receptor. Therefore, the Project would result in a less than significant impact from exposure to construction-generated DPM.

Operation

The Project would not result in new sensitive receptors in the Project area. In addition, the Project would not result in placement of a substantial source of air pollutant emissions near a location of sensitive receptors. The nearest potential receptor is outside the 1,000-foot zone of influence recommended by the BAAQMD.
The primary source of operational emissions from the Project would be employee and customer trips to and from the Project site, which would not present a substantial source of diesel exhaust or other TAC. In addition, the on-site emergency backup diesel generator, which is subject to BAAQMD permitting requirements and requirements of Regulation 9-8-330, would only be run for periodic testing and emergencies. Therefore, the Project's operations would result in a less than significant Project-level and cumulative impact.

Mitigation: No mitigation is needed.

**Impact C-AQ-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to air quality?**

**Analysis:** *Less than Cumulatively Considerable (Less than Significant)*

By its nature, air pollution is largely a cumulative impact, in that individual projects are rarely sufficient in size to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions may contribute to cumulative adverse air quality impacts. In developing regional thresholds of significance for criteria and precursor air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified regional significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD 2017a). Similarly, the CO threshold (the 1-hour and 8-hour state ambient air quality standards) and screening criteria take into account background ambient concentrations and total intersection volumes, respectively. As such, the threshold and screening criteria are cumulative in nature. Finally, consistency with an attainment plan is a cumulative analysis, as it analyzes a project in regards to an adopted plan that is based on growth projections for the region. Therefore, no additional cumulative impacts analysis is required.

As detailed in Impact AQ-1, the Project would not conflict with or obstruct implementation of the applicable air quality plan. As summarized in Impact AQ-2, the Project would not create a localized violation of State or federal air quality standards, or significantly contribute to cumulative non-attainment pollutant violations. As shown in Impact AQ-3, the Project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, implementation of the Project would not contribute to any related cumulative impacts for these criteria.

Mitigation: No mitigation is needed.

### 3.2.7 References


BAAQMD. 2017c. *Final 20107 Clean Air Plan: Spare the Air-Cool the Climate.* April 19.


3.3 Biological Resources

This section provides a description of the existing biological resources in the Project area and evaluates potential environmental effects to those resources from construction and operation of the Project. The impacts and mitigation section establishes thresholds of significance, evaluates potential biological impacts, and identifies the significance of these impacts.

The following subject is related to biological resources, but is evaluated in another section of this EIR:

- Impacts related to water quality and runoff are addressed in Section 3.8, Hydrology and Water Quality.

3.3.1 Setting

Regional Setting

The Project is located in the northern portion of the Town of Corte Madera within Marin County, California. Biological resources within Corte Madera include sensitive aquatic and terrestrial plants, animals, and habitat. Several of these resources are unique to the Corte Madera region, since the area consists of a variety of ecological niches within the transition from the San Francisco Bay to the upland slopes of Corte Madera Ridge (Corte Madera 2009).

The site of the proposed Restoration Hardware building is a paved parking lot on the eastern side of The Village. Redwood Highway separates The Village from the marsh to the east. The gravel lot is situated on the landward side of a quasi-tidal aquatic basin consisting primarily of marsh and known as Corte Madera Shorebird Marsh (Shorebird Marsh). To the east lies the Golden Gate Bridge, Highway and Transportation District parcel (GGBHTD parcel) and the Corte Madera Marsh Ecological Reserve (Ecological Reserve) before reaching San Pablo Bay.

Local Setting

Habitat at the Project site consists predominantly of developed areas and landscaped vegetation that occur in association with the existing commercial center at The Village. The Restoration Hardware building would be constructed on the east side of The Village in the existing parking lot with several trees and about 300 feet or more of existing paved or otherwise developed area surrounding the proposed building. The gravel lot at the northern portion of the Project site is surrounded on three sides (west, north, and east) by saltgrass (*Distichlis spicata*) flats (or northern coastal salt marsh) with an approximate 50 foot buffer of coyote brush (*Baccharis pilularis*) scrub and ruderal grassland communities between the developed and marsh areas. The salt marsh itself only exists as a slim band along the edge, then turns in to open water. The southern portion of the gravel lot is bordered by Redwood Highway, which has street strip landscaping and trees.

Biological Communities

There are four biological communities within the Project site: landscaped, coyote brush scrub, saltgrass flats, and ruderal grassland (see Figure 3.3-1 Biological Communities of Gravel Lot Parcel). The remainder of the Project site is developed and barren. The developed portions are covered in asphalt, concrete, and compacted gravel. The four biological communities are discussed below. Vegetation alliances described in *A Manual of California Vegetation* (MCV) are used to classify
communities with the addition of non-native areas (Sawyer et al. 2009; WRA 2015). Critical habitat and sensitive natural communities, including wetlands, known to occur in the vicinity of the Project site are described in following subsections.

**Landscaped – Tree Dominated**

The MCV does not include an alliance for landscaping within developed areas. However, McBride and Reid describe urban habitat with street strip and shrub cover structures that are appropriate for the Project site. Street strip vegetation, located along roadsides, varies with species type, but typically includes a monoculture of somewhat linear trees with a ground cover of grass. Shrub cover refers to areas commonly landscaped and maintained with hedges, as typically found in commercial districts. An urban street strip or shrub cover community can be valuable to wildlife as additional forage or edge. (CDFW 2013)

The Project site consists of landscaping along Redwood Highway and the gravel lot, around the perimeter of the parking lot, and at evenly spaced intervals as divisions within the parking lot. Tree species include: bottlebrush tree (*Callistemon rigidus*), Monterey pine (*Pinus radiata*), and pepper tree (*Schinus molle*). Non-native shrubs situated at intervals within the landscaping include silverthorn (*Eleagnus pungens*) and rosemary (*Rosmarinus officinalis*). (WRA 2015)

**Coyote Brush Scrub – Shrub Dominated**

The MCV coyote brush scrub or *Baccharis pilularis* Shrubland Alliance is characterized by the presence of dominant to co-dominant coyote brush shrubs. The shrubs are typically less than 3 meters (9.84 feet) tall with a variable canopy and herbaceous layer. Emergent trees may be present, but at low cover consistent with or below the height of the shrubs. This alliance occurs throughout the State at elevations from sea level to 1,500 meters along waterways, coastline, sandy areas, and open slopes and ridges. Soils are variable from sandy to relatively heavy clay. (CNPS 2017)

This alliance correlates to coastal scrub for wildlife considerations. According to Stebbins, coastal scrub appears to support roughly equivalent numbers of species as surrounding habitats. Several listed and sensitive species are known to occur, sometimes exclusively, within this community. However, more research is needed to describe the specific importance of coastal scrub to wildlife as compared to other habitats. (CDFW 2013)

The Project site includes this alliance in uplands along the perimeter of the gravel lot in the buffer between the developed and marsh areas. Vegetation consists of coyote brush and scattered toyon (*Heteromeles arbutifolia*) intermixed with various non-native and perennial grassland species. (WRA 2015)

**Saltgrass Flats - Herbaceous**

The MCV saltgrass flats or *Distichlis spicata* Herbaceous Alliance is characterized by the presence of dominant to co-dominant saltgrass in the herbaceous layer, which is typically less than 1 meter (3.28 feet) tall with an open to continuous canopy. Emergent shrubs may be present, but at low cover and sparsely to coincide with an open canopy description. This alliance occurs throughout the State at elevations from sea level to 1,500 meters in association with coastal salt marshes and intermittently flooded inland areas such as playas, swales, and washes. Soils are usually poorly drained, deep, alkaline or saline with salt accumulation at the surface when dry. (CNPS 2017)
This alliance correlates to saline emergent wetland for wildlife considerations. According to Springer, saline emergent wetland provides forage, cover, and reproduction opportunities to a variety of species that inhabit the wetland and adjacent uplands. Saline emergent wetlands can be particularly important as forage for both resident and migrant wildlife populations. Various listed and special-status species are also endemic to this community. (CDFW 2013)

The Project site includes this alliance in somewhat tidally influenced areas a few feet wide along the eastern edge of the gravel lot parcel. These areas are dominated by saltgrass with co-dominant herbs, including pickleweed (*Salicornia pacifica*), alkali sea heath (*Frankenia salina*), and scattered marsh gumplant (*Grindelia stricta*). This habitat exists in historically graded fill that was later impacted by development. (WRA 2015)

This habitat is an aquatic resource under federal and State laws and is discussed further below under Wetlands and Jurisdictional Waters.

**Ruderal Grassland - Herbaceous**

The MCV does not include an alliance for ruderal habitat, but this typically refers to any area with heavy and ongoing human disturbance. This community generally has a reduced value to wildlife when compared to other habitats, because of the ongoing disturbance and typically higher abundance of non-native species.

Ruderal grassland occurs in upland areas of the Project site around the outside edge of the gravel lot and in open areas between the coyote brush scrub and saltgrass flats (northern coastal salt marsh). This community is dominated by non-native vegetation growing in fill soil that is unlikely to provide much value to native plants. Species include: tall wheat grass (*Elymus ponticus*), fennel (*Foeniculum vulgare*), velvet grass (*Holcus lanatus*), teasel (*Dipsacus sativus*), crane’s bill geranium (*Geranium molle*), and longbeak stork’s bill (*Erodium botrys*). Scattered shrubs were also present throughout the ruderal grassland, including: silver wattle (*Acacia dealbata*), blackwood acacia (*Acacia melanoxylon*), coyote brush, striated broom (*Cytisus striatus*), and French broom (*Genista monspessulana*). (WRA 2015).

**Critical Habitat**

Critical habitat is designated by the United States Fish & Wildlife Service (USFWS) under the federal Endangered Species Act (FESA). Critical habitat refers to a specific geographic area(s) that contains features essential for conservation of a threatened or endangered species and that may require special management and protection. This designation may include an area that is not currently occupied by the species but that will be needed for recovery. No critical habitats are within the Project site.

**Sensitive Natural Communities**

Sensitive natural communities include: a) areas of special concern to resource agencies, b) areas protected under CEQA, c) areas designated as sensitive natural communities by California Department of Fish & Wildlife (CDFW), and d) areas protected under local regulations and policies.

Northern Coastal Salt Marsh is identified in the California Natural Diversity Database/Biogeographic Information and Observation System (CNDDB/BIOS) as a sensitive natural community in the Project area. This community is described as tidally influenced areas along bays, lagoons, and estuaries that are composed of highly productive salt-tolerant hydrophytes forming moderate to dense cover (WRA
This community is present in the Shorebird Marsh and Ecological Reserve and corresponds to the saltgrass flats alliance.

**Wetlands and Jurisdictional Waters**

The definition and regulatory framework of wetlands and jurisdictional waters are described in the Clean Water Act (CWA) and Town of Corte Madera General Plan 2009 (see Regulatory Section below).

The Shorebird Marsh, constructed in 1983 to provide wildlife habitat and flood capacity, is located to the north of the Project site (OEI 2015). This area also includes unvegetated channels that convey stormwater from the shopping center (WRA 2015). The tidal influence in this area is limited by a tidegate northeast of the Project site that connects to San Francisco Bay (WRA 2015).

The GGBHTD parcel, a 72-acre area with slightly-elevated fill supporting ruderal vegetation and seasonal wetlands, occurs between the Project site and the Ecological Reserve to the east (OEI 2015). The Ecological Reserve is a 620-acre northern coastal salt marsh that was designated as a reserve in 1977 (CDFW 2017b). The Ecological Reserve includes 94 acres of unspoiled tidal wetland, about 400 acres of subtidal mudflats and open water, and the remaining portion that was diked off from tidal action and used as a dredge disposal site between 1950 and 1960 before being returned to tidal activity in 1976 (CDFW 2017b).

No potentially jurisdictional aquatic features were noted within any of the developed or upland areas (i.e., developed/barren, ruderal grassland, and coyote brush scrub) at the Project site during the site visit for the Biological Resource Assessment. Furthermore, no indications of ponding, high water marks, or water staining were observed within upland areas at the Project site. (WRA 2015)

**Wildlife Corridors**

Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Corridors are present in a variety of habitats and link undisturbed areas that would otherwise be fragmented. Maintaining the continuity of established wildlife corridors is important to: a) sustain species with specific foraging requirements, b) preserve a species’ distribution potential, and c) retain diversity among many wildlife populations. Therefore, resource agencies consider wildlife corridors to be a valuable resource.

No wildlife movement corridors or regional wildlife linkages have been identified within the Project site.

**Special-status Species**

Biological resources evaluated as part of this analysis include special-status species, which are plants and animals in the following categories:

- Listed or proposed for listing as threatened or endangered under FESA or candidates for possible future listing;
Listed or candidates for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA);

• Listed as Fully Protected under the California Fish and Game Code;

• Species identified by CDFW as species of special concern or rare;

• Plants assigned a California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1A, 1B, 2A, or 2B. The ranking system is summarized as follows:
  - CRPR 1A Plants presumed extirpated in California and either rare or extinct elsewhere;
  - CRPR 1B Plants that are rare, threatened, or endangered in California and elsewhere;
  - CRPR 2A Plants presumed extirpated in California, but common elsewhere;
  - CRPR 2B Plants that are rare, threatened, or endangered in California but more common elsewhere;
  - CRPR 3 Plants about which more information is needed (a review list); and
  - CRPR 4 Plants of limited distribution (a watch list);

• Considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (State CEQA Guidelines, Appendix G); or

• Otherwise meets the definition of rare or endangered under CEQA §15380(b) and (d).

Appendix B of the Biological Resources Assessment (Appendix C1 of this EIR) compiles a list of special-status species that may occur in the Project area and/or may be affected by the Project. The list includes species identified by the USFWS, recorded in the CNDDDB/BIOS, and shown in the CNPS Inventory of Rare and Endangered Plants. Database queries focused on the Project site and records from the surrounding USGS 7.5 minute topographical quadrangles, including: San Rafael, San Quentin, Novato, Petaluma Point, Point Bonita, and San Francisco North. Species considered to be beyond their known range or to have low habitat suitability for reproduction, cover, and/or foraging within the Project area, and have no potential for occurrence or are unlikely to occur at the Project site are not discussed further in detail. Species with a moderate or high potential for occurrence at the Project site or observed during the site visit are addressed in the following sections. (WRA 2015)

A peer review of the Biological Resources Assessment (Appendix C2) was performed in November of 2015. The review concurred with the conclusions provided in the original report (OEI 2015). During preparation of the Draft EIR, an updated (2017) USFWS species list and CNDDDB/BIOS records were obtained and compared to the original assessment. One species, the California least tern (Sterna antillarum browni), was determined to have a moderate potential for occurrence at the Project site and had not been previously considered. This species has been included in the wildlife discussion below.

Special-status Plants

No special-status plant species are expected to occur on the portions of the Project site to be affected by the Project, due to the lack of habitat requirements and/or high level of disturbance (WRA 2015). The Restoration Hardware building portion of the site is currently paved with a few areas of landscaping and does not provide habitat for special-status plant species. A low potential for special-status plant species exists in the marsh on the eastern edge of the gravel lot parcel, in habitat that is at least 50 feet from the portion of the site to be developed. Special-status plants were not observed or indicated during the site visits (WRA 2015).
Special-status Wildlife

Several special-status wildlife species have a potential for occurrence within the Project area. However, habitat at the Project site provides low suitability for many of these species, including California Ridgway’s rail (*Rallus obsoletus obsoletus*; formerly *R. longirostris obsoletus*) and California black rail (*Laterallus jamaicensis coturniculus*) that are known to occur in the Corte Madera-Larkspur area but are very unlikely to occur at the Project site (WRA 2015; OEI 2015). Therefore, these species are not expected to be present at the Project site and are not considered further (see Appendix D-1 for further explanation).

Wildlife with a moderate or higher potential for occurrence within or near the Project area, based on review of available data, are presented in Table 3.3-1 and discussed further below.

**Table 3.3-1 Special-status Wildlife with Moderate or High Potential for Occurrence within or in Immediate Vicinity of Project Site**

<table>
<thead>
<tr>
<th>Species</th>
<th>Status (Federal/ State/Other)</th>
<th>General Habitat Description</th>
<th>Potential for Occurrence</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern harrier (<em>Circus cyaneus</em>)</td>
<td>--/--/SSC</td>
<td>Coastal salt and freshwater marsh, nest and forage in grasslands from saltgrass in desert sink to mountain cienagas; nests on ground in shrubby vegetation, usually at marsh edge, nest built of a large mound of sticks in wet areas</td>
<td>Moderate</td>
<td>The project site includes suitable foraging and nest habitats. However, nesting may be deterred by the ongoing high human disturbance and there are no known records of previous occurrence within the project area.</td>
</tr>
<tr>
<td>White-tailed kite (<em>Elanus leucurus</em>)</td>
<td>--/--/FP</td>
<td>Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland; open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching</td>
<td>Moderate</td>
<td>The project site includes suitable foraging and lesser quality nest habitats. However, there are no known records of previous occurrence within the project area.</td>
</tr>
<tr>
<td>Species</td>
<td>Status (Federal/ State/Other)</td>
<td>General Habitat Description</td>
<td>Potential for Occurrence</td>
<td>Rationale</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------</td>
<td>-----------------------------</td>
<td>--------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Peregrine falcon <em>(Falco peregrinus)</em></td>
<td>FD/CD/FP</td>
<td>Near wetlands, lakes, rivers, or other water, on cliffs, banks, dunes, mounds, and human-made structures; nest consists of a scrape or a depression or ledge in an open site</td>
<td>Moderate</td>
<td>The project site includes suitable foraging habitat. This species has also been recorded previously within 5 miles of the project site.</td>
</tr>
<tr>
<td>Samuels/San Pablo song sparrow <em>(Melospiza melodia samuelis)</em></td>
<td>--/--/SSC</td>
<td>Resident of salt marshes along the north side of San Francisco and San Pablo Bays; inhabits tidal sloughs in the <em>Salicornia</em> marshes and nests in <em>Grindelia</em> bordering slough channels</td>
<td>High</td>
<td>This species has been recorded in association with the surrounding marshes within the project area.</td>
</tr>
<tr>
<td>American white pelican <em>(Pelecanus erythrorhynchos)</em></td>
<td>--/--/SSC</td>
<td>Colonial nester on large interior lakes; nests on large lakes, providing safe roosting and breeding places in the form of well-sequestered islets</td>
<td>High</td>
<td>This species was observed in adjacent lagoon habitat west of the project area during onsite investigations.</td>
</tr>
<tr>
<td>California least tern <em>(Stern antillarum browni)</em></td>
<td>FE/CE/FP</td>
<td>Nests along the coast from San Francisco Bay south to northern Baja, California; colonial breeder on bare or sparsely vegetated, flat substrates, such as sand beaches, alkali flats, landfills, or paved areas</td>
<td>Moderate</td>
<td>The project site includes suitable foraging and nest habitats. However, there are no known records of previous occurrence within the project area.</td>
</tr>
</tbody>
</table>
Biological Resources

<table>
<thead>
<tr>
<th>Species</th>
<th>Status (Federal/State/Other)</th>
<th>General Habitat Description</th>
<th>Potential for Occurrence</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salt marsh harvest mouse</td>
<td>FE/CE/FP</td>
<td>Only in the saline emergent wetlands of San Francisco Bay and its tributaries; pickleweed (Salicornia spp.) is primary habitat, but may occur in other marsh vegetation types and in adjacent upland areas, does not burrow, builds loosely organized nests and requires higher areas for flood escape</td>
<td>Moderate</td>
<td>The transitional wetland within the project area is dominated by pickleweed. Also, this species has been recorded in association with the surrounding marshes.</td>
</tr>
</tbody>
</table>

Sources: CDFW 2017a; WRA 2015

Note: -- = No status to date; CD = California delisted or removed from listing; CE = Listed as endangered in California; FD = Federally delisted or removed from listing; FE = Federally listed as endangered; FP = CDFW fully protected species; SSC = CDFW species of special concern

**Northern Harrier (Circus cyaneus)**

Northern harrier is a CDFW species of special concern. The northern harrier ranges throughout California at elevations up to 10,000 feet. This raptor breeds from sea level to 5,700 feet in the Central Valley and Sierra Nevada foothills as well as up to 3,600 feet in northeastern California. Prey includes voles and small mammals, as well as birds, frogs, small reptiles, crustaceans, insects, and rarely fish. (CDFW 2013)

Northern harriers are frequently observed in meadows, grasslands, open rangelands, desert sinks, and fresh- or saltwater emergent wetlands. The species is seldom found in wooded areas. Harriers most commonly occur in or near freshwater aquatic habitats with flat or hummocky, open areas of tall, dense grasses, or moist, dry shrubs situated along water edges. The species roosts on the ground in or along the border of wetlands. Nests are placed on the ground usually in shrubby vegetation at marsh edges. Northern harriers breed from April to September with peak activity between June and July and have single-brooded nests. Clutch size is an average of five eggs and the nesting period lasts about 53 days. (CDFW 2013)

Loss and degradation of habitat, including loss of wetlands, nest failure from human disturbance, predator-control projects, agricultural practices, and unnatural predation pressure have all contributed to the decline of northern harrier populations (Shuford and Gardali 2008).

Habitats at the Project site provide possible foraging opportunities for northern harrier. However, the site is not ideal for nesting due to the limited areas of contiguous vegetation and usually high human disturbance (WRA 2015). Also, no nests or foraging individuals were observed during site investigations (WRA 2015). Therefore, northern harriers have a potential to occur onsite as occasional foragers or transients, but are not likely to nest onsite.
White-tailed Kite (*Elanus leucurus*)

White-tailed kite is a CDFW fully protected species. This kite is known to occur as a resident of California in herbaceous and open stages of most habitats of coastal and valley lowlands, especially near agriculture. Their primary prey consists of voles and other small, diurnal mammals, as well as occasional birds, insects, reptiles, and amphibians. (CDFW 2013)

White-tailed kites forage in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands. Kites soar, glide, and hover less than 100 feet above the ground in search of prey. This raptor typically uses trees with dense canopies for cover and groves of dense deciduous trees for roosting. Nests are generally situated near the top of a dense tree stand near open foraging area. Nests are made of loosely piled sticks and twigs and lined with grass, straw, or rootlets. Breeding season for the white-tailed kite is from February to October with a peak between May and August. Females lay an average clutch of three to six eggs and are usually single brooded. (CDFW 2013)

Habitat loss or fragmentation from urbanization is the primary threat to the species. White-tailed kite is generally “intolerant of noise and human activities and will abandon nesting areas that are subject to high levels of human disturbances”. The population of white-tailed kites in California appears to be closely tied to rodent abundance in agricultural areas and has increased with conversion to crops that support an abundance of rodent prey. (Leidos 2015)

The Project area provides potential foraging and reduced quality nest habitat for white-tailed kite (WRA 2015). Landscaped trees within the parking lot and along Redwood Highway may be attractive for nesting by this species, due to the proximity and expanse of potential forage habitat within the surrounding marsh (WRA 2015). However, the ongoing human disturbance reduces the likelihood of the Project site supporting a white-tailed kite nest. White-tailed kites have been observed in the Corte Madera-Larkspur region, but there are no recorded occurrences within the Project site (WRA 2015; CDFW 2017a).

Peregrine Falcon (*Falco peregrinus*)

Peregrine falcon is a federal and State delisted species, as well as a CDFW fully protected species. This falcon is found inland throughout the Central Valley, and rarely on the Channel Islands during the winter. Active nests and migrants occur along the coast, in the Sierra Nevada foothills, and in other mountains between spring and fall. The peregrine falcon usually hunts near water and may hunt over water catching prey from flight and rarely from a perch. The species preys on a variety of smaller birds (up to about duck size), and the occasional mammal, insect, or fish. (CDFW 2013)

The peregrine falcon frequents various bodies of water (i.e., lakes, rivers, or other wetlands) in open areas with cliffs and canyons nearby, which are required for cover and nesting. This falcon frequents riparian areas as well as coastal and inland wetlands yearlong, especially in nonbreeding seasons. Peregrine falcons nest between March and late August. The nest is usually a scrape on a depression or ledge in an open site, but human-made structures, snag cavities, or abandoned raptor nests are also used. The average clutch size is three to seven eggs, three to four eggs is typical, and incubation is about 32 days. (CDFW 2013)

Historically, the use of the pesticide dichlorodiphenyltrichloroethane (DDT) caused the decline of the peregrine falcon in North America (USFWS 2006). The falcon breeding populations recovered enough for the bird to be delisted from the FESA and CESA following restrictions on the use of DDT and the
release of captive-bred young (USFWS 2006). However, the peregrine falcon is still protected in California, as competition for nest sites and predation are continuing threats to the species (CDFW 2013).

Peregrine falcon occurrence is recorded in the CNDDB within five miles of the Project site and the species is known to nest in southern Marin County (WRA 2015). These falcons may forage at marshes within the Project area, but typical nesting habitat (vertical features such as cliffs, mounds, etc.) is not available onsite (WRA 2015). Therefore, peregrine falcons have a potential to occur onsite as occasional foragers or transients, but are not likely to nest onsite.

**Samuels/San Pablo Song Sparrow (**Melospiza melodia samuelis**)**

Samuels (or San Pablo) song sparrow is a CDFW species of special concern. This California endemic has a yearlong range restricted to the periphery of San Pablo Bay and portions of the San Francisco Bay estuary. Their diet consists primarily of terrestrial invertebrates taken from exposed ground within the marsh plain. (Shuford and Gardali 2008)

This subspecies occurs in tidal salt marsh and requires dense vegetation for nesting, roosting, and cover. Areas with short, sparse vegetation can expose nests to flooding and predators. Typical plant associations include California cord grass (Spartina foliosa), pickleweed (Salicornia virginica), and gumplant (Grindelia stricta). Samuel song sparrows seem to prefer high marsh dominated by pickleweed with tidal channels lined with gumplant. This sparrow usually nests from early March to July, although some populations begin in late February. Nests are placed at an average height of 8.7 inches (22 centimeters) within the dense vegetation. (Shuford and Gardali 2008)

The primary threat to Samuels song sparrow is habitat loss from development, fragmentation, or degradation. The increasing alteration of native marsh habitat from invasive species and lack of sufficient dispersal corridors are a concern for population success. Additional threats include: reproductive failure due to increased nest predation from non-native and native species closely associated with human disturbance; temporary human activities, such as oil exploration, grazing, or recreational use near or within primary habitat; and alteration of tidal marsh from climate change. (Shuford and Gardali 2008)

Samuels song sparrow is recorded as occurring within the marshes surrounding the Project site, which provides moderate quality habitat for nesting and foraging by this species (WRA 2015). Song sparrows, assumed to be the Samuels subspecies, were also observed exhibiting nesting behavior near the Project area during site investigations (WRA 2015). However, the Project site lacks a consistent tidal influence and dense emergent marsh habitat to support nesting by this species within the Project site (WRA 2015). Therefore, Samuels song sparrow have a potential to occur onsite as foragers, but are not likely to nest at the Project site.

**American White Pelican (**Pelecanus erythrorhynchos**)**

American white pelican is a CDFW species of special concern. Migrants are found throughout California, but especially during the spring and fall in southern California. These pelicans occur at large lakes in the Klamath Basin during nesting season and are found on the salt ponds of San Francisco Bay, coastal slope of Sonoma County, large waterways of the Central Valley, and further south the remainder of the year. Their diet consists primarily of fish, but prey also includes amphibians and crustaceans. American white pelicans forage by diving for prey over various depths of water.
shallow water, individuals will sometime cooperate to drive prey closer to shore where fish can be more easily caught. (CDFW 2013)

American white pelicans roost along the edge of waterways, on beaches, sandbars, or driftwood, but not in trees. Nests are situated on small islands or remote dikes at large fresh- and salt water lakes. Suitable nest areas are flat to gently sloping, offer a clear area for taking flight, and lack human disturbance. Breeding pelicans can travel up to 184 miles (306 kilometers) from their nest sites to forage, so prey does not necessarily have to be readily available near nests. This species is a monogamous, colonial nester that is presumed to be single-brooded with a usual clutch size of two eggs. Pelicans arrive at nesting sites in March or April and depart with independent young by September. (CDFW 2013)

Human disturbance related to recreation, development, and degradation of water quality is the primary threat to this species. Degradation of habitat is known to have eliminated historic pelican colonies in the State. Weather and climate changes that affect the hydrology or reduce the amount of primary nesting or nonbreeding migration areas are further concerns for the continued viability of pelican populations. The colonial nature of the species also increases the risk and spread of disease. (CDFW 2013, Shufard and Gardali 2008)

American white pelicans are known to forage and roost in marshes near the Project area and several individuals were noted during site investigations (WRA 2015). However, this species does not breed in the region (Shuford and Gardali 2008).

**California Least Tern (Sterna antillarum browni)**

California least tern is a federal and State listed endangered species, as well as a CDFW fully protected species. The USFWS has recommended downlisting the species to threatened, because the population has increased from about 600 to 7,100 pairs between 1973 and 2005. Also, the number of California least tern breeding sites has doubled since the initial listing. In general, this species ranges along the Pacific Coast from San Francisco to Baja. Their primary prey is small fish, but their diet also includes shrimp and other invertebrates. (USFWS 2007; 2016)

Suitable habitats for this species are generally limited to barren, estuarine, marine, or saline emergent wetlands (CDFW 2013). California least terns typically nest from April and May to late September with two waves of nesting in that timeframe (Marschalek 2010). The species winters south of California from October to April (CDFW 2013). California least terns begin breeding by performing aerial displays and nests are constructed shortly thereafter. This tern is a colonial nester of typically 25 breeding pairs situated on relatively flat, open or barren areas, such as beaches scoured from tidal action, alkali flats, landfills, or paved areas (CDFW 2017a). Nests consist of a simple scrape and a typical clutch is two eggs. (USFWS 2007; 2016)

Human disturbance is the primary threat to California least tern, as this species prefers to nest on beaches that are also popular recreation areas. Specific disturbances to nest sites include: direct proximity with people and pets; noise pollution; dredging; low flying aircraft; and military training exercises. (USFWS 2007; 2016)

The Project area provides potential foraging and nesting habitat for California least tern. The gravel lot may be attractive for nesting by this species, due to the flat, open characteristics of the area and proximity of potential forage habitat within the surrounding marsh and bays. However, the ongoing
human disturbance, including parking and events at the gravel lot, reduces the likelihood of the Project site supporting nesting terns. Additionally, there are no recorded occurrences of California least terns within the Project area (CDFW 2017a).

**Salt Marsh Harvest Mouse (Reithrodontomys raviventris)**

Salt marsh harvest mouse (SMHM) is a federal and State listed endangered species, as well as a CDFW fully protected species. Their distribution is restricted to the saline emergent wetlands of San Francisco Bay and its tributaries. This primarily nocturnal mouse forages on leaves, seeds, and stems of plants within the marsh habitat, preferring grasses in the winter while foraging mainly on pickleweed and saltgrass the remainder of the year. (CDFW 2013)

SMHM prefers saline emergent wetlands dominated by pickleweed commonly with fat hen (*Atriplex prostrata*) and alkali sea heath, but also inhabits adjacent grasslands with suitable cover, typically during the spring and summer. Habitat must include vegetation that provides cover and escape from the highest tides. SMHM breeds primarily between March and November. This species does not burrow, but builds a nest of grass on the ground. Litters average about four young and there may be up to two litters per year. (CDFW 2013)

The primary threat to SMHM, and reason for the endangered status, is the commercial and residential development of San Francisco Bay that results in loss of pickleweed habitat. Other related concerns include vegetation changes within marsh habitat (i.e., non-native species), changes in salinity of the marshes, and subsidence. (CDFW 2013)

The Project area includes SMHM habitat beginning at the transition to marsh that contains pickleweed with saltgrass, alkali sea heath and gumplant (WRA 2015). Also, this species has been recorded within the marshes surrounding the Project site (CNDDB 2017a). SMHM is considered unlikely to occur within the gravel lot or uplands of the Project site, due to the lack of cover and distance to the nearest suitable habitat (WRA 2015).

**Other Raptors and Migratory Birds**

Trees within the Project area provide potential nest sites for common raptors that could also forage within the area. Migratory birds also forage and nest in a variety of habitats, including landscaped and developed areas.

### 3.3.2 Regulatory Framework

**Federal**

**Federal Endangered Species Act**

The FESA of 1973 (16 USC 1531 et seq.) establishes a national policy that all federal departments and agencies provide for the conservation of threatened and endangered species and their ecosystems. The Secretary of the Interior and the Secretary of Commerce are designated in the FESA as responsible for: (1) maintaining a list of species likely to become endangered within the foreseeable future throughout all or a significant portion of its range (threatened) and that are currently in danger of extinction throughout all or a significant portion of its range (endangered); (2) carrying out programs for the conservation of these species; and (3) rendering opinions regarding the impact of proposed federal
actions on listed species. The FESA also outlines what constitutes unlawful taking, importation, sale, and possession of listed species and specifies civil and criminal penalties for unlawful activities.

Pursuant to the requirements of the FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed or proposed species may be present in the project region, and whether the proposed project would result in a “take” of such species. The FESA prohibits “take” of a single threatened and endangered species except under certain circumstances and only with authorization from the USFWS or the National Oceanic and Atmospheric Administration (NOAA) Fisheries through a permit under Section 7 (for federal entities) or 10(a) (for non-federal entities) of the Act. “Take” under the FESA includes activities such as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS regulations define harm to include “significant habitat modification or degradation.” In 1995, a U.S. Supreme Court ruling further defined harm to include habitat modification “…where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.”

In addition, the agency is required to determine whether a project is likely to jeopardize the continued existence of any species proposed to be listed under the FESA, or result in the destruction or adverse modification of critical habitat for such species (16 USC 1536[3][4]). If it is determined that a project may result in the “take” of a federally-listed species, a permit would be required under Section 7 or Section 10 of the FESA.

Clean Water Act

The CWA of 1977, as amended, establishes the basic structure for regulating discharges of pollutants into waters of the U.S. It gives the U.S. Environmental Protection Agency (EPA) the authority to implement pollution control programs, including setting wastewater standards for industry and water quality standards for contaminants in surface waters. The CWA makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, without a permit under its provisions.

Discharge of fill material into “waters of the U.S.,” including wetlands, is regulated by the USACE under Section 404 of the CWA (33 USC 1251-1376). USACE regulations implementing Section 404 define “waters of the U.S.” to include intrastate waters (such as, lakes, rivers, streams, wetlands, and natural ponds) the use, degradation, or destruction of which could affect interstate or foreign commerce. Wetlands are defined for regulatory purposes as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3; 40 CFR 230.3). The placement of structures in “navigable waters of the U.S.” is also regulated by the USACE under Section 10 of the Rivers and Harbors Act (33 USC 401 et seq.). Projects are approved by USACE under standard (i.e., individual) or general (i.e., nationwide, programmatic, or regional) permits. The type of permit is determined by the USACE and based on project parameters.

The USACE and the EPA announced the release of the Clean Water Rule on May 27, 2015 (80 FR 124: 37054-37127). The Rule is intended to ensure waters protected under the CWA are more precisely defined, more predictable, easier to understand, and consistent with the latest science.

Section 401 of the CWA requires any applicant for a federal license or permit, which involves an activity that may result in a discharge of a pollutant into waters of the U.S., obtain a certification that
the discharge will comply with applicable effluent limitations and water quality standards. CWA 401 certifications are issued by RWQCBs under the California Environmental Protection Agency.

**Migratory Bird Treaty Act**

The MBTA of 1918 (16 USC 703-711) established federal responsibilities for the protection of nearly all species of birds, their eggs, and nests. A migratory bird is defined as any species or family of birds that live, reproduce or migrate within or across international borders at some point during their annual life cycle. The MBTA prohibits the take, possession, buying, selling, purchasing, or bartering of any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21).

**State**

**California Environmental Quality Act**

CEQA requires that biological resources be considered when assessing the environmental impacts resulting from proposed actions. Lead agencies are charged with evaluating available data and determining what specifically should be considered an “adverse effect.”

**Porter-Cologne Water Quality Control Act**

The Porter-Cologne Act provides for statewide coordination of water quality regulations by establishing the California State Water Resources Control Board. The State Board is the statewide authority that oversees nine separate RWQCBs that collectively oversee water quality at regional and local levels. California RWQCBs issue CWA, Section 401 Water Quality Certifications for possible pollutant discharges into waters of the U.S. or state.

**California Fish and Game Code**

The CDFW enforces and permits actions regulated by the California Fish and Game Code, which governs the taking or possession of birds, mammals, fish, amphibians and reptiles, as well as natural resources such as wetlands and waters of the state. The code includes the CESA (Sections 2050-2115), Lake or Streambed Alteration Agreement regulations (Section 1600-1616), Native Plant Protection Act (Section 1900-1913), and Natural Community Conservation Planning (NCCP) Act (Section 2800 et seq.) as well as provisions for legal hunting and fishing, and tribal agreements for activities involving take of native wildlife.

**California Endangered Species Act**

The CESA includes provisions for the protection and management of species listed by the State of California as endangered, threatened, or designated as candidates for such listing (California Fish and Game Code Sections 2050 through 2085). The CESA generally parallels the main provisions of the FESA and is administered by the CDFW, which maintains a list of state threatened and endangered species as well as candidates and species of special concern. The CESA prohibits the “take” of any species listed as threatened or endangered unless authorized by the CDFW in the form of an Incidental Take Permit. Under the California Fish and Game Code, “take” is defined as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”
The species of special concern are broadly defined as species that are of concern to the CDFW, because of population declines and restricted distributions and/or they are associated with habitats that are declining in California.

**Native Plant Protection Act**

The CDFW administers the Native Plant Protection Act (Sections 1900–1913 of the California Fish and Game Code). These sections allow the California Fish and Game Commission to designate endangered and rare plant species and to notify landowners of the presence of such species. Section 1907 of the California Fish and Game Code allows the Commission to regulate the “taking, possession, propagation, transportation, exportation, importation, or sale of any endangered or rare native plants.” Section 1908 further directs that “...[n]o person shall import into this state, or take, possess, or sell within this state, except as incident to the possession or sale of the real property on which the plant is growing, any native plant, or any part or product thereof, that the Commission determines to be an endangered native plant or rare native plant.”

**Birds of Prey**

Section 3503 of the California Fish and Game Code prohibits the take, possession, or needless destruction of the nest or eggs of any bird. Subsection 3503.5 specifically prohibits the take, possession, or destruction of any birds in the orders Falconiformes (hawks and eagles) or Strigiformes (owls) and their nests. These provisions, along with the MBTA, essentially serve to protect nesting native birds.

**Fully Protected Species**

The California Fish and Game Code also accords “fully protected” status to a number of specifically identified fish (Section 5515), reptiles and amphibians (Section 5050), birds (Section 3511), and mammals (Section 4700). As fully protected species, the CDFW cannot authorize any project or action that would result in “take” of these species even with an incidental take permit.

**Regional and Local**

**Corte Madera Municipal Code Section 15.50 Trees**

The removal or modification to any tree within the Town limits requires a permit unless such work is specifically exempted from the tree permit requirements listed in the Municipal Code (CMC 15.50 Trees). Trees requiring consideration under the Municipal Code, and therefore subject to permit, include those with a single trunk circumference of at least 50 inches (or multi-stemmed trees having an aggregate circumference of 120 inches) measured 4.5 feet above grade. Heritage trees are also protected from alteration, destruction, or removal. Heritage trees are defined as a) being no less than 50 years old with a single trunk circumference equal to or more than 100 inches (or multi-stemmed trees having an aggregate circumference of equal to or more than 100 inches) measured 4.5 feet above grade; or b) being no less than 100 years old. Undesirable species may be altered, removed, or destroyed without a permit. However, undesirable species within the size parameters outlined above require an inspection by a Town arborist to confirm the species prior to their alteration, removal, or destruction. Undesirable species include: green wattle acacia (*Acacia decurrens*), black acacia (*Acacia melanoxylon*), sugar gum eucalyptus (*Eucalyptus cladocalyx*), blue gum eucalyptus (*Eucalyptus"
globulus), manna gum eucalyptus (Eucalyptus viminalis), juniper (Juniperus spp.), Monterey pine (Pinus radiata), and Lombardy poplar (Populus nigra “Italica”).

**Corte Madera Municipal Code Section 18.18.200 Baylands Risk Zone and Natural Habitat Overlay District**

For a proposed development on a site designated as "wetland and marshland" by the Town of Corte Madera General Plan 2009, a study and report by a qualified environmental biologist or other specialist in the field shall be required. The report shall classify and document the site in terms of its unique, intrinsic value as wildlife habitat, and where there are differences in the value or sensitivity of portions of the site, shall rate them in order of lowest to highest wildlife resource value. Based on these classifications and ratings, the report shall contain specific recommendations on portions of the site that should not be disturbed in any manner, portions of the site that can sustain limited modification without major loss of resource value, and portions of the site best suited to development.

**Corte Madera General Plan Goals and Policies**

The following goals, policies, and implementation programs related to natural area resource conservation from the Town of Corte Madera General Plan 2009 are related to biological resources and applicable to the Project:

**Goal RCS-6 Sustainable resources management.**

**Policy RCS-6.2**  Protect wetlands (as defined herein), other waters of the U.S., and essential habitat for special status species, including, but not limited to, other wetland habitat areas, habitat corridors, and sensitive natural communities.

**Implementation Program RCS-6.2a: Resource Protection**

Protect sensitive biological resources, including wetlands and other waters of the U.S. and other wetland habitat areas, and habitat corridors, and sensitive natural communities through environmental review of development applications in compliance with CEQA provisions, participation in comprehensive habitat management programs with other local and resource agencies, and continued acquisition and management of open space lands that provide for permanent protection of important natural habitats. Protect wetlands and other waters of the U.S. in accordance with regulations of the USACE and other appropriate agencies as well as consistent with Implementation Program RCS-8.2a. Protect other habitat areas, habitat corridors, and sensitive natural communities consistent with program RCS-6.3a.

**Policy RCS-6.3**  Manage the development review process in compliance with CEQA provisions to promote resource conservation and sustainability.

**Implementation Program RCS-6.3a: Environmental Review**

Continue to require environmental review of development applications pursuant to the CEQA to assess the impact of proposed development on species and habitat diversity, particularly special status species, sensitive habitat areas, wetlands and other wetland habitats, and habitat connectivity. Require adequate mitigation
measures for ensuring the protection of sensitive resources and achieving “no net loss” of sensitive habitat acreage, values and function. Require specific mitigation measures for wetlands and waters of the U.S. (see RCS-8.2a).

Implementation Program RCS-6.3b: Early Agency Consultation

Require early consultation with all trustee agencies and agencies with review authority pursuant to CEQA for projects in areas supporting special status species, sensitive natural communities or wetlands that may be adversely affected by development.

Policy RCS-6.7 Protect migratory corridors.

Implementation Program RCS-6.7a: Migratory Corridors

Condition approval of development proposals to assure that movement corridors for migratory fish and wildlife species are maintained. Coordinate with Marin County and adjoining jurisdictions, and Federal and State agencies such as the California Department of Transportation (CalTrans), to assure regional connectivity of open space and wildlife corridors.

Goal RCS-7 Biodiversity and sustainable habitat.

Policy RCS-7.1 Conserve, restore, and enhance areas containing important habitat, wetlands (as defined herein) and special status species.

Implementation Program RCS-7.1a: Protect Biodiversity

Protect areas known to support a high degree of biological diversity and that may contain species known to be rare or protected under State and Federal Endangered Species Acts. These include the Town’s tidal wetlands, freshwater wetlands, and hillside oak woodlands.

The Town will identify the location, habitat, and buffer needs of species listed for protection. The Town will maintain, for public use, generalized maps showing known locations of listed species. Sensitive habitat areas to be mapped will include, but not limited to, coastal oak woodland, redwood, estuarine, lacustrine, saline emergent, freshwater emergent, coastal scrub, coastal grassland, and chaparral mixed.

Include standards in the updated Zoning Ordinance limiting development within these areas, and limiting public access to particularly sensitive habitats that contain species known to be rare or protected.

Policy RCS-7.2 Retain sensitive habitat areas and restore to their natural state, where feasible, and protect from inappropriate development and landscaping.

Implementation Program RCS-7.2a: Environmental Assessment

Require applicants to provide an environmental assessment in compliance with CEQA provisions for development proposed on sites that may contain sensitive biological or wetland resources including jurisdictional wetlands, waters of the U.S.,
and other wetland habitats. Require the assessment to be conducted by a qualified professional to determine the presence of any sensitive resources, to assess the potential impacts, and to identify measures for protecting the resource and surrounding habitat (see Implementation Program RCS-8.2a for mitigation standards for wetlands and waters of the U.S.; see Implementation Program RCS-6.3a for mitigation standards for other wetland habitat areas).

**Implementation Program RCS-7.2c: Limit Impacts**

As part of the development review process, restrict or modify proposed development in areas that contain essential habitat for special status species, sensitive habitat areas or wetlands as necessary to ensure the continued health and survival of these species and sensitive areas. Development projects preferably shall be modified to avoid impacts on sensitive resources, or impacts shall be mitigated by providing onsite or (as a lowest priority) off-site replacement (see Implementation Program RCS-8.2a for mitigation standards for jurisdictional wetlands and waters of the U.S.; see Implementation Program RCS-6.3a for mitigation standards for other wetland habitat areas).

**Policy RCS-7.5** Require use of native plant species in landscaping plans and reduce spread of invasive species.

**Implementation Program RCS-7.5b: Landscaping Requirements**

As part of the discretionary review of proposed development, prohibit the use of highly invasive species in landscaping and require the removal of invasive exotic species. Require use of native or compatible nonnative plant species indigenous to the site vicinity as part of the discretionary review of project landscaping. Additionally, require that landscaping improvements for community parks, trails, and other public areas include the use of native plant materials and species that recognize and enhance the natural resource setting on the Town.

**Policy RCS-7.7** Control the use of herbicide, insecticides, and similar materials.

**Implementation Program RCS-7.7a: Integrated Pest Management**

Encourage the use of integrated pest management and organic practices to control pests with the least possible hazard to the environment. Restrict the use of insecticides, herbicides, or any toxic chemical substance in sensitive habitats, except when an emergency has been declared, the habitat itself is threatened, a substantial risk to public health and safety exists, including maintenance for flood control, or when such use is authorized pursuant to a permit issued by the Agricultural Commissioner. Encourage non-toxic strategies for pest control, such as habitat management using physical and biological controls, as an alternative to chemical treatment.
Goal RCS-8  **Long-term sustainability of wetlands.**

Policy RCS-8.1  Protect wetlands through careful environmental review of proposed development applications.

**Implementation Program RCS-8.1a: Wetland Data**

Pursuant to CEQA, when sites with potential wetlands (as defined herein), other waters of the U.S., or other wetland habitat areas are proposed for development, require detailed assessments to demonstrate compliance with State and Federal regulations. Assessments shall be conducted by a qualified professional retained by the Town to determine wetland boundaries and the presence of sensitive resources including endangered and special status species and their habitat, to assess the potential impacts, and to identify measures for protecting the resource and surrounding buffer habitat. Assessments will delineate and map jurisdictional wetlands, waters of the U.S., other wetland habitat areas, open-water habitats, and upland habitats and will make recommendations for avoidance. Delineation studies shall be submitted to the USACE and other resource agencies to determine the boundaries of wetlands and waters of the U.S.

**Implementation Program RCS-8.1b: Wetland Avoidance:**

Restrict or modify proposed development in areas that contain wetlands (as defined herein) or waters of the U.S., as necessary to ensure the continued health and survival of special status species and sensitive habitat areas. Development projects shall preferably be modified to avoid impacts on sensitive resources, or to adequately mitigate impacts by providing onsite replacement or (as a lowest priority) off-site replacement at a higher ratio. Modification in project design shall include adequate avoidance measures to ensure that no net loss of wetland acreage, function, water quality protection, and habitat value occurs. This may include the use of setbacks, buffers, and water quality drainage control features, or other measures to maintain existing habitat and hydrologic functions of retained wetlands and waters of the U.S. (see Implementation Program RCS-8.2a for mitigation standards for wetlands and waters of the U.S.; see Implementation Program RCS-6.3a for mitigation standards for other wetland habitat areas).
3.3.3 **Evaluation Criteria and Significance Thresholds**

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.3-2 (Evaluation Criteria and Significance Thresholds) are used to determine if the Project would have a significant effect related to biological resources.

**Table 3.3-2 Evaluation Criteria and Significance Thresholds**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
</table>
| 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 Wildlife or U.S. Fish and Wildlife Service? | Direct loss or harm of a special-status species  
Loss or alteration of habitat that could result in the ‘take’ of a special-status species  
Indirect disturbance (e.g., construction noise) that could disrupt essential activities (e.g., nesting) of a special-status species | CEQA Guidelines Appendix G, Checklist Item IV (a)  
General Plan Policy RCS-7.1 |
| Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | Direct removal of any riparian community or other sensitive natural community (except wetlands)  
Substantial degradation of a sensitive natural community  
Indirect disturbance that could reduce habitat function and value | CEQA Guidelines Appendix G, Checklist Item IV (b)  
General Plan Policies RCS-7.1 and 7.2 |
| Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption, or other means? | Placement of fill in, or discharge into, wetlands, waters of the U.S., or waters of the State  
Indirect disturbance that could substantially affect hydrology or contribute to erosion and/or negatively impact water quality of wetlands, waters of the U.S., or waters of the State | CEQA Guidelines Appendix G, Checklist Item IV (c)  
General Plan Policies RCS 6.2, RCS 7.1, RCS 7.2, and RCS-8.1 |
| 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? | Create a substantial barrier to movement resulting in loss or harm to migratory wildlife | CEQA Guidelines Appendix G, Checklist Item IV (d)  
General Plan Policy RCS-6.7 |
### Evaluation Criteria and Significance Thresholds

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td>Conflict with an applicable local policy or ordinance</td>
<td>CEQA Guidelines Appendix G, Checklist Item IV (e)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMC Section 15.50 Trees</td>
</tr>
<tr>
<td>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?</td>
<td>Conflict with an approved conservation plan</td>
<td>CEQA Guidelines Appendix G, Checklist Item IV (f)</td>
</tr>
</tbody>
</table>

#### 3.3.4 Areas of No Impact

The proposed Project would not result in impacts related to one of the biological evaluation criteria listed in Table 3.3-2 (Evaluation Criteria and Significance Thresholds). For the reasons presented below, the following evaluation criterion is not applicable to the Project:

**Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?**

The Project is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, the Project would not conflict with the provisions of an adopted conservation plan. No impact would occur and the evaluation criterion is not discussed further.

#### 3.3.5 Approach to Analysis

An evaluation of the significance of potential impacts on biological resources must consider both direct effects to the resource as well as indirect effects in a local or regional context.

The gravel lot and surrounding environs were surveyed during investigations to support the *Biological Resources Assessment* (WRA 2015) and again in support of *Review of Biological Resources Assessment* (OEI 2015). The OEI review determined that the *Biological Resource Assessment* (WRA 2015) adequately considers potential impacts to the biological resources and sensitive-status species that could potentially occur in the Project area. In addition, the OEI review provided recommendations to improve the mitigation and to consider potential impacts of increased avian predator activity with the installation of lighting and landscaping in the parking lot (OEI 2015).

In addition, the following information was reviewed during this analysis:

- Aerial imagery of the Project area and vicinity;
- U.S. Geological Survey (USGS), 7.5 minute San Rafael topographic quadrangle;
- Corte Madera General Plan and EIR (Corte Madera 2009);
3.3.6 Impacts and Mitigation Measures

Table 3.3-3 (Summary of Impacts – Biological Resources) provides a summary of potential impacts from the Project.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-1: 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 Wildlife or U.S. Fish and Wildlife Service?</td>
<td>LSM</td>
</tr>
<tr>
<td>BIO-2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</td>
<td>LSM</td>
</tr>
<tr>
<td>BIO-3: Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td>LSM</td>
</tr>
<tr>
<td>BIO-4: 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?</td>
<td>LSM</td>
</tr>
<tr>
<td>BIO-5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td>LSM</td>
</tr>
<tr>
<td>C-BIO-1: Would the project result in a cumulatively considerable contribution to impacts related to biological resources?</td>
<td>LS</td>
</tr>
</tbody>
</table>

Notes: LS = Less than Significant
LSM = Less than Significant with Mitigation
Impact BIO-1:  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 Wildlife or U.S. Fish and Wildlife Service?

Analysis:  Significant

Construction

Special-status Plant Species:

Construction of the Restoration Hardware building and associated improvements would affect only paved areas and limited areas of landscaping which currently support non-native “parking lot” trees. No special-status plant species are expected to occur within the area of the gravel lot improvements or in the coyote brush scrub or ruderal grassland adjacent to the gravel lot. However, there is a low potential for special-status plant occurrence within the marsh habitat1 (see Figure 3.3-1).

Construction of the gravel lot improvements would be limited to the existing disturbed area. Construction would not encroach into the surrounding marsh, because it is at least 50 feet away from the proposed construction area. Therefore, even though there is a low potential for special-status plant species within the marsh habitat, no direct disturbance of marsh vegetation, including special-status plants would occur with Project implementation. In addition, the “buffer” of coyote brush scrub and ruderal grassland between the improved portion of the gravel lot and the marsh would provide additional protection for the marsh vegetation.

If the optional fence were constructed, an area approximately 1-foot wide by 100-feet long of the coyote brush/ruderal grassland “buffer” would be disturbed. However, this community does not support habitat for special-status plant species. Therefore, the optional fence would not impact special-status plant species.

Indirect impacts could potentially occur due to stormwater or dewatering water discharges during construction, as identified in Section 3.8 Hydrology and Water Quality. Therefore, the impact on special-status plant species in the marsh could be significant.

Salt Marsh Harvest Mouse:

Construction of the Restoration Hardware building and associated improvements within the existing parking lot would not affect salt marsh harvest mouse habitat. No habitat for salt marsh harvest mouse exists within the area of the gravel lot that would be affected by the Project, but there is potential habitat within the marsh habitat near the gravel lot.

Construction of the gravel lot improvements would be limited to the existing disturbed area, with the exception of the optional fence which would encroach into

---

1 The official name of the vegetation type per the Manual of California Vegetation is Saltgrass Flats – Herbaceous. However, this analysis of biological impacts uses the more common name of “marsh”.
the coyote brush/ruderal grassland “buffer” approximately 1 foot, along the eastern edge of the gravel lot for approximately 100 feet. Construction would not encroach into the surrounding marsh, because it is at least 50 feet away from the proposed construction area. Therefore, no direct disturbance of salt marsh harvest mouse habitat would occur with Project implementation.

Between the improved portion of the gravel lot and the marsh is a “buffer” of coyote brush and ruderal grassland which would serve to increase protection of the salt marsh harvest mouse habitat. Although very unlikely, salt marsh harvest mouse individuals could stray into the ruderal grassland and coyote brush scrub buffer and from there into the construction area. In addition, indirect impacts could potentially occur due to ground vibration, noise, and fugitive dust emissions from staging and construction, and from stormwater or dewatering water discharges during construction, as identified in Section 3.8 Hydrology and Water Quality. Therefore, the impact on potential habitat for salt marsh harvest mouse could be significant.

Nesting Raptors and Migratory Birds:

Habitat within and adjacent to the Project site provides limited nesting and suitable foraging opportunities for many avian species, including some raptors and migratory birds with no special status. Raptor and migratory bird nests, regardless of species’ status, are considered to be a protected resource by federal and State regulatory authorities under the MBTA and California Code of Regulations. In addition, six special-status raptors and migratory birds (see Table 3.3-1) have the potential to occur at the Project site. Implementation of the Project could result in impacts to nesting of these non-status and special-status birds. Potential impacts to special-status birds would be significant.

Operation

Operation at the Restoration Hardware building would not have impacts on habitat for the salt marsh harvest mouse.

Improvements at the gravel lot include installation of 20-foot tall light poles throughout the site. Lighting fixtures, particularly along the peripheral areas, have the potential to illuminate adjacent sensitive habitat areas, including wetlands and open water in addition to vegetated uplands. Currently the gravel lot utilizes portable, gas-powered (generator-based) lighting for approximately two months per year, during the peak shopping season, or as needed. The addition of year-round lighting could potentially disturb special-status species in the marsh habitat. In addition, these poles could be used as perches by raptors to hunt prey, including salt marsh harvest mouse. The increase in nighttime lighting and the potential increase in avian predator activity would be a significant impact. In addition, indirect impacts could potentially occur due to stormwater and dewatering water discharges from the gravel lot, as identified in Section 3.8 Hydrology and Water Quality. Therefore, the impact on special-status plant species and potential habitat for the salt marsh harvest mouse could be significant.
Mitigation: **Measure BIO-1a: Protect Salt Marsh Harvest Mouse**

The Applicant shall implement the following measures prior to and during construction and staging at the gravel lot:

- All non-landscaped, vegetated habitats within the Project area (i.e., coyote brush scrub, salt grass flats, and ruderal grassland) shall be avoided to the maximum extent feasible.
- Staging areas shall be located in a developed area of the Project site at least 33 feet away from the edge of the developed/barren habitat and transitional habitats (coyote brush scrub and ruderal grassland). If it is not practical to locate the staging area at least 33 feet from the nearest non-landscaped vegetation, the area shall be surrounded by a temporary exclusion fence. The fence type and installation shall follow the same specifications for the work area, as outlined in the next bullet.
- The work area shall be separated from the surrounding natural vegetation by a temporary exclusion fence made of or covered with smooth, heavy plastic sheeting that is at least three feet in height and 12 inches higher than the tallest adjacent vegetation (a maximum fence height of four feet is appropriate). The fence bottom shall be buried at least four inches deep into the ground with no gaps. Stakes shall be located on the inside of the exclusion fence (to deter mice from climbing stakes).
- All construction personnel and onsite staff shall participate in an endangered species training program to be given by the biological monitor (see below). The training shall provide information about salt marsh harvest mouse, measures being implemented to avoid impacts to these species, and procedures to follow should a salt marsh harvest mouse be encountered during work. Training shall cover the sensitive resources located in the area, how to avoid sensitive resources, environmental rules and regulations, and the importance of protecting environmental resources.
- Vegetation within 2 feet of the exclusion fencing shall be trimmed as follows to prevent saltmarsh harvest mouse individuals from climbing on the vegetation as a pathway over the fencing. Trim upland grasses and weeds to less than 6”; trim coyote brush that is touching the exclusion fencing so that it cannot provide a pathway over the fencing for the mouse. Vegetation shall be trimmed by hand beginning at lesser quality habitat and moving toward better quality habitat. The vegetation trimming shall be maintained for the duration of construction.
- A qualified biological monitor shall be present during vegetation trimming and salt marsh harvest mouse exclusion fence installation.
- Construction activities shall only occur during daylight at the gravel lot between 30 minutes after sunrise and 30 minutes before sunset (this condition does not apply to construction within The Village site).
- No lighting shall be used in construction areas overnight at the gravel lot, except for those on motion detectors, affixed downward (minimal up light and spill), and necessary for safety.
• Standard Best Management Practices (BMP) shall be implemented to reduce noise, fugitive dust, and other general disturbance to the area (General Plan Implementation Program RCS-10.3.c Construction Dust Control, RCS-10.3.e Construction Equipment Control, and PSH-5.7b Muffler Requirements).

• Dust abatement involving water shall limit spraying to prohibit the forming of pools on paved areas that might attract birds to the construction area.

• Roosting and landing deterrent (i.e., bird control spikes) shall be permanently installed on the top of new lighting structures at the gravel lot to deter avian predators.

**Measure Bio-1b: Protect Nesting Raptors and Migratory Birds**

The Applicant shall implement the following measures:

• Grading or removal of any vegetation, including landscaping, shall be conducted outside the nesting season (defined as February 1st through August 31st), if feasible. No survey is required for work conducted between September 1st and January 31st. However, if an active nest is encountered, since a few species breed year-round, a qualified biologist shall be contacted and work in the immediate vicinity of the nest shall cease until corrective measures can be implemented (i.e. avoidance of the nest until the young have fledged).

• If grading or vegetation removal between September 1st and January 31st is infeasible and work must occur within the breeding season, a pre-construction nesting bird survey (for both passerines and raptors) of the Project area shall be performed by a qualified biologist within 7 days of breaking ground. If no nesting birds are observed, no further action is required and work shall begin within one week of the survey to prevent "take" of individual birds that could begin nesting after the survey. If the onset of work is delayed or there is a break in construction lasting longer than 7 days during the breeding season, then the original survey is presumed invalid and an additional survey shall be conducted.

• If bird nests (either passerine and/or raptor species that are protected under the MBTA or California Fish and Game Code) are observed during the pre-construction survey, a disturbance-free (or exclusion) buffer zone shall be established around the nest tree(s)/area until the young have fledged, as determined by a qualified biologist. The radius of the required buffer zone can vary depending on the species, (i.e., 75 to 100 feet for passerines and 200 to 300 feet for raptors); the dimensions of any required buffer zones shall be determined by a qualified biologist in consultation with USFWS or CDFW.

• Before construction begins, orange construction fencing shall be placed at the specified radius from the base of the nest tree/area to delineate the exclusion buffer zone from construction areas. No machinery or workers shall intrude into the established buffer zone. Grading and construction activities would not be restricted (in regard to nesting birds) outside the prescribed buffer zone.

**Measure AES-1: Reduce Nighttime Lighting**

Refer to Section 3.1 Aesthetics for the complete text of this mitigation measure.

**Measure HWQ-1: Manage Stormwater during Construction**
Measure HWQ-2: Manage Construction Dewatering Discharges

Measure HWQ-3: Implement Post-construction Stormwater Requirements

Refer to Section 3.8 Hydrology and Water Quality for the complete text of these mitigation measures.

After Mitigation:  Less than Significant after Mitigation

Implementation of Mitigation Measures BIO-1a, AES-1, HWQ-1, HWQ-2, and HWQ-3 would reduce impacts to salt marsh harvest mouse by (a) excluding them from the Project site during construction, (b) working when the species are least likely to be onsite, (c) providing worker education as to species’ potential presence, and (d) managing construction activities to maintain ambient site conditions to the greatest extent practicable.

Implementation of Mitigation Measures HWQ-1, HWQ-2, and HWQ-3 would reduce impacts to special-status plant species potentially located in the marsh by requiring best management practices, permitting, and quality control of storm water and dewatering water.

Implementation of Mitigation Measure BIO-1b would reduce impacts to nesting birds and raptors by requiring avoidance and/or limiting sources of potential interference during construction.

Impact BIO-2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Analysis:  Significant

No sensitive natural communities occur at the proposed location of the Restoration Hardware building and associated improvements.

The gravel lot parcel includes northern coastal salt marsh at the periphery. This habitat is considered to be a sensitive natural community by the USFWS, CDFW, and the Town of Corte Madera. The marsh community would not be directly impacted during Project construction or operation. The footprint of the gravel lot improvements would be limited to the existing gravel area. In addition, there is an approximate 50 to 80 foot “buffer” of coyote brush scrub and ruderal grassland between the gravel lot improvements and the marsh.

If the optional fence were constructed, an area approximately 1-foot wide by 100-feet long of the coyote brush/ruderal grassland “buffer” would be disturbed adjacent to the existing gravel lot. This option would reduce the “buffer” between construction and the marsh by one foot.

Indirect impacts could potentially occur due to dust or stormwater discharges from the gravel lot, as identified in Section 3.8 Hydrology and Water Quality. Therefore, the impact on sensitive natural communities, i.e., the nearby marsh, could be significant.
Mitigation:

- **Measure BIO-1a**: Protect Salt Marsh Harvest Mouse
- **Measure AQ-2**: Implement BAAQMD Basic Construction Measures

Refer to Section 3.2 Air Quality for the complete text of this mitigation measure.

- **Measure HWQ-1**: Manage Stormwater during Construction
- **Measure HWQ-2**: Manage Construction Dewatering Discharges
- **Measure HWQ-3**: Implement Post-construction Stormwater Requirements

Refer to Section 3.8 Hydrology and Water Quality for the complete text of these mitigation measures.

After Mitigation: *Less than Significant after Mitigation*

Implementation of Mitigation Measure BIO-1a, AQ-2, HWQ-1, HWQ-2, and HWQ-3 would reduce impacts to the marsh community by requiring avoidance and limiting sources of potential interference during construction and operation.

**Impact BIO-3:** Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

**Analysis:** *Significant*

No wetlands or waters of the U.S. occur at the proposed location of the Restoration Hardware building and associated improvements.

The gravel lot parcel includes northern coastal salt marsh, an aquatic community which qualifies as a wetlands/waters of the U.S. at the eastern edge of the parcel. The marsh would not be directly impacted during Project construction or operation. The footprint of the gravel lot improvements would be limited to the existing gravel area. In addition, there is an approximate 50- to 80-foot buffer of coyote brush scrub and ruderal grassland between the gravel lot improvements and the marsh.

However, indirect impacts could potentially occur due to dust, or stormwater discharges from the gravel lot, as identified in Section 3.8 Hydrology and Water Quality. Therefore, the impact on the wetlands/waters, i.e., the nearby marsh, could be significant.

**Mitigation:**

- **Measure AQ-2**: Implement BAAQMD Basic Construction Measures

Refer to Section 3.2 Air Quality for the complete text of this mitigation measure.

- **Measure HWQ-1**: Manage Stormwater during Construction
- **Measure HWQ-2**: Manage Construction Dewatering Discharges
- **Measure HWQ-3**: Implement Post-construction Stormwater Requirements

Refer to Section 3.8 Hydrology and Water Quality for the complete text of these mitigation measures.
After Mitigation: *Less than Significant after Mitigation*

Implementation of Mitigation Measures AQ-2, HWQ-1, HWQ-2, and HWQ-3 would reduce impacts to northern coastal salt marsh by requiring avoidance and limiting sources of potential pollution during construction and operation.

**Impact BIO-4:** 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?

**Analysis:** *Significant*

No established wildlife corridors or native wildlife nursery sites are known within the Project area. The marshes are suitable for wildlife dispersal, but the Project would not have any permanent or significant effects on movement within the marshes. Many bird species seasonally migrate through the region, but Project improvements are limited to existing disturbed areas and would not change the nature of that migration. The Project’s potential to substantially interfere with the movement of fish or wildlife species would be less than significant.

If the optional fence were constructed, an area approximately 1-foot wide by 100-feet long of the coyote brush/ruderal grassland “buffer” would be disturbed. However, this community does not support wildlife corridors.

Project construction has the potential to disturb nesting birds, which would be a significant impact.

**Mitigation:** *Measure BIO-1b: Protect Nesting Raptors and Migratory Birds*

**After Mitigation:** *Less than Significant after Mitigation*

Implementation of Mitigation Measure BIO-1b would reduce impacts to nesting birds by requiring avoidance and limiting sources of potential interference during construction.

**Impact BIO-5:** Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

**Analysis:** *Significant*

The Town of Corte Madera has enacted a Tree Ordinance to protect and manage trees within their sphere of influence. Although the Project would remove trees in the parking lot and east entry plaza, the tree removal does not require a permit, in accordance with CMC 15.50 Trees. The trees that would be removed are less than 50 inches in circumference, which are exempt from the permit requirements.

Please note that Mitigation Measure BIO-1a, discussed under Impact BIO-1 above, requires implementation of General Plan Best Management Practices: RCS-10.3.c, Construction Dust Control, RCS-10.3.e Construction Equipment Control, and PSH-5.7b Muffler Requirements.
The Applicant’s Concept Planting Plans include a number of species that do not comply with General Plan Policy RCS-7.5 which requires native plant be used for landscaping. This conflict would be a significant impact.

**Mitigation:**

**Measure BIO-5a: Comply with General Plan Policies regarding Non-native Species**

The Applicant shall prepare planting specifications, including a species list to ensure landscaping complies with General Plan Policy RCS-7.5. The following shall be implemented:

- Landscaping and stormwater detention basins shall be composed of appropriate native species consistent with the BASMAA guidelines.
- Landscaping shall not use species for outdoor landscaping identified as invasive by the California Invasives Plant Council or as undesirable species in the Town of Corte Madera Municipal Code Section 15.50 Trees.
- Landscaped areas shall be maintained to contain and prevent the spread of highly invasive and noxious weeds. However, the use of pesticides or other chemical pest control shall be prohibited unless approved for use in sensitive aquatic areas.

**After Mitigation:** *Less than Significant after Mitigation*

Implementation of the Mitigation Measure BIO-5a would eliminate conflicts with local policies regarding non-native landscape species by ensuring compliance.

**Impact C-BIO-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to biological resources?**

**Analysis:** *Less than Cumulatively Considerable (Less than Significant)*

Several sensitive and listed species have the potential to occur within the Project site. Loss of habitat or individuals due to Project implementation could contribute to cumulative impacts for these species.

Special-status or migratory birds could be nesting on or near the Project at the time of construction. Disturbance of nesting due to the Project could contribute to cumulative impacts for such species.

Mitigation under Impact BIO-1 requires avoidance measures and further protections for salt marsh harvest mouse and special-status plant species. Therefore, Project contributions to potential salt marsh harvest mouse or special-status plant species population decline in the region would not be cumulatively considerable with implementation of MM BIO-1. Similarly, mitigation under Impacts BIO-1 and BIO-4 avoid impacts to protected nesting birds. Consequently, cumulative threats to sensitive and listed species from implementation of the Project would not be cumulatively considerable.

Northern coastal salt marsh, a sensitive natural community and jurisdictional aquatic resource, occurs at the periphery of the Project site. Degradation of jurisdictional
features from Project implementation may contribute to cumulative impacts to these resources.

Mitigation under Impacts BIO-2 and BIO-3 require actions to maintain the quality of the adjacent marsh habitat by limiting indirect impacts. Therefore, Project contributions to the loss of aquatic resources and sensitive natural communities would not be cumulatively considerable. Consequently, cumulative threats to aquatic resources associated with the marsh from implementation of the Project would not be cumulatively considerable.

With mitigation under Impact BIO-5, the Project would be implemented in accordance with Town of Corte Madera policies regarding wetlands setbacks and guidance for maintaining and managing vegetation. Consequently, the Project would not contribute to cumulative impacts regarding conflicts with local plan and policies.

In summary, implementation of the mitigation measures presented within this chapter would reduce the Project’s contribution to cumulative biological resource impacts resulting from completion of the Project. Furthermore, the Project would be implemented within previously developed and disturbed areas. No loss of undisturbed, natural habitat would occur with Project completion. There are also no known proposed actions in the Project area that could potentially amplify the impacts discussed in this chapter resulting in a cumulative concern. Therefore, Project contributions to the potential loss and/or restriction of biological resources in the region would not be considerable (less than significant).

Mitigation: No mitigation is needed.
3.3.7 References


USFWS. 2017. List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by you proposed project. Consultation Code: 08ESMF00-2017-SLI-1846. April 21.

### 3.4 Cultural, Paleontological, and Tribal Cultural Resources

This section provides a description of the existing cultural resources, paleontological resources, and tribal cultural resources in the Project area and evaluates changes to those conditions that would result from implementation of the proposed Project. This section is largely based on the *Archaeological Resources Review and Sensitivity Study for the Village at Corte Madera Expansion Project* prepared by the Anthropological Studies Center at Sonoma State University, dated April 2017.

#### 3.4.1 Setting

**Archaeological Resources**

Many of the archaeological sites in the North Coast Ranges were first used in the Middle and Upper Archaic, when populations were increasing and groups moved into new areas to exploit a more diverse range of resources. By the Upper Archaic period, beginning around 500 B.C., mobility was being replaced by a more sedentary adaptation that included a reliance on intensive acorn processing and storage. Numerous small villages and the beginnings of a more complex society and economy characterize the end of this period.

During the Emergent, or Late, period (ca. A.D. 1000 to the historic-era), social complexity developed toward the contact-era settlement pattern of large, central villages where political leaders resided, with associated hamlets and specialized activity sites. Innovations associated with the period include the bow and arrow, small corner-notched projectile points, and a diversity of beads and ornaments. Archaeological sites dating to this period are common throughout the North Coast Ranges.

**Historic Resources**

One of the area’s first European settlers was Thomas Reed, a native of Dublin who came to San Francisco in 1826. Reed was granted the nearly 8,000-acre Ranch Corte Madera del Presidio in 1834 by Governor Jose Figueroa. Reed died in 1843 and the grant passed to his widow Hilaria. In 1848, the cession of California to the United States and the Treaty of Hidalgo ensured that land grants made under Mexican rule would be honored. As required, a claim for Rancho Corte Madera del Presidio was made with the Public Land Commission in 1852. The commission confirmed only half of the acreage in 1856. Eventually, the land was patented for the total acreage to the heirs of John Reed in 1885.

Many residents fled San Francisco after the 1906 earthquake and settled in Corte Madera. The Town of Corte Madera was incorporated in 1916 and boasted the first post office and railroad station between Sausalito and San Rafael.

An 1892 map of Marin County shows the Project area as marshland owned by T.B. Valentine, et al. The 1897 USGS Tamalpais quadrangle map shows the Project area well within the bay estuary with the sole development the San Francisco and North Pacific Railroad line. By 1941, the development of Highway 101 created a wedge of land largely protected from the tidal zone. In 1954, the Project area was depicted as marshland with sloughs or ponds present to the north cut off from the tidal zone by the railroad. West of Highway 101 developed rapidly between 1954 and 1968, while the Project area continued as open marshland until the late 1970s when the Village at Corte Madera was constructed.
Native American Tribal Resources

A letter was sent to the Native American Heritage Commission (NAHC) on March 15, 2017 requesting a review of the Sacred Lands File for information on Native American cultural resources in the Project area. On March 24, 2017 the NAHC replied that their records search had failed to indicate the presence of Native American cultural resources in the study area. The NAHC response also included a list of Native American individuals and organizations that may have knowledge of cultural resources in the study area. Letters were sent to both groups on the NAHC list on April 19, 2017 informing them of the proposed Project and asking for any additional information or concerns. Letters were sent to Greg Sarris, Tribal Chairperson, and Gene Buvelot of The Federated Indians of Graton Rancheria (FIGR). An email was also sent to Buffy McQuillen, Tribal Historic Preservation Officer for FIGR on April 19.

A response was received from Ms. McQuillen on April 19, 2017 stating that she and Gene Buvelot had previously reviewed the Project and made an assessment that the area has a very low sensitivity for resources, but that in the event of an inadvertent discovery, they would want to be notified immediately and engage in consultation with the Town.

Paleontological Resources

Paleontological resources are the fossilized remains of plants and animals, including vertebrates (animals with backbones), invertebrates (e.g., starfish, clams, ammonites and marine coral) and fossils of microscopic plants and animals (microfossils). The age and abundance of fossils depend on the location, topographic setting and particular geologic formation in which they are found.

The Project would be placed on artificial fill that has no potential for paleontological resources. The mélange underneath the fill would have very low sensitivity for paleontological resources (Finger 2017).

3.4.2 Regulatory Framework

Federal

Historic Preservation Act

The National Register of Historic Places (NRHP) is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources.

National Register Bulletin Number 15, How to Apply the National Register Criteria for Evaluation describes the Criteria for Evaluation for the National Register as being composed of two factors (US Department of the Interior 1997). First, the property must be "associated with an important historic context." The National Register identifies four possible context types, of which at least one must be applicable at the national, state, or local level. As listed under Section 8, "Statement of Significance," of the National Register of Historic Places Registration Form, these are:

- Property is associated with events that have made a significant contribution to the broad patterns of our history.
Property is associated with the lives of persons significant in our past.

Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

Property has yielded, or is likely to yield, information important to prehistory or history.

Second, for a property to qualify under the NRHP’s Criteria for Evaluation, it must also retain "historic integrity of those features necessary to convey its significance." While a property's significance relates to its role within a specific historic context, its integrity refers to "a property's physical features and how they relate to its significance." To determine if a property retains the physical characteristics corresponding to its historic context, the National Register has identified seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association.

State

California Environmental Quality Act

Historic Resources and Unique Archaeological Resources

CEQA requires lead agencies to determine if a proposed Project would have a significant effect on historical resources and unique archaeological resources. CEQA Guidelines Section 15064.5 defines a historical resource as: (1) a resource listed in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in the California Public Resources Code (PRC) Section 5020.1(k), or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency’s determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of CEQA Statute PRC Section 21084.1 and CEQA Guidelines Section 15064.5 would apply. If an archaeological site does not meet the CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of CEQA Statute Section 21083 regarding unique archaeological resources. A unique archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person (CEQA Statute Section 21083.2[g]).

The CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of a Project on that resource shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064[c][4]).
Tribal Cultural Resources

CEQA requires lead agencies to determine if a proposed Project would have a significant effect on tribal cultural resources. CEQA section 21074 defines a tribal cultural resources as: (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are included or determined to be eligible for inclusion in the California Register of Historical Resources, or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.

While some tribal cultural resources include physical archaeological resources, described above, tribal cultural resources are not limited to physical resources that have scientific significance. Tribal cultural resources also include cultural landscapes and non-unique archaeological resources. Non-unique resources are resources that are deemed culturally significant to a tribe, but do not contain information needed for scientific purposes, and may not be the best specimen in terms of quality, uniqueness, or age.

California Register of Historical Resources

The California Register is “an authoritative listing and guide to be used by state and local agencies, private groups and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The criteria for eligibility to the California Register are based on National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for or listed in the National Register.

To be eligible for the California Register as a historical resource, a prehistoric or historic-period resource must be significant at the local or State level under one or more of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history (CEQA Guidelines Section 15064.5 [a][3]).

For a resource to be eligible for the California Register, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. The seven aspects of integrity are: location, design, setting, materials, workmanship, feeling and association. A resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data.
California Public Resources Code (PRC)

Several sections of the PRC protect cultural resources and PRC Section 5097.5 protects vertebrate paleontological sites located on public land. Under Section 5097.5, no person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site (including fossilized footprints), inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature situated on public lands, except with the express permission of the public agency that has jurisdiction over the lands.

PRC Section 5097.98 states that if Native American human remains are identified within a Project area, the landowner must work with the Native American Most Likely Descendant as identified by the California Native American Heritage Commission (NAHC) to develop a plan for the treatment or disposition of the human remains and any items associated with Native American burials with appropriate dignity. These procedures are also addressed in Section 15046.5 of the CEQA Guidelines. California Health and Safety Code Section 7050.5 prohibits disinterring, disturbing, or removing human remains from a location other than a dedicated cemetery. Section 30244 of the PRC requires reasonable mitigation for impacts on paleontological and archaeological resources that occur as a result of development on public lands.

California Health and Safety Code

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

California Native American Historical, Cultural and Sacred Sites Act

This Act applies to both State and private lands. The Act requires that upon discovery of human remains, that construction or excavation activity cease and that the county coroner be notified. If the remains are of a Native American, the coroner must notify the NAHC. The NAHC then notifies those persons mostly likely to be descended from the Native American remains. The Act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

Regional and Local

Corte Madera General Plan Goals and Policies

The following are the goals and policies from the Town of Corte Madera General Plan 2009 that relate to historic, archaeological, and paleontological resources and are applicable to the Project.

Goal RCS-11 Preservation and enhancement of historic resources within the community.

Policy RCS-11.2 Protect historic sites and archaeological resources for their aesthetic, scientific, educational, and cultural values.

Policy RCS-11.3 Protect paleontological resources.
### 3.4.3 Evaluation Criteria and Significance Thresholds

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.4-1, Evaluation Criteria and Significance Thresholds, are used to determine if the Project would have a significant effect related to cultural resources and tribal cultural resources.

**Table 3.4-1 Evaluation Criteria and Significance Thresholds**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</td>
<td>Adverse alteration of those physical characteristics of a historical resource that justify its eligibility for the NRHP, CRHR or as a local landmark.</td>
<td>CEQA Guidelines Appendix G, Checklist Item V (a) General Plan Policy RCS-11.2</td>
</tr>
<tr>
<td>Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</td>
<td>Adverse alteration of those physical characteristics of an archaeological resource that justify its eligibility for the NRHP, CRHR or as a unique archaeological resource.</td>
<td>CEQA Guidelines Appendix G, Checklist Item V (b) General Plan Policy RCS-11.2</td>
</tr>
<tr>
<td>Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>Disturbance of a known vertebrate fossil locality or within a geologic unit that has high sensitivity for vertebrate fossils.</td>
<td>CEQA Guidelines Appendix G, Checklist Item V (c) General Plan Policy RCS-11.3</td>
</tr>
<tr>
<td>Would the project disturb any human remains, including those interred outside of dedicated cemeteries?</td>
<td>Disturbance of human remains, including Native American human remains, associated grave goods, or items of cultural patrimony</td>
<td>CEQA Guidelines Appendix G, Checklist Item V (d)</td>
</tr>
</tbody>
</table>
3.4.4 Areas of No Impact

The proposed Project would not result in impacts related to two of the cultural resource evaluation criteria listed in Table 3.4-1, Evaluation Criteria and Significance Thresholds. For the reasons presented below, the following evaluation criterion are not applicable to the Project or result in a finding of no impact:

Would the Project cause a substantial adverse change in the significance of a historical resource?

No historical resources were identified on the Project site during the cultural resources investigation (ASC 2017). One previously recorded resource has been identified within a 0.25-mile search radius (a 0.4-mile segment of railroad track), but the Project would not affect the railroad segment. Implementation of the Project would not result in adverse effects to historic resources. Therefore, no impact would occur. This analysis relates to historic resources of the built environment; refer to Impact CR-1 below regarding archaeological resources.

Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Because the Project site is on artificial fill, the paleontological sensitivity of the site is very low to nil. Therefore, no impact would occur.
3.4.5 Approach to Analysis

The evaluation of potential impacts on cultural resources is based on the potential for ground disturbance during construction activities to disturb or destroy known or previously unrecorded cultural resources, including historic or unique archaeological sites, or Native American tribal cultural resources. As of the writing of this report, the Town has not received any written requests for notification of proposed Projects from any tribes under Assembly Bill 52 (AB52).

Sources of information cited for identifying the presence or potential presence of cultural resources on the Project site include the Archaeological Resources Review and Sensitivity Study for the Village at Corte Madera Expansion Project (ASC 2017), consultations with California Native American tribes traditionally and culturally affiliated with the geographic area of the Project, review of records on file at the California Historical Resources Information System (CHRIS), the NAHC, and the Northwest Information Center (NWIC). The evaluation included consideration of the Project site in relation to the eligibility criteria for the California Register.

3.4.6 Impacts and Mitigation Measures

Table 3.4-2, Summary of Impacts - Cultural Resources, provides a summary of potential impacts from the proposed Project.

Table 3.4-2 Summary of Impacts – Cultural Resources

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR-1: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</td>
<td>LSM</td>
</tr>
<tr>
<td>CR-2: Would the project disturb any human remains, including those interred outside of dedicated cemeteries?</td>
<td>LSM</td>
</tr>
<tr>
<td>CR-3: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? or 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?</td>
<td>LSM</td>
</tr>
<tr>
<td>C-CR-1: Would the project result in a cumulatively considerable contribution to a cumulative impact?</td>
<td>LS</td>
</tr>
</tbody>
</table>

Notes:  LS = Less than Significant
        LSM = Less than Significant with Mitigation
Impact CR-1: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Analysis: Significant

The cultural resources records search conducted for the Project site indicates that no recorded archaeological sites occur on or adjacent to the Project site (ASC 2017). Therefore, no known historical archaeological resource or “unique archaeological resource” would be impacted by the Project.

Based on the records search results, the potential for unrecorded archaeological resources in the Project area is considered low. However, there is a possibility that unrecognized surficial resources or subsurface archaeological deposits are present within the Project Area. Prehistoric resources may be obscured by colluvium, alluvium, vegetation, pavement, or other factors. Thus, the Project's potential construction-related impact on archaeological resources would be significant.

Mitigation: Measure CR-1: Minimize Impacts to Unknown Archaeological Resources

If potential archaeological resources are uncovered, the Town shall halt work and 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 unique archaeological resource for purposes of CEQA (CEQA Guidelines Section 15064.5(c)(3)), all work must remain stopped in the immediate vicinity to allow the archaeologist to evaluate any materials and recommend appropriate treatment. All significant cultural resources recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. In considering any suggested measures proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the Town shall determine whether avoidance is necessary and 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 (e.g., data recovery) shall be instituted. Work may proceed on other parts of the Project while mitigation for unique archaeological resources is being carried out.

After Mitigation: Less than Significant

Implementation of Mitigation Measure CR-1 would minimize the Project’s potential construction-related impacts on such resources to less-than-significant levels by requiring the Town and its contractors to adhere to appropriate procedures and
protocols for minimizing such impacts, in the event that a possible archaeological resource is discovered during construction activities associated with the Project. Therefore, this potential impact on archaeological resources would be less than significant with mitigation and compliant with CEQA Statute Sections 21083 and 21084.1 and CEQA Guidelines Section 15064.5(d-f).

**Impact CR-2:** Would the project disturb any human remains, including those interred outside of formal cemeteries?

**Analysis:** Significant

Based on review of historical aerial photographs and maps, prior uses of the Project site included marshland. No former cemetery use or burial site is known to have occurred at or near the Project site.

No indication of human burials were identified in record searches performed for the Project (ASC 2017), and consultations with California Native American tribes traditionally and culturally affiliated with the Project area did not identify the presence of such potential burials on the Project site.

Although the potential for the Project to impact human remains is low, the possibility of encountering human remains cannot be completely discounted. Therefore, the Project impact related to the potential disturbance of human remains during construction is considered significant.

**Mitigation:** Measure CR-2: Procedures for Encountering Human Remains

California Health and Safety Code Section 7050.5 states that it is a misdemeanor to knowingly disturb a human grave. If human remains are encountered, the Town shall halt work in the vicinity and notify the County Coroner. At the same time, the Town shall retain a qualified archaeologist to evaluate the situation. If human remains are of Native American origin, the Marin County Coroner shall notify the Native American Heritage Commission within 24 hours of identification, pursuant to Public Resources Code 5097.98, which would appoint a Most Likely Descendant (MLD). A qualified archaeologist, the Town, 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 un-associated funerary objects (CEQA Guidelines Section 15064.5[d]). The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, and final disposition of the human remains and associated or un-associated funerary objects. The Public Resources Code allows 48 hours to reach agreement on these matters. If the MLD and the other parties could not agree on the reburial method, the Town shall follow Section 5097.98(b) of the Public Resources Code, which states that “the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.”
After Mitigation:  *Less than Significant*

Mitigation Measure CR-2 would be implemented during Project construction, requiring the Town to adhere to appropriate excavation, removal, recordation, analysis, custodianship, and final disposition protocols for any buried human remains and associated or un-associated funerary objects that may be accidentally discovered during construction. Therefore, the potential impact on buried human remains would be less than significant with mitigation and compliant with Health and Safety Code 7050.5, PRC 5097.98, and CEQA Guidelines Section 15064.5(d).

*Impact CR-3: Would the project cause a substantial adverse change in the significance of a tribal cultural resource?*

**Analysis:**  *Significant*

The records and literature search found no previously recorded tribal cultural resources within or near the Project site (ASC 2017).

The NAHC response did not indicate the presence of known tribal cultural resources in the study area. Letters were sent to The Federated Indians of Graton Rancheria (FIGR) and an email was also sent to the Tribal Historic Preservation Officer for FIGR. A response was received stating that the Project had previously been reviewed and an assessment made that the area has a very low sensitivity for resources, but that in the event of an inadvertent discovery, they would want to be notified immediately and engage in consultation with the Town. Therefore, while the chance of discovering unknown tribal cultural resources is very low, if as-of-yet unknown tribal cultural resources are encountered during construction activities, a significant impact could occur.

**Mitigation:**  *Measure CR-3: Minimize Impacts to Unknown Tribal Cultural Resources*

If potential tribal cultural resources are uncovered, the Town shall halt work, and workers shall avoid altering the materials and their context. Project personnel shall not collect cultural materials. The Town shall notify The Federated Indians of Graton Rancheria (FIGR). The Town, in coordination with FIGR, shall determine if the resource qualifies as a tribal cultural resource under CEQA. If it does, then all work must remain stopped in the immediate vicinity to allow evaluation of any materials. The Town shall ensure that qualified resources are avoided or protected in place, in accordance with the requests of FIGR, to the extent feasible. Work may proceed on other parts of the Project while mitigation for tribal cultural resources is being carried out.

After Mitigation:  *Less than Significant*

Implementation of Mitigation Measure CR-3 would minimize the Project’s potential construction-related impacts on such resources to less-than-significant levels by requiring the Town and its contractors to adhere to appropriate procedures and protocols for minimizing such impacts, in the event that a possible tribal cultural resource is discovered during construction activities associated with the Project. Therefore, this potential impact on tribal cultural resources would be less than
significant with mitigation and compliant with CEQA Statute Sections 21074 and 21080.3.2.

Impact C-CR-1: Would the project result in a cumulatively considerable contribution to a cumulative impact?

Analysis: Less than Cumulatively Considerable (Less than Significant)

Implementation of the cumulative projects listed in Table 3-1, Projects Considered for Cumulative Impacts, may require grading and excavation that could potentially affect cultural, paleontological, and tribal cultural resources or human remains, or modify or otherwise impact historic buildings/structures. If these resources are not protected, the cumulative effect of the Project plus cumulative projects could be significant.

CEQA requirements for protecting cultural resources, human remains, and tribal cultural resources would be applicable to each of the cumulative projects. As discussed above, record searches and consultations were undertaken to ensure that cultural resources, human remains, paleontological, and tribal cultural resources that could be impacted by Project implementation were identified and mitigation measures are included that would reduce impacts to a less-than-significant level. With implementation of the mitigation measures, the Project’s contribution to this cumulative impact would not be cumulatively considerable, and therefore less than significant.

Mitigation: No mitigation is needed.

3.4.7 References


TOC

3.5 Geology and Soils........................................................................................................ 3.5-1
3.5.1 Setting ........................................................................................................ 3.5-1
3.5.2 Regulatory Framework ............................................................................... 3.5-4
3.5.3 Evaluation Criteria and Significance Thresholds .......................................... 3.5-6
3.5.4 Areas of No Impact..................................................................................... 3.5-8
3.5.5 Approach to Analysis................................................................................ 3.5-8
3.5.6 Impacts and Mitigation Measures .............................................................. 3.5-8
3.5.7 References ............................................................................................... 3.5-12

TABLES

Table 3.5-1 Active Faults near Corte Madera.............................................................. 3.5-3
Table 3.5-2 Evaluation Criteria and Significance Thresholds.................................. 3.5-6
Table 3.5-3 Summary of Impacts – Geology and Soils............................................ 3.5-9

FIGURES

No table of contents entries found.
Geology and Soils

This section evaluates potential environmental impacts related to geology and soils during construction and operation of the Project. The impacts and mitigation section establishes thresholds of significance, evaluates potential impacts, and identifies the significance of these impacts.

The following subject is related to geology and soils, but evaluated in another section of this EIR:

- Impacts to water quality due to erosion, runoff, or alteration of drainage patterns are evaluated in Section 3.8, Hydrology and Water Quality

3.5.1 Setting

Regional Geology

Corte Madera lies within the Coast Range Geomorphic Province, a region characterized by northwest-trending mountains, ridges and intervening valleys. The Coast Ranges Province is the result of the collision of the Farallon and North American tectonic plates which occurred 100 to 65 million years ago. The region’s alignment of valleys and ridges has developed in response to uplift, folding and faulting along the San Andreas system of active faults. (Kleinfelder 2015, Corte Madera 2009a, WGCEP 2015)

The geology in the area, and the San Francisco Bay Area in general, is dominated by the San Andreas Fault (SAF). The SAF is a right-lateral strike-slip fault running northwest approximately 800 miles along the California coast from the Gulf of California in Mexico to Cape Mendocino in Humboldt County. The SAF forms the boundary between two independent tectonic plates: the Pacific plate to the west and the North American plate to the east, with the former migrating about two inches per year relative to the latter. In the San Francisco Bay Area, movement along the fault is concentrated at the SAF, but is also distributed to a lesser extent across many smaller faults. The SAF combined with these smaller faults is referred to as the SAF system. Activity along the SAF system has been ongoing for the past 25 million years, and the northwest trend of these faults is largely responsible for the northwest structural orientation of geological and geomorphic features in the area. (Kleinfelder 2015, Corte Madera 2009a, WGCEP 2015)

Basement rocks west of the SAF are generally granitic. To the east, they consist of a chaotic mixture of highly deformed marine sedimentary, submarine volcanic, and metamorphic rocks of the Franciscan Complex. Both of these are typically Jurassic to Cretaceous in age (205-65 million years old). Overlying the basement rocks are Cretaceous (about 140 to 65 million years old) marine, as well as Tertiary (about 65 to 1.7 million years old) marine and non-marine sedimentary rocks with some continental volcanic rock. These Cretaceous and Tertiary rocks have typically been extensively folded and faulted as a result of Late Tertiary and Quaternary regional compressional forces. The inland valleys as well as the structural depression within which the San Francisco Bay is located are filled with unconsolidated to semi-consolidated deposits of Quaternary age (about the last 1.7 million years). Continental surficial deposits (alluvium, colluvium, and landslide deposits) consist of unconsolidated to semi-consolidated
sand, silt, clay, and gravel while the Bay deposits typically consist of very soft organic rich silt and clay (Bay Mud) or sand. (Kleinfelder 2015)

**Soils**

The U.S. Department of Agriculture (USDA) National Resource Conservation Service (NRCS) has characterized the Project site and its immediate surroundings. The Village parcels contains both Blucher-Cole complex with 2 to 5 percent slopes, and Xerorthents fill\(^1\). The gravel lot is mapped as primarily Bucher-Cole complex with 2 to 5 percent slopes. The surrounding area is primarily Xerorthents or Xerorthents complex, with slopes from 0 to 9 percent; to the east the Xerorthents is predominantly fill.

Site-specific subsurface information for The Village area of the Project site is provided by soil borings drilled on the site by Kleinfelder between September 29 and October 1, 2014. Three borings were conducted. One boring was within the area of the proposed Restoration Hardware building expansion, and the two others were located at the southern end of the parking lot. The boring depths reached between 95 and 100 feet below ground surface.

The first 9 to 12 feet of subsurface materials encountered in the borings generally consisted of a top fill layer, which was composed of an upper layer of clayey sand mixed with gravel, and a lower layer of sandy lean clay with gravel. Below the fill was a layer of Young Bay Mud to depths of approximately 32 feet. Under the Young Bay Mud was a layer of Old Bay Mud to depths of 74. The Old Bay Mud was itself underlain by interbedded shale and sandstone, down to the maximum boring depths.

Site-specific subsurface information for the gravel lot area of the Project site is provided by test pits excavated by Kleinfelder on April 25, 2017. Six test pits were excavated to depths of approximately 4.5 to 5.0 feet. Test pits were located near the northwest, northeast, southeast, and southwest boundary of the gravel lot, as well as within the interior of the gravel lot. The material found in the test pits may be classified as Site Class E, Soft Clay Soil, according to Section 1613.3.2 of the 2016 California Building Code.

**Liquefaction**

Liquefaction occurs when loosely packed sandy or silty materials saturated with water are shaken hard enough to lose strength and stiffness. Liquefied soils behave like a liquid and are responsible for tremendous damage in an earthquake, causing pipes to leak, roads and airport runways to buckle, and building foundations to be damaged. Such liquefaction has been responsible for ground failures during almost all of California’s great earthquakes. The risk of liquefaction depends on many factors, including the height of the groundwater table and the composition of the underlying soil. Liquefaction potential for the soil at the Project site is low (Kleinfelder 2015).

**Landslides**

Landslides result when soils on a hillside become unstable and slide down toward the base of the hill. They can occur very quickly or may unfold slowly over a period of days, weeks, months, or years. Landslides can damage or destroy any structures built on or in the moving soil (e.g., pipelines), and the flow of material can cause further damage to any structure in its path. Landslide risk depends on the

\(^1\) Xerorthent fill soils are found in tidal flats and valley floors, from igneous, metamorphic and sedimentary rock parent material, and have a slope of 0 to 5 percent.
types of earth materials of the hillside and the steepness of the slope. There are multiple types of landslides, and they can be triggered by a number of different events, but the two most common forms are earthquake-induced landslides and moisture-induced landslides (from rain, flooding, or irrigation). Earthquake-induced landslides can happen when the ground shaking makes the soil looser (sometimes as a result of liquefaction) or when rocks in the slope fracture, creating unstable conditions. Moisture-induced landslides can occur when the ground soaks up enough water to cause it to weaken and become unstable. Landslide potential soil at the Project site is low due to the relatively level terrain at the site and in the surrounding area (Kleinfelder 2015). The nearest area with landslide potential is approximately 0.35 mile southwest of the Project site (Corte Madera 2009a).

**Seismicity and Faulting**

The closest faults to the Project site area are the San Andreas, Hayward and Rodgers Creek faults. In addition, as shown in Table 3.5-1 below, many of the other active faults in the region are also capable of causing significant ground shaking in Corte Madera. (Corte Madera 2009b)

The 2014 Working Group on California Earthquake Probabilities has evaluated the probability of one or more earthquakes of magnitude 6.7 or higher occurring in California over the next 30 years. The result of the evaluation indicated a 72 percent likelihood that such an earthquake event will occur in the San Francisco region by the year 2038. (WGCEP 2015)

The site will therefore be subject to seismic shaking from moderate to severe earthquakes in the future. The design life of the Project can expect periodic slight to moderate earthquakes. However, the site is not located on any published Fault Zones based on the Alquist-Priolo Earthquake Fault Zoning Act, and no active faults have been mapped on or projected toward the site. (Kleinfelder 2015)

<table>
<thead>
<tr>
<th>Fault</th>
<th>Distance from Town Boundaries</th>
<th>Maximum Moment Magnitude (Mw)</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Andreas Fault</td>
<td>7.5</td>
<td>7.9</td>
</tr>
<tr>
<td>Hayward Fault</td>
<td>7.25</td>
<td>7.1</td>
</tr>
<tr>
<td>Rodgers Creek Fault</td>
<td>16</td>
<td>7.0</td>
</tr>
<tr>
<td>West Napa Fault</td>
<td>20</td>
<td>6.5</td>
</tr>
<tr>
<td>Concord-Green Valley Fault</td>
<td>22.5</td>
<td>6.9</td>
</tr>
<tr>
<td>Calaveras Fault</td>
<td>27.5</td>
<td>6.8</td>
</tr>
<tr>
<td>Greenville Fault</td>
<td>37</td>
<td>6.9</td>
</tr>
<tr>
<td>Unnamed fault (North)</td>
<td>42.5</td>
<td>N/A</td>
</tr>
<tr>
<td>Maacama Fault</td>
<td>46</td>
<td>6.9</td>
</tr>
<tr>
<td>San Gregorio Fault</td>
<td>26.5</td>
<td>7.3</td>
</tr>
<tr>
<td>Unnamed Fault (Southeast)</td>
<td>44.5</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: Corte Madera 2009a

**Fault Rupture**

Fault rupture is the actual movement and displacement of the ground’s surface along the fault boundary when an earthquake occurs. Depending on the type of fault, this displacement may be horizontal,
vertical, or both. Damage from fault rupture can be severe depending on the size of the displacement, but is limited to the relatively small area along the fault boundary where the slip occurred. Not all earthquakes result in fault rupture that is visible at the surface, and strong earthquakes can occur without any discernible displacement along the boundary. However, Corte Madera is not located within an Alquist-Priolo fault rupture zone (Corte Madera 2009a, Corte Madera 2009b).

**Ground Shaking**

Ground shaking is the primary cause of damage and injury during earthquakes. Ground shaking can lead to surface rupture, liquefaction, landslides, and infrastructure failures, which could lead to fires and other secondary hazards. The geology of the impacted area alters the amount of ground shaking. Thick, water-saturated, unconsolidated materials will generally experience greater shaking motion than areas of firm bedrock.

The size and magnitude of an earthquake have different ways of being measured. The magnitude is a number that characterizes the relative size of an earthquake. Magnitude is based on measurement of the maximum motion recorded by a seismograph. Many scales, such as the Richter scale, do not provide accurate estimates for the magnitudes of large earthquakes. To account for these large earthquakes, the moment magnitude scale (abbreviated as MMS; denoted as Mw) is preferred for its ability to cover a wide range of earthquake sizes and be applied globally. The moment magnitude scale is based on the total moment release of the earthquake. Moment magnitude is a product of the distance a fault moved and the force required to move it. It is derived from modeling recordings of the earthquake at multiple stations.

### 3.5.2 Regulatory Framework

**Federal**

There are no federal plans, policies, regulations, or laws related to geology and soils applicable to this Project.

**State**

**Alquist-Priolo Earthquake Fault Zoning Act**

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the State Geologist established regulatory zones, called “earthquake fault zones,” around the surface traces of active faults and published maps showing these zones. Within these zones, buildings for human occupancy cannot be constructed across the surface trace of active faults. Because many active faults are complex and consist of more than one branch, each earthquake fault zone extends approximately 200 to 500 feet on either side of the mapped fault trace.

Title 14 of the California Code of Regulations (CCR), Section 3601(e), defines buildings intended for human occupancy as those that would be inhabited for more than 2,000 hours per year. The proposed Project area does not cross an Alquist-Priolo Earthquake Fault Zone (CDC 1983). Therefore, the provisions of the act do not apply to the Project.
Seismic Hazards Mapping Act

Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (Public Resources Code [PRC] Sections 2690 to 2699.6) is intended to reduce damage resulting from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. The Act’s provisions are similar in concept to those of the Alquist-Priolo Act, where the State is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, with cities and counties required to regulate development within mapped Seismic Hazard Zones.

Under the California Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within Seismic Hazard Zones until appropriate site-specific geologic and/or geotechnical investigations have been conducted and measures to reduce potential damage have been incorporated into the development plans. The California Geological Survey has not yet evaluated the Project site or surrounding area under the Seismic Hazards Mapping Act.

California Building Code

The California Building Code (CBC), which is codified in CCR Title 24, Part 2, was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards related to structural strength, egress facilities, and general building stability for the purpose of reducing risks due to seismic and other geologic hazards. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all building and structures within its jurisdiction. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards.

Regional and Local

Corte Madera Municipal Code Section 18.18.200 Baylands Risk Zone and Natural Habitat Overlay District (BRNH)

The BRNH Overlay District requires a comprehensive geologic and soil investigation and report be prepared by a qualified engineering geologist for any proposed development on a site underlain by Bay Mud or on a site which in its present form was created by man-made fill. The report must include a classification of the site or portions of the site by degree of risk related to possible damage to structures and improvements, including underground utilities, damage resulting from subsidence, differential settlement, seismic event, or other failure, taking into account all pertinent factors.

Corte Madera General Plan Goals and Policies

The following are the policies and implementation measures from the Town of Corte Madera General Plan 2009 that relate to geology and soils and are applicable to the Project.

Policy PSH-8.1 All construction in Corte Madera shall comply with the California Building Code, including requirements for seismic design.

Implementation Program PSH-8.1.a: Enforce California Building Code
Enforce requirements in the California Building Code, including seismic design provisions, as part of the building permit issuance and inspection process.

Policy PSH-8.2 New development and redevelopment projects with the potential for geological hazards, such as slope failures or soil subsidence, shall be subject to geotechnical evaluation prior to approval.

Implementation Program PSH-8.2.b: Development Standards

In areas with identified geotechnical hazards, development shall conform to geotechnical report mitigation measures and/or project and site modifications to respond to site-specific hazards and conditions.

3.5.3 Evaluation Criteria and Significance Thresholds

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.5-2, Evaluation Criteria and Significance Thresholds, are used to determine if the Project would have a significant effect related to geology and soils.

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project expose people or structures to potential substantial adverse effects 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?</td>
<td>Placement of a structure intended for human occupancy within an Alquist-Priolo earthquake fault zone</td>
<td>CEQA Guidelines Appendix G, Checklist Item VI(a)(i)</td>
</tr>
<tr>
<td>Would the project expose people or structures to potential substantial adverse effects involving strong seismic ground shaking?</td>
<td>Non-compliance with California Building Code</td>
<td>CEQA Guidelines Appendix G, Checklist Item VI(a)(ii)</td>
</tr>
<tr>
<td>Would the project expose people or structures to potential substantial adverse effects involving seismic-related ground failure, including liquefaction?</td>
<td>Non-compliance with California Building Code</td>
<td>CEQA Guidelines Appendix G, Checklist Item VI(a)(iii)</td>
</tr>
<tr>
<td></td>
<td>Non-compliance with recommendations of project-specific geotechnical reports</td>
<td>General Plan Implementation Measure PSH-8.2.b</td>
</tr>
</tbody>
</table>
Evaluation Criteria | Significance Thresholds | Sources
--- | --- | ---
Would the project expose people or structures to potential substantial adverse effects involving landslides? | Non-compliance with California Building Code | CEQA Guidelines Appendix G, Checklist Item VI(a)(iv)
Non-compliance with recommendations of project-specific geotechnical reports | General Plan Implementation Measure PSH-8.2.b

Would the project result in substantial soil erosion or the loss of topsoil? | Non-compliance with applicable erosion and sediment control measures in the Town’s Urban Runoff Pollution Prevention Ordinance. | CEQA Guidelines Appendix G, Checklist Item VI(b)


Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | Non-compliance with California Building Code | CEQA Guidelines Appendix G, Checklist Item VI(c)
Non-compliance with recommendations of project-specific geotechnical reports | General Plan Implementation Measure PSH-8.2.b

Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | Non-compliance with California Building Code | CEQA Guidelines Appendix G, Checklist Item VI(d)
Non-compliance with recommendations of project-specific geotechnical reports |

Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | Installation of septic systems or waste water disposal systems in unsuitable soils | CEQA Guidelines Appendix G, Checklist Item VI(e)
3.5.4 Areas of No Impact

As explained below, the Project would not result in impacts related to three of the geology and soils evaluation criteria listed in Table 3.5-2, Evaluation Criteria and Significance Thresholds. For the reasons presented below, the following evaluation criteria are not applicable to the Project or result in a finding of no impact:

Would the project expose people or structures to potential substantial adverse effects 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?

The site is not in an Alquist-Priolo Special Earthquake Fault Zone (Kleinfelder 2015).

Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The Project site is located in a commercially-zoned area, and wastewater infrastructure is available. The Project does not include a septic tank or alternative wastewater disposal system. The new building would tie in to the existing sanitary sewer service at The Village.

3.5.5 Approach to Analysis

A Geotechnical Investigation Report for The Village portion of the Project site was completed by Kleinfelder on May 1, 2015 (see Appendix D1). Three borings, eight cone penetration tests (CPT)\(^2\), and two supplemental CPTs to depths between 71.5 and 96 feet, were performed. Previous explorations were also presented in the report. Seismic design parameters were included based on the 2013 California Building Code (CBC) based on Site Class E. (Kleinfelder 2015, GHD 2015)

A Geotechnical Investigation Report for the gravel lot portion of the Project site was completed by Kleinfelder on May 22, 2017 (see Appendix D2). Six test pits were excavated to depths of approximately 4.5 to 5.0 feet. Four percolation tests were performed in general accordance with California Test Method 749 (CT 749), Method for Determining the Percolation Rate of Soils Using a 12-inch diameter- test hole. Seismic design parameters were included based on the 2013 California Building Code (CBC) based on Site Class E. (Kleinfelder 2017)

GHD conducted a peer review of the geotechnical reports, which concluded that the Kleinfelder investigation was performed with the standard of care and included appropriate recommendations for addressing site-specific geologic conditions.

3.5.6 Impacts and Mitigation Measures

Table 3.5-3, Summary of Impacts - Geology and Soils, provides a summary of potential impacts from the Project.

---

2 A cone penetration test is a method used to determine the geotechnical engineering properties of soils and delineating soil stratigraphy by pushing an instrumented cone, with tip facing down, into the ground at a controlled rate.
### Table 3.5-3 Summary of Impacts – Geology and Soils

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO-1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving strong seismic ground shaking?</td>
<td>LSM</td>
</tr>
<tr>
<td>GEO-2: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving seismic-related ground failure, including liquefaction?</td>
<td>LSM</td>
</tr>
<tr>
<td>GEO-3: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving landslides?</td>
<td>LS</td>
</tr>
<tr>
<td>GEO-4: Would the project result in substantial soil erosion or the loss of topsoil?</td>
<td>LS</td>
</tr>
<tr>
<td>GEO-5: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</td>
<td>LSM</td>
</tr>
<tr>
<td>GEO-6: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</td>
<td>LS</td>
</tr>
<tr>
<td>C-GEO-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to geology and soils?</td>
<td>NI</td>
</tr>
</tbody>
</table>

**Notes:**  
NI = No Impact  
LS = Less than Significant  
LSM = Less than Significant with Mitigation

**Impact GEO-1:** Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving strong seismic ground shaking?

**Analysis:** Significant

The Project site would be subject to seismic shaking as a result of moderate to severe earthquakes on one of the nearby active faults (Kleinfelder 2015). Therefore, exposure of people or structures to substantial adverse effects from ground shaking could be significant.

**Mitigation:** Measure GEO-1: Reduce Geologic Hazards through Design and Construction Measures

The Applicant shall design and construct the Project in conformance with the specific recommendations contained in the geotechnical reports *Geotechnical Investigation Report Restoration Hardware Building and Southern Parking Structure* (Kleinfelder 2015), *Geotechnical Study North Parking Lot* (Kleinfelder 2017), and any subsequent design-level geotechnical reports. Specifically, the design and construction shall be consistent with the geotechnical recommendations for seismic design, flexible joints for underground utilities, foundation system for the building, earthwork, and excavation. Professional inspection of foundation work, excavation, earthwork and other aspects of site development shall be performed during construction to ensure compliance with the recommendations.
After Mitigation: *Less than Significant*

Implementation of Mitigation Measure GEO-1, Reduce Geologic Hazards through Design and Construction Measures, would reduce significant impacts from strong seismic ground shaking to a less-than-significant level by implementing design and construction measures identified in the site-specific geotechnical studies, which concluded that the Project is feasible from a geotechnical standpoint. Design and construction measures from the site-specific geotechnical studies include seismic design parameters, drilled piers, site preparation and earthwork measures, and flexible pavement structural sections.

**Impact GEO-2:** Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving seismic-related ground failure, including liquefaction?

**Analysis:** *Significant*

The geotechnical studies estimate the liquefaction potential at the site to be low and that the site would experience less than 1 inch of liquefaction induced total settlement during a major seismic event. However, if liquefaction were to occur at the site during an earthquake the site could experience some ground surface disruption, such as sand boils and ground fissures. Such disturbances could result in a significant impact (Kleinfelder 2015).

**Mitigation:** Measure GEO-1: Reduce Geologic Hazards through Design and Construction Measures

After Mitigation: *Less than Significant*

Implementation of Mitigation Measure GEO-1, Reduce Geologic Hazards through Design and Construction Measures, would reduce potential significant impacts from strong seismic ground shaking to a less-than-significant level by implementing design and construction measures identified in the site-specific geotechnical studies, which concluded that the Project is feasible from a geotechnical standpoint. Design and construction measures from the site-specific geotechnical studies include seismic design parameters, drilled piers, site preparation and earthwork measures, and flexible pavement structural sections.

**Impact GEO-3:** Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving landslides?

**Analysis:** *Less than Significant*

The potential for landslides at the Project site is low, due to the relatively level terrain at both the gravel lot and The Village and in the surrounding area. It is possible that shallow slope failures could occur in areas of the Project near unfilled marsh areas. However, The Village portion of the Project site is sufficiently separated from the marsh that slope failures in the marsh would not affect Project structures (Kleinfelder 2015). Exposure of people or structures to landslides would be less than significant.

**Mitigation:** No mitigation is needed.
Impact GEO-4: Would the project result in substantial soil erosion or the loss of topsoil?

Analysis: Less than Significant

Construction

The Project site is essentially flat, with an estimate total vertical relief of less than about 5 feet. Thus little soil erosion due to runoff is expected.

Operation

The Project would result in both The Village and the gravel lot being primarily paved surfaces, although some landscaping would be installed in planters. The potential impact to soil erosion or loss of topsoil would be less than significant.

Mitigation: No mitigation is needed.

Impact GEO-5: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Analysis: Significant

The geotechnical studies concluded that the primary settlement of Young Bay Mud at the Project site should be complete. However, the placing of new fills or adding of building loads on these soils will result in settlements beyond the tolerance of most structures. Construction of the building on potentially unstable soil would be a significant impact.

Mitigation: Measure GEO-1: Report Reduce Geologic Hazards through Design and Construction Measures

After Mitigation: Less than Significant

Implementation of Mitigation Measure GEO-1, Reduce Geologic Hazards through Design and Construction Measures, would reduce significant impacts from placement of a structure on unstable soils to a less-than-significant level by implementing design and construction measures identified in the site-specific geotechnical studies, which concluded that the Project is feasible from a geotechnical standpoint. Design and construction measures from the site-specific geotechnical studies include seismic design parameters, site preparation and earthwork measures, and flexible pavement structural sections.

Impact GEO-6: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Analysis: Less than Significant

The onsite clayey sand fill material at The Village has a low expansion potential (Kleinfelder 2015). Therefore, impacts from expansive soils would be less than significant impact.

Mitigation: No mitigation is needed.
Impact C-GEO-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to geology and soils?

Analysis: No Impact

The nature of geologic hazards is site-specific, and, therefore, geologic hazards do not accumulate as impacts on resources do, as indicated in other sections of this EIR. With compliance with State and local regulations and policies, construction would be consistent with current building standards for seismic and geologic hazards. Because these regulations are designed to protect the community at large, no significant cumulative impact would occur.

3.5.7 References


3.6 Greenhouse Gas Emissions

This section evaluates potential environmental impacts related to greenhouse gas (GHG) emissions during construction and operation of the Project. The impacts and mitigation section establishes thresholds of significance, evaluates potential GHG impacts, and identifies the significance of these impacts.

The following subjects are related to GHG impacts, but are evaluated in other sections of this EIR:

- Impacts to air quality are addressed in Section 3.2, Air Quality.
- Energy use is addressed in Chapter 5.0, Other CEQA-required Sections.

3.6.1 Setting

Gases that trap heat in the atmosphere are referred to as GHGs because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse. The accumulation of GHG has been implicated as the driving force for global climate change. The primary GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), and water vapor (H₂O).

While GHGs in the atmosphere are naturally occurring, the emission rate of CO₂, CH₄ and N₂O has been accelerated by human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with such activities as agricultural practices and landfills. Other GHGs include hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride, which are generated during certain industrial processes. GHGs are typically reported in “carbon-dioxide-equivalent” measures (CO₂e) as each GHG has a different global warming potential.

Potential climate change impacts in California may include, but are not limited to, a decrease in snowpack; sea level rise; and a greater number of extreme heat days per year, high ozone days, large forest fires, and drought years. Secondary effects are likely to include impacts on agriculture, changes in disease vectors, and changes in habitat and biodiversity (ARB 2014).

The Environmental Protection Agency (EPA) reports U.S. GHG emissions for 2014 as 6,870 million metric tons of CO₂e (MMT CO₂e). Electricity production accounted for approximately 30 percent of national GHG emissions, followed by the transportation sector at approximately 26 percent and the industrial sector at approximately 21 percent. Commercial and residential fuel use and the agricultural sector accounted for the remaining 21 percent (U.S. EPA 2016).

The California Air Resources Board (ARB) estimated that in 2015 California produced about 440 MMT CO₂e. The transportation sector was the highest source at 39 percent of the State’s total GHGs, followed by the industrial sector at 23 percent, and electricity generation (both in-state and out-of-state) at 19 percent. Commercial and residential fuel use, recycling and waste, high global warming potential, and agricultural sectors accounted for the remaining 19 percent of the State’s total GHG emissions (ARB 2017).
3.6.2 Regulatory Framework

Federal

The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for implementing the Clean Air Act (CAA). The U.S. Supreme Court ruled on April 2, 2007, that CO₂ is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of GHGs. In response to the mounting issue of climate change, EPA has taken actions to regulate, monitor, and potentially reduce GHG emissions. Actions include a national program to reduce GHG emissions and improve fuel economy for all new cars and trucks sold in the United States. However, there are no federal plans, policies, regulations, or laws related to GHGs that are directly applicable to the Project.

State

Executive Order S-3-05

In 2005, the Governor of California signed Executive Order S-3-05, which established GHG emission reduction targets to reduce emissions to 2000 levels by 2010, to reduce emissions to 1990 levels by 2020, and to reduce emissions to 80 percent below 1990 levels by 2050. The Secretary of the California Environmental Protection Agency (Secretary) was designated to coordinate oversight of the efforts made to meet the targets with the Business, Transportation and Housing Agency, the Department of Food and Agriculture, the Resources Agency, the Air Resources Board, the Energy Commission, and the Public Utilities Commission. The Secretary reports to the Governor and State Legislature biannually on the impacts to California from global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The most recent report, Safeguarding California: Reducing Climate Risk was approved in July 2014 (Natural Resource Agency 2014).

Executive Order B-30-15

On April 29, 2015, California Governor Jerry Brown announced E.O. B-30-15, which contains the following GHG emissions target:

- By 2030, California shall reduce GHG emissions to 40 percent below 1990 levels

The emission reduction target of 40 percent below 1990 levels by 2030 is an interim-year goal to provide substantial progress toward the ultimate goal of reducing emissions by 80 percent below 1990 levels by 2050.

Assembly Bill 32, California Global Warming Solutions Act of 2006

In 2006, the Governor of California signed the Global Warming Solutions Act of 2006 (Assembly Bill 32), committing the State of California to reducing GHG emissions to 1990 levels by 2020. The statute requires the ARB to track emissions through mandatory reporting, determine the 1990 emission levels, set annual emissions limits that will result in meeting the 2020 target, and design and implement regulations and other feasible and cost effective measures to ensure that statewide GHG emissions will be reduced to 1990 levels by 2020. In December 2007, the ARB approved the 2020 emissions limit at 427 MMT CO₂e. The Intergovernmental Panel on Climate Change (IPCC), which assesses scientific, technical, and socioeconomic information relevant to the understanding of climate change, has since revised the global warming potential of certain GHGs. Therefore, ARB recalculated the 2020 emissions
limit as 431 MMT CO₂e. Projected business-as-usual emissions for 2020 are 509 MMT CO₂e. A reduction of 78 MMT CO₂e is needed to meet the goal (ARB 2014).

**Climate Change Scoping Plan**

In December 2008, pursuant to AB 32, the ARB adopted the Climate Change Scoping Plan (Scoping Plan), which outlined measures to attain the 2020 GHG emissions limit. The Scoping Plan estimated that implementation of identified measures would result in a reduction of 105.3 MMT CO₂e from various sectors including transportation, energy, forestry, and high global warming potential gas sectors (originally reported as 174 MMT CO₂e, but updated to 105.3 MMT CO₂e in the Status of Scoping Plan Recommended Measures [ARB 2012]). This is 24 percent more than is needed to meet the 2020 mandate.

In May 2014, ARB approved the *First Update to the Climate Change Scoping Plan* (Updated Scoping Plan) which describes the progress made to meet the near-term (2020) objectives of AB 32 and defines California’s climate change priorities and activities for the next several years (ARB 2014). The Updated Scoping Plan also updated the 2020 emissions limit and business-as-usual emissions for 2020. The 2020 limit is now 431 MMT CO₂e and the business-as-usual forecast is 509 MMT CO₂e. Finally, the Updated Scoping Plan provides recommendations for establishing a mid-term emissions limit that aligns with the long-term (2050) goals of Executive Order S-3-05. The recommendations cover the energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green building, and cap-and-trade sectors.

The initial Scoping Plan recommended that local governments achieve a 15-percent reduction below 2005 levels by 2020, which aligns with the State’s goal of not exceeding 1990 emissions levels by 2020. However, the Updated Scoping Plan does not contain a recommended reduction level or percent for local government’s municipal operations. The ARB is moving forward with a second update to the Scoping Plan. The Draft 2017 Climate Change Scoping Plan update was released for public review and comment in January, 2017. It is anticipated that the plan will go before the ARB’s governing board for consideration (adoption) at the end of June, 2017.

**California Building Code, Title 24**

Title 24 of the CCR regulates how each new home and business is built or altered in California. It includes requirements for the structural, plumbing, electrical, and mechanical systems of buildings, and for fire and life safety, energy conservation, green design, and accessibility in and about buildings. Two sections of Title 24 – Part 6, the California Energy Code, and Part 11, the California Green Building Standards Code or CalGreen Code – contain standards that address GHG emissions related to construction.

The California Green Building Standards Code, or CalGreen, became a mandatory code beginning January 1, 2011. The code takes a holistic approach to green building by including minimum requirements in the areas of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The CalGreen code has minimum mandatory standards and two additional tiers of voluntary measures intended to achieve greater levels of efficiency that result in lower levels of GHG emissions. Local governments must enforce the minimum standards and can choose to adopt either Tier 1 or Tier 2 standards to achieve greater positive environmental impacts. The current 2016 Title 24 standards became effective January 1, 2017.
Regional and Local

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) publishes CEQA Guidelines to assist local jurisdictions and lead agencies in complying with the requirements of CEQA regarding potentially adverse impacts to air quality. These CEQA Guidelines were updated in June 2010 to include new thresholds of significance (2010 Thresholds) adopted by the BAAQMD Governing Board. The BAAQMD’s Guidelines were further updated in May 2017 to address the California Supreme Court’s 2015 opinion in California Building Industry Association vs. Bay Area Air Quality Management District, 62 Cal.4th 369.

The 2010 GHG thresholds of significance contain the following operational thresholds:

- Compliance with a Qualified GHG Reduction Strategy; or
- 1,100 metric tons (MT) of CO₂e per year; or
- 4.6 MT CO₂e per service population (residents plus employees) per year.

The BAAQMD Guidelines do not provide construction thresholds of significance for GHG emissions. The BAAQMD Guidelines state that the BAAQMD encourages local governments to adopt a qualified GHG Reduction Strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified GHG Reduction Strategy that meets the standards laid out below, it can be presumed that the project will not have significant GHG emission impacts. This approach is consistent with the State CEQA Guidelines, Section 15183.5. The standards elements of a GHG reduction strategy identified by the BAAQMD are:

1. Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.
2. Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.
3. Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.
4. Specify measures or a group of measures, including performance standards that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.
5. Monitor the plan’s progress.
6. Adopt the GHG Reduction Strategy in a public process following environmental review.

As provided by the BAAQMD (BAAQMD 2010, BAAQMD 2017):

“BAAQMD’s approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move us towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant.”
Marin Clean Energy

Marin Clean Energy, launched in May 2010, is a public, not-for-profit electricity provider that provides customers with the choice of having 50 percent to 100 percent of their electricity supplied from clean, renewable sources such as solar, wind, bioenergy, geothermal, and hydropower. Marin Clean Energy’s average GHG emission factor is 373 pounds per MWh. In 2014, renewable and carbon-free energy supplies procured by MCE comprised approximately 63 percent of total energy deliveries (MCE 2014).

Corte Madera Climate Action Plan

The Town of Corte Madera approved a Climate Action Plan (CAP) in March 2016. The CAP includes a 2005 baseline GHG emissions inventory, community-wide emissions inventory (2005-2013), municipal operations emissions inventory, and inventory forecasts for years 2020 and 2030. The forecasted inventories included a ‘business as usual’ scenario that incorporated no additional GHG reduction measures above what was in place for the baseline year. The CAP states that under the business as usual scenario, the Town of Corte Madera will reduce emissions to approximately 33 percent below baseline emissions in 2020 and 31 percent below baseline emissions in 2030.

The Town has an adopted emission reduction goal of 15 percent below 2005 levels by 2020. The Town has already met this reduction goal with a projected inventory that is 33 percent below 2005 emissions by 2020. The CAP does not contain a new community-wide emission reduction goal, but states that the Town should consider adopting a more aggressive goal to meet the State’s 2030 goal of 40 percent below 1990 levels, which is equivalent to 49 percent below 2005 levels by 2030.

Incorporating emission reductions associated with State and local strategies further reduces forecasted inventories to 46 percent below baseline emissions in 2020 and 54 percent below baseline emissions in 2030, which is enough to meet the State’s 2030 goal.

The CAP describes CEQA Guidelines Section 15183.5, which allows streamlining of project-level GHG emissions analysis through compliance with a qualified GHG reduction plan. To be a ‘qualified’ GHG reduction plan, a plan must meet the criteria set forth in Section 15183.5, which include requirements for quantifying existing and projected GHGs; identifying a level of cumulative GHG emissions that would not be considered significant; specifying measures and standards that would ensure achievement of this level; and continued monitoring to track progress. A GHG reduction plan, once adopted following certification of an EIR or adoption of an environmental document, may be used in the cumulative impacts analysis of later projects such as development or infrastructure projects. The CAP contains the 6 standard elements of a ‘qualified’ GHG reduction strategy, as identified by the BAAQMD and consistent with CEQA Guidelines Section 15183.5. However, the CAP has not been submitted to the BAAQMD for review and determined to be a ‘qualified’ GHG reduction plan. The CAP indicates this could be done at a later time. As stated in the CAP on page 1: “this document does not and is not intended to create specific and enforceable obligations by the Town. Rather it is intended as a reference tool for possible future actions.” Therefore, the CAP is not applicable to the Project.

Corte Madera General Plan Goals and Policies

The following are the goals, policies, and implementation programs from the Town of Corte Madera General Plan 2009 that are applicable to greenhouse gas emissions. Certain goals and policies, although expressly stated to improve air quality, also reduce greenhouse gas.
Goal RCS-2  Reduced consumption of non-renewable energy sources in Corte Madera.

Policy RCS-2.2  Increase energy conservation and efficiency within Corte Madera.

Policy RCS-2.6  Reduce energy consumption in buildings by balancing energy efficient design with good planning principles.

**Implementation Program RCS-2.6.a: Energy Efficient Building Design**

Require energy efficient site and building design in all new development projects consistent with the requirements of Title 24 of the California Administrative Code. Measures may include, but are not limited to, building orientation and shading, landscaping, use of active and passive solar heating and hot water system, etc.

Goal RCS-3  Reduce existing and future levels of GHG emissions originating from within the community.

Policy RCS-3.1  Actively seek to reduce greenhouse gas emissions within the Planning Area.

Goal RCS-4  Increased recycling participation by Town residents and businesses.

Policy RCS-4.1  Encourage the expansion of vigorous recycling efforts so that all residents and businesses in Corte Madera recycle.

Goal RCS-5  An enhanced environment through conservation of valuable resources.

Policy RCS-5.1  Minimize waste through reducing, reusing, and recycling. Encourage reduced consumption of non-renewable resources by expanding choices for using and reusing materials, energy, and water in an efficient manner.

Goal RCS-10  Attainment of Air Quality standards in the San Francisco Bay Air Basin.

Policy RCS-10.1  Reduce the potential for air quality impact of new development and redevelopment by requiring pedestrian, bicycle, and transit oriented features.

**Implementation Program RCS – 10.1.a: Air Quality Improvements**

Require developers to implement strategies to reduce or avoid potential air quality impacts, including:

- Encouraging or providing incentives for use of public transportation and carpooling.
- Locating residential or mixed-use development in proximity to public transit, employment centers and shopping.

Policy RCS-10.2  Encourage new development and redevelopment of existing sites that will locate mixed land uses near employment and commercial service centers in order to reduce vehicular air pollution.

Policy RCS-10.3  Require the incorporation of air quality mitigation measures for development projects.
Implementation Program RCS – 10.3.b: Tree Planting Mitigation

Consider tree planting as mitigation for GHG emissions and other environmental impacts of development projects as appropriate.

Policy RCS-10.6 Support the Bay Area Air Quality Management District in monitoring air pollutants of concern, the Governor’s Office of Planning and Research (OPR) in developing CEQA guidelines related to GHG emissions and energy for all projects, and in meeting federal and State air quality standards.

3.6.3 Evaluation Criteria and Significance Thresholds

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.6-1, Evaluation Criteria and Significance Thresholds, are used to determine if the Project would have a significant effect related to GHG emissions.

Table 3.6-1 Evaluation Criteria and Significance Thresholds

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>1,100 MT CO$_2$e</td>
<td>CEQA Guidelines Appendix G, Checklist Item VII (a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2017 BAAQMD CEQA Air Quality Guidelines, Table 2-1</td>
</tr>
<tr>
<td>Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>Conflict with the State’s adopted Scoping Plan</td>
<td>CEQA Guidelines Appendix G, Checklist Item VII (b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2017 BAAQMD CEQA Air Quality Guidelines</td>
</tr>
</tbody>
</table>

3.6.4 Approach to Analysis

The greenhouse gas impact analysis in this EIR utilizes the thresholds of significance, screening criteria and levels, and impact assessment methodologies presented in the BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017).

The BAAQMD Guidelines contain the following operational thresholds of significance for GHG emissions:

- Compliance with a Qualified GHG Reduction Strategy; or
- 1,100 MT CO2e per year; or
- 4.6 MT CO2e per service population (residents plus employees) per year.
The BAAQMD’s CEQA Guidelines state that if annual emissions of operational-related GHGs exceed these threshold levels, the proposed Project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact to global climate change (BAAQMD 2017).

As described in Section 3.6.2 (Regulatory Framework), Corte Madera’s CAP is an advisory document only, and is not officially considered a ‘qualified’ GHG reduction plan. Therefore, in accordance with the BAAQMD Guidelines, this analysis evaluates the Project’s GHG emissions against the threshold of 1,100 MT CO₂e per year. BAAQMD’s CEQA Guidelines do not include screening criteria or significance thresholds for construction-related GHG emissions. However, the BAAQMD does recommend that lead agencies quantify and disclose construction-related GHG emissions. Therefore, the Project’s construction emissions were quantified, annualized over an assumed 30-year Project lifespan, and added to operational GHG emissions in order to determine the Project’s potential impact.

The Project’s construction and operational GHG emissions were estimated with the California Emissions Estimator Model (CalEEMod) version 2016.3.1. CalEEMod output is provided in Appendix E. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with construction and operation from a variety of land uses.

CalEEMod model defaults were used to estimate the construction activity and activity duration for all construction phases. CalEEMod default phase durations and equipment activity assumptions are informed by extensive surveys of the construction industry in California; the model adjusts the construction schedule and activity based on the land use type and amounts input into the model. Project-specific model inputs for construction include:

- Construction to begin in 2018
- Construction of a new 46,000 square foot Restoration Hardware Building
- Import/export of 5,000 cubic yards for the new Restoration Hardware Building
- Demolition and export of 200 cubic yards of pavement and hardscape within The Village
- 3.8 acres of grading and paving for the gravel lot improvements
- Export of 2,400 cubic yards for the gravel lot improvements

Operation emissions were estimated using the land use type of “regional shopping center”, an operational year of 2020, model default ITE trip generation rates, and the Project-specific daily vehicle miles traveled (VMT) identified in the Transportation Impact Study (see Appendix G). The Project is estimated to generate 10,900 daily VMT, or 3,978,500 annual VMT. In addition, CalEEMod’s default energy intensity for energy generated by PG&E is based on PG&E’s reporting for year 2008. Therefore, the energy intensity factors were updated to reflect the 5-year average of PG&E’s reporting between 2011-2015 (Climate Registry 2017). CalEEMod defaults for water consumption and energy consumption were used. The Town requires that new development use water efficient, drought tolerant landscaping. CalEEMod is structured such that any emission reduction feature, including Project design features or compliance with regulatory requirements, is labeled as a ‘mitigation measure’. Therefore, although water efficient, drought tolerant landscaping is required, it is identified as a mitigation measure in the CalEEMod output.

The analysis also evaluates the Project’s consistency with State’s adopted Scoping Plan.
3.6.5 Impacts and Mitigation Measures

Table 3.6-2, Summary of Impacts - Greenhouse Gas, provides a summary of potential impacts from the Project.

Table 3.6-2 Summary of Impacts – Greenhouse Gas

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>LSM</td>
</tr>
<tr>
<td>GHG-2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>LS</td>
</tr>
<tr>
<td>C-GHG-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to greenhouse gas emissions?</td>
<td>LS</td>
</tr>
</tbody>
</table>

Notes: LS = Less than Significant  
LSM = Less than Significant with Mitigation

Impact GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Analysis: Significant

Climate change is global in scope, with individual projects contributing to a cumulative impact. The geographic boundary for this analysis is the State of California. The year 2020 GHG emission reduction goal of AB 32 corresponds with the mid-term target established by Executive Order S-3-05, which aims to reduce California’s fair-share contribution of GHGs in 2050 to levels that would stabilize the climate. As provided in the Updated Scoping Plan (ARB 2014):

“The State’s 2050 objective of reducing emissions to 80 percent below 1990 levels, as reflected in Executive Order S-3-05 and Governor Brown’s Executive Order B-16-2012 (which is specific to the transportation sector), is consistent with an Intergovernmental Panel on Climate Change analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million carbon dioxide equivalent (CO₂e) and reduce the likelihood of catastrophic climate change.”

As provided by the BAAQMD (BAAQMD 2017):

“BAAQMD’s approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move us towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant.”

Emissions modeling output for the Project is provided in Appendix E.
Project construction activities would result in a temporary increase in GHG emissions, primarily in the form of CO\(_2\) from exhaust emissions associated with haul trucks, construction worker commute vehicles, and construction equipment. Project construction activities are estimated to generate approximately 271 MT CO\(_2\)e. When annualized over an assumed 30-year Project lifespan, Project construction would generate 9 MT CO\(_2\)e per year.

Operational or long-term emissions would occur annually over the life of the Project. The operational emissions for the Project are shown in Table 3.6-3. The Project’s annualized construction emissions are also provided in Table 3.6-3. The Project would generate approximately 1,736 MT CO\(_2\)e per year. Project-generated greenhouse emissions would exceed the BAAQMD’s recommended threshold of significance; therefore, the Project would result in a potentially significant impact to greenhouse gas emissions.

<table>
<thead>
<tr>
<th>Emissions Source</th>
<th>Annual Emissions (MT CO(_2)e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>106</td>
</tr>
<tr>
<td>Mobile (Vehicles)</td>
<td>1,588</td>
</tr>
<tr>
<td>Waste</td>
<td>24</td>
</tr>
<tr>
<td>Water</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total Operational Emissions</strong></td>
<td><strong>1,727</strong></td>
</tr>
<tr>
<td><strong>Annualized Construction Emissions</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td><strong>Total Annual Project Emissions</strong></td>
<td><strong>1,736</strong></td>
</tr>
<tr>
<td>BAAQMD Threshold</td>
<td>1,100</td>
</tr>
<tr>
<td>Does the Project Exceed Threshold?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: CalEEMod output in Appendix E.

**Mitigation:** **Measure GHG-1: Reduce Greenhouse Gas Emissions**

The Applicant shall prepare and implement a Greenhouse Gas Reduction Plan (GGRP) that contains specific design features and actions to be implemented by the Project, and quantify the emission reductions associated with those features and actions. The GGRP shall demonstrate achievement of a project emissions inventory that is less than the Bay Area Air Quality Management District’s (BAAQMD) threshold of 1,100 metric tons of carbon dioxide equivalent (CO\(_2\)e) per year. The GGRP shall be submitted to the Town for approval prior to the issuance of grading permits. Specific measures may include:

- Subscribe to Marin Clean Energy’s (MCE) “Deep Green” or “Local Sol” energy options, which would reduce the energy intensity of provided energy to 5 pounds of carbon dioxide per megawatt hour (CO\(_2\)e /MWh) (MCE 2014).
- Implement a voluntary trip reduction program for all employees
- Provide shower and locker facilities to support employees bicycling to work.
• Provide a Commute Trip Reduction subsidy for employees consistent with the California Air Pollution Control Officer’s Association’s Greenhouse Gas Measure TRT-4 (CAPCOA 2010).
• Utilize high pressure sodium cutoff lights in outdoor lighted areas
• Exceed 2013 Title 24 requirements by 15 percent
• Use Energy Star energy efficient fans and refrigerators
• Use a recycling and composting service
• Use low-flow for all interior water fixtures (toilets, kitchen and bathroom sink faucets)

These actions are provided as a guide and can be substituted with other actions when shown to achieve the same result of reducing annual emissions below 1,100 MT CO₂e per year.

After Mitigation: Less than Significant with Mitigation

As demonstrated in Table 3.6-4, implementation of the recommended actions in Mitigation Measure GHG-1, would reduce estimated emissions to less than the BAAQMD threshold of 1,100 MT CO₂e per year; therefore, the Project would have a less-than-significant impact for generation of GHG emissions after incorporation of mitigation.

Table 3.6-4 Annual Project Greenhouse Gas Emissions Mitigated

<table>
<thead>
<tr>
<th>Emissions Source</th>
<th>Mitigated Annual Emissions (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>11</td>
</tr>
<tr>
<td>Mobile (Vehicles)</td>
<td>1,047</td>
</tr>
<tr>
<td>Waste</td>
<td>6</td>
</tr>
<tr>
<td>Water</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Operational Emissions</strong></td>
<td><strong>1,068</strong></td>
</tr>
<tr>
<td><strong>Annualized Construction Emissions</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td><strong>Total Project Emissions</strong></td>
<td><strong>1,077</strong></td>
</tr>
<tr>
<td>BAAQMD Threshold</td>
<td>1,100</td>
</tr>
<tr>
<td><strong>Does Project with Mitigation Exceed Threshold?</strong></td>
<td><strong>No</strong></td>
</tr>
</tbody>
</table>

Source: CalEEMod output in Appendix E.

Impact GHG-2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Analysis: Less than Significant

The Project is not located within a jurisdiction covered by an applicable, or “qualified”, Climate Action Plan or other qualified greenhouse gas reduction strategy.

The Climate Change Scoping Plan released by the ARB provided strategies for meeting the near-term 2020 GHG emission reduction goals in Assembly Bill (AB) 32.
The First Update to the Climate Change Scoping Plan provides recommendations for establishing a mid-term emissions limit that aligns with the long-term (2050) goals of Executive Order S-3-05, which consists of reducing GHG emissions to 80 percent below 1990 levels. The recommendations cover the energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green building, and cap-and-trade sectors, and are to be implemented by a variety of State agencies. The Project would not conflict with this statewide policy document.

The recommended next steps in the First Update Climate Change Scoping Plan are broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of individual projects such as the project. Although Project construction and operation may benefit from some of the state-level regulations and policies that will be implemented, such as the Phase 2 heavy-duty truck GHG standards proposed to be implemented within the transportation sector, the Project would not impede the State developing or implementing the greenhouse gas reduction measures identified in the Updated Scoping Plan. The Project facilities would comply with applicable State requirements, such as Title 24 energy efficiency standards and the California Green Building Standards mandatory measures. Therefore, the Project would not conflict with AB 32 or the Climate Change Scoping Plan. The Project would result in a less than significant impact.

**Mitigation:** No mitigation is needed.

**Impact C-GHG-1:** Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to greenhouse gas emissions?

**Analysis:** *Less than Cumulatively Considerable (Less than Significant)*

Greenhouse gas impacts are cumulative in nature. The Project’s cumulative contribution to greenhouse gas impacts is addressed in Impact GHG-1. As identified in Impact GHG-1, the Project would exceed the BAAQMD’s recommended threshold of significance for greenhouse gas emissions. Implementation of Mitigation Measure GHG-1 would reduce this impact to less than significant. No further analysis is required.

**Mitigation:** No mitigation is needed.
3.6.6 References


This page is intentionally left blank
3.7 Hazards and Hazardous Materials

This section evaluates potential environmental impacts related to hazards and hazardous materials during construction and operation of the Project. The impacts and mitigation section establishes thresholds of significance, evaluates potential hazard and hazardous material impacts, and identifies the significance of these impacts.

The following subjects relate to hazards and hazardous materials, but are evaluated in other sections of this EIR:

- Impacts to sensitive receptors from vehicle emissions are evaluated in Section 3.2, Air Quality.
- Impacts to emergency access are evaluated in Section 3.12, Transportation.

3.7.1 Setting

Hazardous materials are a wide-ranging category of substances that include toxic substances, flammable or explosive materials, corrosive substances such as acids, and radioactive substances. A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. Facts that influence the health effects of exposure to hazardous material include the dose to which the person is exposed, the frequency of the exposure, the exposure pathway, and individual susceptibility.

The California Code of Regulations (CCR) defines a hazardous material as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either: (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed (CCR, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10). Hazardous wastes refer to hazardous materials that are no longer used and have been disposed of or are awaiting disposal.

Emergencies involving hazardous materials often occur due to mechanical failure or human error. These types of emergencies also sometimes occur as a secondary impact of another emergency, such as an earthquake or flood. Hazardous material releases can occur from buildings such as factories and processing facilities, as well as from vehicles that transport chemicals or other hazardous substances. Road vehicles, trains, and (more rarely) aircraft can all suffer accidents that cause a release of hazardous materials.

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) was prepared for the parcel associated with the gravel lot in December 2015 by Langan Treadwell Rollo. The investigation concluded that there was no recent environmental condition (presence, use, or release of hazardous substances or petroleum products) in connection with the gravel lot parcel (Langan Treadwell Rollo 2015).

In addition, the environmental database search report did not identify any hazardous materials sites on the Cortese List on or near the gravel lot and The Village properties.
**Wildfire Hazards**

Two ways of categorizing wildfire hazard potential for an area are discussed in the Marin Countywide Plan: wildlife-urban interface zones and fire risk. Wildland-urban interface zones identify areas where structures and other human development intermingle with wildland or vegetative fuels (Marin County 2007, Corte Madera 2009a).

The Marin Countywide Plan lists the Project site as not being in a wildland-urban interface zone. The nearest wildland-urban interface zone is approximately 0.24 miles to the southwest of the Project site, in the hillside residential neighborhoods of Corte Madera (Marin County 2017).

**Airport Operations**

The Project site is located approximately 15 miles south of the Gnoss Field Airport located in Novato, and approximately 6 miles south of the San Rafael Airport, a private airport.

**Evacuation Routes**

The Town of Corte Madera Emergency Operations Plan does not list specific emergency response or evacuation routes (Corte Madera 2009b).

### 3.7.2 Regulatory Framework

**Federal**

The primary federal agencies with responsibility for hazardous materials management include the U.S. Environmental Protection Agency (USEPA), the Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Federal laws, regulations, and responsible agencies relevant to the Project are summarized in Table 3.7-1.

**Table 3.7-1 Federal Laws and Regulations Related to Hazardous Materials Management**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Law or Responsible Federal Agency</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Materials Management and Soil and Groundwater</td>
<td>Community Right-to-Know Act of 1986 (also known as Title III of the Superfund Amendments and Reauthorization Act [SARA])</td>
<td>Imposes requirements to ensure that hazardous materials are properly handled, used, stored, and disposed of and to prevent or mitigate injury to human health or the environment in the event that such materials are accidentally released.</td>
</tr>
</tbody>
</table>
## Classification

<table>
<thead>
<tr>
<th>Hazardous Materials Transportation and Handling</th>
<th>Occupational Safety</th>
<th>Structural and Building Components (Lead-based paint, PCBs, and asbestos)</th>
<th>Hazard Mitigation Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law or Responsible Federal Agency</td>
<td>Description</td>
<td>Description</td>
<td>Description</td>
</tr>
<tr>
<td>U.S. Department of Transportation (DOT)</td>
<td>Hazard Mitigation Planning</td>
<td>Occupational Safety and Health Act of 1970</td>
<td>Stafford Act and Disaster Mitigation Act</td>
</tr>
<tr>
<td></td>
<td>Has the regulatory responsibility for the safe transportation of hazardous materials. The DOT regulations govern all means of transportation except packages shipped by mail (49 Code of Federal Regulations [CFR]).</td>
<td>Fed/OSHA sets standards for safe workplaces and work practices, including the reporting of accidents and occupational injuries (29 CFR).</td>
<td>Requires state, local, and tribal governments to develop and submit to the Federal Emergency Management Agency a mitigation plan that outlines processes for identifying natural hazards, risks, and vulnerabilities of the jurisdiction.</td>
</tr>
<tr>
<td>Occupational Safety and Health Act of 1970</td>
<td></td>
<td>Toxic Substances Control Act (TSCA)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regulates the use and management of PCBs in electrical equipment, and sets forth detailed safeguards to be followed during the disposal of such items.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>U.S. EPA</td>
<td>The EPA monitors and regulates hazardous materials used in structural and building components and effects on human health.</td>
</tr>
</tbody>
</table>

## State

### Soil and Groundwater Contamination

The cleanup of sites contaminated by releases of hazardous substances is regulated primarily by the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), which was amended by the Superfund Amendment and Reauthorization Act of 1986 (SARA), the Brownfields Amendments (2002) and by similar State laws. Under CERCLA, the California EPA (CalEPA) has authority to seek the parties responsible for releasing hazardous substances and to ensure their cooperation in site remediation.

The State’s Hazardous Waste and Substances Sites List (Cortese List, Government Code §65962.5) identifies sites with leaking underground fuel tanks, hazardous waste facilities subject to corrective actions, solid waste disposal facilities from which there is a known migration of hazardous waste, and other sites where environmental releases have occurred. Databases that provide information regarding the facilities or sites identified as meeting Cortese List requirements are managed by the California Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).
**Hazardous Materials and Waste**

CalEPA oversees a Unified Program for hazardous materials and waste to ensure consistency throughout the State concerning administrative requirements, permits, inspections, and enforcement. CalEPA certifies local government agencies known as Certified Unified Program Agencies (CUPA) to implement the hazardous waste and materials standards.

**Hazardous Materials Transportation**

The State of California has adopted regulations for the intrastate movement of hazardous materials. State regulations are contained in Title 26 of the CCR. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing through the state. Both regulatory programs apply in California. The two State agencies that have primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans).

**Occupational Safety**

Worker health and safety in California are regulated by the California Division of Occupational Safety and Health (Cal/OSHA). California standards for workers dealing with hazardous materials (including hazardous wastes) are contained in CCR Title 8. The DTSC and the Cal/OSHA are the agencies that are responsible for overseeing that appropriate measures are taken to protect workers from exposure to potential contaminants.

**Emergency Response**

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local government, and private agencies. Responding to hazardous materials incidents is a part of this plan. The plan is administered by the State Office of Emergency Services (OES), which coordinates the responses of other agencies such as local fire and police agencies, emergency medical providers, CHP, the California Department of Fish and Wildlife, and Caltrans.

**Regional and Local**

**Emergency Operations Plan**

The Town’s Emergency Operations Plan (EOP) was updated in 2009 and addresses the planned response to extraordinary emergency situations that could affect the Town, along with the integration and coordination with other agencies when needed (Corte Madera 2009b). The EOP serves as the legal and conceptual framework for emergency management in the Town. It accomplishes two primary goals:

- Establishes the emergency management organization required to mitigate any significant emergency or disaster affecting the Town; and
- Establishes the overall operational concepts associated with the Town’s Emergency Operations Center activities and the recovery process

The EOP does not address normal day-to-day emergencies or well-established emergency procedures.
Corte Madera General Plan Goals and Policies

The following are the public safety and hazards goals, policies, and implementation programs from the Town of Corte Madera General Plan 2009 that are applicable to the Project.

Goal PSH–1  Reduced fire hazards Town-wide.

Policy PSH–1.1 Require fire safe construction practices, such as fire preventive site design, landscaping and building materials, and installation of sprinklers on new development and redevelopment projects.

Goal PSH–2  Achieve a high level of public safety for all Town residents and businesses.

Policy PSH–2.10 Minimize the exposure of persons to known and unknown hazardous materials in areas proposed for development and from the routine transport, use, disposal, or accidental release of hazardous materials.

Implementation Program PSH – 2.10.a: Hazardous Waste Releases

Work with property owners and applicable regulatory agencies to identify and eliminate hazardous waste releases from private parties and public agencies.

3.7.3 Evaluation Criteria and Significance Thresholds

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.7-2 are used to determine if the Project would have a significant effect related to hazards and hazardous materials.

Table 3.7-2 Evaluation Criteria and Significance Thresholds

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>Non-compliance with State and federal hazardous materials or waste regulations</td>
<td>CEQA Guidelines Appendix G, Checklist Item VIII (a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>California (Title 8 and 26 of the CCR), and federal (CFR 29 and 49) hazardous materials and waste regulations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General Plan Policy PSH-2.10.</td>
</tr>
<tr>
<td>Evaluation Criteria</td>
<td>Significance Thresholds</td>
<td>Sources</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Would the project create a significant hazard to the public or the environment</td>
<td>Potential for improper transport, use, disposal, or accidental release of hazardous</td>
<td>CEQA Guidelines Appendix G, Checklist Item VIII (b)</td>
</tr>
<tr>
<td>through reasonably foreseeable upset and accident conditions involving the release</td>
<td>materials or wastes due to non-compliance with State and federal hazardous materials</td>
<td>California (Title 8 and 26 of the CCR), and federal (CFR 29 and 49) hazardous materials</td>
</tr>
<tr>
<td>of hazardous materials into the environment?</td>
<td>or waste regulations</td>
<td>and waste regulations</td>
</tr>
<tr>
<td>Would the project emit hazardous emissions or involve handling hazardous or acutely</td>
<td>Use, storage, or emission, of acutely hazardous materials or waste within 0.25 mile of</td>
<td>CEQA Guidelines Appendix G, Checklist Item VIII (c)</td>
</tr>
<tr>
<td>hazardous materials, substances, or waste within one-quarter mile of an existing</td>
<td>a school</td>
<td></td>
</tr>
<tr>
<td>or proposed school?</td>
<td>Location of project on or adjacent to a site with presence or likely presence of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hazardous substances or petroleum products</td>
<td>CEQA Guidelines Appendix G, Checklist Item VIII (d)</td>
</tr>
<tr>
<td>Would the project be located on a site that is included on a list of hazardous</td>
<td>Location of project within an airport land use plan or within two miles of an airport and</td>
<td></td>
</tr>
<tr>
<td>materials sites compiled pursuant to Government Code Section 65962.5 and, as a</td>
<td>introduction of new or increased safety hazard</td>
<td></td>
</tr>
<tr>
<td>result, create a significant hazard to the public or the environment (State CEQA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidelines Section 15186)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would the project be located within an airport land use plan or, where such a</td>
<td>Location of project within two miles of a private airport and introduction of new or</td>
<td></td>
</tr>
<tr>
<td>plan has not been adopted, within two miles of a public airport or public use</td>
<td>increased safety hazard</td>
<td></td>
</tr>
<tr>
<td>airport, result in a safety hazard for the people residing or working in the area?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would the project be within the vicinity of a private airstrip and result in a</td>
<td>Location of project within two miles of a private airport and introduction of new or</td>
<td></td>
</tr>
<tr>
<td>safety hazard for people residing or working in the project area?</td>
<td>increased safety hazard</td>
<td></td>
</tr>
<tr>
<td>Would the project impair implementation of or physically interfere with an adopted</td>
<td>Location of project in areas that impair or interfere with adopted plan, including</td>
<td>CEQA Guidelines Appendix G, Checklist Item VIII (g)</td>
</tr>
<tr>
<td>emergency response plan or emergency evacuation plan?</td>
<td>emergency access routes</td>
<td></td>
</tr>
<tr>
<td>Would the project expose people or structures to a significant risk of loss, injury,</td>
<td>Location of project in a WUI zone.</td>
<td>CEQA Guidelines Appendix G, Checklist Item VIII (h)</td>
</tr>
<tr>
<td>or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td></td>
<td>Marin Countywide Plan</td>
</tr>
</tbody>
</table>
3.7.4 Areas of No Impact

As explained below, the proposed Project would not result in impacts related to several of the hazards and hazardous materials evaluation criteria listed in Table 3.7-2. For the reasons presented below, the following evaluation criteria are not applicable to the Project or result in a finding of no impact:

Would the project emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Project would be located more than 0.25 miles from the closest school. Therefore, this question is not applicable to the Project, and no impact would occur.

Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65965.5 and, as a result, would it create a significant hazard to the public or the environment?

State of California Government Code § 65962.5, the Hazardous Waste and Substances Sites List (Cortese List) is a planning document used to comply with the CEQA requirements for providing information about the location of hazardous materials release sites. The online data resources that provide information on facilities or sites pursuant to Section 65962.5 include:

- DTSC EnviroStor database;
- List of Leaking Underground Storage Tank Sites by from the Water Board GeoTracker database;
- List of solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels;
- List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from the Water Board; and
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code;

Langan Treadwell Rollo contracted a records review by Environmental Data Resources, Inc. for the gravel lot in 2015 (Langan Treadwell Rollo 2015), and GHD conducted a search of the Cortese list for The Village in April 2016. Neither search found evidence that the site is included in any of the Cortese List databases. Thus, the Project site is not included on a list of hazardous materials pursuant to Government Code Section 65965.5 (Cal EPA 2016), and no impact would occur.

Would the project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?

The Project site is approximately 15 miles south of the Gnoss Field Airport in Novato, and approximately 6 miles south of a private airport in San Rafael. The Gnoss Field Airport is the only airport in Marin County that is required to have an Airport Land Use Plan (ALUP), and the Project site is not within the geographic planning boundary identified in the ALUP. (Marin County 1991) Therefore, no impact would occur.
Would the project be located within the vicinity of a private airstrip, and result in a safety hazard for people residing or working in the project area?

The Project would not be located within two miles of a private airstrip; no impact would occur.

Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Town of Corte Madera Emergency Operations Plan lists the Emergency Operations Center (EOC) for the Town as Fire Station 14, 342 Tamalpais Drive, which is approximately one mile from the Project location. There is an alternate EOC at Twin Cities Police Station #1, 250 Doherty Drive, Larkspur. The Emergency Operations Plan does not list specific emergency response or evacuation routes with which the Project could interfere (Corte Madera 2009b). Therefore, no impact would occur.

Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Generally, wildfire risk poses a threat to the hillside residential neighborhoods of Corte Madera. However, the Project is separated from these wildland-urban interface zones. The Marin Countywide Plan does not list the Project location as being in a wildland-urban interface zone (Marin County 2007, Marin County 2017).

### 3.7.5 Impacts and Mitigation Measures

Table 3.7-3 (Summary of Impacts - Hazards and Hazardous Materials) provides a summary of potential impacts from the Project.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZ-1: Would the project create a significant hazard to the public or environment through the routine transport, use or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>LS</td>
</tr>
<tr>
<td>C-HAZ-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to hazards or hazardous materials?</td>
<td>LS</td>
</tr>
</tbody>
</table>

Notes: LS = Less than Significant
Impact HAZ-1: Would the project create a significant hazard to the public or environment through the routine transport, use or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Analysis: Less than Significant

Construction

Construction of both the improvements at The Village and the gravel lot would involve the use and transport of hazardous materials such as fuels, lubricants, paints, asphalt materials, concrete curing compounds, and solvents.

As identified in the Regulatory Setting, numerous federal and state regulations exist to ensure the safe transport, use, storage and disposal of hazardous materials. Caltrans and the CHP regulate the transportation of hazardous materials and wastes, including container types and packaging equipment, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. Worker safety regulations cover hazards related to the prevention of exposure to hazardous materials and release to the environment from hazardous materials use. Regulations and criteria for the disposal of hazardous materials mandate disposal at an appropriate landfill. Cal-OSHA also enforces hazard communication program regulations, which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees.

Therefore, because the Town and its contractors would be required to comply with existing and future hazardous materials laws covering transport, use and disposal, the impacts associated with a potential to create a significant hazard to the public or the environment during construction would be less than significant.

Operation

Routine operation and maintenance of the new building and associated improvements could require the use – or result in the release – of small quantities of common cleaners, paint, batteries, herbicides, and similar products. Similar to construction, the use, containment and disposal of these hazardous materials would adhere to all applicable laws and regulations governing the safe transportation, use, storage, and disposal and cleanup of hazardous materials described above.

The operational impact would be less than significant.

Mitigation: No mitigation is needed.
Impact C-HAZ-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to hazards or hazardous materials?

Analysis: Less than Significant

As discussed in Section 3.7.4, Areas of No Impact, the Project would not result in impacts related to: location near a school; location on a site included on a list compiled pursuant to Government Code Section 65965.5; location within an airport land use plan or within two miles of a public or private airport; interference with an adopted emergency response plan or emergency evacuation plan, or risks involving wildland fires. Therefore, implementation of the Project would not contribute to any related cumulative impacts.

Similar to the proposed Project, the cumulative projects listed in Section 3, Table 3-1 (Projects Considered for Cumulative Impacts) would include the transport, use, or potential upset, of common hazardous materials inherent to the construction process in general, including petroleum products for construction equipment and vehicles, and paints, asphalt materials, concrete curing compounds, and solvents for construction of site improvements. Each of the cumulative projects would be required to comply with existing and future laws and regulations governing hazardous materials, similar to the proposed Project. Such laws have been written to avoid significant hazards from multiple sources, vehicles, and projects. For these reasons, the potential cumulative impact from the use, transport, and disposal of hazardous materials during construction would be less than significant. As a result, there would be no significant cumulative impact associated with increased hazards relative to hazardous materials to which the proposed Project would contribute.

Mitigation: No mitigation is needed.

3.7.6 References

California Environmental Protection Agency (Cal EPA). 2016. Cortese List: Section 65962.5(a). Website Accessed May 1, 2017 at: https://www.calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/


3.8 Hydrology and Water Quality

This section evaluates potential environmental impacts related to hydrology and water quality during construction and operation of the Project. The impacts and mitigation section establishes thresholds of significance, evaluates potential hydrology and water quality impacts, and identifies the significance of these impacts.

The following subjects are related to hydrology and water quality, but are evaluated in other sections of this EIR:

- Impacts to protected wetlands and waters are addressed in Section 3.3, Biological Resources.
- Impacts related to loss of topsoil are addressed in Section 3.5, Geology and Soils.

3.8.1 Setting

Climate and Precipitation

Corte Madera is located in eastern Marin County. Corte Madera is partially sheltered from prevailing northwesterly winds off the Pacific Ocean by elevated terrain. Temperatures in Corte Madera are moderated by the cooling effect of the San Francisco Bay in summer and the warming effect of the Bay in winter. (WRCC 2017).

The Town has a mild Mediterranean climate with long, dry, warm summers and cooler, rainy winters. The vast majority of precipitation occurs between October and May. Based on historical weather data from stations near the Project site, the mean annual precipitation ranges from 37 to 47 inches. The main daily high temperature is around 71 degrees Fahrenheit (ºF) with a mean daily low temperature around 45 ºF (WRCC 2017).

Surface Water

Shorebird Marsh is located northwest of the gravel lot. It is managed as both a marsh and a storm water retention basin that discharges to the San Francisco Bay. The Marsh prevents street flooding from high tides and provides flood control for a 100-year flood event1. The marsh does not experience storm surge. The Shorebird Marsh Pump Station and Gate are set to control the water level depending on seasonal variations.

Beneficial Uses

The San Francisco Bay Basin Water Quality Control Plan (Basin Plan) identifies the beneficial uses of surface waters in the region (SFRBWQCB 2015). The Basin Plan assigns beneficial uses by Hydrologic Planning Areas (HPAs). The Project is located within the San Francisco Bay Central Basin HPA, which the Basin Plan indicates has the following existing beneficial uses:

- Industrial Service Supply (IND)
- Industrial Process Supply (PRO)
- Commercial and Sport Fishing (COMM)

---

1 The 100 year flood event for the Project site is a 25-year storm coincident with a 25-year tide (GHD Personal Communication 2017).
• Shellfish Harvesting (SHELL)
• Estuarine Habitat (EST)
• Fish Migration (MIGR)
• Preservation of Rare and Endangered Species (RARE)
• Fish Spawning (SPWN)
• Wildlife Habitat (WILD)
• Water Contact Recreation (REC1)
• Noncontact Water Recreation (REC2)
• Navigation (NAV)

Water Quality

In accordance with Section 303(d) of the federal Clean Water Act, state governments must present the U.S. Environmental Protection Agency (U.S. EPA) with a list of “impaired water bodies,” defined as those water bodies that do not meet water quality standards, even after point sources of pollution have been equipped with the minimum required levels of pollution control technology. The current Clean Water Act Section 303(d) list assigns impaired water bodies by HPAs. The Project is located within the San Francisco Bay Central Basin HPA, which is listed as impaired for chlordane, dichlorodiphenyltrichloroethane (DDT), dieldrin, dioxin compounds, furan compounds, invasive species, mercury, polychlorinated biphenyls (PCBs), selenium, and trash (SWRCB 2010).

Placement of a water body on the Section 303(d) list acts as the trigger for developing a Total Maximum Daily Load (TMDL), which is a pollution control plan for each water body and associated pollutant/stressor on the list. The TMDL identifies the quantity of a pollutant that can be safely assimilated by a water body without violating water quality standards.

A TMDL Implementation Policy for mercury in San Francisco Bay was adopted by the RWQCB on November 1, 2007. The TMDL plan has four objectives: (1) reduce mercury loads to achieve load and wasteload allocations; (2) reduce methylmercury production and consequent risk to humans and wildlife exposed to methylmercury; (3) conduct monitoring and focused studies to track progress and improve the scientific understanding of the system; and (4) encourage actions that address multiple pollutants. (SFBRWQCB 2015)

A TMDL Implementation Policy for Polychlorinated Biphenyls (PCBs) in San Francisco Bay was adopted by the RWQCB on March 29, 2010. This TMDL is intended to achieve protection of the commercial and sport fishing beneficial use and to the extent that other beneficial uses are affected by PCBs, the TMDL will also ensure protection of other beneficial uses, specifically, preservation of rare and endangered species, estuarine habitat and wildlife habitat. The implementation plan includes three categories: (1) control of external loadings of PCBs into the Bay; (2) control of internal sources of PCBs within the Bay; and (3) actions to manage risks to Bay fish consumers. The plan includes monitoring to measure attainment of the numeric target and load allocations, and measuring implementation progress. (SFBRWQCB 2017a)
Groundwater

The Project is located within the Ross Valley Groundwater Basin (Subbasin No. 2-28). The basin is bounded to the east by San Francisco Bay and to the north by Corte Madera Creek and has a surface area of 1,765 acres (2.8 square miles) (SFBRWQCB 2017b). The basin boundaries approximate the contact between the artificial fill (predominantly) and alluvium (minor) in the basin and the surrounding bedrock. The artificial fill is characterized as fill overlying San Francisco Bay Mud, and the alluvium as Holocene, undifferentiated deposits (SFBRWQCB 2017b). The annual precipitation in the basin ranges from 31 inches in the east to 41 inches in the west (SFBRWQCB 2017b). The current California Regional Water Quality Control Board San Francisco Bay Region Basin Plan identifies the following existing and potential beneficial uses of groundwater within the Ross Valley Groundwater Basin: Municipal and Domestic Supply, Industrial Process Water Supply, Industrial Service Water Supply, and Agricultural Water Supply (SFBRWQCB 2015). Although the Basin Plan lists it as a beneficial use, groundwater resources from the local groundwater basin area are not used for drinking water (Corte Madera 2009b).

Geotechnical investigations indicate that shallow groundwater at The Village site is typically encountered at an estimated 3 feet below ground surface (bgs) (Kleinfelder 2015). In the gravel lot, groundwater was not encountered in test pits that were extended approximately six feet below the ground surface. It is anticipated that the groundwater level in the area of the gravel lot will be directly influenced by the water level within the adjacent slough, which was approximately 8 feet below ground surface during the time of the 2017 geotechnical study. Therefore, for the purposes of analysis, groundwater is anticipated to be approximately 8 feet below the current grades at the gravel lot. (Kleinfelder 2017)

Flooding and Flood Plain Management

The Project is located within a Federal Emergency Management Agency (FEMA) mapped 100-year flood hazard zone with a Base Flood Elevation (BFE) of 10.0 feet North American Vertical Datum (NAVD) (FEMA 2016).

The Town of Corte Madera is divided by a series of 10 separate watersheds for the management of storm drainage in the Town. The watersheds drain via nine local pump stations and/or the storm drainage network to Corte Madera Creek, San Clemente Creek, or directly to wetlands adjacent to San Francisco Bay. The Project is located in Watershed No.4, the relatively flat region along San Clemente Drive which eventually drains into Shorebird Marsh and is pumped into the East Side Outfall Channel of the San Francisco Bay from the Shorebird Marsh Pump Station (Corte Madera 2008).

In addition to natural flood hazards, flooding can occur as a result of inundation caused by failure of a dam, a result of seiches (i.e., earthquake-induced oscillating waves in an enclosed water body), tsunamis (i.e., earthquake-induced waves formed in the open ocean that reach a shoreline), or mudflows. According to the California Emergency Management Agency (CalEMA), the Project site is not located within the tsunami inundation area (CalEMA 2009). The Project site is not located in a mapped dam inundation area (CalOES 2017). The Project site is essentially flat, and is not located in the vicinity of unstable slopes (Kleinfelder 2015, 2017). No mudflows have been mapped on or adjacent to the Project site (USGS 1997).
3.8.2 Regulatory Framework

Federal

Clean Water Act

The federal Clean Water Act, enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The Act established the basic structure for regulating discharges of pollutants into the waters of the United States. The Clean Water Act gave the U.S. EPA the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint source pollution. At the federal level, the Clean Water Act is administered by the U.S. EPA and U.S. Army Corps of Engineers (USACE). At the state and regional levels in California, the act is administered and enforced by the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs).

National Flood Insurance Program

FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues Flood Insurance Rate Maps identifying which land areas are subject to flooding. The maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection is established by FEMA, with the minimum level of flood protection for new development determined to be the 1-in-100 annual exceedance probability (i.e., the 100-year flood event).

State

Porter Cologne Water Quality Control Act

The Porter Cologne Water Quality Control Act is the primary statute covering the quality of waters in California. Under the Act, the SWRCB has the ultimate authority over State water rights and water quality policy. The nine RWQCBs regulate water quality under this Act through the regulatory standards and objectives set forth in Water Quality Control Plans (also referred to as Basin Plans) prepared for each region. The five-member State Water Resources Control Board allocates water rights, adjudicates water right disputes, develops state-wide water protection plans, establishes water quality standards, and guides the nine RWQCBs located in the major watersheds of the state. The joint authority of water allocation and water quality protection enables the SWRCB to provide comprehensive protection for California's waters. The SWRCB is responsible for implementing the Clean Water Act, issues National Pollutant Discharge Elimination System (NPDES) permits to cities and counties through RWQCBs, and implements and enforces the NPDES General Permits.

NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities

The General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009, as amended by Order No. 2010-0014
and 2012-006) took effect on July 1, 2010 and was amended on February 14, 2011. The Order applies to construction sites that include one or more acres of soil disturbance. To obtain coverage under the Construction General Permit, dischargers must electronically file permit registration documents, which include a Notice of Intent, Storm Water Pollution Prevention Plan (SWPPP), and other compliance related documents required by the General Permit. The SWPPP must include best management practices to identify, reduce or eliminate sediment and other pollutants in storm water and non-storm water discharges during construction.

**NPDES General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems**

The General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (Phase II Stormwater Permit) (Order No. 2013-0001) took effect on July 1, 2013. The Order applies to municipalities, and includes provisions for both construction-phase best management practices and permanent stormwater controls for new development and redevelopment.

**Regional and Local**

**San Francisco Bay Regional Water Quality Control Board**

Regional Water Quality Control Boards adopt and implement Water Quality Control Plans (Basin Plans) which recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems. The current Basin Plan prepared by the SFBRWQCB provides a definitive program of actions designed to preserve and enhance water quality and to protect beneficial uses of water in the San Francisco Bay Region (SFBRWQCB 2015).

**Corte Madera Urban Runoff Pollution Prevention Ordinance and BASMAA Post-Construction Manual**

The Town’s Urban Runoff Pollution Prevention Ordinance (Municipal Code Chapter 9.33) prohibits discharges that may result in or contribute to a violation of the Phase II Stormwater Permit. The Ordinance requires construction-phase best management practices as well as enforcement of permanent stormwater controls for new development and redevelopment. The Ordinance requires the selection and design of such controls in general accordance with criteria established or recommended by federal, state, and local agencies, and the most recent version of the Bay Area Stormwater Management Agencies (BASMAA) Post Construction Manual (BASMAA 2014) which provides design guidelines for reducing stormwater pollutant discharges through the construction, operation and maintenance of source control measures, low impact development design, site design measures, stormwater treatment measures and hydromodification management measures.

**Corte Madera Grading and Drainage Standards**

The Town’s Grading and Drainage Ordinance (Municipal Code Chapter 15.20) provides minimum standards for projects involving grading. The Ordinance requires acquisition of grading and erosion control permits for specified activities, and protection of water quality and control of erosion and sedimentation associated with grading or storage of earth material.
**Corte Madera Flood Damage Prevention Regulations**

The Town’s Flood Damage Prevention Regulations are contained in Municipal Code Chapter 16.10. The regulations require acquisition of a Floodplain Development Permit, and compliance with flood hazard reduction provisions, including anchoring of improvements, use of flood-resistant materials, raising floor elevations, and floodproofing.

**Corte Madera General Plan Goals and Policies**

The following are the goals and policies from the *Town of Corte Madera General Plan 2009* related to hydrology and water quality and that are applicable to the Project.

**Goal RCS-9**  
Protect, restore and enhance the quality of surface and groundwater resources to meet the needs of all beneficial uses.

Policy RCS-9.1 Continue to comply with local, state, and federal standards for water quality.

Policy RCS-9.2 Continue to address non-point source pollution and protect receiving waters from pollutants discharged into the storm drain system by requiring Best Management Practices.

**Goal F-1**  
Flood control planning and implementation as high priority.

Policy F-1.1 Develop and maintain an ongoing planning process that shall be the basis for flood control projects and managing development in flood prone areas of the community.

**Goal F-2**  
Reduced flood-related hazards to life and property.

Policy F-2.1 Require new development and redevelopment in areas subject to flooding to minimize or eliminate flooding hazards.

Policy F-2.2 Require construction of storm drainage facilities and Low Impact Development (LID) techniques for new development.

Policy F-2.3 Continue to implement flood hazard mitigation measures for San Clemente Creek and other areas subject to flooding.

Policy F-2.4 Allow the use of flood control and prevention measures for individual development applications where determined to be feasible and supported by qualified engineering documentation.

Policy F-2.5 Utilize Best Management Practices (BMPs) to prevent storm water pollution from construction-related actions.

**Goal F-3**  
Increased community awareness of flooding hazards.

Policy F-3.2 Work closely with Marin County to ensure implementation of all applicable National Pollutant Discharge Elimination System requirements relative to storm drainage and storm water run-off.

**Goal F-4**  
 Acquisition of funds for construction of flood control measures.

Policy F-4.3 Ensure adequate provision of storm drainage facilities within the Town.
### 3.8.3 Evaluation Criteria and Significance Thresholds

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.8-1, Evaluation Criteria and Significance Thresholds, are used to determine if the Project would have a significant effect related to hydrology and water quality.

**Table 3.8-1 Evaluation Criteria and Significance Thresholds**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project violate any water quality standards or waste discharge requirements, or alter the existing drainage patterns, rate, or amount of surface runoff in a manner which would result in substantial erosion or siltation, flooding, or exceedance of the capacity of stormwater drainage systems?</td>
<td>Non-compliance with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.</td>
<td>CEQA Guidelines Appendix G, Checklist Item IX (a) (c) (d) (e) General Plan Policies RCS-9.1, RCS-9.2, F-2.2, F-2.5, F-3.2, and F-4.3 General Construction Permit (Order No. 2009-0009, as amended by Order No. 2010-0014 &amp; 2012-006) Phase II Small MS4 General Permit (Order No. 2013-0001) BASMAA Post-Construction Manual Corte Madera Urban Runoff Pollution Prevention Ordinance Corte Madera Grading and Drainage Standards</td>
</tr>
<tr>
<td>Alteration of the course of a stream, river, or waterway in a manner that creates erosion or siltation.</td>
<td>Creation of increased quantity of runoff such that capacity of storm drains would be exceeded.</td>
<td></td>
</tr>
<tr>
<td>Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge?</td>
<td>Creation of a deficit in aquifer volume or lowering of groundwater levels.</td>
<td>CEQA Guidelines Appendix G, Checklist Item IX (b)</td>
</tr>
<tr>
<td>Creation of a substantial amount of new impervious surfaces that would interfere with groundwater recharge.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation Criteria</td>
<td>Significance Thresholds</td>
<td>Sources</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Would the project provide additional sources of polluted runoff, or otherwise</td>
<td>Uncontrolled runoff from construction site.</td>
<td>CEQA Guidelines Appendix G, Checklist Item IX (e) (f)</td>
</tr>
<tr>
<td>substantially degrade water quality?</td>
<td>Non-compliance with Corte Madera storm water requirements.</td>
<td>Corte Madera Urban Runoff Pollution Prevention Ordinance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corte Madera Grading and Drainage Standards</td>
</tr>
<tr>
<td>Would the project place housing within a 100-year flood hazard area as mapped on a</td>
<td>Placement of housing in a 100-year flood hazard area</td>
<td>CEQA Guidelines Appendix G, Checklist Item IX (g)</td>
</tr>
<tr>
<td>federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>delineation map?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would the project expose people or structures to a significant risk involving</td>
<td>Placement of facilities in a 100-year flood hazard area</td>
<td>CEQA Guidelines Appendix G, Checklist Item IX (h) (i)</td>
</tr>
<tr>
<td>flooding, or place within a 100-year flood hazard area structures which would</td>
<td>Non-compliance with the requirements of Municipal Code Chapter 16.10, Flood Damage</td>
<td>Corte Madera Flood Damage Prevention Regulations</td>
</tr>
<tr>
<td>impede or redirect flood flows?</td>
<td>Prevention</td>
<td>General Plan Policies F-1.1, F-2.1, F-2.4</td>
</tr>
<tr>
<td>Would the project expose people or structures to flooding as a result of the</td>
<td>Placement of facilities in areas of potential dam or levee inundation</td>
<td>CEQA Guidelines Appendix G, Checklist Item VIII (i)</td>
</tr>
<tr>
<td>failure of a levee or dam?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would the project expose people or structures to inundation by seiche, tsunami,</td>
<td>Placement of facilities in an area potentially affected by seiche, tsunami or mudflow</td>
<td>CEQA Guidelines Appendix G, Checklist Item VIII (j)</td>
</tr>
<tr>
<td>or mudflow?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.8.4 Areas of No Impact

The proposed Project would not result in impacts related to one of the hydrology and water quality evaluation criteria listed in Table 3.8-1, Evaluation Criteria and Significance Thresholds. For the reasons presented below, the following evaluation criterion is not applicable to the Project:
Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The Project does not include the construction of new housing. Therefore, the significance criterion related to the placement of housing within a 100-year flood hazard zone is not applicable to the proposed Project and is not discussed further.

### 3.8.5 Approach to Analysis

Water quality standards consist of designated beneficial uses, the water quality objectives to protect those designated uses, implementation of federal and State policies for antidegradation, and general policies for application and implementation. Applicable water quality standards and objectives for the Project area are included in the current Water Quality Control Plan (Basin Plan) prepared by the SFBRWQCB, and include a compilation of objectives (SFBRWQCB 2015). Water quality standards and objectives are achieved primarily through the establishment of NPDES permits and waste discharge requirements. Therefore, to evaluate whether construction or operation of the Project would result in a violation of water quality standards or waste discharge requirements, Project compliance with potentially applicable NPDES permits or waste discharge requirements is evaluated. Construction and operation of the Project is also evaluated to determine compliance with applicable federal, State, and local permitting and design requirements related to flooding and drainage.

To evaluate whether construction or operation of the Project would impact groundwater, the extent of excavation dewatering that may be required during construction is evaluated to investigate the potential for aquifer depletion, and the amount of new impervious surfaces that would be created are evaluated for their potential to interfere with groundwater recharge. The evaluation also considers additional runoff from new impervious areas, and whether such increases would increase flooding at or downstream of the Project area. Regional documents and maps were reviewed to identify hydrology and water quality resources that could be directly or indirectly affected by construction or operational activities.

### 3.8.6 Impacts and Mitigation Measures

Table 3.8-2, Summary of Impacts - Hydrology and Water Quality, provides a summary of potential impacts from the Project.

**Table 3.8-2 Summary of Impacts – Hydrology and Water Quality**

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWQ-1: Would the project violate any water quality standards or waste discharge requirements, or alter the existing drainage patterns, rate, or amount of surface runoff in a manner which would result in substantial erosion or siltation, flooding, or exceedance of the capacity of stormwater drainage systems?</td>
<td>LSM</td>
</tr>
<tr>
<td>HWQ-2: Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge?</td>
<td>LS</td>
</tr>
<tr>
<td>HWQ-3: Would the project provide additional sources of polluted runoff, or otherwise substantially degrade water quality?</td>
<td>LS</td>
</tr>
</tbody>
</table>
Impact HWQ-1: Would the project violate any water quality standards or waste discharge requirements, or alter the existing drainage patterns, rate, or amount of surface runoff in a manner which would result in substantial erosion or siltation, flooding, or exceedance of the capacity of stormwater drainage systems?

Analysis: Significant

Construction

SWRCB Order No. 2009-0009 applies to public and private construction projects that include one or more acres of soil disturbance. Because the Project would disturb greater than one acre of land, compliance with Order No. 2009-0009 would be required. Therefore, if the Project does not obtain and adhere to the requirements contained in the General Construction NPDES Permit, then applicable water quality standards and waste discharge requirements would be violated.

Construction activities would include clearing, grading, excavation, concrete and asphalt cutting and removal, trenching, dewatering and other activities, including storage of materials and equipment within staging areas. If not properly managed, construction activities could result in erosion and increase sediment loads in receiving waters, thereby adversely affecting water quality and designated beneficial uses. Earthmoving activities could, therefore, have a significant impact on water quality.

Given the shallow groundwater levels in The Village area (approximately 3 feet below the existing ground surface), excavations for the foundation, utility trenches and other improvements that extend below three feet would need to be dewatered to create a dry working surface. In the gravel lot, groundwater was not encountered in test pits that were advanced to approximately six feet below the ground surface, and given that excavations within the gravel lot are expected to be less than five feet deep, it is possible that groundwater dewatering may not be required. However, in the event that groundwater is encountered during excavations in the gravel lot, groundwater dewatering would be required to create a dry working space.
Often, groundwater generated during dewatering activities is relatively clean, but contains elevated levels of sediment and turbidity, which if discharged to surface waters could result in localized impacts to water quality. The discharge of sediment-laden groundwater to the storm drain system during excavation dewatering could degrade water quality and violate water quality standards. Construction water discharges from excavation dewatering could, therefore, have a significant impact on water quality.

Construction activities also could result in the accidental release of hazardous construction chemicals, such as adhesives, solvents, and fuels. If not managed appropriately, these chemicals could adhere to soil particles, become mobilized by rain or runoff, or infiltrate into groundwater, degrading water quality. If not properly managed, applicable water quality standards and waste discharge requirements could be violated, and polluted runoff could substantially degrade water quality. The impact would be significant.

**Operation**

Project plans indicate that approximately 222,078 square feet of impervious surface would be created and/or replaced, including approximately 143,510 square feet at the gravel lot and approximately 78,568 square feet at The Village. The new and/or replaced impervious surface could result in the contribution of pollutants, such as metals and oils from impervious surfaces that may be washed from the surfaces into downstream waterways during rainstorms.

Storm water runoff from the new and replaced impervious surfaces would be subject to the waste discharge requirements contained in Provision E.12 of the Phase II Stormwater Permit (Order No. 2013-0001). The Town, as a condition of its Phase II Stormwater Permit, requires permanent stormwater controls for new development that creates and/or replaces approximately 5,000 square feet or more of impervious surface. The Project is considered a “Regulated Project”, and is subject to the site design measures, source controls, and stormwater treatment requirements outlined in the BASMAA Post Construction Manual (BASMAA 2014). Therefore, if the Project design is not properly permitted and constructed, applicable water quality standards and waste discharge requirements could be violated. The potential impact to water quality would be significant.

The Project would not directly alter the course of a stream, river, or waterway, and would not substantially alter existing drainage patterns. Following construction, the Project would be designed to prevent increases in stormwater runoff. Stormwater runoff from The Village and associated parking areas would be directed to flow-through planters, which would collect and convey runoff to the existing storm drain system at the Village. Storm water would then be directed off-site through existing storm drain pipes. Runoff from the former gravel parking lot would be conveyed to bioretention areas that would discharge to two existing storm drain outfalls. Therefore, the potential for substantial erosion or siltation to occur during operation would be less than significant.
Mitigation:

**Measure HWQ-1: Manage Stormwater during Construction**

The Applicant shall obtain coverage under State Water Resources Control Board Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, as amended by Order No. 2012-0006. The Applicant shall submit permit registration documents (notice of intent, risk assessment, site maps, SWPPP, annual fee, and certifications) to the State Water Resources Control Board. The SWPPP shall address pollutant sources, non-storm water discharges, best management practices, and other requirements specified in the above-mentioned Order. The SWPPP shall also include dust control practices to prevent wind erosion, sediment tracking, dust generation by construction equipment, management of concrete slurry, asphalt, pavement cutting, and other street and road activities to avoid discharge to storm drains from such work. A Qualified Storm Water Pollution Prevention Plan Practitioner shall oversee implementation of the Plan, including visual inspections, sampling and analysis, and ensure overall compliance.

The Applicant shall also obtain an Erosion Control Permit from the Town of Corte Madera. This shall include development of an Erosion and Sediment Control Plan. The SWPPP required by the General Construction Permit may be submitted to the Town in lieu of the Erosion and Sediment Control Plan provided it meets the requirements of the ESCP, which include:

- Description of the proposed Project and soil disturbing activity;
- Site specific construction-phase best management practices;
- Rationale for selecting the best management practices; and
- List of applicable outside agency permits associated with the soil disturbing activity.

**Measure HWQ-2: Manage Construction Dewatering Discharges**

The Applicant shall implement either of the following options for dewatering management that would avoid discharging to a local surface water or storm drain if feasible:

- Reuse the water on-site for dust control, compaction, irrigation, or other construction-related use.
- Discharge (by permit) to a sanitary sewer.

If discharging to the sanitary sewer, the Applicant shall apply for, and comply with, a Central Marin Sanitation Agency Groundwater Discharge Permit, including, as necessary, measures for characterizing the discharge and ensuring filtering methods and monitoring to verify that the discharge is compliant with the local wastewater discharge requirements.

If reuse of the water on-site or discharging to the sanitary sewer is not feasible, the Applicant may apply for coverage of non-storm water discharges during construction under State Water Resources Control Board Order No. 2009-0009-DWQ (see
Mitigation Measure HWQ-1). The Applicant shall characterize the discharge and identify specific measures to control the discharge, such as sediment controls to ensure that excessive sediment is not discharged, and flow controls to prevent erosion and flooding downstream of the discharge. A temporary water treatment facility shall be used to reduce the turbidity of the dewatering water prior to discharge. The temporary treatment facility shall include a portable sedimentation tank, or similar system, to provide initial settling of sediments followed by a series of pressurized sand filters, or similar filtering devices, designed to produce dewatering water than can be discharged back to the storm drain system without water quality violations.

**Measure HWQ-3: Implement Post-construction Stormwater Requirements**

The Applicant shall comply with the local E.12 Post Construction Requirements contained in the Town’s Phase II Stormwater Permit, and as outlined in the BASMAA Post Contraction Manual: Design Guidance for Stormwater Treatment for Projects in Marin, Sonoma, Napa, and Solano Counties. The Post Construction Requirements are an enforceable part of the Town’s municipal storm water permit. The Applicant shall prepare a Stormwater Control Plan and Stormwater Facilities Operation and Maintenance Plan for Town review and approval. The Plans shall include the following elements:

*Storm Water Control Plan*
- Project information;
- Opportunities and constraints;
- Conceptual site design;
- Calculations and documentation;
- Design details;
- Source controls;
- Maintenance;
- Construction checklist; and
- Certification.

*Stormwater Facilities Operation and Maintenance Plan*
- Designation of responsible individuals;
- Description of facilities;
- Documentation of the facilities “as built”; and
- Scheduling of maintenance activities.

All stormwater management facilities shall be maintained according to the approved Operation and Maintenance Plan. The Plan shall require that stormwater management facilities be inspected by those responsible for maintenance at least annually.
After Mitigation:  *Less than Significant*

Implementation of Mitigation Measures HWQ-1, HWQ-2, and HWQ-3 would reduce potential Project impacts on water quality standards, waste discharge requirements, and drainage system capacity to a less-than-significant level by ensuring compliance with applicable waste discharge requirements. In addition, meeting permit requirements, including the Town’s Phase II Stormwater Permit would address both construction related and long-term impacts on water quality, waste discharge requirements, and drainage capacity by requiring that a Stormwater Control Plan describes and implements appropriate BMPs during and after construction activities.

**Impact HWQ-2:**  *Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge?*

**Analysis:**  *Less than Significant*

**Construction**

Given the shallow groundwater levels in the Project area (approximately 3 feet below the existing ground surface), certain excavations would need to be dewatered to create a dry working surface. Temporary groundwater dewatering would involve the pumping of groundwater in a localized area to lower the water level to approximately two feet below the bottom of the excavation. Such dewatering would be temporary, and prolonged lowering of the groundwater levels in any one location would not be necessary. Such temporary dewatering would have, at most, a very small effect on localized water levels in the immediate vicinity of the excavation, and no substantial deficit in the local groundwater basin or lowering of water levels would occur. The impact would be less than significant.

**Operation**

Operation of the Project would not directly utilize groundwater, and would not result in an increase in population that would indirectly increase groundwater demand. Therefore, the Project operation would not create a deficit in the local groundwater basin or a lowering of water levels. No impact would occur.

The Project includes bioretention facilities, including rain gardens and flow-through planters, which would collect, filter, and discharge water into the existing stormwater system at approximately the same volume as existing conditions. Development of the gravel lot would add approximately 143,510 square feet of impervious surface and expansion of The Village would add approximately 78,568 square feet of impervious surface for a total of approximately 222,078 square feet. The Project would have, at most, only a very small effect on groundwater recharge. The impact would be less than significant.

**Mitigation:**  No mitigation is needed.

**Impact HWQ-3:**  *Would the project provide additional sources of polluted runoff, or otherwise substantially degrade water quality?*

**Analysis:**  *Less than Significant*
Construction and Operation

Please see Impact HWQ-1 for an evaluation of construction impacts.

The Project would not result in a new point source of storm water discharge, and following construction, the proposed facilities, including the improved gravel lot and parking lot, would be maintained and cleaned by the property owner consistent with the remainder of The Village property. The Phase II Stormwater Permit (Order No. 2013-0001) identifies several types of industrial and commercial facilities/sources that have a reasonable potential to contribute to pollution of storm water runoff (SWRCB 2013). Such facilities include, but are not limited to, vehicle salvage yards, waste transfer facilities, corporation yards, and vehicle and mechanical repair facilities. The Project is not such a facility, and would not be expected to contribute to pollution of storm water runoff or result in illicit discharges. The improved gravel lot and parking lot would continue to be operated in a manner similar to existing conditions, and oils and grease that may accumulate on the new and reconstructed lots from vehicles would be addressed through periodic maintenance and cleaning.

Therefore, because the Project would not result in a new point discharge of runoff and would not result in a land use that typically results in polluted runoff, the potential to provide substantial additional sources of polluted runoff or otherwise substantially degrade water quality would be less than significant.

Mitigation: No mitigation is needed.

Impact HWQ-4: Would the project expose people or structures to a significant risk involving flooding, or place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Analysis: Significant

The Project site is located within a FEMA mapped 100-year flood hazard zone with a Base Flood Elevation (BFE) of 10.0 feet North American Vertical Datum (NAVD) (FEMA 2016). This indicates that there is a one percent chance each year for flood waters to reach or exceed an elevation of 10.0 feet NAVD at the Project site. The Project is subject to the Town’s Flood Damage Prevention Regulations and will require a Floodplain Development Permit in accordance with Municipal Code Chapter 16.10, Flood Damage Prevention. As summarized in Chapter 2, Project Description, flood-proofing elements following FEMA standards would be incorporated into the Project, including upturned concrete walls at the base of the building and an aluminum barrier system for ground level doors and windows. While the approach to flood protection proposed as part of the Project appears adequate, it will be necessary to confirm consistency with the Town’s Flood Damage Prevention Regulations at the time that final Project plans are developed. Therefore, the potential for the Project to expose structures to a significant risk involving flooding would be significant.

Although the Project site is located within a FEMA mapped 100-year flood hazard zone, the modest size of the Project would have a very small potential to displace
floodwaters, raise flood elevations, or create new flooding impacts. Therefore, the potential for the Project to impede or redirect flood flows would be less than significant.

Mitigation: **Measure HWQ-4: Provisions for Flood Hazard Reduction**

The Town shall ensure that the Project conforms to the flood damage prevention provisions of Corte Madera Municipal Code Chapter 16.10. The Applicant shall be required to obtain a Floodplain Development Permit before construction or development begins. The application for a Floodplain Development Permit shall include, but not necessarily be limited to, the following elements:

- Plans drawn to scale showing the nature, location, dimensions and elevation of the Project area, including existing and proposed structures, fill, material storage areas, and drainage facilities;
- Foundation design details;
- Proposed elevation in relation to mean sea level to which any nonresidential structure will be floodproofed;
- All appropriate certifications that the Project satisfies the flood hazard reduction provisions; and
- Description of the extent to which any watercourse will be altered or relocated as a result of the Project.

In accordance with the provisions of Municipal Code Chapter 16.10, flood hazard reduction provisions shall include, but would not necessarily be limited to, the following:

- Anchoring new construction and improvements to prevent flotation, collapse or lateral movement of a structure resulting from hydrodynamic and hydrostatic loads;
- Use of flood-resistant materials, utility equipment resistant to flood damage, and other methods and practices that minimize flood damage;
- Raising of the elevation of the lowest floor, including basement, to a height equal to or exceeding one foot above the BFE specified on the FEMA Flood Insurance Rate Map, or floodproofing the building below one foot above the BFE, such that the structure:
  - Is watertight with walls substantially impermeable to the passage of water;
  - Has structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
  - Is certified by a registered professional engineer or architect that the standards of Section 16.10.080 of the Municipal Code are satisfied.
- All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.
The Town’s Public Works Department shall ensure compliance with the permit. Inspections shall be performed at key points during the construction process, and at Project completion.

After Mitigation: *Less than Significant*

Implementation of Mitigation Measure HWQ-4 would mitigate potential flooding impacts to a less-than-significant level by ensuring compliance with the Town’s flood damage prevention provisions contained in Municipal Code Chapter 16.10.

**Impact HWQ-5:** *Would the project expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?*

**Analysis:** *Less than Significant*

The Project would not add additional habitable structures near the San Francisco Bay, which is an enclosed body of water that may experience seiche waves. The Bay Area has not been adversely affected by seiches during its history within this seismically active region of California, and the largest seiche wave measured in the San Francisco Bay, following the 1906 earthquake, was four inches high (County of Alameda 2010). The proposed Project would not influence the frequency or probability of seiches because the Project would not create new enclosed water bodies or affect the frequency of earthquakes. The potential to expose people or structures to a significant loss by seiche would be less than significant.

The Project does not include the construction of structures within an area subject to inundation from tsunami (Cal EMA 2009), and no mudflows have been mapped on or adjacent to the Project site (USGS 1997). No impacts related to inundation by tsunami or mudflow would occur.

**Mitigation:** No mitigation is needed.

**Impact HWQ-6:** *Would the project expose people or structures to flooding as a result of the failure of a levee or dam?*

**Analysis:** *Less than Significant*

The Project does not include the construction of structures within an area subject to inundation from failure of a dam (CalOES 2017). The Project site would however be located in a developed area that is protected by levees, similar to other portions of Corte Madera. The Project would not result in a physical disturbance of an existing levee. Flood control levees may experience damage during strong seismic events that could possibly result in the Project site being exposed to floodwaters. Levees are periodically inspected and maintained by the Town of Corte Madera to ensure stability, and as described in Impact HWQ-4, the Project would be subject to the Town’s flood damage prevention provisions contained in Municipal Code Chapter 16.10. The impact from flooding as a result of levee failure would be less than significant.

**Mitigation:** No mitigation is needed.
Impact C-HWQ-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to hydrology and water quality?

The geographic scope for the analysis of potential cumulative hydrology and water quality impacts in the study area consists of the Project site and the surrounding lands of Shorebird Marsh and Corte Madera Marsh Ecological Reserve. Refer to Section 3, Environmental Analysis, Table 3.1 (Project Considered for Cumulative Analysis) and Figure 3-1 (Location of Projects Considered in the Cumulative Analysis) for a summary of the cumulative projects.

Analysis:  

*Less than Cumulatively Considerable (Less than Significant)*

**Water Quality and Storm Water System Capacity**

As described in Impact HWQ-1, construction and operation of the Project could result in the degradation of water quality in Shorebird Marsh from increased soil erosion, accidental release of hazardous materials, and increases in storm water runoff. Cumulative projects listed in Section 3, Environmental Analysis, Table 3.1 (Project Considered for Cumulative Analysis) could adversely affect the same water body during construction. Therefore, cumulative impacts related to surface water quality could be significant.

Mitigation measures have been included that would reduce impacts on water quality to a less-than-significant level, including compliance with the requirements of the NPDES General Construction Permit, the Town’s Urban Runoff Pollution Prevention Ordinance and Grading and Drainage Standards, and the applicable E.12 Post Construction Requirements.

Relevant cumulative projects identified in Section 3 disturbing more than one acre of land would also be subject to the NPDES General Construction Permit, which would require development and implementation of SWPPPs to avoid water quality impacts. Relevant cumulative projects creating or replacing 5,000 square feet or more of impervious area would also be subject to E.12 Post Construction Requirements, which would require development and implementation of a Stormwater Control Plan to retain and treat storm water. Relevant projects would also be subject to compliance with the Town’s Urban Runoff Pollution Prevention Ordinance and Grading and Drainage Standards. With implementation of the mitigation measures identified for the Project, the Project’s potential contribution to any such cumulative water quality impact would not be cumulatively considerable (less than significant).

**Groundwater**

As described in Impact HWQ-2, the Project may require temporary excavation dewatering. The cumulative projects listed in Section 3 may also require the temporary pumping of groundwater in localized areas for excavation dewatering. The cumulative impact of such dewatering on groundwater levels would be less than significant because such dewatering activities are temporary and have only small effects on localized groundwater levels in the immediate vicinity of pumping.
**Hydrology and Water Quality**

**Flooding**

As described in Impact HWQ-4, the Project is located within a FEMA mapped 100-year flood hazard zone and could be impacted by flood flows. Mitigation measure HWQ-4 has been included that would reduce impacts on exposure to damage from flooding to a less-than-significant level, including compliance with the requirements of the Town’s flood damage prevention provisions contained in Municipal Code Chapter 16.10. Several of the cumulative projects identified in Section 3 are located within a 100-year flood hazard zone and would also be subject to the flood damage prevention provisions contained in Municipal Code Chapter 16.10. With implementation of the mitigation measures identified for the Project, the Project’s potential contribution to any such cumulative flooding impact would not be cumulatively considerable (less than significant).

As described in Impact HWQ-4, the Project’s potential to impede or redirect flood flows would be less than significant. The cumulative impact of impeding or redirecting flood flows would be less than significant because of the modest size and spatial distribution of the projects with respect to each other.

Mitigation: No mitigation is needed.

### 3.8.7 References


San Francisco Bay Regional Water Quality Control Board. 2010. *Clean Water Act Section 303(d) List*.


3.9 **Land Use and Planning**

This section evaluates potential environmental impacts related to land use and planning. To provide the basis for this evaluation, the setting section provides an overview of the land use and regulatory framework that is applicable to the Project.

The following subjects relate to land use and planning, but are evaluated in other sections of this EIR:

- Impacts related to visual character and quality of the Project, the site, and its surroundings are evaluated in Section 3.1, Aesthetics.
- Impacts related to Project-generated noise and sensitive receptors are evaluated in Section 3.10, Noise.
- Impacts related to traffic and performance of pedestrian, bicycle, and transit facilities, and designations of bicycle lanes and pedestrian corridors are evaluated in Section 3.12, Transportation.

### 3.9.1 Setting

**Existing Land Uses**

The Project site consists of two main areas: The Village and the gravel lot. The Village is a regional shopping center developed with office and retail uses. The gravel lot is used for overflow parking and, on occasion, community events.

Surrounding land uses include a managed stormwater retention basin to the north known as Shorebird Marsh, marshland, and San Francisco Bay to the east; and commercial and office uses to the south and west. Highway 101 runs along the west side of The Village.

Approximately 580 feet of the San Francisco Bay Trail runs along the frontage of the existing gravel lot.

**General Plan Land Use Designation**

The 2009 General Plan land use designation for The Village, including the proposed location of the new building, is Mixed-Use Region-Serving Commercial. The Mixed Use Region-Serving Commercial designation applies specifically to parcels that encompass The Village regional shopping center. Allowable uses include retail, outdoor plazas and seating areas, office, public services and community meeting facilities, residential, and accessory uses such as parking garages. The minimum lot size of the Mixed Use Region-Serving Commercial designation is 10,000 square feet; the allowable floor area ratio is up to 0.47; and the allowable residential density is 5.0 to 9.4 dwelling units per acre.

The 2009 General Plan land use designation for the gravel lot is Wetlands and Marshlands. This land use designation permits uses that relate to and enhance wetland habitat. (Corte Madera 2009a)

**Zoning**

The Zoning Ordinance for Corte Madera is the primary tool for implementing the policies of the General Plan, and addressing physical development standards and criteria for the Town.

---

1 Floor area ratio (FAR) refers to the ratio of square footage of building area to the size of the site. Therefore, an FAR of 0.47 on a 1-acre site (43,560 square feet) would allow a building square footage of 20,473 square feet.
Underlying Zoning District

The Village is zoned Regional Shopping (C-2) District. The C-2 District is intended to create and enhance areas where a wide range of retail goods and services are permitted, serving customers from a wide geographic area. In the C-2 District, gross floor area shall not exceed thirty-four percent of the net site area, exclusive of the floor area devoted to required parking. No structure shall exceed thirty-five feet in height. Exceptions to the height limit include towers, spires, cupolas, elevator penthouses, water tanks, monuments, scenery lofts, and necessary mechanical appurtenances covering not more than ten percent of the ground area covered by the structure and not exceeding 10 feet more than the height limit for the district (CMC 18.24.070).

The gravel lot is zoned as Parks, Open Space and Natural Habitat (POS) District. The POS District is used for public facilities and public service installations used primarily for open space, for publicly or privately owned areas used for the preservation or restoration of a natural habitat, or for public parks, playgrounds and other types of public recreation facilities. According to Section 18.16.215, Wetland Buffers, for areas designated as wetlands and marshland in the General Plan, a buffer of at least 100 feet in width is required between any such areas and adjacent uses. (Corte Madera Zoning Ordinance 1994).

Overlay Zoning District

Both The Village and the gravel lot are also subject to the Baylands Risk Zone and Natural Habitat (BRNH) Overlay District. The BRNH Overlay District is one of several “Special Purpose Overlay Districts” in the zoning ordinance that are governed by a set of common regulations. The general provisions for Special Purpose Overlay Districts state that the purpose of the overlay zones is to "establish for certain areas of the town a level of planning and development policy that is consistent with the general plan, but is sufficiently flexible to allow deviations from the standards and regulations of the underlying specific zoning district to encourage a more creative approach to land development...." (CMC 18.18.005). These regulations provide that uses will be regulated by the underlying district and that development standards such as height and setback may be modified from the underlying district by setting standards in a Preliminary or Precise Plan. (Corte Madera Zoning Ordinance 1994).

Preliminary Plan and Precise Plan

The Town Council approved the original Preliminary Plan for The Village in 1981 (Resolution No 2021). Subsequent amendments were adopted in 1983 and 1984. In 2012 the Town Council approved the most recent Preliminary Plan (Resolution No 3685) which included an expansion of Macy's and Nordstrom. The expansion at Macy's was never constructed.

The 2012 Preliminary Plan for The Village allows minimum lot sizes of 10,000 square feet, a non-residential FAR of up to 0.47, and a maximum height limit of 46 feet above finished grade.

3.9.2 Regulatory Framework

Federal and State

No federal or state land use plans, policies, or regulations pertain to the Project.
Regional and Local

Bay Conservation and Development Commission

The San Francisco Bay Conservation and Development Commission (BCDC) is a California state planning and regulatory agency with regional authority over the San Francisco Bay, the Bay's shoreline band (generally referred to as 100 feet upland from mean high tide), and the Suisun Marsh. Shorebird Marsh borders the gravel lot. However, because Shorebird Marsh is tidally controlled by a structure installed prior to the creation of BCDC, BCDC does not have jurisdiction over Shorebird Marsh or the gravel lot (BCDC 2017).

San Francisco Bay Trail Plan

The San Francisco Bay Trail Plan is a guide to implementing the Bay Trail, a 400-mile recreation trail around the perimeter of San Francisco and San Pablo Bays. Review and approval of Bay Trail design and development is the responsibility of local implementing jurisdictions and agencies. Therefore, the Town would be responsible for review of the segment of Bay Trail that traverses the Project site.

Corte Madera General Plan

The General Plan, adopted in 2009, outlines policies, standards, and programs that together provide a comprehensive, long-term plan for physical development within the Town. Individual development projects proposed within the Town must demonstrate general consistency with the goals and policies outlined within the General Plan.

The following are the land use policies and implementation programs from the Town of Corte Madera General Plan 2009 and the 2015 Housing Element that are applicable to the Project.

Policy H-2.3 Consider housing needs for local workers when reviewing non-residential development proposals. The Town will require non-residential uses to contribute to the provision of affordable workforce housing by techniques such as in lieu fees, provision of housing, or other alternatives of equal value.

Policy H-2.4 The Town will work with employers developing larger projects (20+ employees) to promote local housing opportunities for their employees and will encourage employers to find ways to provide housing assistance as part of their employee package. Developers of major projects in mixed-use areas will be encouraged to consider and propose housing, if feasible.

Implementation Program H-2.4.a: Employee Housing

As part of the development review process for larger projects, encourage developers to provide housing on-site. Where permitted by the General Plan land use designations, the base zoning district and/or overlay zoning, offer flexible development standards as an incentive to provide on-site employee housing.

Policy LU-2.14 Support commercial, mixed-use and high density residential uses when consistent with Town objectives for development, including provision of necessary public services and infrastructure.

Policy LU-3.2 Support infill projects where clearly consistent with Town objectives for infill development.
Implementation Program LU-3.2.a: Infill Objectives

Support infill development if findings can be made that the proposal is consistent with the infill goals and policies outlined herein, would be consistent with applicable provisions of the General Plan and would ensure land use compatibility with established neighborhood character. Approvals for infill development projects shall be based on findings of fact that the proposed projects have the potential to achieve one or more of the following attributes:

- Produce jobs for Town residents
- Create high density, market-rate and/or affordable housing
- Provide convenient access to transportation facilities and public transit, as well as schools, shopping and other local destinations, as a means of increasing residential density and commercial intensity
- Reduce automobile-oriented design
- Reduce creation of traffic congestion
- Utilize existing infrastructure systems
- Provide a desirable built environment, as described in LU-3.5
- Include community amenities, such as plazas, public art, street furniture, child care centers, appropriate street landscaping and tree planting, and similar uses or improvements
- Encourage community interaction through use of outdoor gathering and seating areas and inclusion of pedestrian-oriented improvements
- Embody environmentally sensitive design and construction principles, as described in CD-6.2
- Provide for more efficient use of Corte Madera’s limited land supply

Policy LU-4.3 Apply flexible development standards to The Village shopping center in order to promote the community’s economic development, protect and enhance the Town’s tax base, and to encourage mixed-use development, including housing.

Implementation Program LU-4.3.a: Expansion of The Village Shopping Center

Allow expansion of The Village regional shopping center consistent with Town goals for establishing a mix of land uses. Encourage construction of high-density residential units (including affordable housing) on-site. The established Floor Area Ratio for the shopping center shall be 0.47. Increased floor area may be accommodated through construction of upper stories, or through expanded building footprints when combined with construction of parking garages. Modify the Zoning Ordinance to allow for building height bonuses of 15 feet beyond the based zone standard and/or reduce parking standards if proposed development includes affordable housing. Such increases in height shall minimize view impacts to properties with views of San Francisco Bay through thoughtful building design and placement. At the discretion of the Town Council, Policy LU-4.3 and Implementation...
Program LU-4.3.a may be implemented under the provisions of the PD (Planned Development Overlay District).

3.9.3 **Evaluation Criteria and Significance Thresholds**

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.9-1, Evaluation Criteria and Significance Thresholds, are used to determine if the project would have a significant effect related to land use and planning.

**Table 3.9-1 Evaluation Criteria and Significance Thresholds**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project physically divide an established community?</td>
<td>A physical barrier to movement dividing an established community that results in a complete physical separation from the rest of the neighborhood.</td>
<td>CEQA Guidelines Appendix G, Checklist Item X (a)</td>
</tr>
<tr>
<td>Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>Any such conflict with a goal or policy in the Corte Madera General Plan.</td>
<td>CEQA Guidelines Appendix G, Checklist Item X (b) Corte Madera 2009 General Plan</td>
</tr>
<tr>
<td>Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
<td>Any conflict with a goal or policy envisioned in an applicable habitat conservation plan or natural community conservation plan.</td>
<td>CEQA Guidelines Appendix G, Checklist Item X (c)</td>
</tr>
</tbody>
</table>

3.9.4 **Areas of No Impact**

The proposed Project would not result in impacts related to two of the land use and planning evaluation criteria listed in Table 3.9-1 (Evaluation Criteria and Significance Thresholds). For the reasons presented below, the following evaluation criteria are not applicable to the Project or result in a finding of no impact:

**Would the project physically divide an established community?**

The Project would add similar structures and facilities to an existing regional shopping center. The Project would not physically divide an established community. No impact would occur.
Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

The project would not conflict with an applicable habitat conservation plan or natural community conservation plan. No such plans apply to the Project site or its immediate surroundings; therefore, no impact would occur.

3.9.5 Approach to Analysis

The impact analysis for land use focuses on whether implementation of the Project would conflict with applicable land use plans, policies, and regulations. This analysis was performed by evaluating Project components against the regulations and plans described under the Regulatory Framework section, and by comparing changes in land use against existing conditions.

3.9.6 Impacts and Mitigation Measures

Table 3.9-2, Summary of Impacts - Land Use and Planning, provides a summary of potential impacts from the Project.

Table 3.9-2 Summary of Impacts – Land Use and Planning

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>LU-1: Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>LS</td>
</tr>
<tr>
<td>C-LU-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to land use?</td>
<td>LS</td>
</tr>
</tbody>
</table>

Notes: LS = Less than Significant

Impact LU-1: Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Analysis: Less than Significant

The General Plan land use designation and zoning for The Village properties are Mixed-Use Region-Serving Commercial and C-2 District, with a BRNH Overlay District. If the proposed General Plan Amendment and Rezoning are approved then the General Plan land use designation and zoning for the gravel lot would be the same as The Village properties.

Improvements proposed at The Village and gravel lot would be consistent with the General Plan land use designation and zoning. Retail uses, outdoor plazas, and parking are all allowable uses. The café would be conditionally allowed. The Village consists of a total of 31.70 acres and would have a total of 521,217 square feet of
office and retail space with implementation of the Project. This would equate to a FAR of 0.38, well below the allowable 0.47. All three parcels that comprise The Village are in excess of 10,000 square feet which is the minimum lot size for the Mixed-Use Region-Serving Commercial Designation. The lot line adjustment would not change this. Although the height of the building would be greater than what is allowed in the C-2 District, including the exceptions, the site is subject to a Special Purpose Overlay District, which provides that uses will be regulated by the underlying district but that development standards such as height and setback may be modified from the underlying district by setting standards in a Preliminary Plan. The height limitation in the existing Preliminary Plan for The Village is 46 feet, and would continue to be 46 feet, the maximum height of the proposed building, under the proposed Preliminary Plan. The Project would not conflict with the allowable uses or development parameters of the existing and proposed land use or zoning designations.

General Plan Policies H-2.3 and H-2.4 suggest the consideration of housing needs when reviewing non-residential projects and projects that have more than 20 employees, while LU-4.3 encourages housing. Although the Mixed-Use Region-Serving Commercial land use designation allows for, it does not require residential units be included with an expansion of The Village. According to the Town of Corte Madera General Plan 2009, Commercial development has historically been a significant economic factor for the Town, with two large shopping centers, including The Village, as well as older neighborhood commercial centers. The Project would implement the Plan’s objective to support commercial development, promote the community’s economic development, and protect and enhance the Town’s tax base. As noted in General Policy LU-4.3, the approach to development at The Village should be flexible to promote the community’s economic development. The Project is consistent with the intent of LU-4.3 in that it would promote and enhance the tax base, and is not in conflict with H-2.3 and H-2.4 as housing should be considered where feasible and is not a requirement.

The Town of Corte Madera General Plan 2009 acknowledges that Corte Madera is mostly built out and that future development would mostly occur as infill or redevelopment. General Plan Policy LU-3.2 supports infill projects where the project would achieve one or more identified attributes as identified under Implementation Program LU-3.2.a. The Project would produce jobs, provide a desirable build environment, and provide more efficient use of the land at The Village and gravel lot. The Project would not conflict with General Plan Policy LU-3.2.

Mitigation: No mitigation is needed.

Impact C-LU-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to land use?

Analysis: Less than Significant

For land use, the geographic scope for assessing cumulative impacts is the area immediately surrounding the Project site, since this area would have the most
relevant land use impacts. Of the cumulative projects identified in Section 3.0 Environmental Analysis, Table 3-1 Projects Considered for Cumulative Impacts, the Village at Corte Madera Center Court Improvements is located on the Project site, the Redwood Highway Pathway Repaving is partially located along the frontage of the gravel lot, while the other cumulative projects are located west of Highway 101 or are much further away from the Project site (see Figure 3-1 in Section 3.0, for location of cumulative projects).

The Village at Corte Madera Center Court Improvements Project was found to be consistent with the Preliminary Plan, was approved by the Town, and has been partially built. The Redwood Highway Pathway Repaving project is to improve the existing Bay Trail and would not conflict with any adopted land use policies. The other projects are still under review by the Town. These other projects may result in conflicts or inconsistencies with some of the objectives and policies of local land use plans. However, as discussed in Impact LU-1, the Project would not conflict with applicable land use policies, and therefore would not contribute to cumulative land use impacts related to inconsistency with land use policies. The cumulative effect of the proposed Project, in combination with other past, present, and foreseeable projects, would be less than significant, and the Project would not result in or contribute to any significant cumulative impacts related to land use.

Mitigation: No mitigation is needed.

3.9.7 References


3.10 Noise

This section provides a description of the existing noise environment in the Project area and evaluates changes to those conditions that would result from implementation of the proposed Project. The impacts and mitigation section establishes thresholds of significance, evaluates potential noise impacts, and identifies the significance of these impacts.

3.10.1 Setting

Fundamentals of Acoustics

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 3.10-1 (Definitions of Acoustical Terms).

There are several methods of characterizing sound. The most common method in California is the A-weighted sound level or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called $L_{eq}$. The most common averaging period is hourly, but $L_{eq}$ can describe any series of noise events of arbitrary duration.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level (CNEL) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 p.m. to 10:00 p.m.) and a 10 dB addition to nocturnal (10:00 p.m. to 7:00 a.m.) noise levels. The Day/Night Average Sound Level ($L_{dn}$) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.
Table 3.10-1 Definition of Acoustical Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decibel, dB</td>
<td>A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).</td>
</tr>
<tr>
<td>Frequency, Hz</td>
<td>The number of complete pressure fluctuations per second above and below atmospheric pressure.</td>
</tr>
<tr>
<td>A-Weighted Sound Level, dBA</td>
<td>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 section are A-weighted, unless indicated otherwise.</td>
</tr>
<tr>
<td>L₀₁, L₁₀, L₅₀, L₉₀</td>
<td>The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.</td>
</tr>
<tr>
<td>Equivalent Noise Level, Lₑq</td>
<td>The average A-weighted noise level during the measurement period.</td>
</tr>
<tr>
<td>Community Noise Equivalent Level, CNEL</td>
<td>The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 p.m. to 10:00 p.m. and after addition of 10 decibels to sound levels in the night between 10:00 p.m. and 7:00 a.m.</td>
</tr>
<tr>
<td>Day/Night Noise Level, L₃₀ or DNL</td>
<td>The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 p.m. and 7:00 a.m.</td>
</tr>
<tr>
<td>Lₘₐₓ, Lₘᵟᵣ</td>
<td>The maximum and minimum A-weighted noise level during the measurement period.</td>
</tr>
<tr>
<td>Ambient Noise Level</td>
<td>The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.</td>
</tr>
<tr>
<td>Intrusive</td>
<td>That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.</td>
</tr>
</tbody>
</table>

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several methods are typically used to quantify the amplitude of vibration including Peak Particle Velocity (PPV) and Root Mean Square (RMS) velocity. PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave.
Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life are evaluated against different vibration limits. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as minor cracking of building elements, or may threaten the integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher and there is no general consensus as to what amount of vibration may pose a threat for structural damage to the building. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

**Project Area**

The Project site is located west of U.S. Highway 101 (U.S. 101) along Redwood Highway. Nearby sensitive receptors have been identified as residences on Echo Avenue (south of the Project), residences on Tamal Vista Boulevard (west of the Project), the Golden Gate Trailer Park on Redwood Highway (north of the Project, within the City of Larkspur), and the Best Western Plus Corte Madera Inn on Madera Boulevard (west of the Project).

**Existing Noise Environment**

The Town's General Plan describes the ambient noise environment in Corte Madera as defined primarily by traffic on U.S. 101, which runs north and south through the town. At locations removed from U.S. 101, the ambient noise environment tends to be defined by local traffic and typical neighborhood noise sources. No significant noise-producing commercial or industrial activities are identified within the Town of Corte Madera. (Corte Madera 2009)

For the Project area, U.S. 101 and Redwood Highway are the primary contributors to the ambient noise environment. According to the *Town of Corte Madera General Plan 2009*, the Project site falls within zones that indicate a Day/Night Noise Level of 60 – 65 dBA due to U.S. 101 traffic. (Corte Madera 2009)

The Best Western Corte Madera Inn, located approximately 700 feet to the west, is the nearest sensitive receptor to the Project site. The Inn is on the far side of U.S. 101 from the Project site and has average daytime noise levels of 65-67 dBA (see Appendix F, Noise and Vibration Analysis).

---

1 Sensitive receptors include residences, overnight health care facilities, schools, and religious institutions. Retail establishments are not considered sensitive receptors; shoppers are also not considered to be sensitive receptors because of the limited duration of the exposure for any particular shopper, and the fact that shoppers have the ability to move away from the construction noise if it is found to be of annoyance.
Residences on Tamal Vista Boulevard, located approximately 1,100 feet to the west, are located on the far side of U.S. 101 and within the 65 dBA noise contour for day/night noise level as depicted on Figure 8.1 of the Town’s General Plan (Corte Madera 2009).

The Golden Gate Trailer Park, a residential community, located approximately 1,400 feet to the north in the City of Larkspur, has average daytime noise levels of 61-63 dBA (see Appendix F, Noise and Vibration Analysis).

Residences on Echo Avenue, located approximately 1,975 feet to the south, fall within the 60 dBA noise contour for Day/Night Noise Level as depicted on Figure 8.1 of the Town's General Plan (Corte Madera 2009).

3.10.2 Regulatory Framework

Federal

No federal regulations pertaining to noise are relevant to the Project.

State

2013 California Building Code, Title 24, Part 2

The current (2013) California Building Code (CBC) does not place limits on interior noise levels attributable to exterior environmental noise sources. The July 1, 2015 Supplement to the 2013 CBC corrects this omission, reinstating limits on interior noise levels attributable to exterior environmental noise sources which had been contained in all prior versions of the CBC dating back to 1974.

California Department of Transportation – Construction Vibration

Caltrans recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards. A conservative vibration limit of 0.25 to 0.30 in/sec PPV has been used for older buildings that are found to be structurally sound but cosmetic damage to plaster ceilings or walls is a major concern. For historic buildings or buildings that are documented to be structurally weakened, a conservative limit of 0.08 in/sec PPV is often used to provide the highest level of protection. All of these limits have been used successfully and compliance to these limits has not been known to result in appreciable structural damage. All vibration limits referred to herein apply on the ground level and take into account the response of structural elements (i.e., walls and floors) to groundborne excitation. (California Department of Transportation 2013)

Regional and Local

Larkspur Municipal Code

The nearest sensitive receptor to the north is located within the City of Larkspur. The Larkspur Municipal Code establishes allowable exterior noise levels as follows:

Section 9.54.040 of the Municipal Code - Exterior Noise Limits:

A. Unless otherwise specifically indicated in this chapter, it shall be unlawful for any person at any location within the City to create, or cause to be created, any noise that exceeds the applicable exterior noise limit as described below:
### Noise

<table>
<thead>
<tr>
<th>Receiving land use</th>
<th>Time</th>
<th>Noise level not to be exceeded for more than 30 minutes per hour (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>7:00 a.m. – 10:00 p.m. 10:00 p.m. – 7:00 a.m.</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Commercial</td>
<td>Any time</td>
<td>60</td>
</tr>
</tbody>
</table>

B. The exterior noise limit shall be adjusted as follows:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Adjustment to exterior limit (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise contains a steady, audible tone such as a whine, screech, or hum</td>
<td>-5</td>
</tr>
<tr>
<td>Noise is repetitive or impulsive (e.g., hammering, riveting)</td>
<td>-5</td>
</tr>
<tr>
<td>Noise consists of speech or music</td>
<td>-5</td>
</tr>
<tr>
<td>Noise occurs more than fifteen but less than thirty minutes per hour</td>
<td>+5</td>
</tr>
<tr>
<td>Noise occurs more than five but less than fifteen minutes per hour</td>
<td>+10</td>
</tr>
<tr>
<td>Noise occurs more than one but less than five minutes per hour</td>
<td>+15</td>
</tr>
<tr>
<td>Noise occurs less than one minute per hour</td>
<td>+20</td>
</tr>
</tbody>
</table>

C. If the ambient noise level is less than that permitted by Subdivision (A), then the measured ambient noise level plus 5 dBA shall be considered the "exterior noise limit", but in no case shall the noise level exceed the maximum permitted by Subdivision (A).

D. If the ambient noise level exceeds that permitted by subdivision (A), then the measured ambient level shall be considered the "exterior noise limit."

E. For the purposes of this ordinance school, hospitals, and convalescent homes shall be considered residential land uses. (Ord. 697 § 1 (part), 1983)

**Corte Madera Municipal Code**

Chapter 9.36 of the Corte Madera Municipal Code provides regulations to prohibit unnecessary, excessive and annoying noises from all sources (Corte Madera 2016). The provisions that apply to this proposed Project include the following:

**9.36.030-Specific maximum noise levels**

(a) Except as modified in subsection (c) below, it is unlawful for any person to operate any machinery or equipment, pump, fan, air-conditioning apparatus, or similar mechanical device or any radio receiving set, musical instrument, phonograph, television set, or other similar device in any manner so as to create any noise which would cause the noise level at the property plane of the property from which the noise is emitted to exceed the following values:
(b) If the measurement location is on a boundary between two zoning districts, the lower sound level shall apply.

(c) The provisions of subsection (a) shall not apply to construction or demolition work performed during the following times: Monday through Fridays from seven a.m. to five p.m.; and Saturdays and Sundays from ten a.m. to five p.m.; provided, that all powered construction equipment is equipped with intake and exhaust mufflers recommended by the manufacturers thereof; and provided, further, pavement breakers and jackhammers shall also be equipped with acoustical attenuating shields or shrouds recommended by the manufacturers thereof. In lieu of or in the absence of manufacturer's recommendations, the town engineer shall have the authority to prescribe such means of accomplishing maximum noise attenuation as he deems to be in the public interest, considering the available technology and economic feasibility. Additionally, the provisions of subsection (a) shall not apply to motorized landscape equipment (lawn mowers, shears, and similar equipment), excepting gas powered leaf blowers, operated during the following times. Monday through Friday from seven a.m. to five p.m. and Saturdays and Sundays from ten a.m. to five p.m..

Corte Madera General Plan Goals and Policies

The following are the noise policies and implementation programs from the Town of Corte Madera General Plan 2009 that are applicable to the Project.

Policy PSH-5.7 Reduce noise impacts from construction activities.

Implementation Program PSH-5.7.a: Construction Time Restrictions

Construction activities shall be limited to the hours between 7:00 a.m. and 5:00 p.m. on weekdays, and 10:00 a.m. and 5:00 p.m. on weekends, unless an exemption is first obtained from the Town in response to special circumstances.

Implementation Program PSH-5.7.b: Muffler Requirements

All internal combustion engines used in conjunction with construction shall be muffled according to the equipment manufacturer’s requirements.

3.10.3 Evaluation Criteria and Significance Thresholds

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.10-2, Evaluation Criteria and Significance Thresholds, are used to determine if the Project would have a significant effect related to noise.
## Table 3.10-2 Evaluation Criteria and Significance Thresholds

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
</table>
| Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | For Operation: 70 dBA from 7:00 a.m. to 10:00 p.m. 60 dBA from 10:00 p.m. to 7:00 a.m. Within Corte Madera: from 10:00 p.m. to 7:00 a.m. 60 dBA; from 7:00 a.m. to 10:00 p.m. 70 dBA At Golden Gate Trailer Park: from 10:00 p.m. to 7:00 a.m. 40 dBA for 30 minutes; from 7:00 a.m. to 10:00 p.m. 50 dBA for 30 minutes | CEQA Guidelines Appendix G, Checklist Item XII (a)
| Would the project result in exposure of persons to or generation of excessive groundborne vibration or noise levels? | 0.5 in/sec | CEQA Guidelines Appendix G, Checklist Item XII (b)
California Department of Transportation – Construction Vibration Guidance Manual |
| Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | Within Corte Madera and Larkspur: Increase of 5 dBA L<sub>eq</sub> Within Corte Madera: from 10:00 p.m. to 7:00 a.m. 60 dBA; from 7:00 a.m. to 10:00 p.m. 70 dBA At Golden Gate Trailer Park: from 10:00 p.m. to 7:00 a.m. 40 dBA for 30 minutes; from 7:00 a.m. to 10:00 p.m. 50 dBA for 30 minutes | CEQA Guidelines Appendix G, Checklist Item XII (c) |
| Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | Exceed 60 dBA Leq at sensitive receptor and exceed ambient by 5 dBA Leq for more than 1 year | CEQA Guidelines Appendix G, Checklist Item XII (d) |
### Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project be located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, exposing people residing or working in the project area to excessive noise levels?</td>
<td>Location of project in area exposed to effects of airport noise</td>
<td>CEQA Guidelines Appendix G, Checklist Item XII (e)</td>
</tr>
<tr>
<td>Would the project be located within the vicinity of a private airstrip, exposing people residing or working in the Project area to excessive noise levels?</td>
<td>Location of project in area exposed to effects of airport noise</td>
<td>CEQA Guidelines Appendix G, Checklist Item XII (f)</td>
</tr>
</tbody>
</table>

### 3.10.4 Areas of No Impact

The Project would not result in impacts related to two of the noise evaluation criteria listed in Appendix G of the CEQA Guidelines. For the reasons presented below, the following evaluation criteria are not applicable to the Project or result in a finding of no impact:

**Would the project be located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, exposing people residing or working in the project area to excessive noise levels?**

The Project is not located within an airport land use plan or within two miles of a public airport. Therefore this significance criterion is not applicable to the Project and is not discussed further.

**Would the project be located within the vicinity of a private airstrip, exposing people residing or working in the Project area to excessive noise levels?**

The Project is not included in an adopted airport land use plan and is not located in the vicinity of a private airstrip. The closest such airstrip is the San Rafael Airport, which is located more than 5 miles from the Project site. Therefore, the Project would not expose people to noise in the vicinity of a private airstrip, and no impact would occur.

### 3.10.5 Approach to Analysis

The analysis is based on the *Village at Corte Madera Restoration Hardware Expansion, Corte Madera, CA – Noise and Vibration Analysis*, prepared by Illingworth & Rodkin, Inc., dated April 24, 2017 (see Appendix F, Noise and Vibration Analysis).

Because the buildings near the Project were built after 1970 and are assumed to be structurally sound and designed to modern engineering standards, a significance threshold of 0.5 in/sec PPV is used for vibration impacts.

The Town of Corte Madera does not have adopted standards that can be used as significance thresholds for temporary increases in noise levels. Therefore, the following industry standards are used.

A substantial temporary noise increase would be significant if construction-related noise would exceed 60 dBA L_{eq}, and the ambient noise environment by at least 5 dBA L_{eq}, for a period of more than one
year. The 60 dBA $L_{eq}$ threshold represents the noise level at which construction noise would have the potential to interfere with conversations outdoors, requiring persons to raise their voice effort in order to effectively communicate with one another. The construction noise level must also exceed the ambient noise level by at least 5 dBA $L_{eq}$ in order for the construction noise to be clearly perceptible above the ambient noise level.

The Corte Madera Municipal Code indicates that, for the receiving commercial land use, machinery should not exceed 60 dBA from 10:00 p.m. to 7:00 a.m. and 70 dBA from 7:00 a.m. to 10:00 p.m..

The City of Larkspur Municipal Code indicates that, for the receiving residential land use (Golden Gate Trailer Park), machinery should not exceed 40 dBA from 10:00 p.m. to 7:00 a.m. and 50 dBA from 7:00 a.m. to 10:00 p.m..

For both Corte Madera and Larkspur, a substantial permanent noise increase would occur if the $L_{dn}$ increases by more than 5 dBA.

### 3.10.6 Impacts and Mitigation Measures

Table 3.10-3, Summary of Impacts – Noise, provides a summary of potential noise impacts from the Project.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOI-1: Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>LSM</td>
</tr>
<tr>
<td>NOI-2: Would the project result in exposure of persons to or generation of excessive groundborne vibration or noise levels?</td>
<td>LS</td>
</tr>
<tr>
<td>NOI-3: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>LS</td>
</tr>
<tr>
<td>NOI-4: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the Project?</td>
<td>LS</td>
</tr>
<tr>
<td>C-NOI-1: Would the project plus cumulative projects result in a cumulatively considerable contribution to cumulative impacts related to noise?</td>
<td>LS</td>
</tr>
</tbody>
</table>

Notes: LS = Less than Significant  
LSM = Less than Significant with Mitigation

Impact NOI-1: Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Analysis: Significant

Operation

The Corte Madera and Larkspur Noise Ordinances set specific thresholds for machinery at receiving land uses. The Project would not result in exposure to or
generation of noise levels in excess of established standards. Noise due to the operation of roof-top mechanical equipment associated with the Project would be inaudible at the nearest off-site receptors. No conflict with the Noise Ordinances would occur.

Construction

The Corte Madera General Plan limits construction hours and requires mufflers and acoustical shielding for construction equipment. The Applicant has not proposed specific construction hours or acoustical shielding. Therefore, the Project could conflict with the General Plan policies (Implementation Programs PSH-5.7a and PSH-5.7b); the impact would be significant.

Mitigation: Measure NO-1: Comply with Corte Madera General Plan Policies

Construction and demolition work shall be limited to the following times: Monday through Friday from 7:00 a.m. to 5:00 p.m.; and Saturdays and Sundays from 10:00 a.m. to 5:00 p.m. unless an exemption is first obtained from the Town in response to special circumstances.

For all construction activities, the following noise reduction measures shall be implemented:

1. All powered construction equipment must be equipped with intake and exhaust mufflers recommended by the manufacturers.
2. Pavement breakers and jackhammers shall be equipped with acoustical attenuating shields or shrouds recommended by the manufacturers.
3. In lieu of or in the absence of manufacturer’s recommendations, the town engineer shall have the authority to prescribe such means of accomplishing maximum noise attenuation as they deem to be in the public interest, considering the available technology and economic feasibility.

After Mitigation: Less than Significant

Mitigation Measure NO-1 restricts construction to the times, and equipment to the conditions, provided in General Plan Implementation Programs PSH-5.7a and PSH-5.7b. Therefore, the Project would not exceed applicable local standards, and the impact would be less than significant.

Impact NOI-2: Would the project result in exposure of persons to or generation of excessive groundborne vibration or noise levels?

Analysis: Less than Significant

Construction

Construction of the Project may generate perceptible vibration when heavy equipment or impact tools (e.g. jackhammers, hoe rams) are used in close proximity to nearby receptors. Construction activities would include site demolition, preparation work, foundation work, and new building framing and finishing. The Project would not require impact pile driving, which can cause excessive vibration levels. The nearest structures
to the proposed building footprint are the buildings within The Village approximately 40 feet to the west. Groundborne vibration generated by Project construction would be up to 0.125 in/sec PPV as measured at the nearest structures, which is well below the 0.5 in/sec PPV threshold. The potential for exposure to excessive groundborne vibration during construction would be less than significant.

**Operation**

During operation, neither the improved gravel lot nor the Restoration Hardware building would produce excessive groundborne vibration or noise. Project operation does not include activities capable of generating groundborne vibration. The new building and associated parking improvements would be similar to the existing improvements at The Village which are not significant vibration or noise producers.

**Mitigation:** No mitigation is needed.

**Impact NOI-3:** Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

**Analysis:** Less than Significant

The Project would not result in a permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project. Noise due to the operation of roof-top mechanical equipment associated with the Project would be inaudible on the site and at the nearest off-site receptors.

The only Project noise source with the potential to increase ambient noise levels on a permanent basis would be increased traffic on nearby roadways. During the weekday mid-afternoon peak (3:00 p.m. to 4:00 p.m) traffic scenario, the Project is expected to add 120 trips to the local roadway network. Based on this number of trips, the Project is expected to increase traffic noise levels along roadways serving the site by less than 1 dBA Ldn (Illingworth & Rodkin 2017). Therefore, impacts would be less than the significance threshold of a 5 dBA increment, and the impact would be less than significant.

**Mitigation:** No mitigation is needed.

**Impact NOI-4:** Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the Project?

**Analysis:** Less than significant

Noise levels within and around The Village would be elevated during construction of the Project. Noise levels would fluctuate throughout the day and throughout the various phases of construction. Noise levels would range from 77 to 89 dBA at a distance of 50 feet from the center of the construction site during peak construction periods. Peak noise levels would range from 57 to 67 dBA Leq at sensitive receptors, as shown in Table 3.10-4, Peak Construction Noise Levels.
### Table 3.10-4 Peak Construction Noise Levels (dBA, Leq)

<table>
<thead>
<tr>
<th>Receptor</th>
<th>Building Improvements</th>
<th>Gravel Lot Improvements</th>
<th>Combined Noise Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>89 dBA (50 feet)</td>
<td>89 dBA (50 feet)</td>
<td></td>
</tr>
<tr>
<td>North – Golden Gate Trailer Park</td>
<td>56 dBA (2,300 feet)</td>
<td>60 dBA (1,400 feet)</td>
<td>61 dBA</td>
</tr>
<tr>
<td>West - Best Western Corte Madera Inn</td>
<td>56 dBA (850 feet)¹</td>
<td>66 dBA (700 feet)</td>
<td>67 dBA</td>
</tr>
<tr>
<td>West - Tamal Vista Residences</td>
<td>53 dBA (1,250 feet)¹</td>
<td>54 dBA (1,100 feet)¹</td>
<td>57 dBA</td>
</tr>
<tr>
<td>South - Echo Avenue Residences</td>
<td>57 dBA (1,975 feet)</td>
<td>55 dBA (2,600 feet)</td>
<td>59 dBA</td>
</tr>
</tbody>
</table>

Source: Illingworth & Rodkin 2017

Note: ¹ Assumes minimum of 8 dBA for acoustical shielding due to intervening buildings.

Temporary noise resulting from Project construction activities would not be considered significant because Project construction would abide by the Town’s established hours of construction. In addition, retail establishments are not considered sensitive receptors; similarly, shoppers are also not considered to be sensitive receptors because of the limited duration of the construction noise on any shopper, and the fact that shoppers have the ability to move away from the construction noise if it is found to be of annoyance.

Peak noise levels at the Golden Gate Trailer Park and the Best western Corte Madera Inn would exceed 60 dBA. However, the ambient noise levels at these locations are already 61-63 dBA at the Trailer Park and 65-67 dBA at the hotel. Therefore, these noise levels would not exceed the ambient noise environment by 5 dBA Leq, and the temporary noise impact from construction would be less than significant.

**Mitigation:** No mitigation is needed.

**Impact C-NOI-1:** Would the project plus cumulative projects result in a cumulatively considerable contribution to cumulative impacts related to noise?

**Analysis:** *Less than Significant*

The geographic context for cumulative noise and vibration impacts would be construction of similar projects within distance of the Project site to be perceptible. The Corte Madera Inn Rebuild project is the only project on the cumulative projects lists (Section 3, Table 3-1 Projects Considered for Cumulative Analysis) close enough to consider. Construction noise levels from the Corte Madera Inn project at the Tamal Vista residences would range from about 65 to 88 dBA Leq. Construction noise levels from the Project would not exceed 60 dBA Leq at the Tamal Vista residences. The Project would not cumulatively increase the construction noise levels produced by the Corte Madera Inn Rebuild project alone. The Project’s contribution to the cumulative construction noise impact would be less than significant.
None of the cumulative projects identified in Section 3, Table 3-1 are close enough to the Project site to contribute to a permanent cumulative increase in noise or vibration levels in the impact areas considered in this section including NOI-1 through NOI-3.

Mitigation: No mitigation is needed.

3.10.7 References


Larkspur, City of. Municipal Code Section 9.54.040

### 3.11 Public Services and Recreation

This section provides a description of public services and existing recreation facilities in the Project area and evaluates changes to those conditions that would result from implementation of the proposed Project.

The following subject relates to public services and recreation, but is evaluated in another section of this EIR:

- Impacts to emergency access are evaluated in Section 3.12, Transportation.

#### 3.11.1 Setting

**Fire Protection and Emergency Services**

The Corte Madera Fire Department (CMFD) provides fire protection and emergency medical response to the Town. The department has a wide range of programs aimed at preserving the safety, health and well-being of all individuals through a wide range of programs to respond to threats from fire hazards. Primarily, the CMFD responds to requests for service, but they also manage disaster preparedness, community outreach and education, training, maintenance, and inspections.

The CMFD uses two fire stations: Station 14 (main station) at 342 Tamalpais Drive (4 minutes driving time to the Project), and Station 13, at 5600 Paradise Drive (2 minutes driving time to the Project). The department has an ISO rating of 4, on a scale from 1 to 10, with 1 being the highest firefighting capability. The target response time for fire protection services is five minutes or less 90% of the time, and four minutes or less 95% of the time, and the Town meets its target (Corte Madera 2009a).

**Police Services**

The Town of Corte Madera is served by the Central Marin Police Authority, which also serves the communities of Larkspur, San Anselmo and portions of Greenbrae, comprising approximately 35,000 residents. The Central Marin Police Authority was formed under a Joint Powers Agreement, which became effective on January 1, 2013. The target response time for calls is three minutes or less, and the Authority meets the Town’s target (Corte Madera 2009b, CMPA 2017).

**Schools**

Three school districts, Larkspur, Reed Union, and Tamalpais, serve the residents of Corte Madera. Within the three districts are five elementary schools, two middle schools, and one high school.

**Parks and Recreational Facilities**

Recreational facilities in the Project area include the Bay Trail and the Corte Madera Marsh Ecological Reserve.

The Bay Trail in the Project area runs in a north-south direction, parallel with Redwood Highway, to the east of the parking lot, then turns west to cut between the parking lot and gravel lot, before turning north again along Redwood Highway parallel to Highway 101 northwest of the Project site. The portion of the Bay Trail that is between Redwood Highway and the gravel lot traverses the Project site for approximately 580 feet.
Corte Madera Marsh Ecological Reserve is a 620-acre northern coastal salt marsh located east of the Project site. Recreational activities at the Reserve include wildlife viewing and hiking. It is maintained and operated by the California Department of Fish and Wildlife (CDFW 2017).

3.11.2 Regulatory Framework

Federal

There are no federal regulations that are directly applicable to the proposed Project regarding public services and recreation.

State

**California Occupational Safety and Health Administration**

In accordance with California Code of Regulations, Title 8 Sections 1270 “Fire Prevention and Fire Equipment,” the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance and use of all firefighting and emergency medical equipment.

**Uniform Fire Code**

The Uniform Fire Code (UFC) contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The UFC contains specialized technical regulations related to fire and life safety.

**California Health and Safety Code**

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, which includes regulations for building standards (as set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers, smoke alarms, high-rise building, childcare facility standards, and fire suppression training.

**California Education Code Section 17620 (School Impact Fees)**

The governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against construction, including commercial, industrial, or residential, within the boundaries of the district, for funding the construction or reconstruction of school facilities.

**Quimby Act**

California Government Code section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fee are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby
Act may be used for acquisition, improvement, and expansion of parks, playgrounds, and recreational facilities or the development of recreational areas and facilities on public school grounds that provide a desirable recreation site and immediate access to a public street.

**Regional and Local**

**Corte Madera Emergency Operations Plan**

The Town’s Emergency Operations Plan (EOP) was updated in 2009 and addresses the planned response to extraordinary emergency situations that could affect the Town, along with the integration and coordination with other agencies when needed (Corte Madera 2009b). The EOP serves as the legal and conceptual framework for emergency management in the Town. It accomplishes two primary goals:

- Establishes the emergency management organization required to mitigate any significant emergency or disaster affecting the Town; and
- Establishes the overall operational concepts associated with the Town’s Emergency Operations Center activities and the recovery process

The EOP does not address normal day-to-day emergencies or well-established emergency procedures.

**Corte Madera Fire Code**

The Town Municipal Code has a Building and Construction Fire Code for all development and construction activities within the Corte Madera. The Fire Code requires compliance with California Fire Code and Uniform Fire Code and was adopted for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion. The Fire Code includes requirements for the storage of petroleum gases (Title 15, Chapter 15.02 Fire Code).

**Corte Madera General Plan Goals and Policies**

The following are the policies and implementation programs from the Town of Corte Madera General Plan 2009 that are related to public services and recreation, and applicable to the Project.

**Policy LU-6.2**  
Provide high-quality fire protection and paramedic services for residents and businesses in the community

**Implementation Program LU-6.2a: Response Times**

Maintain the existing target response time of five minutes or less for emergency Fire calls through adequate staffing and proper distribution of Fire stations and equipment.

**Implementation Program LU-6.2.b: Update Town Impact Fees**

Through periodic updates to Town impact fees, require all new development to contribute to funding toward necessary Fire and paramedic facilities and equipment.

**Implementation Program LU-6.2.d: Fire Department Review**
Policy LU-6.3  Provide high-quality law enforcement services for residents and businesses in the community

Implementation Program LU-6.3.a: Target Response Time
Maintain the existing target response time.

Implementation Program LU-6.3.b: Financing of Police Services
Through periodic updates to Town impact fees, require all new development to contribute fair-share funding toward necessary law enforcement facilities and equipment.

Implementation Program LU-6.3.d: Police Department Review
Include Police Department review and comments on proposed building plans to address safety concerns.

Policy LU-6.4 Provide high-quality primary and secondary educational facilities to accommodate projected student enrollments

Implementation Program LU-6.4.d: Project Review by Schools
Refer development project and environmental reviews within the Town to the appropriate school districts.

Implementation Program LU-6.4.e: School Impact Fees
Require evidence of payment of school impact fees prior to issuance of building permits.

3.11.3 Evaluation Criteria and Significance Thresholds
For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.11-1, Evaluation Criteria and Significance Thresholds, are used to determine if the Project would have a significant effect related to public services and recreation.
### Table 3.11-1 Evaluation Criteria and Significance Thresholds

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
</table>
| Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:  
• fire protection  
• police protection  
• schools  
• parks                                                                                                                                                                                                                                                                                           | Increase in population  
Increase in ratio of people to acres for recreation                                                                                           | CEQA Guidelines Appendix G, Checklist Item XIV (a)  
General Plan Policies LU-6.2a and LU-6.3b                                                                                      |
| 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?                                                                                                                                                                                      | Increase in population  
Increase in ratio of people to acres for recreation                                                                                           | CEQA Guidelines Appendix G, Checklist Item XIV (b)                                                                                                   |
| 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?                                                                                                                                                                                  | New or expanded recreational facilities                                                                                                          | CEQA Guidelines Appendix G, Checklist Item XV (a)                                                                                                    |

#### 3.11.4 Approach to Analysis

Potential impacts to public services and recreational facilities are evaluated for both construction and operational activities. The evaluation considers whether the Project would affect the Town’s existing public services, including fire and police protection, park, and educational services and facilities by increasing the population or affecting the current service ratios/response times. The evaluation also considers temporary disruption to park facilities during construction.
3.11.5 Impacts and Mitigation Measures

Table 3.11-2 below provides a summary of potential impacts from the Project.

### Table 3.11-2 Summary of Impacts – Public Services and Recreation

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSR-1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for the following public services: fire protection, police protection, schools, parks, and/or other public facilities?</td>
<td>LS</td>
</tr>
<tr>
<td>PSR-2: 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, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</td>
<td>LS</td>
</tr>
<tr>
<td>C-PSR-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to public services and recreational resources?</td>
<td>LS</td>
</tr>
</tbody>
</table>

Notes: LS = Less than Significant

**Impact PSR-1:** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for the following public services: fire protection, police protection, schools, and/or other public facilities?

**Analysis:** Less than Significant

The Project does not involve the construction of new housing, which is the typical type of project to impact public services. The Project would expand The Village by approximately 46,000 square feet and increase employment by approximately 118.

Fire and police services in Corte Madera currently meet the response time goals established in the General Plan. The Village is adequately served by fire and police services. The modest increase of 10% retail space at The Village would not result in a substantial demand on fire and police services, or require new facilities to service The Village.

Although the Project would increase employment opportunities at The Village, it is not anticipated that it would result in an indirect increase in population that would have a substantial impact on emergency services, schools, or parks. It is anticipated that a majority of the employees would be existing residents of Corte Madera and the surrounding communities. In a review of home zip codes of employees of the
existing Restoration Hardware store, the average distance from The Village was 14 miles. For those that may move to Corte Madera to work at the new store, they would live in existing housing that is already serviced by existing fire, police, school and park facilities.

Because service ratios would continue to be met with implementation of the Project, and the Project would not result in a substantial increase in population, impacts to public services would be less than significant.

Mitigation: No mitigation is needed.

Impact PSR-2: **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, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Analysis: *Less than Significant*

The Project would create a modest demand for new employees, which could increase the number of daily users at the nearby Bay Trail and Corte Madera Marsh Ecological Reserve. The new employees may use the adjacent park facilities before or after work, or during breaks. However, the increase in the number of employees would be small, and therefore not be expected to contribute noticeably to the deterioration of those facilities. Increased use of existing facilities would be a less-than-significant impact.

Mitigation: No mitigation is needed.

Impact C-PSR-1: **Would the project result in a cumulatively considerable contribution to cumulative impacts related to public services and recreational resources?**

Analysis: *Less than Significant*

**Schools**

Because the Project does not have an impact on school capacity, it does not contribute to a cumulative impact on schools.

**Fire and Police Services**

As discussed in the above Project-specific analysis, service demand from the proposed Project would not result in a significant impact on Corte Madera Fire Department (CMFD) or Central Marin Police Authority services or create the need for new or expanded facilities. The Project would be subject to Fire Code requirements and other standard requirements for emergency access, signage, lighting, and security. The *Town of Corte Madera General Plan 2009* also identified less than significant impacts relative to cumulative effects on law enforcement services because future development would provide additional funding sources for the provision of these services.
Overall, the effect of the proposed Project on police and fire services, in combination with other past, present, and foreseeable projects, would be less than significant.

**Parks and Recreational Facilities**

The Project would create a modest demand for new employees, which could increase the number of daily users at the nearby Bay Trail and Corte Madera Marsh Ecological Reserve. However, the increase in the number of employees would be small, and therefore is not expected to contribute noticeably to cumulative impacts associated with the deterioration of those facilities beyond regular maintenance. The Project’s contribution to the cumulative impact on parks is not considerable, and therefore the impact is less than significant.

Mitigation: No mitigation is needed.

### 3.11.6 References

- California, State of. California Education Code Section 17620.
3.12 Transportation and Traffic

This section evaluates potential environmental impacts related to transportation and traffic during construction and operation of the Project.

The following subjects are related to transportation and traffic, but are evaluated in other sections of this EIR:

- Impacts related to interfering with an adopted emergency response plan, and with the transport of hazardous materials during construction, are addressed in Section 3.7, Hazards and Hazardous Materials.
- Impacts related to increases in ambient noise levels due to changes in traffic levels and circulation are addressed in Section 3.10, Noise.

3.12.1 Setting

Local Roadways

The Project site is bounded by Redwood Highway (east), U.S. Highway 101 (west), and Tamalpais Drive (south). To the north, Redwood Highway bisects The Village and gravel lot parcels. Figure 3.12-1 shows the location of the Project site and streets and intersections within the area.

The primary roadways used to access The Village include Redwood Highway, U.S. Highway 101 (U.S. 101), Tamalpais Drive, and San Clemente Drive. Four primary vehicular entrances to The Village and two entrances to the gravel lot are located along Redwood Highway between San Clemente Drive and Wornum Drive.

U.S. 101 provides the primary regional access to The Village and runs north-south through the Project area. U.S. 101 connects Marin and Sonoma counties with San Francisco to the south. U.S. 101 also provides access to other regional roadways, including I-580 to the North of the Project area. Primary access to and from The Village is provided at the Tamalpais Drive interchange as well as the northbound on-ramps at the intersection of Redwood Highway and Industrial Way. Additional access is provided at the Fifer Avenue southbound off-ramps and on-ramps. Within the Project area, U.S. 101 is generally four lanes in each direction, including three mixed-flow lanes and one high occupancy vehicle (HOV) lane.

Redwood Highway is a north-south running local street on the east side of U.S. 101 north of Tamalpais Drive. Along the Project site frontage, Redwood Highway has two travel lanes in each direction. North of The Village, the roadway provides one travel lane in each direction. West of San Clemente Drive, Redwood Highway becomes Tamalpais Drive. Redwood Highway provides access to The Village at four intersections, three of which are signalized. Access to U.S. 101 northbound is provided at the on-ramp located at Industrial Way via Redwood Highway. The Bay Trail parallels Redwood Highway on the east side from Tamalpais Drive to Wornum Drive.

Tamalpais Drive is a four-lane east-west minor arterial street located south of The Village with two travel lanes in each direction. The Tamalpais Drive / U.S. 101 interchange provides the primary freeway access to The Village. East of San Clemente Drive, Tamalpais Drive becomes Redwood Highway. West of the U.S. 101 interchange, Tamalpais Drive provides access to the residential neighborhoods in Corte Madera.
San Clemente Drive is a north-south arterial street with two travel lanes in each direction. San Clemente Drive connects to the residential neighborhoods to the southeast of the Project area. San Clemente Drive connects with and becomes Paradise Drive approximately 2,500 feet south of its intersection with Tamalpais Drive.

Wornum Drive is a two-lane, east-west local street that passes under U.S. 101 and provides a connection between Tamal Vista Boulevard, located west of U.S. 101 and Redwood Highway, located east of U.S. 101. Currently, there is no direct freeway access to and from Wornum Drive. There is a multi-use path that runs on the south side of Wornum Drive, designated as Route 16 on the Marin County bicycle network. This path is a primary route for bicyclists and pedestrians to cross U.S. 101 north of the Project area.

Tamal Vista Boulevard is a two-lane, north-south collector street that connects Madera Boulevard to Fifer Avenue and is located west of U.S. 101. The street also provides a center two-way left turn lane.

**Traffic Volumes and Level of Service**

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, LOS A represents free flow conditions and LOS F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

**Intersections**

Fourteen study area intersections were selected for analysis, given their location along routes where a significant number of Project trips would be added, and comments received during the scoping period. All 14 study intersections were studied for the weekday PM peak period, while the mid-afternoon peak period was a focused analysis of intersections 11, 12, and 13, which are located near Redwood High School and Tamiscal High School.

Table 3.12-1 presents the existing LOS and corresponding delay at each study intersection. As shown in the table, all study intersections currently operate at LOS C or better during the PM and mid-afternoon peak hours. The longest delay occurs at Tamalpais Drive/Madera Boulevard with 34 seconds of average intersection delay during the PM peak hour.

At Tamal Vista Boulevard/Wornum Drive, the southbound left movement experiences substantial queueing during some traffic signal cycles that occur in both the PM and mid-afternoon PM peak periods. The mid-afternoon period experiences a higher volume of left turning vehicles and longer queues due to traffic traveling from nearby schools (Redwood High School and Tamiscal High School).
<table>
<thead>
<tr>
<th>Intersection</th>
<th>Intersection Control</th>
<th>Time Period</th>
<th>Delay</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Redwood Highway / Wornum Drive</td>
<td>Signal</td>
<td>PM</td>
<td>11</td>
<td>B</td>
</tr>
<tr>
<td>2. Redwood Highway / Northwest Village Entrance</td>
<td>SSSSC</td>
<td>PM</td>
<td>&lt;10</td>
<td>A</td>
</tr>
<tr>
<td>3. Redwood Highway / Northeast Village Entrance</td>
<td>Signal</td>
<td>PM</td>
<td>12</td>
<td>B</td>
</tr>
<tr>
<td>4. Redwood Highway / Middle Village Entrance</td>
<td>Signal</td>
<td>PM</td>
<td>&lt;10</td>
<td>A</td>
</tr>
<tr>
<td>5. Redwood Highway / Southeast Village Entrance</td>
<td>Signal</td>
<td>PM</td>
<td>12</td>
<td>B</td>
</tr>
<tr>
<td>6. Tamalpais Drive / Redwood Highway / San Clemente Drive</td>
<td>Signal</td>
<td>PM</td>
<td>25</td>
<td>C</td>
</tr>
<tr>
<td>7. Tamalpais Drive / Northbound U.S. 101 Ramps</td>
<td>Signal</td>
<td>PM</td>
<td>15</td>
<td>B</td>
</tr>
<tr>
<td>8. Tamalpais Drive / Southbound U.S. 101 Ramps</td>
<td>Signal</td>
<td>PM</td>
<td>15</td>
<td>B</td>
</tr>
<tr>
<td>9. Tamalpais Drive / Town Center Entrance</td>
<td>Signal</td>
<td>PM</td>
<td>&lt;10</td>
<td>A</td>
</tr>
<tr>
<td>10. Tamalpais Drive / Madera Boulevard</td>
<td>Signal</td>
<td>PM</td>
<td>34</td>
<td>C</td>
</tr>
<tr>
<td>11. Tamal Vista Boulevard / Fifer Avenue</td>
<td>Signal</td>
<td>PM Mid-Afternoon</td>
<td>17</td>
<td>B</td>
</tr>
<tr>
<td>12. Tamal Vista Boulevard / Wornum Drive</td>
<td>Signal</td>
<td>PM Mid-Afternoon</td>
<td>18</td>
<td>B</td>
</tr>
<tr>
<td>13. Wornum Drive / Nellen Avenue</td>
<td>SSSSC</td>
<td>PM Mid-Afternoon</td>
<td>&lt;10</td>
<td>A</td>
</tr>
<tr>
<td>14. Redwood Highway / Industrial Way</td>
<td>Signal</td>
<td>PM</td>
<td>11</td>
<td>B</td>
</tr>
</tbody>
</table>

Sources: Fehr & Peers, 2017

Notes: 1 Volume data provided by Caltrans’ PeMS database.

2 Based on Highway Capacity Model (HCM) 2000 methodology for basic freeway segments.

3 LOS results were adjusted based on PeMS spatial speed data.

**Freeway**

Table 3-12-2, Existing Freeway Segment LOS and Delay, below displays the existing PM peak hour traffic volumes and level of service results on the study freeway segments. The freeway mainline segments were evaluated using a vehicle speed analysis consistent with the 2000 HCM and Marin County Congestion Management Plan (CMP) requirements. Using the HCM methodology, most freeway segments currently operate at or better than the CMP level of service standard (LOS E) during the PM peak period. Due to the bottleneck of traffic at the Sir Francis Drake Boulevard interchange, the northbound U.S. 101 segments south of the interchange operate at LOS F.
### Table 3.12-2 Existing Freeway Segment LOS and Delay

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Volume¹</th>
<th>Speed (mph)²</th>
<th>LOS³</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Northbound U.S. 101</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tiburon Boulevard to Tamalpais Drive</td>
<td>7,024</td>
<td>&lt;30</td>
<td>F1</td>
</tr>
<tr>
<td>Tamalpais Drive to Industrial Way</td>
<td>7,598</td>
<td>&lt;30</td>
<td>F3</td>
</tr>
<tr>
<td>Industrial Way to Sir Francis Drake Boulevard</td>
<td>8,044</td>
<td>&lt;30</td>
<td>F3</td>
</tr>
<tr>
<td>Sir Francis Drake Boulevard to I-580</td>
<td>4,350</td>
<td>&gt;60</td>
<td>A</td>
</tr>
<tr>
<td><strong>Southbound U.S. 101</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-580</td>
<td>4,965</td>
<td>&gt;60</td>
<td>A</td>
</tr>
<tr>
<td>Sir Francis Drake Boulevard to Fifer Avenue</td>
<td>5,183</td>
<td>&gt;60</td>
<td>A</td>
</tr>
<tr>
<td>Fifer Avenue to Tamalpais Drive</td>
<td>5,417</td>
<td>&gt;60</td>
<td>A</td>
</tr>
<tr>
<td>Tamalpais Drive to Tiburon Boulevard</td>
<td>5,441</td>
<td>&gt;60</td>
<td>A</td>
</tr>
</tbody>
</table>

Notes: ¹ Volume data provided by Caltrans’ PeMS database. ² Based on HCM 2000 methodology for basic freeway segments. ³ LOS results were adjusted based on PeMS spatial speed data.

Source: Fehr & Peers 2017

### Local and Regional Transit Services

Table 3.12-3 below summarizes transit service in the study area, while the remainder of this section provides detail about the two main transit operators in the area: Marin Transit and Golden Gate Transit. The transit network is depicted graphically in Figure 2-2 of Appendix G, Traffic Impact Study. Given the nature of The Village retail stores and the distance to the nearest bus stop, transit ridership associated with the shopping center is relatively small and generated by employees who travel to the center by Marin Transit buses.

### Table 3.12-3 Transit Service Summary

<table>
<thead>
<tr>
<th>Line</th>
<th>Major Destinations</th>
<th>Nearest Stop to Village</th>
<th>Weekday Operations</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hours of Operation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marin Transit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Sausalito – Mill Valley – San Rafael</td>
<td>Tamalpais Drive / U.S. 101 northbound off-ramp</td>
<td>5:30 a.m. to 11:25 p.m.</td>
<td>30/60 minutes</td>
</tr>
<tr>
<td>22</td>
<td>San Rafael – Marin City</td>
<td>Tamalpais Drive / Paradise Drive / U.S. 101 Overpass</td>
<td>5:32 a.m. to 11:55 p.m.</td>
<td>30/60 minutes</td>
</tr>
<tr>
<td>36</td>
<td>Canal – San Rafael – Marin City</td>
<td>Tamalpais Drive / U.S. 101 northbound off-ramp</td>
<td>6:53 a.m. to 5:54 p.m.</td>
<td>30 minutes</td>
</tr>
</tbody>
</table>

**Golden Gate Transit**

<table>
<thead>
<tr>
<th>Line</th>
<th>Major Destinations</th>
<th>Nearest Stop to Village</th>
<th>Weekday Operations</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>College of Marin – San Francisco</td>
<td>Tamalpais Drive / Paradise Drive / U.S. 101 Overpass</td>
<td>6:00 a.m. to 9:30 a.m. 4:00 p.m. to 7:45 p.m.</td>
<td>15/30 minutes</td>
</tr>
<tr>
<td>24</td>
<td>Fairfax (Manor) – San Francisco</td>
<td>Tamalpais Drive / U.S. 101 northbound off-ramp</td>
<td>4:30 a.m. to 10:00 a.m. 2:30 a.m. to 8:30 p.m.</td>
<td>15/30 minutes</td>
</tr>
</tbody>
</table>
Marin Transit provides local bus service within Marin County. Table 3.12-3 describes the service provided through Marin Transit within the Project area. Bus service within the vicinity of The Village is provided through Route 22, which runs along Tamalpais Drive West of San Clemente Drive, and Routes 17 and 36, which run along U.S. 101. There are bus stop locations on the arterial street Tamalpais Drive/Paradise Drive/U.S. 101 Overpass and Tamalpais Drive/Madera Boulevard. There are two bus stops serving U.S. 101 located at Tamalpais Drive/U.S. 101 southbound on-ramp and Tamalpais Drive/U.S. 101 northbound off-ramp. The closest bus stop, located on Tamalpais Drive near the U.S. 101 northbound off-ramp is approximately 1,400 feet from The Village.

Golden Gate Transit is the primary regional transit provider within Marin County. Commute route 18 provides service to San Francisco on weekdays with bus stop locations along Tamalpais Drive shared with Marin transit. Commute routes 24, 27, and 97 as well as regional routes 30 and 70 provide service to San Francisco on weekdays with bus stop locations along U.S. 101 located at Tamalpais Drive/U.S. 101 southbound on-ramp, Tamalpais Drive/U.S. 101 northbound off-ramp, Lucky Drive/U.S. 101 on-ramp and Lucky Drive/U.S. 101 off-ramp.

**Bicycle and Pedestrian Facilities**

Pedestrian circulation within the study area is relatively complete. There are sidewalks on at least one side of all streets surrounding The Village and along the frontage of the gravel lot. Redwood Highway provides pedestrian access on a paved, shared-use path (the Bay Trail) on the east side of the street between Wornum Drive and San Clemente Boulevard. Each of the three signalized entrances into The Village has one crosswalk over Redwood Highway to allow pedestrians to enter The Village from the Bay Trail. All other intersections along Redwood Highway have at least one north-south and one east-west crossing to allow for pedestrian circulation.

Tamalpais Drive has sidewalks on both sides of the street west of the U.S. 101 southbound ramps. Between the U.S. 101 northbound on-ramp and U.S. 101 southbound off-ramp, there is a sidewalk on the south side of Tamalpais Drive for pedestrian crossing over U.S. 101. At the U.S. 101 northbound on-ramp, the sidewalk merges into a pathway that brings pedestrians down from the overcrossing, and provides access to the southern crosswalk at Tamalpais Drive/U.S. 101 northbound off-ramp. Between San Clemente Drive and the U.S. 101 northbound off-ramp there is a sidewalk on the north side of Tamalpais Drive that allows pedestrian circulation from the bus stop near the Tamalpais Drive/U.S. 101 northbound ramp intersection. There are no north-south crosswalks on Tamalpais Drive between the U.S. 101 Southbound off-ramp and San Clemente Drive on the U.S. 101 overcrossing.

<table>
<thead>
<tr>
<th>Line</th>
<th>Major Destinations</th>
<th>Nearest Stop to Village</th>
<th>Weekday Operations</th>
<th>Source: Golden Gate Transit and Marin Transit, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>San Anselmo – San Francisco</td>
<td>Tamalpais Drive / U.S. 101 northbound off-ramp</td>
<td>4:30 a.m. to 11:45 a.m. 12:15 p.m. to 7:45 p.m. 15/30 minutes</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>San Rafael – San Francisco</td>
<td>Tamalpais Drive / U.S. 101 northbound off-ramp</td>
<td>4:00 a.m. to 2:00 a.m. 60 minutes</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>Novato – San Rafael – San Francisco</td>
<td>Tamalpais Drive / U.S. 101 northbound off-ramp</td>
<td>4:00 a.m. to 2:00 a.m. 30/- minutes</td>
<td></td>
</tr>
</tbody>
</table>
The bicycle network is depicted graphically in Figure 2-3 of Appendix G, Traffic Impact Study. Currently, there are designated Class I shared-use bicycle paths along Wornum Drive, Redwood Highway, and San Clemente. The east-west shared use path on the south side of Wornum Drive is provided west of Redwood Highway to Tamal Vista Boulevard, at which point the shared path becomes the Sandra Marker Trail. The shared-use path (Bay Trail) located on the east side of Redwood Highway begins South of Wornum Drive and continues to San Clemente Drive. At the intersection of Redwood Highway and San Clemente Drive, the shared use path continues on the east side of San Clemente Drive to Paradise Drive. Redwood Highway, Tamal Vista Boulevard, and San Clemente Boulevard have segments where Class II bicycle lanes are present. On San Clemente Boulevard there are north-south bicycle lanes from Tamalpais Drive to Paradise Drive, in addition to the Class I shared-use path to the east side of the street.

At The Village, there are a few bicycle storage racks, but no bicycle lockers.

### 3.12.2 Regulatory Framework

#### State

**California Department of Transportation**

Transportation analysis in California is guided by policies and standards set at the State level by the California Department of Transportation (Caltrans) for highway facilities under State jurisdiction, as well as by local jurisdictions. Caltrans operates and maintains U.S. 101 and has jurisdiction over the freeway and the on and off-ramp intersections and interchanges that access the Project site, and are included in the freeway segments and intersections studied. U.S. 101 provides regional access to the Town of Corte Madera and the neighboring cities within Marin County. Caltrans Division of Planning has four major functions including the Office of Advance Planning, Regional Planning/Metropolitan Planning Organization, Local Assistance/IGR/CEQA, and System Planning Public Transportation.

**Governor's Office of Planning and Research (OPR)**

On January 20, 2016, the Governor's Office of Planning and Research (OPR) released draft guidance for changes to the CEQA Guidelines that will amend the way transportation impacts are analyzed (Public Resources Code Section 21099), as directed under Senate Bill (SB) 743 passed in 2013. SB 743, codified as Public Resources Code Section 21099, requires OPR to amend the CEQA Guidelines to provide an alternative to Level of Service (LOS) for evaluating transportation impacts. Measurements of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated". Once the CEQA Guidelines are amended to include those alternative criteria, auto delay will no longer be considered a significant impact under CEQA. OPR has not amended the CEQA Guidelines at this time.

#### Regional and Local

**Transportation Authority of Marin (TAM)**

(TAM) is designated as the Marin Congestion Management Agency (CMA), to address Marin's unique transportation issues and to fulfill the legislative requirements of Propositions 111 and 116, approved in June 1990. TAM is responsible for programming funding for all transportation programs in Marin County. The TAM Board includes representatives from each city and town in Marin County, plus the
five members of the Board of Supervisors. The Marin County Congestion Management Plan (CMP) was last updated in 2015. The CMP establishes LOS standards for applicable roadways; U.S. 101 is the only applicable roadway that would be substantially affected by the Project. (TAM 2015)

**City of Larkspur General Plan Goals**

The City of Larkspur is located to the north of the Town of Corte Madera and has jurisdiction over the intersection of Redwood Highway and Industrial Way. The City’s General Plan contains a Circulation Element that has the following transportation-related policy that is applicable to the proposed Project:

**Goal 4, Policy d**: Whenever possible, maintain standards for acceptable traffic Levels of Service during peak periods. Acceptable Level of Service (LOS) shall be defined for signalized intersections at the D level.

**Town of Corte Madera Bicycle Plan**

The Town’s Bicycle Plan (adopted July 2016) establishes the Town’s vision for a network of bicycle and pedestrian facilities to encourage bicycling and walking as viable modes of travel around the Town. The Plan identifies specific improvement projects around the Town to improve the walking and bicycling environment.

**Town of Corte Madera General Plan Goals and Policies**

The following are the transportation policies and implementation programs from the *Town of Corte Madera General Plan 2009* that are applicable to the Project.

**Policy CIR-1.2** Ensure that current Levels of Service at intersections are maintained when considering new development within Corte Madera.

**Implementation Program CIR-1.1a: Level of Service Standards**

Ensure that current Levels of Service (LOS) at intersections are maintained at LOS D or better operation during the evening peak periods at intersections of an arterial street with either another arterial or a collector street and intersections of two collector streets. For all types of controls the LOS standard is to be applied to the average operation of the intersection, and not that for any single movement or approach. Exceptions to meeting this standard include:

1. Stop-controlled minor street approaches to either collector or arterial streets, where safety shall be the primary consideration;

2. Locations where the Town Engineer deems improvement to be technically, financially, or environmentally infeasible;

3. Conditions where the improvement would result in significant adverse impacts to other travel modes, including walking, bicycling, or transit; or

4. Locations where attainment would ensure the loss of an area’s unique character.

**Policy CIR-1.8** Support investment in local and regional transit and transportation plans that provide alternatives to automobile-intensive transportation programs through CIP actions.
Policy CIR-1.6 Assure the adequacy and availability of the circulation system for all persons by implementing the Americans with Disabilities Act.

**Implementation Program CIR-1.6b: Barrier Free Design**

Continue to design roadway intersection, and sidewalk projects to assure accessibility for all persons, consistent with Americans with Disabilities Act.

Policy CIR-3.5 Emphasize use of pedestrian pathways and sidewalks as an integral part of the Town’s circulation system.

**Implementation Program CIR-3.5a: Sidewalk Design**

Design new and replacement sidewalks to increase pedestrian safety, use, and aesthetics.

Policy CIR-6.1 Require parking to meet the needs of existing and planned uses.

**Implementation Program CIR-6.1b: Preferential Employee Parking**

The Zoning Ordinance shall require that all new office, commercial, and light industrial development that includes 50 or more on-site employees provide preferential employee parking for carpools and vanpools.

### 3.12.3 Evaluation Criteria and Significance Thresholds

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.12-4, Evaluation Criteria and Significance Thresholds, are used to determine if the Project would have a significant effect related to transportation and traffic.

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the vehicular circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</td>
<td>LOS deteriorates from LOS D or better, to LOS E or F</td>
<td>CEQA Guidelines Appendix G, Checklist Item XVI (a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corte Madera General Plan Policy CIR-1.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Larkspur General Plan Goal 4, Policy d</td>
</tr>
<tr>
<td>Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</td>
<td>LOS deteriorates from LOS E or better to LOS F Where LOS already is at LOS F, an increase in traffic of greater than 1 percent of theoretical freeway capacity</td>
<td>CEQA Guidelines Appendix G, Checklist Item XVI (b)</td>
</tr>
</tbody>
</table>
3.12.4 Areas of No Impact

The proposed Project would not result in impacts related to one of the transportation and traffic evaluation criteria listed in Table 3.12-1, Evaluation Criteria and Significance Thresholds. For the reasons presented below, the following evaluation criteria is not applicable to the Project:

**Would the project result in a change in air traffic pattern, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

The Project is not located within an airport land use plan or within two miles of a public airport. Therefore this significance criterion is not applicable to the Project and is not discussed further.

3.12.5 Approach to Analysis

Potential transportation and traffic impacts are based on the findings of a traffic study performed by Fehr & Peers (see Appendix G Traffic Impact Study). Level of Service (LOS) is used as a transportation impact metric because the Governor’s Office of Planning and Research (OPR) has yet to release final guidance on implementing SB 743.
Intersections

The operating characteristics of study intersections were evaluated using the metric of LOS. LOS is a qualitative description of driver comfort and convenience. Most often, an intersection’s average delay per vehicle is used as a quantitative proxy for LOS. Intersection levels of service range from LOS A, which indicates free flow or excellent vehicle flow conditions with short delays, to LOS F, which indicates congested or overloaded vehicle flow conditions with extremely long delays. For this Project, LOS A through D are considered acceptable, and LOS E and LOS F are considered a significant impact.

The intersections were evaluated using the methodology described in the 2000 Highway Capacity Manual (HCM). A signalized intersection’s LOS is based on the weighted average control delay measures in seconds per vehicle and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration. Table 3.12-5 summarizes the relationship between the control delay and LOS for signalized intersections.

Table 3.12-5 Signalized Intersection Level of Service Criteria

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Description</th>
<th>Average Control Delay (seconds per vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Operations with very low delay occurring with favorable traffic signal progression and/or short cycle lengths.</td>
<td>&lt;10</td>
</tr>
<tr>
<td>B</td>
<td>Operations with low delay occurring with good progression and/or short cycle lengths.</td>
<td>&gt;10 to 20</td>
</tr>
<tr>
<td>C</td>
<td>Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.</td>
<td>&gt;20 to 35</td>
</tr>
<tr>
<td>D</td>
<td>Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.</td>
<td>&gt;35 to 55</td>
</tr>
<tr>
<td>E</td>
<td>Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.</td>
<td>&gt;55 to 80</td>
</tr>
<tr>
<td>F</td>
<td>Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.</td>
<td>&gt;80</td>
</tr>
</tbody>
</table>

Source: Source: Fehr & Peers 2017

Operations at unsignalized intersections are defined by the average control delay per vehicle (measured in seconds) for each movement that must yield the right-of-way. Table 3.12-6 summarizes the relationship between delay and LOS for unsignalized intersections.
Table 3.12-6 Unsignalized Intersection Level of Service Criteria

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Description</th>
<th>Average Control Delay (seconds per vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Little or no delays</td>
<td>&lt;10</td>
</tr>
<tr>
<td>B</td>
<td>Short traffic delays</td>
<td>&gt;10 to 15</td>
</tr>
<tr>
<td>C</td>
<td>Average traffic delays</td>
<td>&gt;15 to 25</td>
</tr>
<tr>
<td>D</td>
<td>Long traffic delays</td>
<td>&gt;25 to 35</td>
</tr>
<tr>
<td>E</td>
<td>Very long traffic delays</td>
<td>&gt;35 to 50</td>
</tr>
<tr>
<td>F</td>
<td>Extreme traffic delays with intersection capacity exceeded</td>
<td>&gt;50</td>
</tr>
</tbody>
</table>

Source: Source: Fehr & Peers 2017

Turning movement data at each of the four Village access driveways were used to estimate the number of vehicle trips that would be generated by the proposed expansion during each of the time periods. Using the number of vehicles entering and exiting The Village, the number of vehicle trips generated by each 1,000 square feet (KSF) of the existing retail land uses was calculated for The Village. These Village-specific empirical trip generation rates were applied to the size of the proposed building square-footage to estimate the number of new vehicle trips that would be generated by the Project during each time period. Therefore, this methodology uses existing trip generation rates and applies them to the Project. Driveway counts and trip generation calculations are summarized in Table 3.12-7.

Table 3.12-7 Driveway Count and Trip Generation.

<table>
<thead>
<tr>
<th>Method</th>
<th>Village Center Driveway Counts</th>
<th>Village Center Average Trip Rate per KSF</th>
<th>Proposed Project Trip Generation (Vehicle Trips)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Driveway Count</td>
<td>Inbound Percentage</td>
<td>Outbound Percentage</td>
</tr>
<tr>
<td>Total</td>
<td>1,187</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Inbound Percentage</td>
<td>54%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outbound Percentage</td>
<td>54%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekday PM Commute Peak Hour (4-5 PM)</td>
<td>1,069</td>
<td>49%</td>
<td>51%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Fehr & Peers, 2017

Trip distribution is the process of determining the likely origins and destinations of trips. For this study, trip distribution was derived using origin-destination data collected over the entire year 2015 using the Streetlight platform (a data vendor), which utilizes anonymized cell phone location data to provide insight on traffic entering and exiting the site. The proposed Project trip generation was then distributed based on the trip distribution percentages. Refer to Figure 3.12-2 for the percentage trip distribution.
Freeway Operations

Mainline freeway segments located near The Village were analyzed using methodology specified by the 2015 Congestion Management Program Update published by the Transportation Authority of Marin (TAM). Based on guidance from TAM, eight freeway segments are analyzed (see Table 3.12-2, above). These segments are analyzed during the PM peak period, because it represents the most congested period on U.S. 101.

The operating characteristics of freeway segments, like intersections, are evaluated using the concept of Level of Service. Traffic operations on freeway segments are evaluated using the LOS method described in Chapter 16 of the HCM. While LOS is typically defined using density (vehicles per lane per mile), the CMP assesses a freeway segment’s LOS based on the average vehicle speed measured in miles per hour. Table 3.12-8 summarizes the relationship between the control delay and LOS for signalized intersections. For segments that operate worse than the established threshold (LOS F) without the Project, the Project will be considered to have a significant impact to a freeway segment if it would add trips equal to one percent or more of the freeway’s theoretical capacity. The capacity of the freeway segments in the vicinity of The Village is assumed to be 8,880 vehicles per hour, so if the Project adds more than 88 trips to any freeway segment already operating at LOS F, there would be a significant impact.

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Speed (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>&gt; 60</td>
</tr>
<tr>
<td>B</td>
<td>&gt; 57 to 60</td>
</tr>
<tr>
<td>C</td>
<td>&gt; 54 to 57</td>
</tr>
<tr>
<td>D</td>
<td>&gt; 46 to 54</td>
</tr>
<tr>
<td>E</td>
<td>&gt; 30 to 46</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 30</td>
</tr>
</tbody>
</table>

Source: Feth & Peers, 2017

3.12.6 Impacts and Mitigation Measures

Table 3.12-9 (Summary of Impacts - Transportation and Traffic) provides a summary of potential impacts from the Project.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-1: Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the vehicular circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</td>
<td>LS</td>
</tr>
</tbody>
</table>
### Impact

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-2: Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</td>
<td>LS</td>
</tr>
<tr>
<td>TR-3: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td>LSM</td>
</tr>
<tr>
<td>TR-4: Would the project result in inadequate emergency access?</td>
<td>LS</td>
</tr>
<tr>
<td>TR-5: Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</td>
<td>LS</td>
</tr>
<tr>
<td>C-TR-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to transportation?</td>
<td>LSM</td>
</tr>
</tbody>
</table>

Notes: LS = Less than Significant  
LSM = Less than Significant with Mitigation

**Impact TR-1:** Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the vehicular circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

**Analysis:** Less than Significant

**Construction**

Construction would occur for as little as 11.5 months or up to 22 months. The number of construction-related truck trips would range from approximately 1 to 155 per day, and worker trips from 10 to 200 per day, depending on the construction phase. The greatest number of trucks trips would occur during the excavation and grading phase, while the greatest number of construction workers would occur during the building construction phase. It is anticipated that trucks and workers would use U.S. 101 to travel to the site and access the study area via the U.S. 101/Tamalpais Drive interchange and Redwood Highway. The impact of construction traffic on the interchange and Redwood Highway could result in a slight lessening of their available capacities, because of slower-moving vehicles, but would not substantially affect AM or PM peak-period conditions because construction work schedules do not typically coincide with the peak commute periods. Additionally, impacts on local intersections would be substantially less than those generated by operations of the proposed Project and are temporary in nature. The Project’s impact on the study intersections would be less than significant during construction.

**Operation**

After construction is complete, all 14 study intersections would operate at LOS C or better during the PM and mid-afternoon peak periods as shown in Table 3.12-10,
Existing Plus Project Intersection LOS and Delay, the intersections of Tamalpais Drive/Redwood Highway/San Clemente Drive, Tamalpais Drive/Southbound U.S. 101 Ramps, and Redwood Highway/Industrial Way would experience a minor decline in delay during the PM peak period. During the mid-afternoon peak period there is a minor decline in delay at Tamal Vista Boulevard/Fifer Avenue. But none of the intersections would operate at LOS E or F. The Project's impact on the study intersections would be less than significant for both the PM and mid-afternoon peak periods.

Mitigation: No mitigation is needed.

### Table 3.12-10 Existing Plus Project Intersection LOS and Delay

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Time Period</th>
<th>Existing</th>
<th></th>
<th>Existing Plus Project</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Delay1</td>
<td>LOS1</td>
<td>Delay1</td>
<td>Delay1</td>
</tr>
<tr>
<td>1. Redwood Highway / Wornum Drive</td>
<td>PM</td>
<td>11</td>
<td>B</td>
<td>11</td>
<td>B</td>
</tr>
<tr>
<td>2. Redwood Highway / Northwest Village Entrance</td>
<td>PM</td>
<td>&lt;10</td>
<td>A</td>
<td>&lt;10</td>
<td>A</td>
</tr>
<tr>
<td>3. Redwood Highway / Northeast Village Entrance</td>
<td>PM</td>
<td>12</td>
<td>B</td>
<td>13</td>
<td>B</td>
</tr>
<tr>
<td>4. Redwood Highway / Middle Village Entrance</td>
<td>PM</td>
<td>&lt;10</td>
<td>A</td>
<td>&lt;10</td>
<td>A</td>
</tr>
<tr>
<td>5. Redwood Highway / Southeast Village Entrance</td>
<td>PM</td>
<td>12</td>
<td>B</td>
<td>12</td>
<td>B</td>
</tr>
<tr>
<td>6. Tamalpais Drive / Redwood Highway / San Clemente Drive</td>
<td>PM</td>
<td>25</td>
<td>C</td>
<td>26</td>
<td>C</td>
</tr>
<tr>
<td>7. Tamalpais Drive / Northbound U.S. 101 Ramps</td>
<td>PM</td>
<td>15</td>
<td>B</td>
<td>15</td>
<td>B</td>
</tr>
<tr>
<td>8. Tamalpais Drive / Southbound U.S. 101 Ramps</td>
<td>PM</td>
<td>15</td>
<td>B</td>
<td>16</td>
<td>B</td>
</tr>
<tr>
<td>9. Tamalpais Drive / Town Center Entrance</td>
<td>PM</td>
<td>&lt;10</td>
<td>A</td>
<td>&lt;10</td>
<td>A</td>
</tr>
<tr>
<td>10. Tamalpais Drive / Madera Boulevard</td>
<td>PM</td>
<td>34</td>
<td>C</td>
<td>33</td>
<td>C</td>
</tr>
<tr>
<td>11. Tamal Vista Boulevard / Fifer Avenue</td>
<td>PM Mid-Afternoon</td>
<td>17 16</td>
<td>B B</td>
<td>17 17</td>
<td>B B</td>
</tr>
<tr>
<td>12. Tamal Vista Boulevard / Wornum Drive</td>
<td>PM Mid-Afternoon</td>
<td>18 21</td>
<td>B C</td>
<td>18 21</td>
<td>B C</td>
</tr>
<tr>
<td>13. Wornum Drive / Nellen Avenue</td>
<td>PM Mid-Afternoon</td>
<td>&lt;10 &lt;10</td>
<td>A A</td>
<td>&lt;10 &lt;10</td>
<td>A A</td>
</tr>
<tr>
<td>14. Redwood Highway / Industrial Way</td>
<td>PM</td>
<td>11</td>
<td>B</td>
<td>12</td>
<td>B</td>
</tr>
</tbody>
</table>

Source: Fehr & Peers, 2017

Note: Delay reported as seconds per vehicle. For all intersections, a combined weighted average delay for various movements within intersection is reported based on methodology in Highway Capacity Manual 2000.
Impact TR-2: Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Analysis: Less than Significant

The only roadway in the County’s Congestion Management Plan that is near the Project is U.S. 101. The Project would add up to 21 trips to southbound U.S. 101 and up to 26 trips to northbound U.S. 101. The addition of Project trips would be less than one percent of the freeway capacity for all segments analyzed. This incremental change in volume would not affect traffic speeds substantially. Therefore, the Project would not substantially change freeway traffic patterns in the surrounding area, since additional Project trips would not change mainline speeds.

Because the Project would not cause any freeway segment to deteriorate from LOS E or better conditions to LOS F, nor, for a segment that currently operates at LOS F, result in an addition of trips that would be equal to or greater than one percent of the freeway’s capacity (i.e., more than 88 peak hour trips on any segment in any direction), the Project’s impacts to freeway operations would not exceed the significance threshold. The impact would be less than significant.

Mitigation: No mitigation is needed.

Impact TR-3: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?

Analysis: Significant

Construction

Construction activities would cause localized disruptions to the transportation network near the Project site, including temporary lane closures, sidewalk closures, and trail closures. If not managed properly, construction could result in unsafe conditions. Construction of improvements at the gravel lot could impact the Bay Trail, where it fronts the gravel lot parallel with Redwood Highway. The Bay Trail serves bicycle and pedestrian travel. The potential for increased hazards to vehicles, pedestrians, and bicyclists during construction would be a significant impact.

If construction at the gravel lot and the building were to occur at the same time, or construction of the building occurred prior to construction at the gravel lot, the parking supply would be reduced by several hundred spaces. In addition, a portion of the improved gravel lot is proposed for use as a staging area during construction, which would temporarily reduce the supply of parking provided at the gravel lot. If these construction activities occur during periods of peak parking demand (such as during the winter holidays), there would be less parking supplied than what would typically be available to meet the parking demand at The Village. This would cause additional traffic circulation through the existing parking lot and on the surrounding streets as visitors seek to find parking. Therefore, the potential traffic hazards from
an increase in traffic circulation due to a loss of parking supply during construction activities would be a significant impact.

**Operation**

The Project would permanently reduce the number of parking spaces in The Village’s parking lot by 166 spaces. This reduction in conjunction with improvements to the gravel lot, would result in a substantial increase in pedestrians crossing Redwood Highway. For those pedestrians that park in the north and west portion of the improved gravel lot, the most direct route to The Village stores would be to walk to the northern driveway and cross Redwood Highway using an existing marked crosswalk at an existing traffic signal. The improved gravel lot plans show a north-south drive aisle located immediately east of the driveway access, creating a 4-way intersection that pedestrians must traverse as they walk between their parking space and the driveway. This presents a potential conflict between pedestrians and motorists that could make multiple turn movements. This potential hazard for pedestrians would be a significant impact.

For pedestrians that park in the southern portion of the improved gravel lot, the most direct route to The Village stores would be to walk to the southern driveway and cross Redwood Highway at an unsignalized mid-block location. This route requires pedestrians to walk across the landscaped area on the west side of Redwood Highway and through The Village parking area. This route is currently used enough by pedestrians that several worn paths can be seen through the landscaped area. The southerly crossing location of Redwood Highway has no marked crosswalks. It is located on a curved section of Redwood Highway, where visibility of pedestrians crossing Redwood Highway by motorists is limited by the roadway alignment and landscaping. This condition would represent a potential hazard for pedestrians and would be a significant impact.

**Mitigation:**

**Measure TR-3a: Reduce Traffic Hazards during Construction**

The Applicant shall prepare a detailed Construction Traffic Control Plan and submit it for review and approval to the Town Department of Public Works, as part of the design review process. The Applicant and the Town shall consult with Marin Transit and local emergency service providers for their input prior to approving the Plan. The plan shall ensure that acceptable operating conditions on local bicycle and pedestrian facilities, local roadways, and freeway facilities are maintained during construction. At a minimum, the plan shall include:

- Number of daily truck trips during each construction phase
- Time of day of arrival and departure of trucks, and identification of a staging area that is adequate to accommodate all waiting trucks without impacting traffic on local streets
- Any limitations on the size and type of trucks
- Truck circulation routes
- Days and times of any planned street or lane closures
• Location of advance warning signage for any street or lane closures
• For any street or lane closures, show safe and efficient access routes for emergency vehicles
• Driveway access plan that provides safe vehicular, pedestrian, and bicycle movements (e.g., steel plates, minimum distances of open trenches, and provide vehicle pick up and drop off areas)
• Days, times, and locations for any manual traffic control
• Provisions for pedestrian safety
• Number of construction employees by phase
• Location of employee parking by phase

Measure TR-3b: Redirect Bay Trail Users during Construction

The Applicant shall keep the Bay Trail path on the east side of Redwood Highway open at all times during Project construction. If a closure of the Bay Trail path is required for any construction phase, a continuous path shall be maintained around the closure until construction is completed in order to provide safe travel for users of the Bay Trail. A flagger will be stationed at either end of the construction (northern and southern driveway) to assist Bay Trail users in safely navigating the closure. Work at the gravel lot shall be phased to minimize closure of the Bay Trail to the fewest number of days that is feasible. If construction causes any damage to the existing Bay Trail path, as determined by the Town Department of Public Works, it shall be reconstructed and/or repaired during the final construction phase.

Measure TR-3c: Manage Parking during Construction

The Applicant shall prepare and implement a detailed parking management plan acceptable to the Public Works Director that specifies when (and by how many spaces) the parking supply at The Village would be reduced during construction activities (both in the existing lot and in the improved gravel lot, when completed). If the parking supply during the specified construction periods would be less than the parking demand during the same time period (assuming a 90 percent occupancy factor), the applicant shall implement travel and/or parking management strategies to address any parking shortfall for the duration of the shortfall such as (a) valet parking, (b) an off-site parking area with a sufficient number of parking spaces to meet the deficit in supply and shuttle service between the off-site parking area and The Village, (c) incentives to reduce vehicle travel by employees, and/or (d) special shopper shuttle buses. These travel and/or parking demand strategies shall be sufficient to maintain safe vehicular, pedestrian, and bicycle travel in the vicinity of The Village.
Measure TR-3d: Improve Pedestrian Safety

Northern Driveway to Improved Gravel Lot

Modify the proposed improvement plans for the gravel lot to provide for low speed vehicular entry and exit at the northern driveway. An extended driveway “throat” length that eliminates the intersection with the north-south vehicular cross aisle, and provides direct, visible pedestrian paths that are separated from vehicular traffic to link the parking lot interior with the adjacent signalized crosswalk.

Southern Driveway to Improved Gravel Lot

Restrict driveway access to right-in, right-out movements and eliminate the southbound left turn lane by extending the existing median to the northwest. Provide fencing, or another type of barrier such as a hedge, inside the curb line of the median to prevent pedestrians from crossing at this location. The barrier should extend from the northwestern extent of the new median (at the location of the beginning of the median taper for the westbound Redwood Highway left turn lane at the north Village entrance) and continue south for approximately 50 feet past the driveway entrance. Provide signage both within the improved gravel lot and at the southern driveway to direct pedestrians to cross Redwood Highway at the traffic signal at the northern driveway to the improved gravel lot.

After Mitigation: Less than Significant

Implementation of Mitigation Measures TR-3a, TR-3b, and TR-3c would resolve conflicts for traffic, pedestrians, and bicyclists during construction by managing the safety and circulation of the transportation network users. The Project’s construction impacts would be less than significant with mitigation.

Implementation of Mitigation Measure TR-3d would require modification to the design at the gravel lot that would reduce potential vehicle/pedestrian conflicts and hazards. The driveway “throat” length is the distance that a driver travels upon entering a site before encountering the first intersecting cross aisle within the parking lot. The length is measured from the curb of the abutting roadway to the nearest curb or roadway edge of the first cross aisle. Providing a minimum driveway throat length allows vehicles to enter, exit, or circulate on the site without interfering with each other or with through traffic on the abutting roadway. The Project’s impacts related to increased hazards would be less than significant after mitigation.

Impact TR-4: Would the project result in inadequate emergency access?

Analysis: Less than Significant

The Corte Madera Fire Department station is centrally located in the Town of Corte Madera at 342 Tamalpais Drive, approximately 1 mile west of the Project site. The Central Marin Police Authority serves Corte Madera as well as Larkspur and San Anselmo. The closest police station is located at 250 Doherty Drive on the border of Larkspur and Corte Madera, approximately 1.75 miles west of the Project site.
The Project does not propose any changes to existing site access or circulation surrounding the site. The added vehicle Project trips would not result in a significant change in travel speeds on emergency response routes, based on the intersection Level of Service assessment described under Impact TR-1. Therefore, the Project’s impact to emergency access would be less than significant.

See Impact TR-3 regarding construction-phase impacts to emergency access.

Mitigation: No mitigation needed.

Impact TR-5: Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Analysis: Less than Significant

Transit Facilities

The Project would generate approximately 10 transit trips during the weekday mid-afternoon or PM peak period. Marin Transit Routes 17, 22, and 36 make two stops each during the p.m. peak hour in both the northbound and southbound direction (i.e., six northbound buses and six southbound buses) at bus stops located just west of The Village in the vicinity of the U.S. 101/Tamalpais Drive interchange. Addition of 10 transit trips from the proposed Project to these three routes would result in an average of one trip per bus. The addition of an average of one trip per bus would not constitute a significant unanticipated increase in transit ridership such that it would decrease performance of the system. The Project’s impacts to transit services and facilities would be less than significant.

Pedestrian Facilities

The existing pedestrian facilities in the vicinity of the Project site are adequate. The Project does not include any changes that would conflict with, or change the capacity of, the existing pedestrian facilities. The nearest transit stop is located approximately 1,400 feet from the Project site, which is served by transit that arrives every 20 minutes during peak service times. Pedestrians utilize the sidewalks on Redwood Highway and Tamalpais Drive as they provide direct access to transit facilities from the Project site. Existing sidewalks connecting The Village to the transit stop and nearby uses are sized adequately to accommodate additional pedestrian traffic generated by the Project. The Project’s impact to pedestrian facilities would be less than significant.

Bicycle Facilities

The Project would provide 23 off-street bicycle parking spaces, which will be either Class II racks or Class I lockers, adjacent to the building. This amount of bicycle parking is sufficient based on the Town’s Municipal Code.

During the PM peak hour, up to 10 bicycle trips would be generated by the Project. Bicycle travel would likely occur on Redwood Highway and Tamal Vista Boulevard,
where bicycle facilities are present. Currently, these facilities are not heavily used and any Project-generated bicycle trips would have minor impacts on circulation.

The Corte Madera Bike Plan shows that Class II bicycle lanes are proposed along Redwood Highway adjacent to The Village, adjacent to the existing Class I shared-use path (Bay Trail). The Project would not make any changes to Redwood Highway that would conflict with this planned facility.

In the summer of 2017 the Corte Madera Public Works Department plans to implement the Redwood Highway Pathway Repaving Project, which will extend from San Clemente Drive to Wornum Drive. This Project will rehabilitate and widen the existing Class I multi-use path, providing additional capacity for bicycle and pedestrian travel. The Project would not conflict with this planned improvement.

Since the Project would not remove existing facilities or conflict with planned improvements and would add only a small number of bicycle trips, the Project’s impacts to bicycle facilities would be less than significant.

See Impact TR-3 regarding construction-phase impacts to transit, bicycle, or pedestrian facilities.

Mitigation: No mitigation is needed.

**Impact C-TR-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to transportation?**

**Analysis:** *Significant*

**Intersections**

The cumulative scenario for impacts to study intersections is buildout under the Town’s 2009 General Plan. Under Cumulative Plus Project conditions, 10 of the 14 study intersections would operate at LOS D or better conditions during the PM and mid-afternoon peak hours (refer to Appendix G, Table 7-1). At these intersections, the cumulative impact would be less than significant.

The remaining four intersections would operate at LOS E or F under cumulative conditions during the weekday PM period, as follows:

- Tamalpais Drive/Redwood Highway/San Clemente Drive (LOS F),
- Tamalpais Drive/Northbound U.S. 101 Ramps (LOS E),
- Tamalpais Drive/Southbound U.S. 101 Ramps (LOS F), and
- Tamalpais Drive/Madera Boulevard (LOS E).

The Project’s contribution to the cumulative impact would be 108 trips. This would be a considerable contribution to the significant cumulative impact at these intersections.

**Freeway**

Compared to existing conditions, freeway volumes on southbound U.S. 101 under cumulative conditions would grow by less than five percent. This growth would result
in small decreases in speed in the southbound direction during the PM peak hour, but no change in Level of Service (remains at LOS A). Therefore, the cumulative impact to the southbound U.S. 101 segments would be less than significant.

The northbound U.S. 101 segments south of the Sir Francis Drake interchange would operate at LOS F under cumulative conditions. The cumulative condition would add trips, resulting in a worsening of the LOS F conditions for three freeway segments from Tiburon Boulevard to Sir Francis Drake Boulevard. The addition of these trips would exceed one percent of the capacity of the freeway segments, and therefore cumulative impacts to U.S. 101 would be significant. The Project would add up to 26 trips during the PM peak hour, a very small contribution (0.1 to 0.3 percent) to the future traffic (7,180 to 8,430 trips, depending on the segment) on the freeway during the PM peak hour (see Table 3.12-11 Cumulative Plus Project Freeway Segment LOS). This small contribution to the cumulative impact would not be considerable. Therefore, the Project’s contribution to the cumulative impact would be less than significant.

Table 3.12-11 Cumulative Plus Project Freeway Segment LOS and Delay

<table>
<thead>
<tr>
<th>Segment</th>
<th>Existing Volume</th>
<th>LOS</th>
<th>Volume without Project</th>
<th>Project Trips</th>
<th>Volume with Project</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northbound U.S. 101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Tiburon Boulevard to Tamalpais Drive</td>
<td>7,024</td>
<td>F³</td>
<td>7,157</td>
<td>23</td>
<td>7,180</td>
<td>F³</td>
</tr>
<tr>
<td>2. Tamalpais Drive to Industrial Way</td>
<td>7,598</td>
<td>F³</td>
<td>7,730</td>
<td>11</td>
<td>7,741</td>
<td>F³</td>
</tr>
<tr>
<td>3. Industrial Way to Sir Francis Drake Boulevard</td>
<td>8,044</td>
<td>F³</td>
<td>8,404</td>
<td>26</td>
<td>8,430</td>
<td>F³</td>
</tr>
<tr>
<td>4. Sir Francis Drake Boulevard to I-580</td>
<td>4,350</td>
<td>A</td>
<td>4,699</td>
<td>26</td>
<td>4,725</td>
<td>A</td>
</tr>
<tr>
<td>Southbound U.S. 101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I-580 to Sir Francis Drake Boulevard</td>
<td>4,965</td>
<td>A</td>
<td>5,159</td>
<td>21</td>
<td>5,180</td>
<td>A</td>
</tr>
<tr>
<td>6. Sir Francis Drake Boulevard to Fifer Avenue</td>
<td>5,183</td>
<td>A</td>
<td>5,418</td>
<td>21</td>
<td>5,439</td>
<td>A</td>
</tr>
<tr>
<td>7. Fifer Avenue to Tamalpais Drive</td>
<td>5,417</td>
<td>A</td>
<td>5,596</td>
<td>13</td>
<td>5,609</td>
<td>A</td>
</tr>
<tr>
<td>8. Tamalpais Drive to Tiburon Boulevard</td>
<td>5,441</td>
<td>A</td>
<td>5,633</td>
<td>20</td>
<td>5,653</td>
<td>A</td>
</tr>
</tbody>
</table>

Notes: Bold denotes LOS E or F operations

1 Volume data provided by Caltrans’ PeMS database. 2 Based on HCM 2000 methodology for basic freeway segments

3 Existing volume plus trips anticipated with growth under General Plan Alternative 4. 4 Cumulative Plus Project.

Sources: Fehr & Peers, 2017
Transit, Pedestrian, Bicycle Facilities

The General Plan identifies numerous implementation programs to improve and enhance transit, pedestrian, and bicycle facilities. The Town of Corte Madera General Plan 2009 concluded that implementation of the General Plan would result in a less-than-significant impact to transit, pedestrian, or bicycle facilities. Therefore, there is not a cumulative impact to which the Project could contribute.

Construction

Project related impacts during construction would be temporary in nature and have been mitigated to less than significant. There are no reasonably foreseeable projects that would be under construction near The Village at the same time as Project construction. Therefore, a significant cumulative transportation impact related to construction would not occur.

Mitigation: Measure C-TR-1: Fair Share Contribution to Intersection Improvements

The Applicant shall make a fair share contribution, prior to issuance of a building permit, to implementation of the following intersection improvements.

1. Widen eastbound Tamalpais Drive to three lanes from the U.S. 101 northbound off-ramp through the San Clemente Drive intersection

2. Extend the third through lane at the San Clemente Drive intersection into one of the northbound left turn lanes at the Redwood Hwy/Village at Corte Madera South Driveway intersection

3. Construct a total of 3 northbound left-turn lanes and one right-turn lane at Tamalpais Drive/San Clemente Drive

The Village at Corte Madera is ultimately responsible for 100 percent of the cost of implementing this mitigation measure. The Corte Madera General Plan EIR identified that the full buildout of The Village under the adopted Alternative 4 would generate an additional 475 PM peak hour trips. The Project is expected to generate 108 PM peak hour trips, which represents 23 percent of the total. Therefore, the Applicant’s fair share contribution is 23 percent of the cost. To determine the dollar amount of the fair share contribution, the Applicant shall fund the preparation of an engineer’s estimate for construction of the mitigation measures, as directed and approved by the Public Works Director for the Town of Corte Madera.

After Mitigation: Less than Significant

Similar to contributions required by the 2014 Nordstrom’s Expansion, Measure C-TR-1 would require the Applicant to pay the Project’s fair share contribution to the three roadway improvements identified in the mitigation measure. The roadway improvements would improve operation of each of the four impacted intersections to acceptable levels (see Table 3.12-12 Intersection LOS Delay).
### Table 3.12-12 Cumulative Plus Project Intersection LOS and Delay

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Intersection Control</th>
<th>Time Period</th>
<th>Cumulative Plus Project (General Plan Alternative 4)</th>
<th>With Mitigation Measure C-TR-1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Delay(^\d)</td>
<td>LOS(^\d)</td>
</tr>
<tr>
<td>6. Tamalpais Drive / Redwood Highway / San Clemente Drive</td>
<td>Signal</td>
<td>PM</td>
<td>83</td>
<td>F</td>
</tr>
<tr>
<td>7. Tamalpais Drive / Northbound U.S. 101 Ramps</td>
<td>Signal</td>
<td>PM</td>
<td>72</td>
<td>E</td>
</tr>
<tr>
<td>8. Tamalpais Drive / Southbound U.S. 101 Ramps</td>
<td>Signal</td>
<td>PM</td>
<td>88</td>
<td>F</td>
</tr>
<tr>
<td>10. Tamalpais Drive / Madera Boulevard</td>
<td>Signal</td>
<td>PM</td>
<td>68</td>
<td>E</td>
</tr>
</tbody>
</table>

Notes: **Bold** denotes unacceptable level of service and delay. (LOS E or F)

\(^1\) Delay reported as seconds per vehicle. For all intersections, a combined weighted average delay for the various movements within the intersection is reported based on the methodology in the Highway Capacity Manual 2000. This is consistent with the Town of Corte Madera’s guidance for reporting intersection LOS results from the General Plan.

### 3.12.7 References


Legend

#  = Study Intersection
This page is intentionally left blank
3.13 Utilities and Service Systems

This section provides a description of the existing utilities in the Project area and evaluates changes to those conditions that would result from implementation of the proposed Project.

3.13.1 Setting

Water Distribution and Supply

The Village obtains its water supply from the Marin Municipal Water District (MMWD), which provides potable water to 189,400 customers over 147 square miles in central and southern Marin County. The MMWD potable water supplies come from a combination of MMWD’s seven reservoirs and water imported from the Sonoma County Water Agency.

The MMWD potable water distribution system includes approximately 941 miles of water mains, 90 pumping stations, and 124 storage tanks with a total storage capacity of 82 million gallons. (Corte Madera 2009a)

Wastewater Collection, Treatment, and Disposal

Sanitary District No.2 of Marin County, a member of the Central Marin Sanitation Agency (CMSA), provides sewage collection services for the Town, limited areas of the surrounding communities of Larkspur and Tiburon, and certain unincorporated areas of the County, for a total area served of about 3.84 square miles. These services include the installation and maintenance of sanitary sewer pipelines and pump stations, regulation of sanitary sewer connections, and waste collection services within the boundary of the District (Town of Corte Madera 2017). The Town of Corte Madera Public Works Department provides all engineering, management, and operational services for the Town’s wastewater collection system (Corte Madera 2009b).

CMSA owns and operates the CMSA Wastewater Treatment Plant, located off of Interstate 580 in San Rafael, which treats sewage from member districts and the San Quentin State Prison via conveyance from several remote pump stations. The CMSA Treatment Plant produces effluent treated to an advanced secondary treatment level and then discharged to San Francisco Bay through an outfall structure owned and maintained by CMSA.

The CMSA Treatment Plant has a hydraulic capacity of 125 million gallons of sewage per day during peak rainfall periods. The average dry weather flow is 10 million gallons per day, and the maximum peak wet weather flow is 90 million gallons per day. The CMSA Treatment Plant has an additional hydraulic capacity of 35 million gallons during maximum peak wet weather flow periods.

The Sanitary District No.2 sewage is conveyed mostly through a series of six-, eight-, and ten-inch clay pipes in the Town’s streets and related easements to larger collection systems, leading toward a series of pump stations located throughout the Town. The Paradise Pump Station is the main pump station in The District.

Storm Water Collection and Treatment

The Town of Corte Madera is divided into a series of 10 separate watersheds for the management of storm drainage in the Town. The Project site is located in Watershed No.4, the relatively flat region...
along San Clemente Drive which eventually drains into Shorebird Marsh and is pumped into the East Side Outfall Channel (ESOC) of the San Francisco Bay from the Shorebird Marsh Pump Station.

**Solid Waste**

Mill Valley Refuse Service provides solid waste collection service in Corte Madera and surrounding areas. Mill Valley Refuse Service offers a variety of commercial and residential services, including trash, recycling, commercial food composting, green waste, and debris boxes. All garbage, green waste, and recycled materials are hauled to Redwood Landfill (Iveronni 2017). Redwood Landfill, located in Novato, is used for more than 95 percent of Marin County's waste disposal, including the Town of Corte Madera.

### 3.13.2 Regulatory Framework

**Federal**

There are no federal policies or regulations pertaining to the Project.

**State and Regional**

**Urban Water Management Planning Act**

The Urban Water Management Planning Act (UWMP Act) was originally established by Assembly Bill 797 (AB 797) on September 21, 1983. The primary objective of the UWMP Act is to direct “urban water suppliers” to develop an Urban Water Management Plan which provides a framework for long-term water supply planning, and documents how urban water suppliers are carrying out their long-term resource planning responsibilities to ensure adequate water supplies are available to meet existing and future water demands. The UWMP Act applies to water suppliers that provide over 3,000 acre-feet per year or have over 3,000 connections. The *Marin Municipal Water District 2015 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures Update* was finalized in 2015.

**Regional Integrated Waste Management Plan**

The Marin County Hazardous and Solid Waste Management Joint Powers Authority (JPA), of which the Town of Corte Madera is a member, is a state-approved regional agency that works to reduce disposal in landfills, promotes recycling, and promotes proper handling of household hazardous wastes. The JPA also develops and implements the county's Regional Integrated Waste Management Plan and administers the Marin Countywide Hazardous Waste Management Plan. The County of Marin's Integrated Waste Management Plan requires recycling programs that are expected to result in a 50 percent diversion away from landfills, thereby extending the life of landfills. The JPA implements a monitoring system that enables the JPA to evaluate its diversion programs with hard data. This monitoring system incorporates a complex structure of checks and balances to ensure accuracy and has enlisted the cooperation of all of the JPA’s haulers and facility operators. The Integrated Waste Management Plan has a goal of 80% landfill diversion by 2012 and achieving a zero waste goal by 2025 (County of Marin 2007).
California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (Public Resources Code Division 30), enacted through Assembly Bill (AB) 939 and modified by subsequent legislation, required all California cities and counties to implement programs to divert waste from landfills (Public Resources Code Section 41780). Compliance with AB 939 is determined by the Department of Resources, Recycling, and Recovery (Cal Recycle), formerly known as the California Integrated Waste Management Board (CIWMB).

The Marin County Hazards Waste and Solid Waste Joint Powers Authority, calculates the County's diversion rate. The diversion rate is the percentage of total waste that a jurisdiction diverts from disposal at Cal Recycle-permitted landfills and transformation facilities through reduction, reuse, recycling programs, and composting programs based on the base year of 1990. Jurisdictions were required by law to achieve 50 percent diversion by the year 2000. In 2000, Marin County achieved a 62.3 percent diversion rate (Marin Hazardous and Solid Waste JPA 2015). Jurisdictions’ diversion rates are no longer calculated by Cal Recycle to determine compliance with AB 939. Instead, a per capita disposal rate is used as a benchmark of program effectiveness. The statutory change was instituted by Senate Bill (SB) 1016. In 2013, Marin County had a waste diversion rate target goal of 7.6 pounds per person per day. In 2015, they reached a 74 percent diversion rate which is over 50 percent diversion and consistent with SB 1016 (Marin Hazardous and Solid Waste JPA 2015).

Local

Stormwater and Wastewater NPDES Permits

Under the Town’s National Pollutant Discharge Elimination System (NPDES) permit #CAG912003, the Town of Corte Madera is required to implement the Construction Element of its Stormwater Quality Improvement Plan (SQIP) to reduce pollutants in runoff from construction sites during all construction phases. In addition, the Town is required to adopt a Development Standards Plan (DSP) describing measures to reduce pollutant discharges to the maximum extent practical from all new development projects.

The CMSA has an NPDES Permit for operation of the CMSA Treatment Plant and is required to comply with applicable regulations regarding wastewater treatment. Wastewater within the Town of Corte Madera may be discharged into Town sewers for collection, treatment, and disposal by the Town, provided that such wastes do not contain prohibited substances or exceed limitation of wastewater volume or strength, as applicable. The Town of Corte Madera Municipal Code includes specific wastewater discharge prohibitions. These include, but are not limited to, limits and prohibitions related to pH, temperature, toxic pollutants, and malodorous liquids. Daily maximum allowable discharge limits are established for metals, biochemical oxygen demand, pH, total toxic organics, total suspended solids, total petroleum hydrocarbons, total dissolved solids, and other constituents.

Corte Madera General Plan Goals and Policies

The following are the policies from the Town of Corte Madera General Plan 2009 that relate to utilities and service systems and are applicable to the Project.

Policy LU-1.10 Coordinate with Marin Municipal Water District to assure the availability of water supply and distribution facilities for all development approvals.
Policy LU-6.11  Ensure adequate provision of water supply and treatment to Town residents and businesses.

Policy LU-6.12  Encourage conservation of water resources throughout the Town.

Policy LU-6.14  Ensure adequate provision of wastewater conveyance and treatment to Town residents and businesses.

Policy RCS-4.1  Encourage the expansion of vigorous recycling efforts so that all residents and businesses in Corte Madera recycle.

Policy RCS-5.1  Minimize waste through reducing, reusing, and recycling. Encourage reduced consumption of non-renewable resources by expanding choices for using and reusing materials, energy, and water in an efficient manner.

### 3.13.3 Evaluation Criteria and Significance Thresholds

For the purpose of this EIR, the evaluation criteria and significance thresholds summarized in Table 3.13-1, Evaluation Criteria and Significance Thresholds, are used to determine if the Project would have a significant effect related to utilities.

**Table 3.13-1 Evaluation Criteria and Significance Thresholds**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
</table>
| Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | An increase in wastewater volume or strength exceeding existing treatment capacity CEQA Guidelines Appendix G, Checklist Item XVIII (a)  
Corte Madera General Plan Policy LU.6-11 |                                                                                       |
| Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | Inadequate water supply or sewer capacity to serve the project CEQA Guidelines Appendix G, Checklist Item XVIII (b) |                                                                                       |
| Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | Inadequate storm water drainage capacity to serve the site CEQA Guidelines Appendix G, Checklist Item XVIII (c) |                                                                                       |
| Would the project have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed? | Inadequate water supply capacity or infrastructure to serve the needs of the project CEQA Guidelines Appendix G, Checklist Item XVIII (d)  
Corte Madera General Plan Policy LU.6-11 |                                                                                       |
### Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Significance Thresholds</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td>Inadequate sewer capacity to serve the project and future needs of the Town</td>
<td>CEQA Guidelines Appendix G, Checklist Item XVIII (e)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corte Madera General Plan Policy LU-6.14</td>
</tr>
<tr>
<td>Would the project be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>Inadequate regional landfill capacity to serve the project</td>
<td>CEQA Guidelines Appendix G, Checklist Item XVIII (f)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corte Madera General Plan Policy RCS-5.1</td>
</tr>
<tr>
<td>Would the project comply with federal, State and local statutes and regulations related to solid waste?</td>
<td>Non-compliance with applicable solid waste diversion regulations</td>
<td>CEQA Guidelines Appendix G, Checklist Item XVIII (g)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corte Madera General Plan Policy RCS-5.1</td>
</tr>
</tbody>
</table>

#### 3.13.4 Areas of No Impact

The proposed Project would not result in impacts related to several of the evaluation criteria listed in Table 3.13-1, Evaluation Criteria and Significance Thresholds. For the reasons presented below, the following evaluation criteria are not applicable to the Project or result in a finding of no impact:

**Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**Water Treatment Facilities**

During the General Plan 2009 update process, the MMWD indicated that there would be adequate water supply to accommodate the growth projected under the proposed General Plan which included expansion of The Village by up to 185,000 square feet (Corte Madera 2009b). The 2011 expansion of Nordstrom increased in size by approximately 17,430 square feet, leaving 167,570 square feet remaining for future expansion. The Project would add 46,000 square feet. Existing water supply and facilities would be sufficient to serve the Project, with no new or expanded water facilities required.

**Wastewater Treatment Facilities**

Implementation of the *Town of Corte Madera General Plan 2009* included expansion of The Village, as noted above. Wastewater is collected by the Sanitary District No.2 and conveyed for treatment to the CMSA Wastewater Treatment Plant. During the General Plan 2009 update process, the Central Marin Sanitation Agency indicated that growth under the General Plan would not significantly impact treatment capacity or operations at the treatment plant (Corte Madera 2009b). The Project would not require or result in the construction of new wastewater treatment facilities or expansion of existing
facilities. No environmental impacts associated with construction of new treatment facilities or expansion of existing facilities would occur.

**Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

Improvements would be made to the on-site stormwater facilities, but no improvements are required to existing off-site facilities. At the gravel lot stormwater would be captured within bioretention features on site and treated, prior to discharge. The bioretention features would tie in to the existing storm drain system beneath Redwood Highway and adjacent to the gravel lot. After leaving the bioretention features and entering the existing storm drain, stormwater would drain through the existing outfall structures, with no changes to the outfall configuration. The Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, and therefore, no impact would occur.

**Would the project comply with federal, State and local statutes and regulations related to solid waste?**

No applicable federal solid waste regulations would apply to the Project. At the State level, the Integrated Waste Management Act mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. As noted in the setting, Marin County, including Corte Madera, exceeds current state requirements for diversion.

The Town of Corte Madera maintains a collection services contract to provide solid waste, recycling, and green waste collection services for residential and commercial uses in Corte Madera. Solid waste disposal services provided within Corte Madera must follow the applicable State and local regulations related to the collection of solid waste. Compliance with applicable statues and regulations would be conditionally required as part of the Project. Therefore, no impact would occur, and this evaluation criterion is not discussed further.

### 3.13.5 Impacts and Mitigation Measures

Table 3.13-2, Summary of Impacts – Utilities, provides a summary of potential impacts from the Project.

**Table 3.13-2 Summary of Impacts – Utilities**

<table>
<thead>
<tr>
<th>Impact</th>
<th>Project Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>UT-1: Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td>LS</td>
</tr>
<tr>
<td>UT-2: Would the project have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?</td>
<td>LS</td>
</tr>
<tr>
<td>Impact</td>
<td>Project Significance</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>UT-3: 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?</td>
<td>LS</td>
</tr>
<tr>
<td>UT-4: Would the project be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>LS</td>
</tr>
<tr>
<td>C-UT-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to utilities?</td>
<td>LS</td>
</tr>
</tbody>
</table>

Notes: LS = Less than Significant

Impact UT-1: **Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

Analysis: *Less than Significant*

The new building would connect to existing on-site wastewater facilities, and wastewater would be conveyed to the Central Marin Sanitation Agency Wastewater Treatment Plant. The Central Marin Sanitation Agency indicated that growth under the General Plan would not significantly impact treatment capacity or operations at the treatment plant (Corte Madera 2009b). In addition, the Project is not a land use that would have regulated discharges, such as an industrial facility. Therefore, the Project’s contribution to the wastewater flow would not cause the CMSA Wastewater Treatment Plant to exceed applicable wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board, and the Project's impact would be less than significant.

Mitigation: No mitigation is needed.

Impact UT-2: **Would the project have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?**

Analysis: *Less than Significant*

Water supplies would be provided by existing MMWD facilities. During the General Plan 2009 update process, the MMWD indicated that there would be adequate water supply to accommodate the growth projected under the proposed General Plan which included expansion of The Village by up to 185,000 square feet (Corte Madera 2009b). The 2011 expansion of Nordstrom increased in size by approximately 17,430 square feet, leaving 167,570 square feet remaining for future expansion. The Project would add 46,000 square feet. Therefore, sufficient water supplies would be available to serve the Project site, as it is within the previously analyzed expansion.

The Project’s impact to water supplies would be less than significant.

Mitigation: No mitigation is needed.
Impact UT-3: 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?

Analysis: Less than Significant

Wastewater is collected by the Sanitary District No.2 and conveyed for treatment to the Central Marin Sanitation Agency Wastewater Treatment Plant (WWTP). Implementation of the Town of Corte Madera General Plan 2009 included expansion of The Village, as noted above. During the General Plan 2009 update process, the Central Marin Sanitation Agency indicated that growth under the General Plan would not significantly impact treatment capacity or operations at the treatment plant (Corte Madera 2009b). In addition, the Sanitary District No.2 conveyance infrastructure was considered to have adequate capacity to convey future wastewater from implementation of the General Plan. (Corte Madera 2009a)

The Project’s impact to wastewater treatment capacity would be less than significant.

Mitigation: No mitigation is needed.

Impact UT-4: Would the project be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

Analysis: Less than Significant

Solid waste generated by the construction and operation phases of the Project would be recycled to the extent possible and sent to the Redwood Landfill. The Project would generate approximately 48.3 tons of solid waste per year (CalEEMod).

In October 2014, Redwood Landfill was issued a new Solid Waste Facility permit, which extended the landfill site life to the year 2024. As shown in Table 3.13-3, sufficient capacity exists at not only Redwood Landfill, but other regional landfills to accommodate the Project’s solid waste disposal needs.
Table 3.13-3 Landfill Capacity Summary

<table>
<thead>
<tr>
<th>Landfill</th>
<th>Location</th>
<th>Remaining Capacity (cubic yards)</th>
<th>Estimated Closure Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Petaluma</td>
<td>9 million</td>
<td>2034</td>
</tr>
<tr>
<td>Redwood</td>
<td>Novato</td>
<td>26 million</td>
<td>2024</td>
</tr>
<tr>
<td>Potrero Hills</td>
<td>Suisun City</td>
<td>13.9 million</td>
<td>2048</td>
</tr>
<tr>
<td>Vasco Road</td>
<td>Livermore</td>
<td>8 million</td>
<td>2022</td>
</tr>
<tr>
<td>Keller Canyon</td>
<td>Pittsburg</td>
<td>63.4 million</td>
<td>2030</td>
</tr>
</tbody>
</table>

Solid waste during construction and operation of the Project would represent a small fraction of the daily permitted tonnage of these facilities. Therefore, the Project's solid waste disposal needs would be sufficiently accommodated by existing landfills, and the impact would be less than significant.

Mitigation: No mitigation is needed.

Impact C-UT-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to utilities?

Analysis: Less than Significant

Water

For water service, the geographic scope for assessing cumulative impacts is the area within the Marin Municipal Water District service area.

The proposed Project, in conjunction with other past, present, and reasonably foreseeable future projects, could result in a cumulative increase in water demands and the need for new or expanded water facilities. As discussed in the above Project-specific analysis, however, water consumption by the proposed Project would not result in a significant impact on water supply or create the need for new or expanded water facilities. Currently, MMWD expects water supply to be adequate to serve the Project combined with other anticipated projects as outlined in the Town of Corte Madera General Plan EIR, and no significant cumulative impact would occur.

The effect of the proposed Project on water service, in combination with other past, present, and foreseeable projects, would be less than significant.

Wastewater

For wastewater service, the geographic scope for assessing cumulative impacts is the service area of the Sanitary District No.2 and the CMSA Wastewater Treatment Plant.

The proposed Project, in conjunction with other past, present, and reasonably foreseeable future projects, could result in a cumulative increase in wastewater generation, resulting in increased demand on wastewater collection and treatment facilities. As discussed in the above Project-specific analysis, however, service demand by the proposed Project would not result in a significant impact on
wastewater treatment capacity or create the need for new or expanded wastewater treatment facilities. Currently, the Sanitary District No.2 and CMSA Wastewater Treatment Plant expect conveyance and treatment to be adequate to serve the Project combined with other anticipated projects as outlined in the Town of Corte Madera General Plan EIR, and no significant cumulative impact would occur.

The effect of the proposed Project on wastewater service, in combination with other past, present, and foreseeable projects, would be less than significant.

Solid Waste Disposal

For solid waste disposal service, the geographic scope for assessing cumulative impacts consists of the service area of Redwood Landfill through 2024. Construction and operation of the proposed Project, in conjunction with past, present, and reasonably foreseeable future projects, could result in a cumulative increase in construction and operation-related solid waste and debris. Implementation of state and local waste reduction and diversion requirements and programs has and would continue to reduce the potential for exceeding existing capacities of the regional landfills, which still have adequate capacity.

For these reasons, the effect of the proposed Project on solid waste disposal service, in combination with other past, present, and foreseeable projects, would be less than cumulatively considerable.

Mitigation: No mitigation is needed.

3.13.6 References

Marin, County of. 2007. Resolution of the Marin County Board of Supervisors Adopting the Goal of Zero Waste by 2025. April.
4. Alternatives Description and Analysis

4.1 Introduction

This chapter presents the alternatives analysis for the Project. CEQA and the CEQA Guidelines require that an EIR “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (CEQA Guidelines Section 15126.6[a]). In addition, an EIR must identify alternatives that were considered by the lead agency and were rejected as infeasible during the scoping process and should briefly explain the reasons underlying the lead agency’s determination (CEQA Guidelines Section 15126 [(c)].

For ease of reference, the Project objectives identified in Chapter 2, the Project Description, are repeated below:

- Expand The Village by 46,000 square feet, consistent with the Town of Corte of Madera General Plan 2009, with a commercial space inclusive of a cafe and roof-top scenery loft.
- Improve the gravel parking lot across Redwood Highway by paving, landscaping, and lighting the area using low-impact development elements to promote a more convenient and safe use that is consistent with the existing uses of the gravel lot.
- Build a retail space large enough to operate as a design gallery, rather than a regular retail store.
- Promote the community's economic development and enhance the Town's tax base by supporting the continued evolution and relevance of The Village to provide a first-class shopping and dining experience.
- Allow the Town to retain ownership of the gravel lot, while eliminating costs associated with liability, maintenance, security, and potential required future improvements.

One of the alternatives analyzed must be the “No Project” alternative. CEQA Guidelines Section 15126.6(e)(1) states that the purpose of describing and analyzing the no project alternative is “to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.” The no project analysis is required to “discuss the existing conditions at the time the notice of preparation is published…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 (Section 15126.6[e][2]).

The alternatives are described and analyzed below, followed by a matrix (Table 4-1) that compares the impacts of the alternatives to that of the Project. This section also includes a description of those alternatives that were considered but not carried forward in the analysis.

4.1.1 Alternative 1 - No Project Alternative

Description

The No Project Alternative consists of two options. Under Option 1a, no action would be taken by the Town, and the existing conditions at both The Village and the gravel lot would continue to occur in the future. This alternative would not fulfill any of the Project objectives.
Option 1b of the No Project Alternative would consist of the reasonably foreseeable condition that would result from buildout of the current plans that is also consistent with available infrastructure and services. Because of past applications for additional retail development at The Village1, and because additional retail development was approved in the Town of Corte Madera General Plan 2009 (General Plan), it is considered reasonably foreseeable that this second option under the No Project Alternative would consist of adding retail development at The Village. Because the gravel lot has a current General Plan designation of Wetlands and Marshlands, the gravel lot could not be developed or improved further under the existing General Plan designation and would, therefore, continue to be used and maintained in its existing condition.

The General Plan identifies an additional 185,000 square feet of retail (based on a 0.47 FAR) and 300 dwelling units at The Village that could be developed. The 2011 Nordstrom Expansion included 17,430 square feet, leaving 167,570 square feet of development potential. Although it is unlikely in the reasonably foreseeable future that an applicant would come forward with a single proposal for complete buildout of the site under the General Plan, if the Project is not approved, it is reasonably foreseeable that The Village, in coordination with a different retailer, could propose a similar sized project or that Macy's would renew its interest in expanding2. Therefore, under the No Project Alternative, it is reasonably foreseeable that future additional retail space to be built would be approximately the same size as the Restoration Hardware building or smaller. The additional retail space is assumed to be between 20,000 and 46,000 square feet, and located within The Village. To accommodate the additional parking required for the new retail building, as well as replacement of the parking that would be displaced by the new building, a multi-level parking structure would be needed. Depending on the size of the building, the additional parking demand could be accommodated in various configurations either as second and third story parking over retail, or as a separate parking structure. For a 46,000 square-foot retail building, parking would likely need to be provided in a separate parking structure. No additional infrastructure improvements or services would be needed for such a proposal.

In summary, Option 1b of the No Project Alternative would consist of a 46,000 square-foot retail building, a separate three-story parking structure, and no development at the gravel lot. The buildings would be consistent with the General Plan and the Preliminary and Precise Plans for The Village, and would have a height of 46 feet or less.

This alternative would fulfill most of the basic Project objectives, although it would not improve the gravel parking lot for increased convenience and safety and would not allow the Town to eliminate costs associated with continued ownership of the gravel lot.

Analysis

Under Option 1a of the No Project Alternative, no action would be taken, and the existing conditions at both The Village and the gravel lot would continue to occur in the future. None of the impacts identified for the Project would occur.

---

1 Two applications for development at The Village have been received since the General Plan was adopted: one for the Nordstrom and Macy's expansions, and the current application from Corte Madera Village, LLC and Restoration Hardware.

2 Macy's previously received approval for, but never built, a 20,000 square-foot expansion. This approval has since expired.
Option 1b of the No Project Alternative is very similar to Alternative 2 Structured Parking (see below), in that both would include a similar sized building and a separate three-story parking structure located at The Village. Under Option 1b of the No Project Alternative, impacts would be very similar to those of Alternative 2. Please refer to the discussion under Alternative 2.

4.1.2 Alternative 2 - Structured Parking

In Alternative 2, a 46,000 square-foot retail expansion, including the ancillary improvements such as utilities, storm water, and landscaping, would occur as described in Chapter 2 Project Description. However, the gravel lot would not be improved, but would continue to be used and maintained in its current capacity for overflow parking and special events. Instead, parking for the retail building would be provided with a structured parking facility located along the southern border of The Village within the existing parking lot between Tamalpais Drive and Macy's. The facility would have a footprint of approximately 1.1 acres, would include three levels of parking, and would not exceed 46 feet in height. Similar to Option 1b under the No Project Alternative, Alternative 2 would fulfill most of the basic Project objectives, although it would not improve the gravel parking lot for increased convenience and safety and would not allow the Town to eliminate costs associated with continued ownership of the gravel lot.

Analysis

Aesthetics and Land Use

Alternative 2 would result in a second multi-story structure at the Project site, which could have an increased effect on scenic vistas and visual contrast as compared to the Project. However, Alternative 2 would be subject to the same general plan, zoning, and preliminary and precise plan requirements, including height and massing limitations, as the Project. Therefore, impacts related to those identified in the Aesthetics and Land Use sections would be similar to the Project. With regard to light and glare, although the extent of nighttime lighting may be less, as there would be no new light poles at the gravel lot, there would still be additional lighting at The Village to support the building and parking structure which. Therefore mitigation measure AES-1, Reduce Night-time Lighting, would still be required.

Air Quality, Greenhouse Gas Emissions, and Transportation

Construction-related impacts would increase for air quality, greenhouse gas emissions, and traffic. Alternative 2 would require more truck trips related to the construction of the structured parking. Alternative 2 would require a more detailed analysis with regard to construction related air quality impacts associated with the increased haul trips, and could require additional mitigation. Transportation construction impacts related to an increase in hazards, and specific to the gravel lot improvements and the Bay Trail would no longer occur. Therefore Mitigation Measures TR-3b, Redirect Bay Trail Users during Construction, TR-3c, Manage Parking during Construction, and TR-3d, Improve Pedestrian Safety, would no longer be necessary.

Alternative 2 would have a similar sized building, use, and vehicle trips as the Project. Therefore, operational and cumulative impacts related to air quality, greenhouse gas emissions, and transportation would be similar to the Project. Mitigation Measures GHG-1, Reduce Greenhouse Gas Emissions, and C-TR-1, Fair Share Contribution to Intersection Improvements, would still be required.
**Biological Resources**

Under Alternative 2, the gravel lot would remain in its current condition, and construction and operational impacts related to improvements to the gravel lot would not occur. Therefore, Alternative 2 would eliminate potential impacts to salt marsh harvest mouse, and potential dust and stormwater impacts on marsh habitat near the gravel lot. Mitigation Measure BIO-1a, Protect Salt Marsh Harvest Mouse, would no longer be needed.

**Cultural Resources, Hazards and Hazardous Materials, Geology and Soils, and Hydrology and Water Quality**

Impacts identified in the Cultural Resources, Hazards and Hazardous Materials, Geology and Soils, and Hydrology and Water Quality sections would be the same as the Project, as evaluation of these resources relate to compliance with regulations or characteristics specific to the site, which would be applicable to any development at the site, regardless of size or footprint. All of the mitigation measures applicable to the Project also would apply to Alternative 2.

**Noise**

Construction of Alternative 2 would be approximately 800 feet closer to sensitive receptors to the south, as compared to the Project. Therefore the peak construction noise levels at the Echo Avenue residents would be approximately 62 dBA. The existing ambient noise level at Echo Avenue is 60 dBA. Therefore, the noise level would not exceed the ambient noise environment by 5 dBA L\textsubscript{eq}. Therefore, Alternative 2 would have similar construction noise impacts as those of the Project, and Mitigation Measure NO-1, Comply with Corte Madera General Plan Policies, would still be applicable. Operational noise impacts of Alternative 2 also would be similar, as Alternative 2 would allow a similar retail use and size as that of the Project.

**Public Services and Utilities**

Alternative 2 would allow expansion at The Village consistent with that analyzed in the General Plan. The Town of Corte Madera General Plan EIR analyzed and concluded that growth under the General Plan, including 185,000 square feet of commercial development at The Village, would be adequately served by existing fire and police services, and water, wastewater, and stormwater infrastructure. Therefore, impacts to utilities and public services would be the same as the Project.

### Table 4-1 Alternatives Analysis Matrix

<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Project</th>
<th>Alternative 1 (Option 1b) - No Project Alternative(^3)</th>
<th>Alternative 2 - Structured Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aesthetics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AES-1: Would the project have a substantial adverse effect on a scenic vista?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
</tbody>
</table>

\(^3\) The Option 1a under the No Project Alternative has no impacts because it represents no change from the existing conditions. This column represents the second option under the No Project Alternative, which consists of the...
## Alternatives Description and Analysis

<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Project</th>
<th>Alternative 1 (Option 1b) - No Project Alternative</th>
<th>Alternative 2 - Structured Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>AES-2: Would the project substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>AES-3: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation</td>
</tr>
<tr>
<td>C-AES-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to visual resources?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
</tbody>
</table>

### Air Quality

<table>
<thead>
<tr>
<th>Air Quality</th>
<th>Project</th>
<th>Alternative 1 (Option 1b) - No Project Alternative</th>
<th>Alternative 2 - Structured Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>AQ-2: Would the project violate an air quality standard or contribute substantially to an existing or projected air quality violation, or 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation (greater impacts related to construction)</td>
<td>Less than Significant with Mitigation (greater impacts related to construction)</td>
</tr>
<tr>
<td>AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>C-AQ-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to air quality?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
</tbody>
</table>

---

*reasonably foreseeable condition of development consistent with existing plans and available infrastructure and services. See the earlier definition of the No Project Alternative in Section 4.1.1.*
<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Project</th>
<th>Alternative 1 (Option 1b) - No Project Alternative</th>
<th>Alternative 2 - Structured Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biological Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO-1: Would the project have a substantial adverse effect, either directly or</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation (MM BIO-1a</td>
<td>Less than Significant after Mitigation (MM BIO-1a no longer required)</td>
</tr>
<tr>
<td>through habitat modifications, on any species identified as a candidate, sensitive,</td>
<td></td>
<td>no longer required)</td>
<td></td>
</tr>
<tr>
<td>or special status species in local or regional plans, policies, or regulations,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO-2: Would the project have a substantial adverse effect on any riparian</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation (MM BIO-1a</td>
<td>Less than Significant after Mitigation (MM BIO-1a no longer required, and avoids impacts to marsh)</td>
</tr>
<tr>
<td>habitat or other sensitive natural community identified in local or regional</td>
<td></td>
<td>no longer required, and avoids impacts to marsh)</td>
<td></td>
</tr>
<tr>
<td>plans, policies, regulations, or by the California Department of Fish and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wildlife or U.S. Fish and Wildlife Service?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO-3: Would the project have a substantial adverse effect on federally protected</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation (avoids</td>
<td>Less than Significant after Mitigation (avoids impacts to wetlands)</td>
</tr>
<tr>
<td>wetlands as defined by Section 404 of the Clean Water Act (including, but not</td>
<td></td>
<td>impacts to wetlands)</td>
<td></td>
</tr>
<tr>
<td>limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hydrological interruption, or other means?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO-4: Would the project interfere substantially with the movement of any native</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>resident or migratory fish or wildlife species or with established native resident</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or migratory wildlife corridors, or impede the use of native wildlife nursery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sites?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO-5: Would the project conflict with any local policies or ordinances protecting</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>biological resources, such as a tree preservation policy or ordinance?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C-BIO-1: Would the project result in a cumulatively considerable contribution to</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>cumulative impacts related to biological resources?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Project</td>
<td>Alternative 1 (Option 1b) - No Project</td>
<td>Alternative 2 - Structured Parking</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
<td>----------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Cultural Resources</td>
<td></td>
<td>Least than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>CR-1: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>CR-2: Would the project disturb any human remains, including those interred outside of formal cemeteries?</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>CR-3: Would the project cause a substantial adverse change in the significance of a tribal cultural resource?</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>C-CR-1: Would the project result in a cumulatively considerable contribution to a cumulative impact?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>Geology and Soils</td>
<td></td>
<td>Least than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>GEO-1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving strong seismic ground shaking?</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>GEO-2: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving seismic-related ground failure, including liquefaction?</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>GEO-3: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving landslides?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>GEO-4: Would the project result in substantial soil erosion or the loss of topsoil?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Project</td>
<td>Alternative 1 (Option 1b) - No Project Alternative</td>
<td>Alternative 2 - Structured Parking</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
<td>--------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>GEO-5: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>GEO-6: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td><strong>Greenhouse Gas Emissions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation (greater impacts related to construction)</td>
<td>Less than Significant with Mitigation (greater impacts related to construction)</td>
</tr>
<tr>
<td>GHG-2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>C-GHG-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact relative to greenhouse gas emissions?</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation</td>
</tr>
<tr>
<td><strong>Hazards and Hazardous Materials</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAZ-1: Would the project create a significant hazard to the public or environment through the routine transport, use or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>C-HAZ-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to hazards or hazardous materials?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Project</td>
<td>Alternative 1 (Option 1b) - No Project Alternative</td>
<td>Alternative 2 - Structured Parking</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-------------</td>
<td>-----------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>Hydrology and Water Quality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HWQ-1: Would the project violate any water quality standards or waste discharge requirements, or alter the existing drainage patterns, rate, or amount of surface runoff in a manner which would result in substantial erosion or siltation, flooding, or exceedance of the capacity of stormwater drainage systems?</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation</td>
</tr>
<tr>
<td>HWQ-2: Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>HWQ-3: Would the project provide additional sources of polluted runoff, or otherwise substantially degrade water quality?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>HWQ-4: Would the project expose people or structures to a significant risk involving flooding, or place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation</td>
</tr>
<tr>
<td>HWQ-5: Would the project expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>C-HWQ-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to hydrology and water quality?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td><strong>Land Use and Planning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LU-1: Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Project</td>
<td>Alternative 1 (Option 1b) - No Project Alternative³</td>
<td>Alternative 2 - Structured Parking</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>C-LU-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to land use?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td><strong>Noise</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOI-1: Would the project result in exposure of persons to or generation noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation</td>
<td>Less than Significant with Mitigation</td>
</tr>
<tr>
<td>NOI-2: Would the project result in exposure of persons to or generation of excessive groundborne vibration or noise levels?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>NOI-3: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>NOI-4: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the Project?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>C-NOI-1: Would the project plus cumulative projects result in a cumulatively considerable contribution to cumulative impacts related to noise?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
</tbody>
</table>
### Public Services

<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Project</th>
<th>Alternative 1 (Option 1b) - No Project Alternative³</th>
<th>Alternative 2 - Structured Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSR-1: 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 the following public services: fire protection, police protection, schools, parks, and/or other public facilities?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>PSR-2: 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, or include recreational facilities or require the construction or expansion of recreation facilities which might have an adverse physical effect on the environment?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>C-PSR-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to public services and recreational resources?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Project</td>
<td>Alternative 1 (Option 1b) - No Project Alternative&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Alternative 2 - Structured Parking</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
<td>----------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR-1: Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the vehicular circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>TR-2: Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>TR-3: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant (MM TR-3b, TR-3c, TR-3d no longer required)</td>
<td>Less than Significant (MM TR-3b, TR-3c, TR-3d no longer required)</td>
</tr>
<tr>
<td>TR-5: Would the project result in inadequate emergency access?</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
<td>Less than Significant after Mitigation</td>
</tr>
<tr>
<td>TR-6: Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
</tbody>
</table>
## Alternatives Considered but not Carried Forward in this EIR

During the preliminary planning of the Project and the scoping process for the EIR, several alternatives to the Project were evaluated and/or suggested. These alternatives are summarized below, and are evaluated to determine if they meet the qualifications for alternatives, as required under CEQA.

In accordance with CEQA Guidelines Section 15126.6(a), an alternative must meet the following three criteria: 1) the alternative must attain most of the Project’s basic objectives; 2) the alternative must avoid or substantially reduce the significant environmental impacts of the proposed project; and 3) the alternative must be potentially feasible. An EIR need not analyze an alternative whose impact cannot be

<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Project</th>
<th>Alternative 1 (Option 1b) - No Project Alternative&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Alternative 2 - Structured Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-TR-1: Would the project result in a cumulatively considerable contribution to a significant cumulative impact related to transportation?</td>
<td>Significant</td>
<td>Significant</td>
<td>Significant</td>
</tr>
<tr>
<td><strong>Utilities and Service Systems</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UT-1: Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>UT-2: Would the project have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>UT-3: 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?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>UT-4: Would the project be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
<tr>
<td>C-UT-1: Would the project result in a cumulatively considerable contribution to cumulative impacts related to utilities?</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
<td>Less than Significant</td>
</tr>
</tbody>
</table>
reasonably ascertained and whose implementation is remote and speculative. Furthermore, an EIR need not consider every conceivable alternative, but must consider a reasonable range of alternatives that will foster well-informed decision-making and public participation.

4.2.1 Alternative Location

In accordance with CEQA Guidelines Section 15126.6(f)(2) Alternative Locations, research was conducted to determine if suitable alternative locations are available nearby. Approximately 2.5 acres would be required to accommodate the proposed Restoration Hardware building and associated improvements such as parking, landscaping, and low impact development features. Review of the Town’s parcel database identified four parcels that are underutilized and at least 2.5 acres in size. However, all four parcels are designated either single or multi-family residential and are located within residential communities. No parcels were found that have a commercial General Plan land use designation that would allow a retail facility. And, it is not reasonably foreseeable that the Town of Corte Madera would approve a General Plan Amendment to convert land from a residential designation to a commercial or mixed use designation.

4.2.2 Restore Gravel Lot to Marsh/Wetlands

During the scoping process, a member of the public suggested that the gravel lot be restored to marsh or wetlands. The 1995 agreement between the Town and The Village owners requires that the gravel lot be used for “public parking purposes.” Under this agreement, the site cannot be modified to preclude its use for parking without mutual consent of the Town and The Village owners. It is not reasonably foreseeable that the agreement would be changed to allow conversion of the gravel lot to marsh, as both The Village and the Town have found that the additional parking is valuable. Therefore, this suggested alternative is found to be infeasible. In addition, it does not meet most of the Project Objectives.

4.2.3 Place Restoration Hardware Building on Gravel Lot

During the scoping process, a member of the public suggested that the gravel lot be used for the proposed Restoration Hardware building. In the 1995 agreement between the Town and The Village owners, the gravel lot must be used for “public parking purposes.” Although construction of the Restoration Hardware building would not preclude the gravel lot from also being used for parking, it would significantly decrease the amount of parking that could be provided. Of the 3.81 acres, approximately one acre would be required for the building, leaving a little over 2 acres for parking. Therefore, this suggested alternative was determined to be infeasible. In addition, it could potentially have greater impacts than the Project, to nearby biological resources.

4.2.4 Structured Parking with Ground-level Retail

During the scoping process, a member of the public suggested that a structured parking facility be built with retail uses on the ground floor. This alternative is similar to Option 1b of the No Project Alternative, which includes the potential for a multi-story structure with retail on the bottom and parking on the top two levels. Please refer to the analysis of Alternative 1.
4.2.5 Mixed-Use (Affordable and Senior Housing)

During the scoping process, a member of the public suggested that the Project include affordable and senior housing. This suggestion is consistent with the General Plan. However, the Project does not result in any impacts to housing in general, or affordable or senior housing in particular. Therefore, this suggestion does not qualify as an alternative under CEQA, because it would not avoid or substantially reduce a significant impact of the Project.
5. Other CEQA-required Sections

5.1 Effects Found not to be Significant

CEQA Guidelines Section 15128 requires an EIR to briefly describe any possible significant effects that were determined not to be significant and were, therefore, not discussed in detail in the EIR. For the purposes of this Draft EIR, an evaluation of agricultural and forest resources, mineral resources, and population and housing were eliminated from further evaluation during scoping for the reasons presented below.

5.1.1 Agriculture and Forest Resources

The Project site does not include any Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or land covered by a Williamson Act contract (Corte Madera General Plan, April 2009). In addition, the Project site is not zoned for agricultural, forest land, or timberland, nor are there any agricultural or forest lands within the site (Corte Madera Zoning Ordinance 1994). No impact to agriculture or forest resources would occur.

5.1.2 Mineral Resources

The Project is located on an existing developed site that is built upon bay fill. Construction of the Project would not result in the loss of a known mineral resource or availability of a locally-important mineral resource recovery site as delineated on a land use plan, such as a local general plan or specific plan. Neither the Town of Corte Madera General Plan (Corte Madera 2009) nor the Marin Countywide Plan (Marin County 2007) designates the Project site as having a known mineral resource of value. No impact to mineral resources would occur.

5.1.3 Population and Housing

The Project would not remove housing or otherwise displace people. No impact would occur. For a discussion of the Project’s growth-inducing impacts, refer to Section 5.4 below.

The Town of Corte Madera General Plan Update EIR analyzed whether implementation of the General Plan would result in housing impacts by creating an imbalance between employment and housing as measured by the jobs/housing balance. The jobs/housing balance is a metric designed to indicate the relative growth of economic activity (represented by the number of jobs) to the relative growth of housing (represented by the number of existing or projected housing units). Although the jobs/housing balance can be a valuable planning tool, an EIR need not evaluate the jobs/housing balance, because CEQA does not require the evaluation of social or economic impacts, specifically the economic impacts related to the creation of jobs. However, the direct impacts of a project on housing, e.g., the demolition of housing units, are a physical environmental impact that must be evaluated in an EIR. And, reasonably foreseeable indirect impacts of a project caused by the need to build additional housing must be evaluated in an EIR.

The direct impacts of the Project on housing are evaluated in this section above (No Impact). Reasonably foreseeable indirect impacts of the Project on housing are evaluated in Section 3.11 Public Services and Recreation, under Impact PSR-1 (Less than Significant).
5.2 Energy Resources

To guarantee that energy implications are considered in Project decisions, Appendix F, Energy Conservation, in the CEQA Guidelines requires that EIRs “include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.”

The following goals, policies, and implementation programs from the Corte Madera General Plan 2009 are applicable to the Project regarding energy service.

**Goal RCS-2 Reduced consumption of non-renewable energy sources in Corte Madera.**

RCS-2.6 Reduce energy consumption in buildings by balancing energy efficient design with good planning principles.

**Implementation Program RCS-2.6.a: Energy Efficient Building Design**

- Require energy efficient site and building design in all new development projects consistent with the requirements of Title 24 of the California Administrative Code. Measures may include, but are not limited to, building orientation and shading, landscaping, use of active and passive solar heating and hot water system, etc.

**Goal RCS-5 An enhanced environment through conservation of valuable resources.**

RCS-5.1 Minimize waste through reducing, reusing, and recycling. Encourage reduced consumption of non-renewable resources by expanding choices for using and reusing materials, energy, and water in an efficient manner.

This analysis evaluates the use of energy resources (e.g., fuel and electricity) associated with the construction and operation of the Project. For construction, the analysis considers whether construction activities would use large amounts of fuels or energy, and whether they would be used in a wasteful manner. For energy used during operation and maintenance, the analysis identifies energy use that would occur with implementation of the Project to determine whether large amounts would be used and whether they would be used in a wasteful manner.

Construction of the Project would require the use of fossil fuels (primarily gas, diesel, and motor oil) for a variety of activities, such as excavation, grading, demolition, and vehicle travel. The precise amount of construction-related energy consumption is uncertain. However, construction would not require a large amount of fuel or energy usage because of the moderate number of construction vehicles and equipment, worker trips, and truck trips that would be required for a Project of this scale (see Chapter 2, Project Description). In addition, equipment idling times would be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes or less (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Therefore, Project construction would not encourage activities that would result in the use of large amounts of fuel and energy in a wasteful manner.

Project operation would consume energy for multiple purposes, including but not limited to building heating and cooling, lighting, appliances, and electronics. In addition, vehicle trips associated with operation would consume gasoline. Annual energy use of the building is anticipated to include...
approximately 940 MWh of electricity and 4,800 therms of natural gas. This is based on energy use of existing similar-sized Restoration Hardware facilities.

The estimate of the Project’s energy use does not account for energy savings that would result from implementation of Mitigation Measure GHG-1, Greenhouse Gas Reduction Plan, which is described in Section 3.6, Greenhouse Gases. Implementation of Mitigation Measure GHG-1 requires the Project proponent to prepare and implement a Greenhouse Gas Reduction Plan that contains specific and measurable energy-saving features, including exceeding the State of California Title 24 requirements, using Energy Star efficient fans and refrigerators, and other energy-saving features. The increase in energy demand resulting from the Project would not be expected to require or result in the construction of new sources of energy supplies or additional energy infrastructure capacity, and the Project would not conflict with applicable energy policies or standards in the Town General Plan. Therefore, operation of the Project would not use large amounts of energy and would not use it in a wasteful manner.

5.3 Significant Unavoidable Effects

Section 2100(b)(2)(A) of CEQA and Section 15126.2(b) of the CEQA Guidelines require identification of significant environmental effects that cannot be avoided if the proposed Project were implemented. Significant unavoidable impacts are those impacts identified in Section 3 of this EIR that remain significant after implementation of mitigation (i.e., impacts that cannot be reduced to a level of insignificance).

The Project does not have any significant unavoidable effects. Although the Project has the potential to result in a number of significant environmental impacts, all can be avoided through the adoption of appropriate mitigation measures that will reduce those effects to a less-than-significant level.

5.4 Significant Irreversible Environmental Changes

Section 21100(b)(2)(B) of CEQA requires that an EIR include a discussion of significant irreversible environmental changes that would result from Project implementation. CEQA Guidelines Section 15126.2(c) describes irreversible environmental changes in the following manner:

“Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

Construction activities associated with the Project would result in an irretrievable and irreversible commitment of non-renewable resources through the use of construction materials. This would include the use of fossil fuels (such as gasoline, diesel and oil) during the construction period, and the use of earth minerals and ores (such as concrete and steel). The Project would expand The Village regional shopping center in areas that have already been developed and would not expand or modify off-site roadways; therefore, the Project would not modify regional access or result in access to a previously inaccessible area. As a proposed commercial shopping center expansion, the Project is not
representative of a land use type that would result in accidents that could lead to irreversible environmental damage. Overall, given the Project’s low consumption of irretrievable resources, such commitment is justified.

5.5 Growth-inducing Impacts of the Project

CEQA requires that the EIR evaluate the growth-inducing impacts of the Project. CEQA Guidelines Section 15126.2(d) describes growth-inducing impacts in the following manner:

“[T]he ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.” (CEQA Guidelines Section 15126.2(d)).

The Project would expand The Village by approximately 46,000 square feet and increase employment by approximately 118 employees. The modest increase of 10% retail space at The Village would not result in a substantial demand on community service facilities and would not result in the need for new or physically altered public facilities (see Section 3.11, Public Services and Recreation). The increase in employment and retail space would lead to minor economic growth consistent with the growth already approved in the Town’s General Plan (Corte Madera 2009).

Although the Project would increase employment opportunities at The Village, it is not anticipated that it would result in an indirect increase in population that would indirectly require the construction of housing. It is anticipated that a majority of the new employees would be existing residents of Corte Madera and the surrounding communities. In a review of home zip codes of employees of the existing Restoration Hardware store, the average distance from The Village was 14 miles. For those that may move to Corte Madera to work at the new store, they would live in existing housing that is already serviced by existing fire, police, school and park facilities (see Section 3.11, Public Services and Recreation).

The Project is located within the Town limits and in areas of previous development. The Project would not expand or modify regional roadways, highways, water or wastewater treatment facilities, water supplies, or otherwise remove an obstacle to population growth. The Project would not result in the provision of access to a previously inaccessible area, and as a modest commercial shopping center expansion, the Project does not include characteristics that encourage or facilitate other growth-inducement activities in the Project area.

5.6 Environmentally Superior Alternative

The CEQA Guidelines require the identification of an environmentally superior alternative to the proposed Project (Section 15126.6[e]). If it is determined that the No Project Alternative would be the environmentally superior alternative, then the EIR shall also identify an environmentally superior
alternative among the other Project alternatives (Section 15126.6[e][2]). For reference, significance is determined based on substantial or potentially substantial adverse changes of any of the physical environmental conditions due to the Project. The degree of change is evaluated against existing environmental conditions. Please refer to Chapter 4, Alternatives Description and Analysis, for a comparison of the primary differences in environmental impacts among the alternatives and the Project.

Option 1a of the No Project Alternative (Existing Conditions) is environmentally superior to the Project and the other alternatives, because it would have no impacts. When the No Project Alternative is selected as the Environmentally Superior Alternative, the CEQA Guidelines require that an environmentally superior alternative be selected from among the other alternatives. As discussed in Chapter 4, this option of the No Project Alternative does not fulfill any of the Project objectives.

No significant and unavoidable impacts have been identified for either the Project or the No Project Alternative (Option 1b, Reasonably Foreseeable Conditions) nor Alternative 2, Structured Parking. The impacts of the Project and the two alternatives would be very similar with implementation of mitigation measures. Nonetheless, the Project and the two alternatives are different in the following respects.

The Project would improve the gravel lot, whereas the two alternatives would not improve the gravel lot. The Project would be subject to Mitigation Measures TR-3b, TR-3c, and TR-3d, which would serve to avoid or reduce the effects of constructing the gravel lot to a less-than-significant level by protecting pedestrian safety, requiring off-site parking when necessary, and prohibiting conflicts with the Bay Trail. The Project would also be subject to Mitigation Measures BIO-1a, AES-1, HWQ-1, HWQ-2, and HWQ-3, all of which would serve to avoid or reduce the effects of constructing and operating the gravel lot to a less-than-significant level by protecting salt marsh harvest mouse habitat, controlling nighttime lighting, and protecting the water quality of the marsh.

The two alternatives would build a separate multi-story parking structure at The Village, whereas the Project would not. With the two alternatives the existing uses at the gravel lot would continue to operate as they do today. The additional structure could have an increased effect on scenic vistas and visual contrast compared to the Project. However, the additional structure would be limited to a height of 46 feet and be subject to the general plan, zoning, preliminary and precise plan, and design review requirements, which would serve to reduce the visual effects to a less-than-significant level.

Therefore, the Project, Option 1b of the No Project Alternative, and Alternative 2 would have very similar environmental impacts after mitigation, and none is environmentally superior to the others. As discussed in Chapter 4, the Project would fulfill all of the Project objectives, however, the two alternatives would not improve the gravel lot to increase convenience and safety and would not allow the Town to eliminate costs associated with future maintenance, security, liability, and any future improvements needed at the facility.
6. **List of Preparers**

6.1 **Town of Corte Madera**
- Adam Wolff, Planning Director
- Phil Boyle, Senior Planner
- Judith Propp, Assistant Town Attorney

6.2 **GHD Inc.**
- Brian Bacciarini, Senior Environmental Scientist
- Kristine Gaspar, Senior Environmental Planner, QA Reviewer
- Patricia Collins, Senior Environmental Planner
- James Alcorn, AICP, Senior Planner
- Jonathan Eller, Ph.D., Environmental Scientist
- Chryss Meier, Senior Environmental Planner
- Jessica Nadolski, Senior Biologist
- Rebecca Batzel, Environmental Planner
- Nick Colley, Environmental Scientist
- Elissa Overton, Project Administrator
- Renee Remillard, Graphic Designer

6.3 **Subconsultants**

6.3.1 **Fehr & Peers (Traffic)**
- Bob Grandy, Principal
- Matt Crane, Transportation Engineer

6.3.2 **Paleontology**
- Kenneth Finger, PhD

6.3.3 **Illingworth & Rodkin (Noise)**
- Michael Thill, Acoustical Specialist

6.3.4 **Visual Simulations**
- William Kanemoto & Associates

6.3.5 **Olofson Environmental (Biological Resources)**
- Jennifer McBroom, Program Manager/Biologist

6.3.6 **Sonoma State University Anthropological Studies Center**
- Kate Green, Staff Archaeologist