

4 Introduction to Environmental Analysis

4.1 Environmental Assessment Methodology

This chapter discusses the potential environmental impacts that would result with approval and implementation of the proposed project. The following environmental topics are evaluated in Chapters 5 through 19 of this Draft EIR:

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

4.1.1 Environmental Setting

Existing conditions are the on-site and (as relevant) regional environmental conditions in existence on August 4, 2017 (the time of publication of the Notice of Preparation (NOP), pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15125.

4.1.2 Environmental Analysis

Thresholds of Significance

The environmental analysis first specifies the significance thresholds (i.e., the condition or state, which if reached or surpassed by the proposed project, would signify a negative physical change to the environment [environmental impact]).

Similar terminology has been used in the description of the applicable regulatory framework and development of mitigation measures to provide a reasonable level of consistency between the City's existing, and/or recently approved development projects.

4.1.3 Environmental Impacts and Mitigation Measures

Impacts

This subsection describes changes that would potentially result to the existing physical environment should the proposed project be approved, in accordance with State CEQA Guidelines Sections 15126 and 15126.2. Pursuant to State CEQA Guidelines Section 15143, the discussion focuses on the significant effects that might result if the project is approved. Impacts

are numbered sequentially within each chapter. For example, impacts discussed in Chapter 5 (Aesthetics) are numbered AES-1, AES-2, etc.; impacts in Chapter 9 (Geology and Soils) are numbered GEO-1, GEO-2, etc. A discussion that provides supporting analysis and justification for the impact determination is presented first. Impacts are stated second and conclude with a summary description of the level of significance of the potential impact. If mitigation is required to reduce the significance of the impact, it is stated third. Finally, if mitigation is required, a concluding statement that describes the level of significance of the impact after implementation of mitigation is presented.

It should be noted that assumptions used in the analysis presented in the following resource chapters are based on the highest impact-generating scenarios for the proposed project. For example, the transportation analysis assumed 100 percent age-restricted attached housing at Shadow Lakes and Deer Ridge for the AM peak hour. The analysis also included a 2:1 ratio of age-restricted housing (attached) to assisted living on Shadow Lakes, and an approximate 1.5:1 ratio of age-restricted housing (attached) to assisted living at Deer Ridge in the PM and Saturday peak hours. As a second example, for public services, the highest impact-generating uses are assumed to be 100% assisted living, given the higher frequency of emergency medical services generated by seniors who require extra care.

Mitigation

Pursuant to State CEQA Guidelines Sections 15002, 15021, and 15126.4, mitigation measures are required (as feasible) when significant impacts are identified. Unless otherwise noted, all mitigation measures contained herein are proposed by the lead agency. If a mitigation measure itself would cause a significant impact, in addition to the impact caused by the proposed project alone, that impact is also discussed, although at a lesser level of detail than the project impact (pursuant to State CEQA Guidelines Section 15126.4 (A)(1)(d)). “Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments” (pursuant to State CEQA Guidelines Section 15126.4(A)(2)), and “mitigation measures must be consistent with all applicable constitutional requirements” (pursuant to State CEQA Guidelines Section 15126.4(A)(4)).

Mitigation Monitoring

Public Resources Code Section 21081.6 establishes two distinct requirements for agencies involved in the CEQA process. Subdivisions (a) and (b) of the section relate to mitigation monitoring and reporting, and the obligation to mitigate significant effects where possible. Pursuant to subdivision (a), whenever a public agency completes an EIR and makes a finding pursuant to Section 21081(a) of the Public Resources Code taking responsibility for mitigation identified in the EIR, the agency must adopt a program of monitoring or reporting which will ensure that mitigation measures are complied with during implementation of the proposed project.

4.1.4 Significance Determinations

This Draft EIR includes as much detail as is currently available to maximize information available for public review and thus avoid and/or minimize the need for future environmental documentation (see Chapter 2, Introduction, of this Draft EIR for further explanation of the EIR Process). This Draft EIR includes information gathered from Notice of Preparation comments which is presented at the beginning of each chapter, available literature and reference documents, and applicable data from preparation of prior City EIR's.

The analysis of the project's impacts, as contained in this Draft EIR, is presented to clearly indicate the significance determination for each of the impacts by numbering each impact, with a corresponding numbered impact discussion and, if necessary, mitigation measure(s). The significance determinations are based on a number of factors as explained in each impact section. These thresholds are derived from Appendix G of the State CEQA Guidelines, General Plan policies, ordinances, generally accepted professional standards, and quantified thresholds established by the City of Brentwood or other agencies (such as level-of-service standards for traffic impacts and pollutant emission thresholds adopted by the Air Quality Management District).

The following is an explanation of the different significance determinations made in this Draft EIR:

- **No Impact:** Due to the nature or location of the project, this impact will not occur. For example, underground facilities do not have the potential for long-term visual impacts.
- **Less Than Significant:** Although an impact may occur, it will not be at a significant level based on the standards described above. For example, construction-related air emissions that fall below the adopted standards are less than significant.
- **Less Than Significant With Mitigation:** In this case, there is an impact that may be potentially significant. However, the significance of this impact will be reduced to less-than-significant levels through adherence to and/or implementation of mitigation measures.
- **Significant and Unavoidable:** This determination is made for a potentially significant impact where there is either no mitigation available, or the recommended mitigation measures are not sufficient to reduce the impact to less-than-significant levels. This determination requires a Statement of Overriding Considerations, pursuant to CEQA guidelines Section 15093 (this would need to be adopted by the City Council as part of the resolution, prior to approving the project).

4.2 Effects Not Found to Be Significant

Pursuant to the CEQA Guidelines Section 15128, “An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.” This chapter of the Draft EIR describes the resource areas which were found not to pose any potentially significant effects.

Based on the scope of the proposed project, comment letters in response to the NOP, site visits, review of project applicant materials and technical reports, and additional background research on the construction and operational features of the project, the following resource topics were found to not have impacts that would be considered potentially significant. These topics, therefore, are not subject to further detailed analysis in the EIR.

4.2.1 Agricultural Resources

The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the State Farmland Mapping and Monitoring Program (FMMP). According to the City of Brentwood General Plan Land Use Map, a majority of the project site is designated as Semi-Public Facility, with several small areas associated with the Contra Costa County Flood Control District designated as Public Facility (City of Brentwood, 2014). Further, no Williamson Act contract applies to the project site and the project site does not currently comprise agricultural or forestry uses. As a result, there would be no impact to agricultural and forestry resources.

4.2.2 Mineral Resources

The project site lies within Mineral Resource Zone 1 (MRZ-1), as mapped by the California Department of Mines and Geology (DMG). MRZ-1 zones are “areas where adequate information indicates that no significant mineral despoils are present, or where it is judged that little likelihood exists for their presence” (DMG, 1999). Since the project site is not located within a mineral resource recovery site, there would be no impact to mineral resources.

4.3 Cumulative Impacts

4.3.1 CEQA Requirements

Under the CEQA Guidelines, “a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the environmental impact report (“EIR”) together with other projects causing related impacts” (14 CCR Section 15130(a)(1)). According to CEQA PRC Section 21000 et seq., an EIR must discuss cumulative impacts if the incremental effect of a project, combined with the effects of other projects is “cumulatively considerable” (14 CCR Section 15130(a)). Such incremental effects are to be “viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects” (14 CCR Section 15164(b)(1)). Together, these projects compose the cumulative scenario which forms the basis of the cumulative impact analysis.

Cumulative impacts analysis should highlight past actions that are closely related either in time or location to the project being considered, catalogue past projects, and discuss how they have harmed the environment and discuss past actions even if they were undertaken by another agency or another person. Both the severity of impacts and the likelihood of their occurrence are to be reflected in the discussion, “but the discussion need not provide as great a level of detail as is provided for the effects attributable to the project alone. The discussion of cumulative impacts shall be guided by standards of practicality and reasonableness, and shall focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact” (14 CCR Section15130(b)).

The cumulative analysis must be in sufficient detail to be useful to the decision maker in deciding whether, or how, to alter the project to lessen cumulative impacts. Table 4-1 (Cumulative Projects List) provides a list of projects there were used in assessing the potential for cumulative impacts from the proposed project. Most of the projects included in the cumulative analysis are undergoing, or will be required to undergo, their own independent environmental review under CEQA. Significant adverse impacts of the cumulative projects would be required to be reduced, avoided, or minimized through the application and implementation of mitigation measures. The net effect of these mitigation measures is assumed to be a general lessening of contribution to cumulative impacts.

There are two commonly used approaches, or methodologies, for establishing the cumulative impact setting or scenario. One approach is to use a “list of past, present, and probable future projects producing related or cumulative impacts” (14 CCR Section15130(b)(1)(A)). The other is to use a “summary of projects contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact” (14 CCR Section15130(b)(1)(B)).

This EIR uses the list-based approach to provide a tangible understanding and context for analyzing the cumulative effects of a project. Kimley-Horn coordinated with City of Brentwood staff to determine development projects in the vicinity of the project site that are in various stages of planning, approval, or development. Information for this list was also obtained from the City of Antioch. Table 4-1 (Cumulative Projects List) provides information pertaining to all known projects within Brentwood and Antioch that are in the vicinity of the project site. Each jurisdiction provided information on land uses and project size for specific projects to be included in the cumulative impact analysis. The information provided was also used to estimate traffic on the roadway network for Existing Plus Approved Projects conditions. Traffic associated with the approved and pending projects was assigned through each study area intersection.

Based on the information provided by the City of Brentwood and City of Antioch, cumulative projects in the area would result in approximately 3,404 additional residential units. The City’s General Plan and other planning documents were used as additional reference points in establishing the cumulative scenario for the analysis.

Cumulative Impact Analysis Methodology

The area within which a cumulative effect can occur varies by resource. For example, air quality impacts generally affect a large area (such as the regional Air Basin), while traffic impacts are typically more localized. For this reason, the geographic scope for the analysis of cumulative impacts is identified for each resource area in the following chapters.

The analysis of cumulative effects considers a number of variables, including geographic (spatial) limits, time (temporal) limits, and the characteristics of the resource being evaluated. The geographic scope of each analysis is based on the topography surrounding the project site and the natural boundaries of the resource affected, rather than jurisdictional boundaries. The geographic scope of cumulative effects will often extend beyond the scope of the direct effects, but not beyond the scope of the direct and indirect effects of the proposed project.

| Table 4.3: Short Term Cumulative Projects List (Approved Projects)¹ | | | |
|---|--------------------------|-----------------------------------|---|
| Project No. | Project Name | Existing Use and Site Size | Project Description |
| City of Brentwood | | | |
| 1 | Cornerstone Fellowship | 6.87 acres | 40,540 sf two-story church |
| 2 | Tractor Supply Company | 2.81 acres | Tractor Supply Store; Retail 19,028 SF |
| 3 | Best Western Motel | 0.92 acres | 28,260 SF motel with 45 rooms |
| 4 | Garin Commercial | 9.89 acres | General office building (55,500 SF) and Retail (44,300 SF) |
| 5 | Elite Self Storage | 3.99 acres | Mini-warehouse (170,262 SF) |
| 6 | The Shops at Fairview | 9.60 acres | Retail (94,000 SF) |
| 7 | City Block | 4.47 acres | Retail (40,925 SF); Office (8,439 SF) |
| 8 | The Streets of Brentwood | 53.67 acres | Retail (460,000 SF) |
| 9 | Lone Tree Crossing | 9.69 acres | Retail (117,368 SF) |
| 10 | Palmilla | 77.45 acres | Single-Family Detached Housing: 237 du |
| 11 | Vista Dorado I | 43.90 acres | Single-Family Detached Housing: 82 du |
| 12 | Palermo | 18.50 acres | Single-Family Detached Housing: 96 d du |
| 13 | Mission Grove | 15.60 acres | Single-Family Detached Housing: 58 du |
| 14 | Catchings Ranch | 8.03 acres | Single-Family Detached Housing: 24 du |
| 15 | Bridle Gate | 134 acres | Single-Family Detached Housing: 336 du |
| 16 | Parkside Villas | 10.40 acres | Single-Family Detached Housing: 35 du Apartment: 2 du |
| 17 | Brentwood CC | 26 acres | Single-Family Detached Housing: 63 du |
| 18 | Villagio | 42.30 acres | Single-Family Detached Housing: 151 du |
| 19 | Amber Meadows | 14.43 acres | Single-Family Detached Housing: 69 du Apartment: 126 du |
| 20 | Mission Park | 6.07 acres | Single-Family Detached Housing: 48 du |
| 21 | Sellers Pointe | 16.63 acres | Single-Family Detached Housing: 84 du |
| 22 | Bella Fiore | 13.5 acres | Single-Family Detached Housing: 45 du |
| 23 | Lexington Park | 55.41 acres | Single-Family Detached Housing: 10 du |
| 24 | Pioneer Square | 10.89 acres | Single-Family Attached Housing: 72 du |
| 25 | Vista Dorado II | 16.18 acres | Single-Family Detached Housing: 50 du |
| Total Residential Units | | | 1,588 units |
| Antioch | | | |
| 26 | Park Ridge | 171 acres | Single-Family Detached Housing: 525 du |
| 27 | Heidorn Village | 20.09 acres | Single-Family Detached Housing: 117 du |
| 28 | Aviano | 189 acres | Single-Family Detached Housing: 533 du Apartment: 641 du |
| Total Residential Units | | | 1,816 units |
| TOTAL RESIDENTIAL UNITS | | | 3,404 UNITS |
| Notes: | | | |
| 1. The list above has been adjusted to account for reasonably foreseeable pending projects (not already approved) for the long term cumulative condition. The long term cumulative plus project condition is assessed at a qualitative level of analysis. | | | |
| Source: Appendix E of the Traffic Impact Study-Draft Report prepared by Kimley-Horn, 2018. | | | |

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