

CHAPTER 3: ENVIRONMENTAL IMPACT ANALYSIS

Organization of Issue Areas

This chapter sets forth the physical and regulatory environmental setting and addresses the environmental impacts of the proposed project with respect to 15 environmental resource areas. The discussions of the environmental setting describe the present physical conditions, or baseline conditions, in the project area. The baseline used for the analysis of environmental impacts under the California Environmental Quality Act (CEQA) reflects the conditions present at the time the Notice of Preparation (NOP) for this Draft Environmental Impact Report (Draft EIR) was published. The potential impacts of the proposed project are compared against the existing baseline conditions for each environmental resource.

Environmental Topics Addressed in this Draft EIR

The proposed project is analyzed in this Draft EIR from the perspective of the following 15 environmental resource areas:

- Aesthetics
- Agricultural Resources and Forestry Resources
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions and Energy
- Hazards, Hazardous Materials, and Wildfire
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Utilities and Service Systems

Format of the Environmental Analysis

Each resource area analyzed in this chapter includes the subsections summarized below.

Introduction

This subsection summarizes what will be discussed in the respective environmental topic section, states what informational documents are used as the basis for the section, and indicates what related comments, if any, were received during the EIR public scoping period.

Environmental Setting

This subsection describes the existing, baseline physical conditions of the project site and surroundings (e.g., existing land uses, transportation conditions, noise environment) with respect to each resource topic at the time the NOP was issued. Conditions are described in sufficient detail and breadth to allow a general understanding of the environmental impacts of the proposed project.

Regulatory Framework

This subsection describes the relevant federal, State, and local regulatory requirements that are directly applicable to the environmental topic being analyzed.

Impacts and Mitigation Measures

This subsection evaluates the potential for the proposed project to result in direct and indirect adverse impacts on the existing physical environment, with consideration of both short-term and long-term impacts. The analysis covers all phases of the proposed project, including construction and operation. The significance thresholds for environmental impacts are defined at the beginning of this subsection, and the discussion of the approach to the analysis explains how the significance thresholds have been applied to evaluate the impacts of the proposed project.

Indirect impacts are discussed only for those resources for which they have the potential to occur (e.g., population and housing, cultural resources, air quality, and biological resources). Both project-level and cumulative impacts are analyzed. Project-level impacts could result from actions related to implementation of the proposed project. Cumulative impacts could result from implementation of the proposed project in combination with other cumulative projects in the study area. As discussed under “Cumulative Impacts,” below, the projects listed in Table 3-1, in conjunction with the proposed project, are considered the cumulative scenario for the analysis of cumulative impacts.

Impacts are analyzed and the respective assessment and findings are included in this Draft EIR, applying the following levels of significance:

- **No Impact.** A conclusion of No Impact is reached if no potential exists for impacts or if the environmental resource does not occur in the project area or the area of potential impacts.
- **Less Than Significant.** This determination applies if the impact does not exceed the defined significance criteria or would be eliminated or reduced to a less than significant level through compliance with existing local, State, and federal laws and regulations, or through the implementation of mitigation.
- **Significant and Unavoidable.** This determination applies if the proposed project would result in an adverse impact that exceeds the established significance criteria. While feasible mitigation may be available to reduce impacts, the residual impact would be significant and unavoidable.

Impacts are defined in terms of their context and intensity. Context is related to the uniqueness of a resource; intensity refers to the severity of the impact. Where applicable, best management practices or project improvement measures, or both, are incorporated into the proposed project to limit the potential for a significant impact. Where necessary, mitigation measures are identified for significant impacts to limit the degree or lower the magnitude of the impact; rectify the impact by repairing, rehabilitating, or restoring the affected environment; or compensate for the impact by replacing or providing substitute resources or environments. These impacts conclude with a finding of Less than Significant Impact with Mitigation. Where no mitigation measures are necessary, relevant impacts are concluded to be Less than Significant or to have No Impact.

As part of the impact analysis, mitigation measures are identified, where feasible, for impacts considered significant or potentially significant consistent with CEQA Guidelines Section 15126.4, which states that an EIR “shall describe feasible measures which could minimize significant adverse impacts.” CEQA requires that mitigation measures have an essential nexus and be roughly proportional to the significant impact identified in the EIR. The Applicant is required to implement all identified mitigation measures identified in this chapter, and the lead agency (in this case, the City of Antioch) is responsible for overseeing the Applicant’s implementation of such mitigation measures.

Pursuant to CEQA Guidelines Section 15126.4, mitigation measures are not required for environmental impacts that are found not to be significant. Therefore, for resource topics where this Draft EIR finds the physical environmental impact of the proposed project to be less than significant, but for which the City of Antioch has identified measures that would further lessen the proposed project’s already less than significant impacts, these measures have been identified as “improvement measures.” The Applicant has indicated that if the proposed project were approved, it would incorporate all improvement measures identified in this Draft EIR as part of the proposed project.

Impacts are numbered and shown in bold type. The corresponding mitigation measures, where identified, are numbered and indented, and follow the impact statements. Impacts and mitigation measures are numbered consecutively within each topic and include an abbreviated reference to the impact section (e.g., “LAND” for Land Use and Planning). The following abbreviations are used for individual topics:

- Aesthetics (AES)
- Agricultural Resources and Forestry Resources (AG)
- Air Quality (AIR)
- Biological Resources (BIO)
- Cultural and Tribal Cultural Resources (CUL)
- Geology and Soils (GEO)
- Greenhouse Gas Emissions and Energy (GHG)
- Hazards, Hazardous Materials, and Wildfire (HAZ)
- Hydrology and Water Quality (HYD)
- Land Use and Planning (LAND)
- Noise (NOI)
- Population and Housing (POP)
- Public Services and Recreation (PUB)
- Transportation (TRANS)
- Utilities and Service Systems (UTIL)

Cumulative Impacts

The discussion of cumulative impacts in this subsection analyzes the cumulative impacts of the proposed project, taken together with other past, present, and reasonably foreseeable future projects producing related impacts. The goal of this analysis is to determine whether the overall long-term impacts of all such projects would be cumulatively significant, and to determine whether the proposed project itself would cause a “cumulatively considerable” incremental contribution to any such

cumulatively significant impacts. To determine whether the overall long-term impacts of all such projects would be cumulatively significant, the analysis generally considers the following factors:

- The area in which impacts of the project would be experienced;
- The impacts of the project that are expected in the area;
- Other past, proposed, and reasonably foreseeable projects that have had or are expected to have impacts in the same area;
- The impacts or expected impacts of these other projects; and
- The overall impact that can be expected if the individual impacts from each project are allowed to accumulate.

“Cumulative impacts” refers to two or more individual impacts that, when considered together, are potentially significant, or that compound or increase other environmental impacts (CEQA Guidelines § 15355). Cumulative impacts can result from individually minor but collectively significant impacts taking place over time (40 Code of Federal Regulations [CFR] 1508.7). If the analysis determines that the potential exists for the project, taken together with other past, present, and reasonably foreseeable future projects, to result in a significant or adverse cumulative impact, the analysis then determines whether the project’s incremental contribution to any significant cumulative impact is itself significant (i.e., “cumulatively considerable”). The cumulative impact analysis for each individual resource topic is presented in each resource section of this chapter immediately after the description of the project-related impacts and identified mitigation measures.

A lead agency may use a list of past, present and probable future projects or a summary of projects contained in an applicable plan to analyze a project’s cumulative impacts. For this Draft EIR, the City has elected to analyze a list of projects with the City’s jurisdiction, as well as within the City of Brentwood. Table 3-1 lists the relevant cumulative projects considered for the environmental analysis and Exhibit 3-1 shows the location of the cumulative projects.

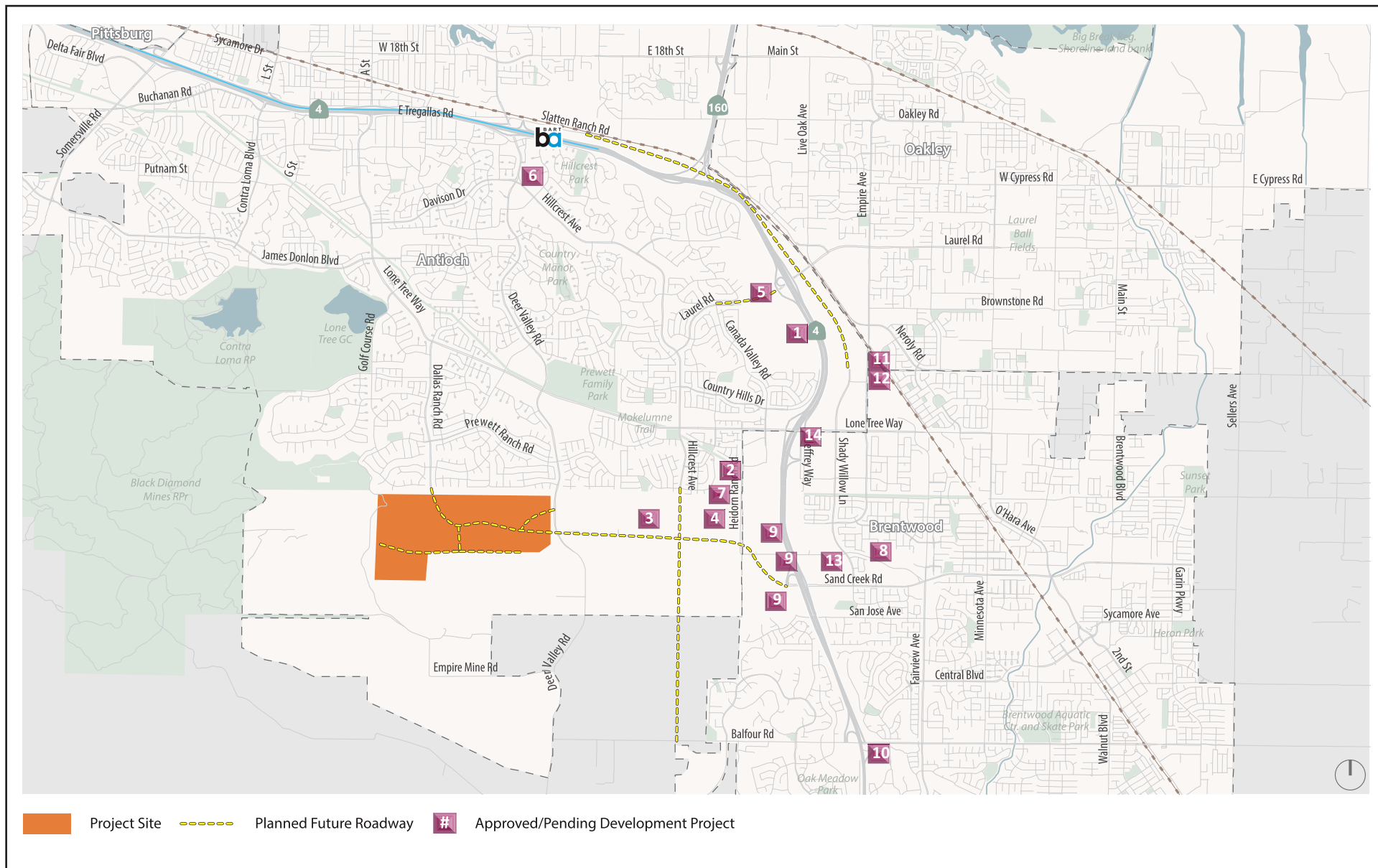
Table 3-1: List of Cumulative Projects

No.	Project	Characteristics	Project Development			
			Number of Units	Square Footage or Acreage	Location	Status
City of Antioch						
1	Park Ridge	Single-family detached dwelling units	525 single-family	171 Acres	Antioch, CA	Approved, under construction
2	Heidorn Village	Single-family detached dwelling units	117 single-family	20 Acres	Antioch, CA	Approved, under construction
3	Aviano	Single-family detached dwelling units	533 single-family	189 Acres	Antioch, CA	Approved
4	Vineyard at Sand Creek	Single-family detached dwelling units	641 single-family	141 Acres	Antioch, CA	Approved, under construction

Table 3 1: List of Cumulative Projects

No.	Project	Characteristics	Project Development			
			Number of Units	Square Footage or Acreage	Location	Status
5	Laurel Ranch	Single-family detached dwelling units	180 single-family	54 Acres	Antioch, CA	Approved
6	Wildflower	Single-family detached dwelling units, condominiums, commercial	22 single-family, 98 condominiums	10 acres of commercial use	Antioch, CA	Approved, under construction
7	Quail Cove	Single-family detached dwelling units	32 units	5.6 Acres	Antioch, CA	Approved, awaiting construction
City of Brentwood						
8	Parkside Villas	Single-family detached dwelling units	37 single-family dwelling units	—	Brentwood, CA	Approved
9	Bridle Gate Residential Elementary School	Single-family detached dwelling units, elementary school	265 single-family, 700 student school	—	Brentwood, CA	Pending Pending
9	Bridle Gate Commercial	Shopping Center	n/a	150,000 square-feet shopping center	Brentwood, CA	Pending
9	The Enclave	Single-family detached dwelling units	258 apartments	—	Brentwood, CA	Pending
10	Brentwood Country Club	Detached active adult dwelling units	63 active adult	—	Brentwood, CA	Approved
11	Orfanos	Single-family detached dwelling units	160 single-family	—	Brentwood, CA	Approved
12	Alvarez Partners	Single-family dwelling units	48 single-family	—	Brentwood, CA	Approved
13	Streets of Brentwood	Apartments, retail	320 apartments	32,000 square feet of retail	Brentwood, CA	Pending
14	Shop at Lone Tree Village	Shopping center	n/a	54,000 square feet of retail	Brentwood, CA	Pending
Total Units/Square footage				3,299 units/236,000 square feet	—	—

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