

El Dorado Hills Apartments Project
Draft Environmental Impact Report

SCH No. 2017042017



Prepared by:

IMPACT
SCIENCES

505 14th Street, Suite 1230
Oakland, California 94612

Prepared For:

County of El Dorado
Planning and Building Department
2850 Fairlane Court, Building C
Placerville, CA 95667

June 2017

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2850 Fairlane Court, Building C
Placerville, CA 95667

Prepared by:

Impact Sciences, Inc.
505 14th Street, Suite 1230
Oakland, California 94612
(510) 267-0494

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1.0 INTRODUCTION

The County of El Dorado (County) has prepared this Environmental Impact Report (EIR) to provide an assessment of the potentially significant environmental effects of the proposed El Dorado Hills Apartments project (“proposed project”), located on the northwestern corner of the intersection of Town Center Boulevard and Vine Street within the Town Center East Commercial Center in the unincorporated community of El Dorado Hills. As required by the California Environmental Quality Act (CEQA), this Draft EIR (1) assesses the potentially significant environmental effects of the proposed project, including cumulative impacts of the proposed project in conjunction with other reasonably foreseeable development; (2) identifies feasible means of avoiding or substantially lessening significant adverse impacts; and (3) evaluates a range of reasonable alternatives to the proposed project, including the No Project alternative.

1.1 PURPOSE OF THIS EIR

The purpose of this EIR is to inform decision makers for the County of El Dorado, other responsible agencies, and the public of the environmental consequences of implementing the project as proposed. The EIR has been prepared in accordance with and in fulfillment of the *CEQA Statute and Guidelines (State CEQA Guidelines)*. The County of El Dorado is the Lead Agency for this EIR. The County of El Dorado Board of Supervisors has the principal responsibility for authorizing the implementation of the project as proposed.

As described in CEQA and the *State CEQA Guidelines*, public agencies are required to avoid or substantially lessen significant environmental effects of a project where feasible. A public agency has an obligation to balance the potential significant effects on the environment from the implementation of a proposed project with its benefits, including economic, social, technological, legal, and other benefits. This Draft EIR is an informational document, the purpose of which is to identify the potentially significant effects of the proposed project on the environment and to indicate the manner in which those significant effects can be avoided or lessened; to identify any significant and unavoidable adverse impacts that cannot be mitigated; and to identify reasonable and feasible alternatives to the proposed project that would eliminate any significant adverse environmental effects or reduce the impacts to a less than significant level.

The Lead Agency is required to consider the information in the EIR, along with any other relevant information, in making its decisions on the proposed project. Although the EIR does not determine the ultimate decision that the Board of Supervisors will make regarding implementation of the proposed project, CEQA requires the Lead Agency to consider the information in the EIR and make findings

regarding each significant effect identified in the EIR. If the Board of Supervisors determines the EIR to be adequate, it will certify the Final EIR prior to taking action on the proposed project and requested entitlements. Other agencies may also use this EIR in their review and approval processes.

1.2 SUMMARY OF THE PROPOSED PROJECT

1.2.1 Background

The project site is within the Village T area of a larger master planned community identified as the El Dorado Hills Specific Plan (EDHSP) area. The EDHSP was approved in July 1988, along with a certified Environmental Impact Report (EIR [SCH No. 86122912]), by the Board of Supervisors. Village T comprises the El Dorado Hills Town Center East (TCE) Commercial Development Plan area, a 925,000-square-foot commercial center. In August 1995, the Board of Supervisors approved the Planned Development Permit (PD94-0004) for establishing the official Commercial Development Plan for the El Dorado Hills TCE. In conjunction with approval of the TCE project, the Board adopted a Mitigated Negative Declaration.

Since approval of the TCE project, development of the Village T area has occurred in phases. All roads (both public and private), site accesses, and amenities (such as Town Center Lake, trails) within the TCE area have been constructed, and the majority of the planned buildings have been built. The project site is one of the few remaining vacant properties in the TCE area.

In January 2014, the project applicant proposed a 250-unit apartment complex on the project site and requested a number of entitlements to facilitate construction and occupancy of the proposed project. The requested entitlements included: (1) a General Plan Amendment (A14-0001) to add a new policy that would increase the maximum allowed density on the project site; (2) an amendment to the EDHSP (SP86-0002-R) to allow multi-family residential on the project site; (3) a rezone (Z14-0001) of the project site to allow multi-family residential; (4) and a revision to the TCE development plan (PD94-0004-R) to allow multi-family residential on the project site.

On December 2, 2014, the Board certified an Initial Study/Mitigated Negative Declaration (IS/MND) tiered from the previous CEQA documentation for the project, and approved the requested entitlements. The legal validity of the IS/MND and the other approvals are the subject of ongoing litigation; although a trial court has issued a judgment and writ in that litigation, the trial court's rulings are currently stayed, pending the outcome of an appeal.

The proposed project is a modified version of the project that was approved in December 2014 and is now in litigation. The project applicant is seeking new approvals to authorize the modified project. The litigation concerning the original version of the project will continue to its conclusion, unless the County approves the modified project and certifies the EIR, and those approvals and certification become final and effective, before the appellate proceedings terminate.

1.2.2 Proposed Project

The applicant proposes to construct a 4-story, 214-unit apartment complex, comprising two apartment buildings, a parking structure, outdoor recreation areas, and an informal open space area. The apartment units would range from 576 square feet to 1,195 square feet in size, with a mix of 114 studio/1-bedroom units and 100 2-bedroom units. A 5-level parking structure located in the middle of the complex would provide approximately 409 vehicle parking spaces and 22 motorcycle parking spaces for residents and visitors, with an additional five spaces of surface parking provided elsewhere on the site. The residential buildings would be between 42 and 52 feet in height, with some architectural elements reaching 60 feet. The parking structure would be 60 feet in height.

The proposed project would be designed in conformance with the proposed *El Dorado Hills Town Center East Urban Infill Residential Area Residential Design Guidelines and Development Standards* (EDH Design Guidelines). Way-finding, security lighting, and perimeter fencing would be provided in conformance to EDH Design Guidelines and County standards. The proposed project would provide ornamental landscaping within the interior common areas and along the perimeter that would be consistent with the existing landscaping in the TCE area.

Four entitlements would be necessary to facilitate construction and occupancy of the proposed project:

- 1) General Plan Amendment (A16-0001) adding a new Policy under Objective 2.2.6 (Site Specific Policy Section) to increase the maximum residential density allowed in the General Plan from 24 dwelling units per acre to a maximum of 47 dwelling units per acre specifically for the 4.56-acre project site within the TCE Planned Development area identified as Assessor's Parcel Numbers 121-290-60, 61, and 62.
- 2) El Dorado Hills Specific Plan Amendment (SP86-0002-R-2) incorporating multi-family residential use, density, and related standards for the project site. The project site would be designated as "Urban Infill Residential" within the Village T area of the El Dorado Hills Specific Plan.
- 3) Rezoning (Z16-0004) of the project site from General Commercial-Planned Development (CG-PD) to Multi-Family Residential-Planned Development (RM-PD) and revisions to the RM-zone district development standards applicable to the proposed 214-unit apartment project.
- 4) Revision to the approved TCE Development Plan (PD94-0004-R-3) incorporating multi-family residential use, density, and related design and development standards for the proposed 214-unit apartment project within Planning Area 2 of the TCE Plan area.

1.3 ENVIRONMENTAL REVIEW PROCESS

The County issued a Notice of Preparation (NOP) for this Draft EIR on April 7, 2017 and circulated it for 30 days. A scoping meeting was held at El Dorado Hills Fire Department, 1050 Wilson Boulevard, El Dorado Hills, CA 95762 on April 25, 2017.

The County has filed a Notice of Completion (NOC) with the Governor's Office of Planning and Research, State Clearinghouse indicating that this Draft EIR has been completed and is available for review and comment by the public.

The Draft EIR will be available for review by the public and interested parties, agencies, and organizations for a review period of 46 days, as required by California law. In reviewing the Draft EIR, reviewers should focus on the document's adequacy in identifying and analyzing significant effects of the proposed project on the environment and ways in which the significant effects of the project might be avoided or mitigated. To ensure inclusion in the Final EIR and full consideration by the Lead Agency, comments on the Draft EIR must be received in writing during the 45-day public review period at the following address:

Contact:

Rommel (Mel) Pabalinas, Senior Planner
The County of El Dorado
Development Services Department, Planning Services
2850 Fairlane Court, Building C
Placerville, California 95667

Email address: Rommel.Pabalinas@edcgov.us

Responses to comments on the Draft EIR will be prepared and included in the Final EIR. The Draft EIR text and appendices, together with the response to comments document and any text changes to the Draft EIR made in response to comments or other new information, will constitute the Final EIR.

The County of El Dorado will review the Final EIR for adequacy and consider it for certification pursuant to the requirements of Section 15090 of the *State CEQA Guidelines*. If the County certifies the Final EIR, it will then consider the project separately for approval or denial. If the County chooses to approve the project, findings on the feasibility of reducing or avoiding significant environmental effects will be made and, if necessary, a Statement of Overriding Considerations will be prepared. If the County approves the project, a Notice of Determination (NOD) will be prepared and filed with the State Clearinghouse and the County Clerk. The NOD will include a description of the project, the date of approval, an indication of whether the Findings and Statement of Overriding Considerations were prepared, and the address where the Final EIR and record of project approval are available for review.

1.4 SCOPE OF THIS EIR

The County of El Dorado completed an Initial Study for the proposed project, as described in Section 15063 of the *State CEQA Guidelines*, and determined that a Project EIR would be prepared. Based on the Initial Study (which was made available to the public on the County website, with the web address included in the NOP for this EIR) and comments received during the 30-day scoping period, the County determined that the following key resource topics would be evaluated in detail in the Draft EIR:

- Air Quality
- Biological Resources
- Cultural Resources, including Tribal Cultural Resources
- Greenhouse Gas Emissions
- Land Use and Planning
- Noise
- Public Services, including Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Energy

1.5 REPORT ORGANIZATION

This Draft EIR is organized into the following sections:

Section 1.0, Introduction, provides an introduction and overview describing the purpose of this EIR, the resource topics addressed in this Draft EIR, and the environmental review process.

Section 2.0, Executive Summary, presents a brief description of the proposed project, summarizes environmental consequences that would result from implementation of the proposed project, provides a summary table that denotes anticipated significant environmental impacts, describes identified mitigation measures, and indicates the level of significance of impacts before and after mitigation. In addition, this section also presents a brief description of alternatives to the proposed project and provides a table comparing each of the alternatives to the proposed project. The summary also presents areas of controversy relative to the proposed project that are known to the Lead Agency.

Section 3.0, Project Description, describes the proposed project, including the proposed land uses, on-site parking and circulation, as well as other improvements such as pedestrian facilities, landscaping, and utilities to serve the proposed development. It also lists the approvals and authorizations needed for the proposed project and lists the Lead and Responsible agencies with discretionary approval authority relative to the proposed project.

Section 4.0, Environmental Impact Analysis, describes the environmental setting, including applicable plans and policies for each environmental topic identified above; provides an analysis of the significant

project-level and cumulative environmental impacts of the proposed project; and identifies mitigation measures to avoid or reduce the magnitude of significant impacts.

Section 5.0, Alternatives, summarizes alternatives to the proposed project and the comparative environmental consequences of each alternative. This section includes an analysis of the No Project alternative, among others.

Section 6.0, Other CEQA Considerations, provides a discussion of the project's significant and unavoidable impacts and significant irreversible environmental changes, the potential for growth inducement due to project implementation, and mandatory findings of significance.

Section 7.0, Report Preparation, provides a list of the individuals involved in the preparation of the Draft EIR, including Lead Agency staff and consultants.

Appendices to this Draft EIR include the technical reports used to prepare the Draft EIR sections, as well as the Initial Study and NOP.

2.0 EXECUTIVE SUMMARY

2.1 PURPOSE

This Draft EIR provides an assessment of the potentially significant environmental effects that could result from the implementation of the proposed El Dorado Hills Apartments project (“proposed project”), located on the northwestern corner of the intersection of Town Center Boulevard and Vine Street within the Town Center East (TCE) Commercial Center in the unincorporated community of El Dorado Hills. This Executive Summary is intended to provide the decision makers, responsible agencies, and the public with a clear, simple, and concise description of the proposed project and its potential significant environmental impacts.

The *California Environmental Quality Act (CEQA) Guidelines* (Section 15123) requires that a summary be included in an EIR that identifies all major conclusions, identifies each significant effect, recommended mitigation measure(s), and alternatives that would minimize or avoid potential significant impacts. The summary is also required to identify areas of controversy known to the lead agency, including issues raised by agencies and the public and issues to be resolved. These issues include the choice among alternatives and whether or how to mitigate significant effects. All of these requirements of an EIR summary are addressed in the sections below. This summary focuses on the major areas of importance in the environmental analysis for implementation of the proposed project and utilizes non-technical language to promote understanding. The County of El Dorado is the CEQA lead agency for the proposed project.

2.2 PROJECT LOCATION

The project site is located in El Dorado Hills, which is an unincorporated community in western El Dorado County. The project site is approximately 500 feet south of U.S. Highway 50 (U.S. 50), approximately 23 miles east of downtown Sacramento and 60 miles southwest of Lake Tahoe. Folsom Lake is located approximately 4 miles to the northwest.

The approximately 4.56-acre project site, located on the northwestern corner of the intersection of Town Center Boulevard and Vine Street within the TCE Commercial Center in El Dorado Hills, is presently vacant. The site is bounded by Town Center Boulevard to the south, Vine Street to the east, Mercedes Lane to the north, and an open space area that includes Town Center Lake to the west.

The area surrounding the project site is fully developed and consists mainly of retail/commercial uses. An automobile dealership is to the north of the project site, across Mercedes Lane. Other retail/commercial uses are located to the east across Vine Street, which include restaurants and a movie theater (the Regal

Cinemas El Dorado 14 and IMAX), and to the south across Town Center Boulevard, which include a Target store and other retail, restaurant and commercial businesses. Town Center Lake is immediately adjacent to the project site to the west. An El Dorado Sheriff's Department field office is located approximately 1,200 feet to the west, along Town Center Boulevard. The Blue Shield of California campus is further west, across Latrobe Road.

2.3 PROJECT DESCRIPTION

The proposed project would develop a multifamily residential project on the approximately 4.56-acre site. The 4-story, 214-unit apartment complex would consist of two apartment buildings, a parking structure, outdoor recreation areas, and an informal open space area. The apartment units would range from 576 square feet to 1,195 square feet in size, with a mix of 114 studio/1-bedroom units and 100 2-bedroom units. A 5-level parking structure located in the middle of the complex would provide approximately 409 vehicle parking spaces and 22 motor cycle parking spaces for residents and visitors, with an additional five vehicle spaces of surface parking provided elsewhere on the site. The residential buildings would be between 42 and 52 feet in height, with some architectural elements reaching 60 feet. The parking structure would be 60 feet in height.

2.4 PROJECT APPROVALS

The project site is currently designated General Commercial-Planned Development (CG-PD) in the El Dorado Hills Specific Plan (EDHSP). As the proposed project would develop housing on the project site and would have a density of approximately 47 du/ac, the project applicant has applied to the County for the following four entitlements for the proposed project:

- 1) General Plan Amendment adding a new Policy (Policy 2.2.6.6) under Objective 2.2.6 (Site Specific Policy Section) to increase the maximum residential density allowed in the General Plan from 24 dwelling units per acre to a maximum of 47 dwelling units per acre specifically for the 4.565-acre project site within the TCE Planned Development area identified as Assessor's Parcel Numbers 121-290-60, 61, and 62.
- 2) El Dorado Hills Specific Plan Amendment incorporating multi-family residential use, density, and related standards for the project site. The project site would be designated as "Urban Infill Residential" within the Village T area of the EDHSP Plan (see **Figure 3.0-5**, Existing and Proposed EDHSP Land Use Designations in **Chapter 3.0**).
- 3) Rezoning of the project site from General Commercial-Planned Development (CG-PD) to Multi-Family Residential-Planned Development (RM-PD) and revisions to the RM-zone district

development standards applicable to the proposed 214-unit apartment project (see **Figure 3.0-6**, Existing and Proposed Zoning in **Chapter 3.0**).

- 4) Revision to the approved TCE Development Plan incorporating multi-family residential use, density, and related design and development standards for the proposed 214-unit apartment project within Planning Area 2 of the TCE Plan area (see **Figure 3.0-4**, Village T Planning Area Locations in **Chapter 3.0**).

2.5 OBJECTIVES OF THE PROPOSED PROJECT

The objectives of the project are to develop a well-designed, economically feasible residential community that consists of a variety of residential unit types and incorporates smart growth elements. The key objectives for the proposed project are to:

- Implement the County's General Plan by directing growth to areas that are already developed with existing access to services, schools and transportation systems in order to preserve agricultural land and open space;
- Implement goals and objectives of the El Dorado Hills Specific Plan;¹
- Provide a residential population to support commercial development within the Town Center East Planned Development area;
- Assist in increasing the housing supply in El Dorado County to improve the job-housing imbalance, including housing that is more affordable;
- Implement smart growth principles by developing underutilized properties with higher density housing projects.
- Develop a sustainable community that incorporates smart-growth elements, places higher-density housing in close proximity to job centers, and complements adjacent commercial uses; and
- Create a residential development that maximizes density with accessibility to alternate transportation modes, and integrates pedestrian, bicycle, transit, open space and outdoor uses to encourage active centers.

2.6 TOPICS OF KNOWN CONCERN

To determine which environmental topics should be addressed in the Draft EIR for the proposed project, the County circulated a Notice of Preparation (NOP) in April 2017 in order to receive input from interested public agencies and private parties. A copy of that NOP and the Initial Study prepared for the

¹ See http://www.edcgov.us/Government/Planning/Zoning_Ordinances_for_Specific_Plans.aspx#El%20Dorado%20Hills for the goals and objectives listed in the El Dorado Hills Specific Plan.

proposed project are included in **Appendix 1.0, Notice of Preparation, Initial Study, and Scoping Comments** of this Draft EIR. Based on the Initial Study and comments received in response to the NOP, this Draft EIR addresses the following environmental topics in depth:

- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Greenhouse Gas Emissions
- Land Use and Planning
- Noise
- Public Services and Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Energy

2.7 ISSUES TO BE RESOLVED/AREAS OF CONTROVERSY

This Draft EIR addresses environmental issues associated with implementation of the proposed project that are known to the lead agency or were raised by other public agencies or interested parties during the EIR scoping process. Key issues brought to the County's attention during the scoping process centered on traffic congestion in the Town Center area and nearby freeway off-ramps, and pedestrian safety issues resulting from the congestion, as well as parking and increased demand for alternative forms of transportation. Other issues brought to the County's attention include air quality, including emissions of naturally occurring asbestos, noise, land use compatibility and the scale and density of the proposed project, impacts to public services (i.e., fire, police, schools, and parks), and water supply and sewer service. Finally, scoping comments received suggested that the project be located in another part of the Town Center area east of Vine Street, between Rossmore Lane and White Rock Road, and that the County consider a mixed-use project consisting of residential apartments above ground-floor retail on the project site. All of these issues are addressed in **Chapter 4.0, Environmental Impact Analysis**, and **Chapter 5.0, Alternatives**, of this Draft EIR.

2.8 ALTERNATIVES

Consistent with CEQA requirements, a reasonable range of alternatives was evaluated that could feasibly avoid or lessen any significant environmental impacts while substantially attaining the basic objectives of the proposed project. The alternatives analyzed in detail in this Draft EIR are presented below.

Alternative 1: No Project/ No Development Alternative

Section 15126.6(e)(1) of the *State CEQA Guidelines* state that “the purpose of describing and analyzing a 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.” Under the No Project/No Development alternative, no grading or new construction would occur on the project site and the site would remain vacant.

Alternative 2: No Project/Existing Zoning

The *State CEQA Guidelines* state that “the ‘no project’ analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistency with available infrastructure and community services.” Should the proposed project not be approved by the County, it would be reasonable to expect that the project site would be developed by another entity consistent with the site’s existing specific plan land use and zoning designations, and available infrastructure. The project site is designated Commercial (C) in the El Dorado Hills Specific Plan (EDHSP) and zoned General Commercial-Planned Development (CG-PD). Based on a previous commercial land use proposal for the project site,² this alternative would include development of the site with approximately 74,350 square feet of commercial building space, assumed to be retail, in seven buildings ranging in size from 2,750 square feet to 24,700 square feet.³

Alternative 3: Reduced Density

The Reduced Density alternative would reduce the number of residential units on the project site by approximately 50 percent. Specifically, this alternative would develop the project at a density of 24 units per acre, which is the density allowed under the El Dorado County General Plan’s Multifamily Residential land use designation (see General Plan Policy 2.2.1.2). Under this alternative, a total of 108 residential units would be provided in two 2-story buildings on the project site as opposed to a total of 214 residential units provided in two 4-story buildings under the proposed project. The mix of apartment units under this alternative would consist of 58 studio/1-bedroom units and 50 2-bedroom units. In addition, a total of 209 vehicle parking spaces and 11 motorcycle parking spaces would be provided in a central 3-story garage as opposed to a total of 409 vehicle parking spaces and 22 motor cycle parking

² CB Richard Ellis promotional materials for the project site.

³ This amount of retail space is substantially lower than the amount of retail that could be entitled for this site under its current land use designation and zoning. However, this retail scenario is considered a realistic scenario as its development density is consistent with that of the adjoining commercial development in the TCE.

spaces located in a central 5-story garage under the proposed project. This alternative would also include an additional five vehicle spaces of surface parking elsewhere on the site similar to the proposed project.

2.9 IMPACT SUMMARY

A detailed discussion regarding potential impacts of implementation of the proposed project is provided in **Chapter 4.0 Environmental Impact Analysis**. A summary of the impacts of the proposed project is provided in **Table 2.0-1, Summary of Impacts and Mitigation Measures**. Also provided in **Table 2.0-1** are mitigation measures that are proposed to avoid or reduce significant project impacts. The table indicates whether implementation of the recommended mitigation measures would reduce the impact to a less than significant level. **Table 2.0-2, Comparison of Alternatives to the Proposed Project**, presents the environmental impacts of each alternative to allow the decision makers, agencies, and the public to compare and contrast these alternatives with the proposed project and weigh their relative merits and demerits.

**Table 2.0-1
Summary of Impacts and Mitigation Measures**

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1 Air Quality			
Impact AIR-1		Mitigation Measure AIR-1a	
Construction activities associated with the proposed project would result in a violation of an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable national or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	Significant	<p>To ensure that the impact from the project's construction equipment exhaust remains less than significant, the project shall implement at least one of the following EDCAQMD construction mitigation measures:</p> <ul style="list-style-type: none"> Require the prime contractor to provide an approved plan demonstrating that heavy-duty (i.e., greater than 50 horsepower) off-road vehicles to be used in the construction project, and operated by either the prime contractor or any subcontractor, will achieve, at a minimum, a fleet-averaged 15 percent NOx reduction compared to the most recent CARB fleet average. Implementation of this measure requires the prime contractor to submit a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during the construction project. In addition, the inventory list shall be updated and submitted monthly throughout the duration of when the construction activity occurs. Require the prime contractor to use an alternative fuel, other than Diesel, verified by the CARB or otherwise documented through emissions testing to have the greatest NOx and PM10 reduction benefit available, provided each pollutant is reduced by at least 15 percent. 	Less than significant

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
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4.1 Air Quality (cont.)

Impact AIR-1 (cont.)

Mitigation Measure AIR-1b

Prior to the start of construction activities, the project applicant shall coordinate with the El Dorado AQMD to ensure that only low-VOC architectural coatings are utilized during the construction phase of the proposed project, for both indoor and outdoor surfaces. All architectural coatings used during the construction phase shall have a maximum allowable VOC content limit of 50 g/L.

Impact AIR-1 (cont.)

Mitigation Measure AIR-1c

During construction activities, the project applicant shall implement the following Best Available Fugitive Dust Control Measures as outlined in Table C.4 in the AQMD CEQA Guide.

Fugitive Dust Source Category	Control Actions
Earth-moving (except construction cutting and filling areas, and mining operations)	1a. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the District; two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR 1a-1. For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1 Air Quality (cont.)			
Impact AIR-1 (cont.)	Mitigation Measure AIR-1c (cont.)		
	Earth-moving – construction fill areas	1b. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the District; for areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM method 1557 or other equivalent method approved by the District, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content; two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations	
	Earth-moving – construction cut areas and mining operations	1c. Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining areas unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.	
	Disturbed surface areas (except completed grading areas)	2a/b. Apply dust suppression in a sufficient quantity and frequency to maintain a stabilized surface; any	

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1 Air Quality (cont.)			
Impact AIR-1 (cont.)		Mitigation Measure AIR-1c (cont.)	
		<p>area which cannot be stabilized, as evidenced by wind driven dust, must have an application of water at least twice per day to at least 80 percent of the unstabilized area.</p> <p>Disturbed surface areas – completed grading areas</p> <p>2c. Apply chemical stabilizers within 5 working days or grading completion; OR</p> <p>2d. Take action 3a or 3c specified for inactive disturbed surface areas.</p> <p>Inactive disturbed surface areas</p> <p>3a. Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible due to excessive slope or other safety conditions; OR</p> <p>3b. Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR</p> <p>3c. Establish a vegetative ground cover within 21 days after active operations have ceased; ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR</p> <p>3d. Utilize any combination of control actions 3a, 3b and 3c such that, in total, they apply to all inactive</p>	

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1 Air Quality (cont.)			
Impact AIR-1 (cont.)		Mitigation Measure AIR-1c (cont.)	
		disturbed surface areas.	
	Unpaved roads	4a. Water all roads used for any vehicular traffic at least once per every two hours of active operations;	
		OR 4b. Water all roads used for any vehicular traffic once daily and restrict vehicle speed to 15 mph; OR 4c. Apply chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.	
	Open storage piles	5a. Apply chemical stabilizers; OR 5b. Apply water to at least 80 percent of the surface areas of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR 5c. Install a three-sided enclosure with walls with no more than 50 percent porosity that extend, at a minimum, to the top of the pile.	
	Track-out control	6a. Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100	

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1 Air Quality (cont.)			

Impact AIR-1 (cont.)

Mitigation Measure AIR-1c (cont.)

	feet and width of at least 20 feet; OR 6b. Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
All categories	7a. Any other control measures approved by the District

Mitigation Measure AIR-1d

During construction activities in high wind conditions, the project applicant shall implement the following Best Available Fugitive Dust Control Measures as outlined in Table C.5 in the *AQMD CEQA Guide*.

Fugitive Dust Source Category	Control Actions
Earth moving	1A. Cease all active operations, OR 2A. Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	1B. On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1 Air Quality (cont.)			

Impact AIR-1 (cont.)

Mitigation Measure AIR-1d (cont.)

	<p>mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR</p> <p>1B. Apply chemical stabilizers prior to a wind event; OR</p> <p>2B. Apply water to all unstabilized disturbed areas 3 times per day; if there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR</p> <p>3B. Take the actions specified in Table B.6, Item 3c; OR</p> <p>4B. Utilize any combination of control actions specified in Table 1, Items 1B, 2B and 3B, such that, in total, they apply to all disturbed surfaced areas.</p>
Unpaved roads	<p>1C. Apply chemical stabilizers prior to a wind event; OR</p> <p>2C. Apply water twice per hour during active operation; OR</p> <p>3C. Stop all vehicular traffic.</p>
Open storage piles	<p>1D. Apply water twice per hour; OR</p> <p>2D. Install temporary coverings.</p>
Paved road track-out	<p>1E. Cover all haul vehicles; OR</p> <p>2E. Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for operation on both public and private roads.</p>
All categories	<p>1F. Any other control measures approved by</p>

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation		
4.1 Air Quality (cont.)					
Impact AIR-1 (cont.)		Mitigation Measure AIR-1d (cont.)			
		<table border="1"> <tr> <td data-bbox="919 391 1094 435"></td> <td data-bbox="1094 391 1602 435">the District.</td> </tr> </table>		the District.	
	the District.				
Impact AIR-2		Mitigation Measure AIR-2			
Operation of the proposed project would result in a violation of an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable national or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	Significant	<p>To ensure that project emissions remain below applicable thresholds, the project applicant shall implement the following sustainable design features and mitigation measures:</p> <ol style="list-style-type: none"> 1. Exceed Title 24 by 10 percent 2. Install high efficiency lighting 3. Install energy efficient appliances 4. Use only natural gas hearths (i.e. fireplaces)(sealed natural gas only, no wood burning) 5. Install low flow bathroom faucets 6. Install low flow kitchen faucets 7. Install low flow toilets 8. Install low flow showers 9. Use water efficient irrigation system 10. Design and construct the parking garage to allow for the installation of electric vehicle charging facilities when the demand for the charging facilities is demonstrated. 11. Provide bicycle storage with convenient access 	Less than significant		
Impact AIR-3		No mitigation measures are required.	Not applicable		
The proposed project would not conflict with or obstruct implementation of the applicable air quality plan.	Less than significant				

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1 Air Quality (cont.)			
Impact AIR-4			
Project operations would not expose project site sensitive receptors to substantial pollutant concentrations.	Less than significant	No mitigation measures are required.	Not applicable
Impact AIR-5			
Project construction would expose sensitive receptors to substantial pollutant concentrations.	Potentially significant	Mitigation Measure AIR-5 Prior to any grading activities, the project applicant shall prepare an Asbestos Hazard Dust Mitigation Plan and shall comply with applicable state and local regulations regarding asbestos, including CARB's asbestos airborne toxic control measure (ATCM) (Title 17, CCR § 93105 and 93106) and EDCAQMD Rule 223-2 Fugitive Dust – Asbestos Hazard Mitigation, to ensure that exposure to construction workers and the public is reduced to an acceptable level.	Less than significant
Impact AIR-6			
The proposed project would not create objectionable odors affecting a substantial number of people.	Less than significant	No mitigation measures are required.	Not applicable
Cumulative Impact C-AIR-1			
The proposed project, in conjunction with other past, present and reasonably foreseeable future development, would not result in significant cumulative air quality impacts.	Less than significant	No mitigation measures are required.	Not applicable
4.2 Biological Resources			
Impact BIO-1			
The proposed project would not adversely affect candidate, sensitive, or special-status species or their habitat.	No impact	No mitigation measures are required.	Not applicable

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.2 Biological Resources (cont.)			
<p>Impact BIO-2</p> <p>The proposed project would not directly or indirectly affect any riparian habitat, sensitive natural community, or wetlands nor interfere with the movement of any wildlife species, but project construction noise could affect nesting birds.</p>	Potentially significant	<p>Mitigation Measure BIO-2</p> <p>For the protection of birds species protected by the Migratory Bird Treaty Act and the California Fish and Game Code, project activities shall occur during the non-breeding bird season to the extent feasible (September 1 – January 31). However, if site clearance, grading, or initial ground-disturbing activities must occur during the breeding season (February 1 through August 31), a survey for active bird nests shall be conducted by a qualified biologist no more than 14 days prior to the start of these activities. The survey shall be conducted in a sufficient area around the work site to identify the location and status of any nests that could potentially be affected by project activities. If active nests of protected species are found within project impact areas or close enough to these areas to affect breeding success, a work exclusion zone shall be established around each nest by a qualified biologist. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes vary dependent upon bird species, nest location, existing visual buffers and ambient sound levels, and other factors; an exclusion zone radius may be as small as 50 feet (for common, disturbance-adapted species) or as large as 250 feet or more for raptors. Exclusion zone size may also be reduced from established levels if supported with nest monitoring by a qualified biologist indicating that work activities outside the reduced radius are not adversely impacting the nest.</p>	Less than significant
<p>Impact BIO-3</p> <p>The proposed project would not conflict with local policies protecting biological resources.</p>	No impact	No mitigation measures are required.	Not applicable

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.2 Biological Resources (cont.)			
Cumulative Impact BIO-1			
The proposed project, in conjunction with other past, present and reasonably foreseeable future development, would not result in significant cumulative impacts on biological resources.	Less than significant	No mitigation measures are required.	Not applicable
4.3 Cultural Resources			
Impact CUL-1			
The proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.	No impact	No mitigation measures are required.	Not applicable
Impact CUL-2			
The proposed project could cause a substantial change in the significance of an archaeological resource pursuant to Section 15064.5.	Potentially significant	<p data-bbox="919 829 1213 857">Mitigation Measure CUL-2</p> <p data-bbox="919 873 1604 997">El Dorado County shall note on any plans that require ground-disturbing excavation that there is a potential for exposing buried cultural resources including prehistoric Native American burials.</p> <p data-bbox="919 1013 1604 1159">The project applicant shall inform the United Auburn Indian Community of the Auburn Rancheria and the Shingle Springs Band of Miwok Indians of the project construction schedule and allow for a tribal monitor to be present at the project site during grading activities in native soil.</p> <p data-bbox="919 1175 1604 1395">The project applicant shall retain a Professional Archaeologist to provide a pre-construction briefing to supervisory personnel of the excavation contractor to alert them to the possibility of exposing significant prehistoric archaeological resources within the project site. The briefing shall discuss any archaeological objects that could be exposed, the need to stop excavation at the discovery, and the procedures to follow regarding discovery</p>	Less than significant

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.3 Cultural Resources (cont.)			
Impact CUL-2 (cont.)		<p>protection and notification of the project applicant and archaeological team. The Professional Archaeologist shall develop and distribute for job site posting an "ALERT SHEET" summarizing potential find types and the protocols to be followed as well as points of contact to alert in the event of a discovery. The tribal monitor will be provided an opportunity to attend the pre-construction briefing.</p> <p>The Professional Archaeologist shall be available on an "on-call" basis during ground disturbing construction in native soil to review, identify and evaluate cultural resources that may be inadvertently exposed during construction. The archaeologist shall temporarily divert, redirect, or halt ground disturbance activities at a potential discovery to allow the identification, review and evaluation of a discovery to determine if it is a historical resource(s) and/or unique archaeological resource(s) under CEQA.</p> <p>If the Professional Archaeologist determines that any cultural resources exposed during construction constitute a historical resource and/or unique archaeological resource, he/she shall notify the project applicant and other appropriate parties of the evaluation and recommend mitigation measures to mitigate to a less-than significant impact in accordance with California Public Resources Code Section 15064.5. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing and data recovery among other options. Contingency funding and a time allotment sufficient for recovering an archeological sample or to employ an avoidance measure may be required. The completion of a formal Archaeological Monitoring Plan (AMP) may be recommended by the archaeologist if significant archaeological deposits are exposed during ground disturbing construction. Development and implementation of the AMP will be</p>	

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.3 Cultural Resources (cont.)			
Impact CUL-2 (cont.)		determined by the County of El Dorado and treatment of any significant cultural resources shall be undertaken with the approval of the project proponent and the County. A Monitoring Closure Report shall be filed with the County of El Dorado at the conclusion of ground disturbing construction if archaeological resources were encountered and/or recovered.	
Impact CUL-3			
The proposed project would not directly or indirectly destroy a unique paleontological resource or site of unique geologic feature.	No impact	No mitigation measures are required.	Not applicable
Impact CUL-4			
The proposed project could disturb human remains, including those interred outside of formal cemeteries.	Potentially significant	Mitigation Measure CUL-4 The treatment of human remains and any associated or unassociated funerary objects discovered during any soil-disturbing activity within the project site shall comply with applicable State laws. This shall include immediate notification of the El Dorado County Sheriff-Coroner and the County of El Dorado. In the event of the Coroner's determination that the human remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC shall identify a Most Likely Descendant (MLD) of the deceased Native American (PRC Section 5097.98). The MLD may then make recommendations to the landowner or the person responsible for the excavation work, for the means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. Development activity on the impacted site will halt until the landowner has	Less than significant

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.3 Cultural Resources (cont.)			
Impact CUL-4 (cont.)		<p>conferred with the MLD about their recommendations for treatment of the remains, and the coroner has determined that the remains are not subject to investigation under California Government Code Section 27491.</p> <p>The project applicant, archaeological consultant, and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.</p> <p>The California PRC allows 48 hours to reach agreement on these matters. If the MLD and the other parties do not agree on the reburial method, the project will follow PRC Section 5097.98(b) 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."</p>	
Impact CUL-5			
The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource.	Potentially significant	Implement Mitigation Measures CUL-2 and CUL-4.	Less than significant
Cumulative Impact CUL-1			
Cumulative development could cause a substantial change in the significance of a historical resource or	Potentially significant	Implement Mitigation Measures CUL-2 and CUL-4.	Less than significant

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.3 Cultural Resources (cont.)			
unique archaeological resource pursuant to Section 15064.5 or impact tribal cultural resources.			
4.4 Greenhouse Gas Emissions			
Impact GHG-1			
The proposed project would generate greenhouse gas emissions, either directly or indirectly, that would not have a significant impact on the environment.	Less than significant	Implement Mitigation Measure AIR-2	Less than significant
Impact GHG-2			
The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.	Less than significant	Implement Mitigation Measure AIR-2.	Less than significant
Cumulative Impact GHG-1			
The proposed project would not result in a significant cumulative GHG impact.	Less than significant	Implement Mitigation Measure AIR-2.	Less than significant
4.5 Land Use and Planning			
Impact LU-1			
The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.	Less than significant	No mitigation is required.	Not applicable

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.5 Land Use and Planning (cont.)			
Cumulative Impact LU-1			
The proposed project, in conjunction with other past, present and reasonably foreseeable future development, would not result in significant cumulative impacts related to land use and planning.	Less than significant	No mitigation is required.	Not applicable
4.6 Noise			
Impact NOI-1			
The proposed project would generate increased traffic in the project vicinity but the increase in traffic would not cause a substantial permanent increase in noise levels at off-site sensitive receptors.	Less than significant	No mitigation is required.	Not applicable
Impact NOI-2			
The proposed project would add new stationary and area noise sources to the project site but noise from these new noise sources would not cause a substantial permanent increase in ambient noise levels that could affect off-site sensitive receptors.	Less than significant	No mitigation is required.	Not applicable
Impact NOI-3			
Implementation of the proposed project would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity during construction.	Less than significant	No mitigation is required.	Not applicable

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.6 Noise (cont.)			
However, due to compliance with County's Noise Ordinance, the noise increase would not be considered significant.			
Impact NOI-4			
The proposed project would not expose on-site sensitive receptors to noise levels in excess of standards established in the County General Plan.	Less than significant	No mitigation is required.	Not applicable
Cumulative Impact NOI-1			
The proposed project, along with other future development in El Dorado County would generate increased traffic, but the increase in traffic would not cause a substantial permanent increase in noise levels at off-site locations.	Less than significant	No mitigation is required.	Not applicable
Cumulative Impact NOI-2			
Construction activities associated with the proposed project, along with other construction projects in El Dorado County, would not result in a substantial temporary or periodic cumulative increase in ambient noise levels.	No impact	No mitigation is required.	Not applicable

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.7 Public Services			
Impact PS-1			
The proposed project would not require the construction of new or physically altered fire facilities.	Less than significant	No mitigation is required.	Not applicable
Impact PS-2			
The proposed project would not require the construction of new or physically altered police facilities.	Less than significant	No mitigation is required.	Not applicable
Impact PS-3			
The proposed project would not require the construction of new or physically altered library facilities.	Less than significant	No mitigation is required.	Not applicable
Impact PS-4			
Development of the proposed project would increase the use of existing neighborhood parks or other recreational facilities but not result in substantial physical deterioration of the facilities. In addition, the demand created by the proposed project would not require the construction of new or physically altered parks and recreation facilities.	Less than significant	No mitigation is required.	Not applicable
Cumulative Impact C-PS-1			
The proposed project, in conjunction with other closely related past, present and reasonably foreseeable future development, would not result in a	Less than significant	No mitigation is required.	Not applicable

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.7 Public Services (cont.)			
significant cumulative impact on public services.			
4.8 Transportation and Traffic			
Impact TRANS-1			
Development of the proposed project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the traffic circulation system under Existing plus Project Conditions.	Less than significant	No mitigation is required.	Not applicable
Impact TRANS-2			
Development of the proposed project would not conflict with policies, programs or plans for alternate transportation.	Less than significant	No mitigation is required.	Not applicable
Cumulative Impact C-TRANS-1		Mitigation Measure C-TRANS-1	
Development of the proposed project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the traffic circulation system under Near-Term (2027) plus Project Conditions.	Significant	The project applicant will pay TIM fees to the County prior to issuance of building permit(s).	Less than significant

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.8 Traffic and Transportation (cont.)			
Cumulative Impact C-TRANS-2		Mitigation Measure C-TRANS-2	
Development of the proposed project would not conflict with applicable policies establishing measures of effectiveness for the performance of the local roadway system and regional freeway system under Long-Term (2035) plus Project Conditions.	Less than significant	The project applicant shall be responsible for ensuring that a traffic signal is installed at the private intersection of Post Street and Town Center Boulevard, and that a funding mechanism is created for maintenance of that signal. Peak hour intersection signal warrant analysis will be performed, consistent with the methodologies presented in the County's Transportation Impact Study Guidelines, at 24-month intervals and provided to the County, and the signal will be installed when the intersection operations reach LOS F and applicable traffic signal warrants are satisfied. The new traffic signal will be interconnected or subordinate to the traffic signal at Latrobe Road/El Dorado Hills Boulevard, subject to an encroachment permit and agreement. Prior to issuance of a grading permit for project construction, the project applicant shall demonstrate to the County's satisfaction that it has obtained legally binding authority to assure implementation of this mitigation measure, via an agreement with the owner of the right-of-way encompassing the Post Street/Town Center Boulevard intersection or otherwise.	Not applicable
Cumulative Impact C-TRANS-3			
Development of the proposed project, in combination with reasonably foreseeable future developments, would not cause a substantial conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	Less than significant	No mitigation is required.	Not applicable

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.8 Traffic and Transportation (cont.)			
Cumulative Impact C-TRANS-4			
Development of the proposed project, in combination with reasonably foreseeable future developments, would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of mass transit.	Less than significant	No mitigation is required.	Not applicable
4.9 Utilities and Service Systems			
Impact UTL-1			
Development of the proposed project would not result in the need for new or expanded water supply entitlements.	Less than significant	No mitigation is required.	Not applicable
Impact UTL-2			
Development of the proposed project would not require the construction of new or expanded water conveyance systems.	Less than significant	No mitigation is required.	Not applicable
Impact UTL-3			
Development of the proposed project would not require the construction of new or expanded wastewater treatment facilities, nor would it result in a discharge that would cause the water treatment facility to exceed the wastewater treatment requirements of the Regional Water Quality Control Board.	Less than significant	No mitigation is required.	Not applicable

Environmental Topic and Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.9 Utilities and Service Systems (cont.)			
Impact UTL-4		Mitigation Measure UTL-4	
Development of the proposed project would require the construction of new or expanded wastewater conveyance systems.	Potentially significant	The applicant shall pay fair-share fees towards the planned CIP improvement for the EDHB trunk sewer line improvement and associated EID connection costs.	Less than significant
Cumulative C-UTL-1			
The proposed project, in conjunction with other past, present and reasonably foreseeable future development, would not result in a significant cumulative impact on utilities.	Less than significant	No mitigation is required.	Not applicable
4.10 Energy			
Impact EN-1			
Construction and operation of the proposed project would increase the consumption of energy but would not result in wasteful, inefficient or unnecessary consumption of energy.	Less than significant	No mitigation is required.	Not applicable
Impact EN-2			
The proposed project would not result in the excessive consumption of energy resources that could not be accommodated within the long-term electricity supply and distribution system or the long-term natural gas supply and distribution system.	Less than significant	No mitigation is required.	Not applicable
KEY			
SU	Significant and unavoidable	PS	Potentially significant impact
S	Significant	LTS	Less than significant impact

**Table 2.0-2
Summary Comparison of Project Alternatives¹**

	Project Impact	Proposed Project (Before/After Mitigation)	Alternative 1: No Project/ No Development	Alternative 2: No Project/ Existing Zoning	Alternative 3: Reduced Development
AIR-1	Construction activities associated with the proposed project would result in a violation of an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable national or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)	S/LTS	Avoided	Reduced	Reduced
AIR-2	Operation of the proposed project would result in a violation of an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable national or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	S/LTS	Avoided	Reduced	Reduced
AIR-5	Project construction would expose sensitive receptors to substantial pollutant concentrations.	PS/LTS	Avoided	Similar	Reduced

	Project Impact	Proposed Project (Before/After Mitigation)	Alternative 1: No Project/ No Development	Alternative 2: No Project/ Existing Zoning	Alternative 3: Reduced Development
BIO-2	The proposed project would not directly or indirectly affect any riparian habitat, sensitive natural community, or wetlands nor interfere with the movement of any wildlife species, but project construction noise could affect nesting birds.	PS/LTS	Avoided	Similar	Similar
CUL-2	The proposed project could cause a substantial change in the significance of an archaeological resource pursuant to Section 15064.5.	PS/LTS	Avoided	Similar	Similar
CUL-4	The proposed project could disturb human remains, including those interred outside of formal cemeteries.	PS/LTS	Avoided	Similar	Similar
CUL-5	The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource.	PS/LTS	Avoided	Similar	Similar
C-CUL-1	Cumulative development could cause a substantial change in the significance of a historical resource or unique archaeological resource pursuant to Section 15064.5 or impact tribal cultural resources, but the proposed project would not contribute substantially to the cumulative impacts.	PS/LTS	Avoided	Similar	Similar
C-TRANS-1	Development of the proposed project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the traffic circulation system under Near-Term (2027) plus Project Conditions.	PS/LTS	Avoided	Similar	Reduced
UTL-4	Development of the proposed project would require the construction of new or expanded wastewater conveyance systems.	PS/LTS	Avoided	Greater (S)	Reduced

Project Impact	Proposed Project (Before/After Mitigation)	Alternative 1: No Project/ No Development	Alternative 2: No Project/ Existing Zoning	Alternative 3: Reduced Development
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KEY

SU Significant and unavoidable

S Significant

PS Potentially significant impact

LTS Less than significant impact

Avoided Proposed project's impact avoided

Similar Impact similar to proposed project

Reduced Impact less than proposed project

Greater Impact greater than proposed project

1 This table lists only the significant or potentially significant environmental impacts of the proposed project.

3.0 PROJECT DESCRIPTION

3.1 INTRODUCTION

The chapter presents the details of the proposed El Dorado Hills Apartments project in terms of the project's location and setting, project objectives and characteristics, and construction schedule and activities. The project applicant, Spanos Corporation (applicant) has applied to the County of El Dorado for approval of the proposed project ("proposed project") and related entitlements.

The applicant proposes to construct a 4-story, 214-unit apartment complex, comprising two apartment buildings, a parking structure, outdoor recreation areas, and an informal open space area.

3.2 PROJECT SETTING

3.2.1 Project Location and Surrounding Land Uses

The unincorporated community of El Dorado Hills is located in western El Dorado County (see **Figure 3.0-1, Project Location**). The project site is located in El Dorado Hills, approximately 500 feet south of U.S. Highway 50 (U.S. 50), approximately 23 miles east of downtown Sacramento and 60 miles southwest of Lake Tahoe. Folsom Lake is located approximately 4 miles to the northwest.

The approximately 4.56-acre project site, located on the northwestern corner of the intersection of Town Center Boulevard and Vine Street within the Town Center East Commercial Center in El Dorado Hills, is presently vacant. The site is bounded by Town Center Boulevard to the south, Vine Street to the east, Mercedes Lane to the north, and an open space area that includes Town Center Lake to the west.

The area surrounding the project site is fully developed and consists mainly of retail/commercial uses. An automobile dealership is to the north of the project site, across Mercedes Lane. Other retail/commercial uses are located to the east across Vine Street, which include restaurants and a movie theater (the Regal Cinemas El Dorado 14 and IMAX), and to the south across Town Center Boulevard, which include a Target store and other retail, restaurant and commercial businesses. Town Center Lake is immediately adjacent to the project site to the west. An El Dorado Sheriff's Department field office is located approximately 1,200 feet to the west, along Town Center Boulevard. The Blue Shield of California campus is further west, across Latrobe Road.

3.2.2 Existing Site Conditions

The project site consists of three parcels, Assessor's Parcel Numbers 121-290-60, 121-290-61, and 121-290-62. Under the County of El Dorado General Plan, the site is designated 'AP' (Adopted Plan), as the site is

located within the adopted El Dorado Hills Specific Plan (EDHSP) area (see **Figure 3.0-2, General Plan Land Use Designation**). In adopting the nearly 4,000 acre EDHSP, the County of El Dorado designated the area that includes the project site as Villages T and U (see **Figure 3.0-3, EDHSP Village U and T Location Map** and **Figure 3.0-4, EDHSP Village T Planning Area Locations**). Known collectively as the El Dorado Hills Town Center, these villages were “intended to provide for commercial uses of greater variety and at a higher intensity than provided elsewhere in the Specific Plan area or in the greater El Dorado Hills/Cameron Park area.” Village T is now known as ‘Town Center East’ (TCE). The site is designated ‘Commercial’ in the EDHSP. All three project parcels are zoned CG-PD (General Commercial, Planned Development). Refer to **Figure 3.0-5, Existing and Proposed Specific Plan Designations**, and **Figure 3.0-6, Existing and Proposed Zoning**.

The project site ranges in elevation from approximately 605 to 620 feet above mean sea level and slopes gently east to west. The site is vacant and undeveloped, but indications of previous disturbance, including mass grading, are present. The vegetation on the project site is characterized as disturbed, non-native annual grassland; no large shrubs or trees are present on the site.

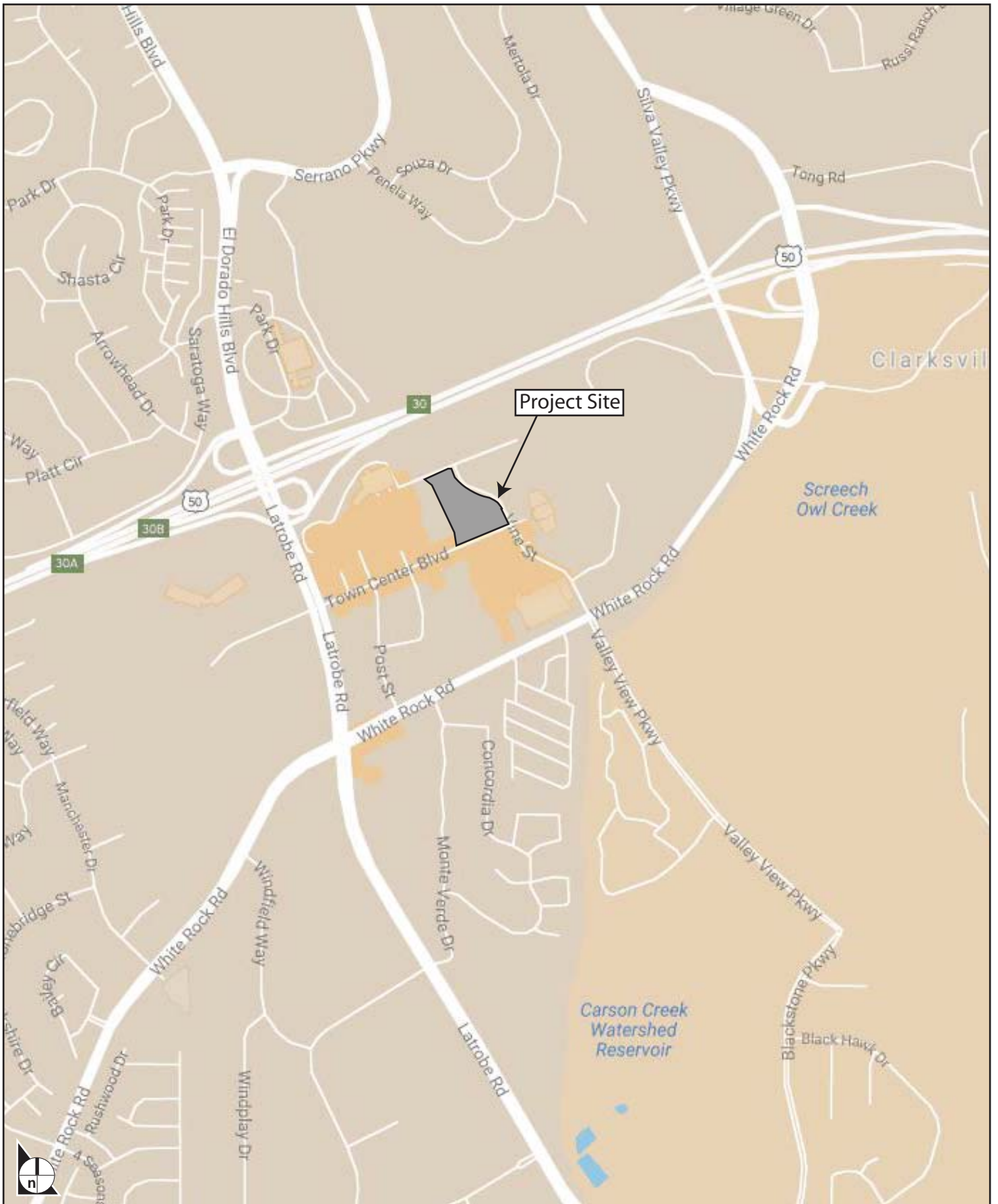
According to the geotechnical investigation prepared for the site, the native subsurface profile below the fill generally consists of soft sandy silts with minor organic material underlain by very dense metavolcanic rock. The permanent groundwater table is generally below 100 feet of the existing site grades. However, during and following the rainy season, perched water may exist within fractures or on top of the metavolcanic rock, due to the relative impermeable nature of the underlying rock.

3.3 PROJECT OBJECTIVES

The objectives of the project are to develop a well-designed, economically feasible residential community that consists of a variety of residential unit types and incorporates smart growth elements. The applicant’s key objectives for the proposed project are to:

- Implement the County’s General Plan by directing growth to areas that are already developed with existing access to services, schools and transportation systems in order to preserve agricultural land and open space;
- Implement goals and objectives of the El Dorado Hills Specific Plan;¹
- Provide a residential population to support commercial development within the Town Center East Planned Development area;

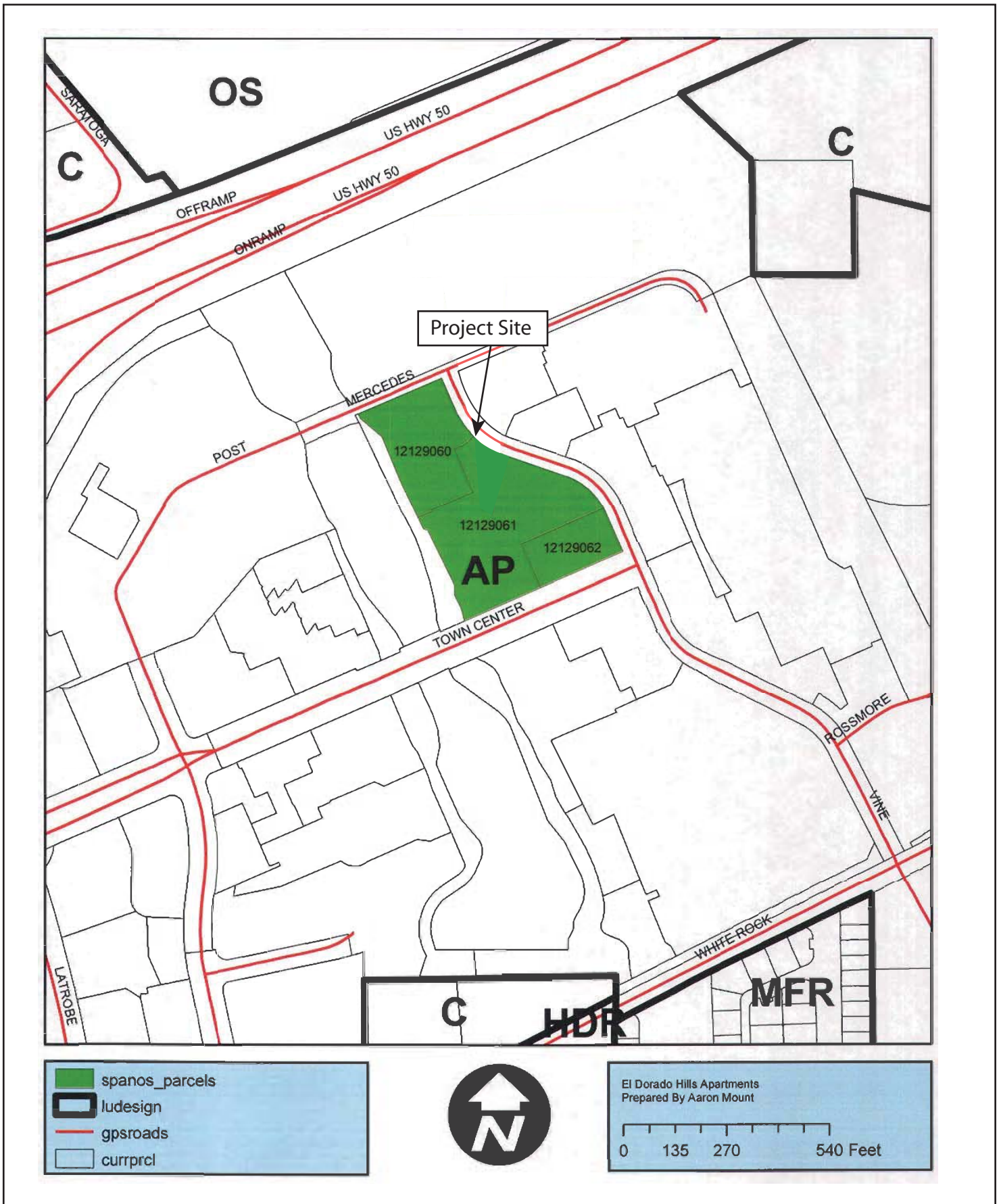
¹ See http://www.edcgov.us/Government/Planning/Zoning_Ordinances_for_Specific_Plans.aspx#El%20Dorado%20Hills for the goals and objectives listed in the El Dorado Hills Specific Plan.



SOURCE: Google Maps, 2017

FIGURE 3.0-1





SOURCE: County of El Dorado

FIGURE 3.0-2

TOWN CENTER

KEY MAP

EAST



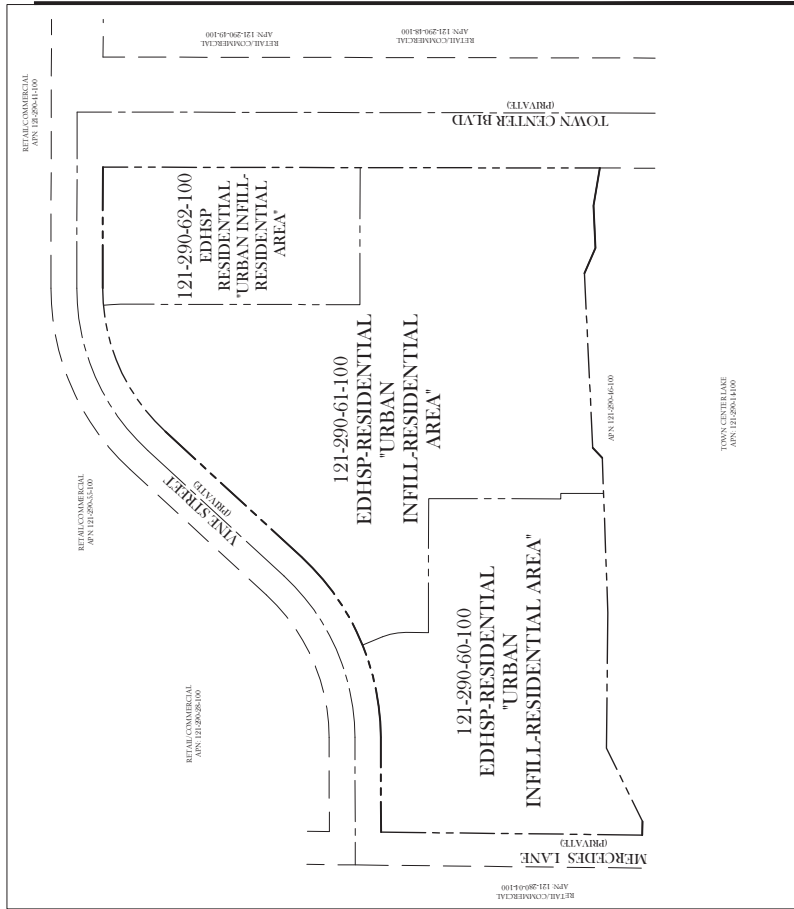
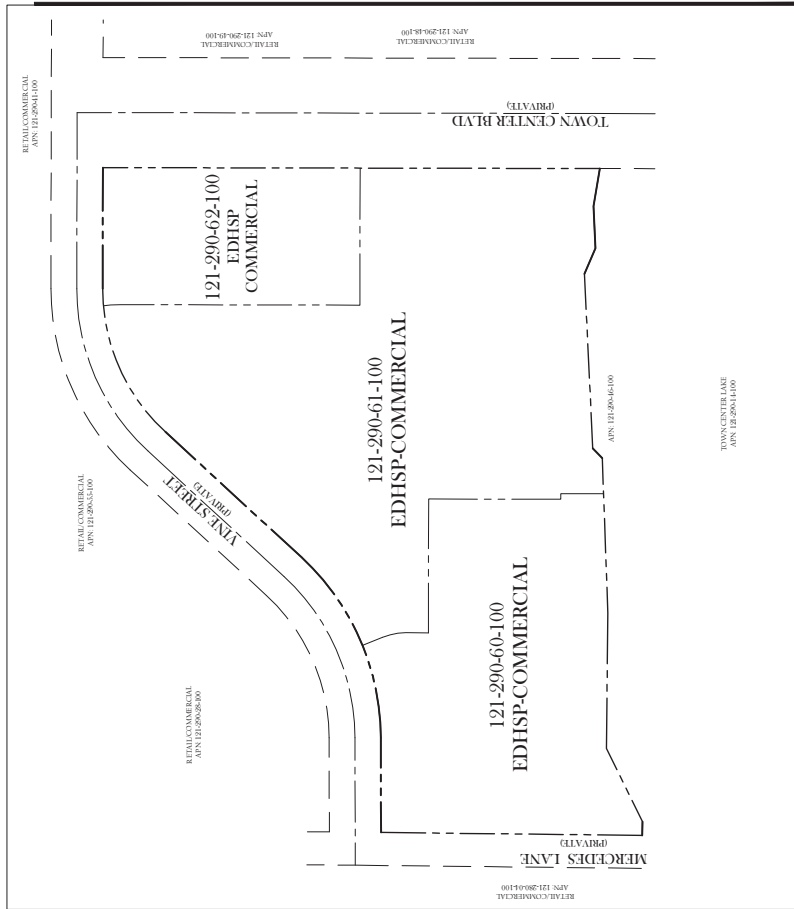
1-16-2015

SOURCE: County of El Dorado

FIGURE 3.0-4

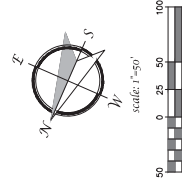


El Dorado Hills Specific Plan Village T Planning Area Locations
17-0846 2E 49 of 391



EXISTING SPECIFIC PLAN

PROPOSED SPECIFIC PLAN



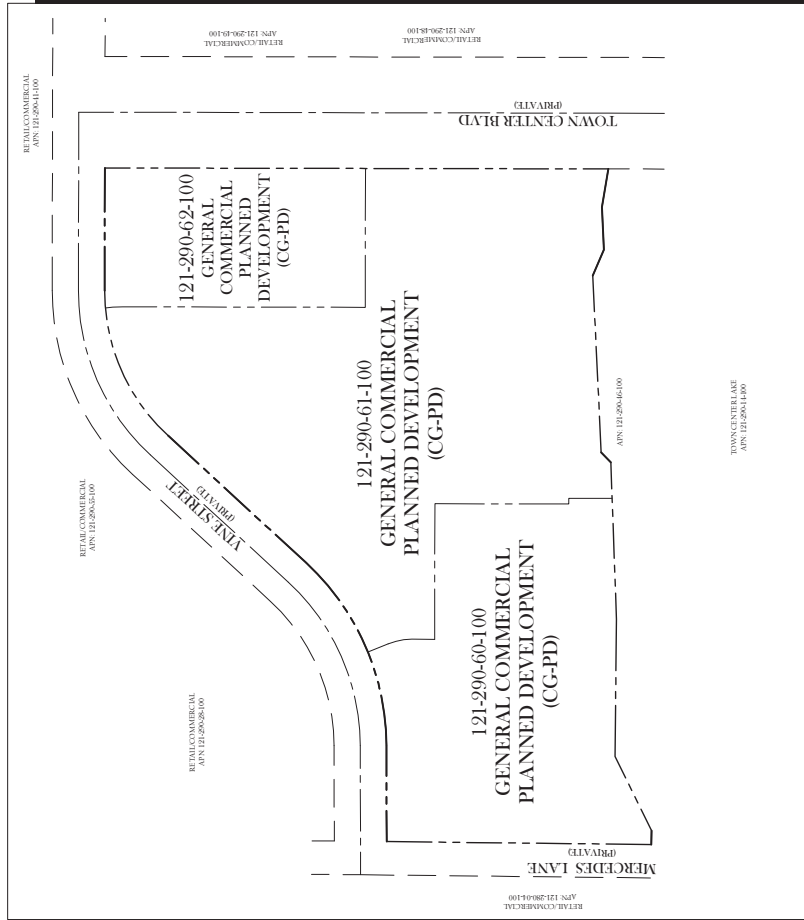
SOURCE: Kephart, 2017

FIGURE 3.0-5

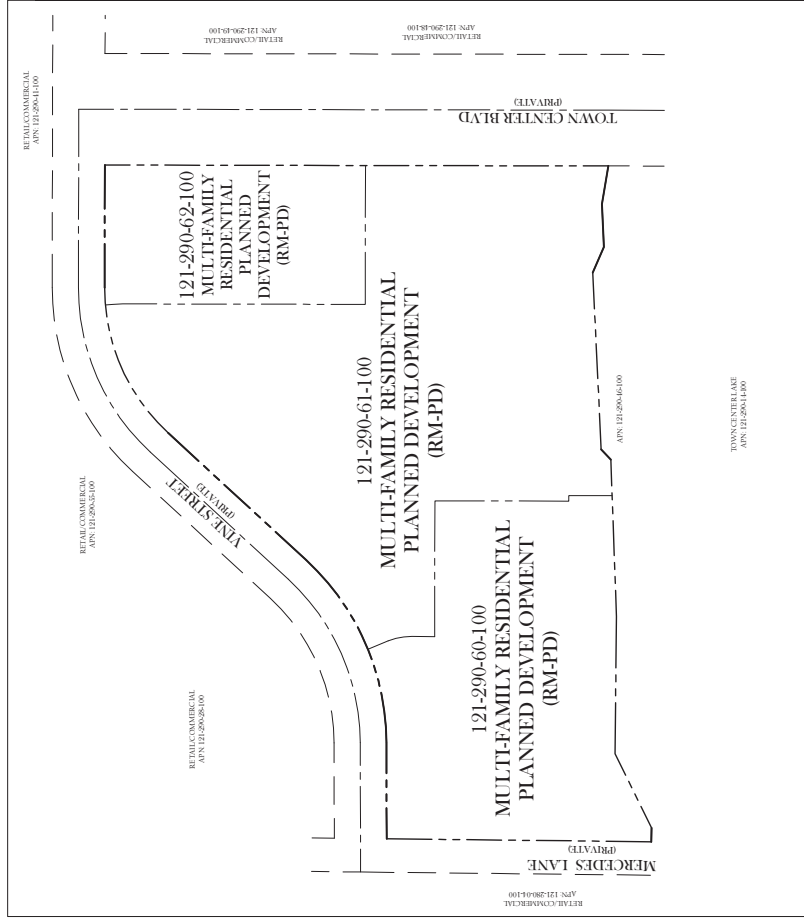
Existing and Proposed Specific Plan Designations



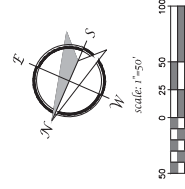
REZONE EXHIBIT
EL DORADO HILLS APARTMENTS
 TOWN CENTER
 EL DORADO COUNTY, CA



EXISTING
 ZONING



PROPOSED
 ZONING



SOURCE: Kephart, 2017

FIGURE 3.0-6

Existing and Proposed Zoning



- Assist in increasing the housing supply in El Dorado County to improve the job-housing imbalance, including housing that is more affordable;
- Implement smart growth principles by developing underutilized properties with higher density housing projects.
- Develop a sustainable community that incorporates smart-growth elements, places higher-density housing in close proximity to job centers, and complements adjacent commercial uses; and
- Create a residential development that maximizes density with accessibility to alternate transportation modes, and integrates pedestrian, bicycle, transit, open space and outdoor uses to encourage active centers.

3.4 PROJECT CHARACTERISTICS

3.4.1 Project Components

The proposed project would develop a multifamily residential project on the approximately 4.56-acre site. The 214-unit apartment complex would consist of two apartment buildings, a parking structure, outdoor recreation areas, and an informal open space area. The project components are shown in **Figure 3.0-7, Site Plan**.

Apartment Buildings

The proposed project includes 214 rental apartment units and would have an overall density of approximately 47 dwelling units per acre. The apartment units would range from 576 square feet to 1,195 square feet in size, with a mix of 114 studio/1-bedroom units and 100 2-bedroom units. The residential unit mix is summarized in **Table 3.0-1, Residential Unit Mix Summary**.

**Table 3.0-1
Residential Unit Mix Summary**

Housing Type	Number of Units	Unit Size (nsf)	Mix (Percent)
Studio/One-Bedroom Units	114	576 to 930	53.3
Two-Bedroom Units	100	1,022 to 1,195	46.7
Totals	214	--	100

Source: Spanos Corporation, 2017

Notes: nsf= net square feet

The apartment units would be located in two residential buildings (Buildings 1 and 2) and the leasing office would be located in Building 2, near the corner of the building near the Town Center Boulevard

and Vine Street intersection. The residential buildings would be 4 stories high, with the building heights varying between 42 and 52 feet due to the approximately 15 foot elevation change from east to west on the project site. Some architectural elements of the two residential buildings would be up to 60 feet high.

Parking Structure

A 5-story parking garage would be located in the center of the project site between Buildings 1 and 2. The total garage area would be approximately 122,500 gross square feet (gsf) (approximately 30,625 square feet/level). The parking garage would provide a total of 409 vehicle parking spaces and 22 motorcycle parking spaces for residents and visitors. Entrances to the parking garage would be on Vine Street and Town Center Boulevard.

Outdoor Recreation Areas

The proposed project would include three outdoor recreation areas, as further described below and shown on **Figure 3.0-8, Preliminary Landscape Plan**.

Interior Courtyard

This courtyard would be located between Building 2 and the parking garage. Amenities in this area would include a natural gas fire pit with built-in seating on two sides, an arbor area designating a BBQ area, and a patio area allowing for informal seating and table arrangements. This area would be relatively shady during most of the day, requiring plant materials to be sustainable under low light conditions. The design theme for this area would be 'woodland' in nature consisting of bold leaf shrubs, perennials, and ornamental grasses. Selected trees would generally be deciduous, broad leaf varieties.

Pool Area

The pool area would be located adjacent to the west side of Building 1 and would have a view of Town Center Lake. This area is designed to provide multiple areas for recreation and lounging. Entry to the pool area would be from two locations, the main lobby area, and the clubhouse area. Stairs would provide access between the elevation differences, with ramps both inside and outside the clubhouse providing accessibility for all.

The lower area associated with the clubhouse would include a natural gas fire pit, lounge area, BBQ arbor area, and areas for informal seating and table setups for resident events. The pool area would be access-controlled by gates and low fencing in order to control the hours of use, while still allowing the outdoor lounge and fire pit area (next to the clubhouse) to be used "after hours."

Plant materials utilized around the pool would be selected for their compatibility with the pool (low maintenance, soft texture, color, etc.) and low to medium water use. Tall and narrow deciduous and smaller flowering trees would be planted to provide shade and color. A small lawn area furnished with tent cabanas and umbrellas would be included to provide opportunities for shade and lounging.



SOURCE: Kephart, 2017

FIGURE 3.0-7

Site Plan



PRELIMINARY LANDSCAPE NOTES

(notes associated with letter callouts on the plan view)

A. INTERIOR COURTYARD
 The design of the landscape irrigation system is intended to meet the State of California's Landscape Water Conservation Model Ordinance. Toward this end, the project will include the following best practices:
 1. High water-use lawns will be limited to not more than 50% of the landscape, and shall be irrigated by a low volume job-up rotary system.
 2. Plant materials will be selected based on their proposed location and micro-climate expectations.
 3. Hydrozone irrigation techniques will be incorporated.
 4. The plant palette will utilize at least 60% native California or low water use plant materials appropriate to the climate zone region.
 5. Common tree and landscape area landscaping irrigation will consist of a combination of water conserving low volume rotary systems (water appropriate in light ground cover areas), traditional drip irrigation, and/or in-line drip irrigation systems.
 6. All electronic irrigation valves shall be connected to an automatic "SMART" irrigation control system.
 7. The irrigation system shall be designed to meet the most Current State and local agency water conservation policies, standards.

B. VINE STREET AND MERCEDES LANE PERIMETER
 The north and east perimeter of the project ground number landscape areas between the building structure and the existing sidewalks. In some areas the sidewalk area is elevated above the ground floor units. In these areas a retaining wall will support the elevation change, creating upper and lower landscape areas. Low to medium water use trees, shrubs, perennials, and ground covers will be placed to buffer ground floor units from the upper story of Big Blue Yurt.
 A. In some areas a fire pit wall will be installed on two sides, an arbor area denoting a BBQ dining area, and a patio area allowing for informal seating and table arrangement.
 B. The west facing landscape space is intended to provide for a picnic area. The surrounding landscape area will consist of low to medium use trees, shrubs, perennials, and ground covers that are sustainable under high heat and reflective heat conditions. A lawn grass provides opportunities for passive/recreational (E ball, frisbee, etc.) and lounging. A medium of flowering and evergreen trees are included to provide visual interest and vertical height in this area dominated by the apartment building structure on three sides.
 C. **INDICATED AREA**
 The west facing landscape space is intended to provide for a picnic area. The surrounding landscape area will consist of low to medium use trees, shrubs, perennials, and ground covers that are sustainable under high heat and reflective heat conditions. A lawn grass provides opportunities for passive/recreational (E ball, frisbee, etc.) and lounging. A medium of flowering and evergreen trees are included to provide visual interest and vertical height in this area dominated by the apartment building structure on three sides.

D. NATURAL TRANSITION AREA LANDSCAPE
 This area consists of a transitional landscape between the emergency vehicle access lane and the pathway along the Town Center Lake. Toward this end, the project will include the following best practices:
 1. High water-use lawns will be limited to not more than 50% of the landscape, and shall be irrigated by a low volume job-up rotary system.
 2. Plant materials will be selected based on their proposed location and micro-climate expectations.
 3. Hydrozone irrigation techniques will be incorporated.
 4. The plant palette will utilize at least 60% native California or low water use plant materials appropriate to the climate zone region.
 5. Common tree and landscape area landscaping irrigation will consist of a combination of water conserving low volume rotary systems (water appropriate in light ground cover areas), traditional drip irrigation, and/or in-line drip irrigation systems.
 6. All electronic irrigation valves shall be connected to an automatic "SMART" irrigation control system.
 7. The irrigation system shall be designed to meet the most Current State and local agency water conservation policies, standards.

E. EMERGENCY VEHICLE ACCESS AREAS
 The EVU lanes are located on the east side of the site. The EVU lanes will be paved with "UC Verdes Buffalo Grass" or "No Mow low water use grass". These type of grasses are special hybrid buffalo grasses specifically created to be cut as a lawn grass or left longer as a meadow grass. These low water needs and high heat tolerance will provide a transition area between the active landscape area and the more ornamental landscape around the apartment complex.

F. POOL AREA LANDSCAPE
 The pool area is designed to provide multiple areas of recreation and lounging. Entry to the pool area will be from two locations, 1) the main lobby area (elevation 61") and the cab house area (elevation 60"). The pool and spa area will be located at elevation 60". The surrounding ground floors of the apartment building vary between elevations 61", 61.5" and 62". Stairs will provide regular access between the elevation differences, with ramps located inside the cab house and on the cab house porch/entrance for accessibility for all.
 The lower level area associated with the cab house will include a fire pit lounge area, BBQ arbor area, and area for informal seating and table-top outdoor lounge furniture (e.g. patio furniture, etc.). The pool area will be surrounded by a retaining wall and a fire pit lounge area. The pool area will be surrounded by a retaining wall and a fire pit lounge area. The pool area will be surrounded by a retaining wall and a fire pit lounge area.

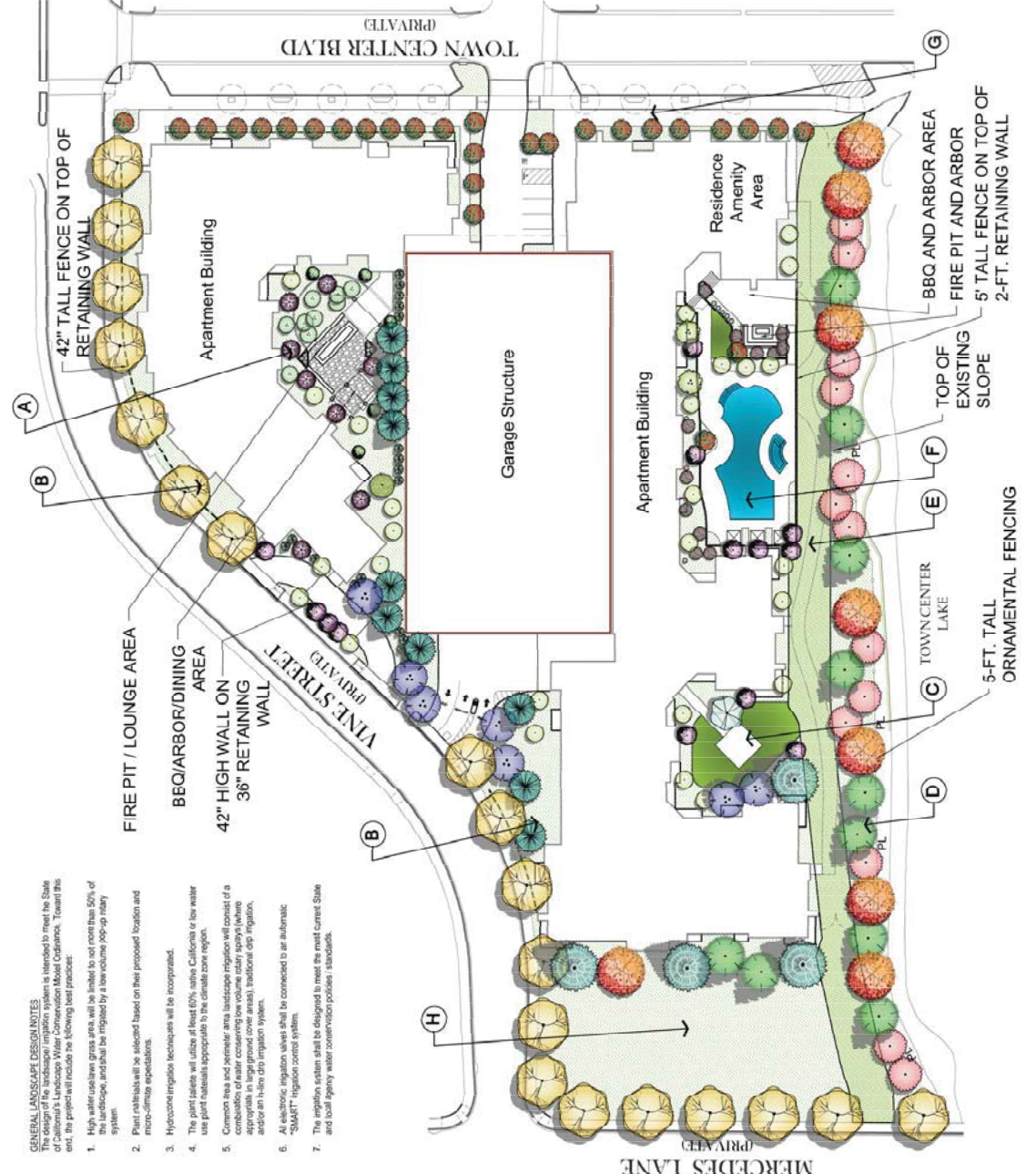
G. TOWN CENTER BOULEVARD PERIMETER LANDSCAPE
 The perimeter landscape along Town Center Boulevard consists primarily of narrow planters both raised and at ground level. These planters will be treated with post-sprinkler therapy plants in a small scale raised bed evergreen tree. Existing trees in planters along the street will remain. Planter container plants will also be selected around the main entry to the project garage and seating area.
 H. **FORMAL OPEN SPACE AREA**
 This landscape area will consist of a natural open space area. Site excavated from the construction of the apartment building will create low rising berms throughout the area. The landscape will be composed of drought tolerant plant species and seeded with native grasses and wild flowers.

H. FORMAL OPEN SPACE AREA
 This landscape area will consist of a natural open space area. Site excavated from the construction of the apartment building will create low rising berms throughout the area. The landscape will be composed of drought tolerant plant species and seeded with native grasses and wild flowers.

I. FORMAL OPEN SPACE AREA
 This landscape area will consist of a natural open space area. Site excavated from the construction of the apartment building will create low rising berms throughout the area. The landscape will be composed of drought tolerant plant species and seeded with native grasses and wild flowers.

J. FORMAL OPEN SPACE AREA
 This landscape area will consist of a natural open space area. Site excavated from the construction of the apartment building will create low rising berms throughout the area. The landscape will be composed of drought tolerant plant species and seeded with native grasses and wild flowers.

K. FORMAL OPEN SPACE AREA
 This landscape area will consist of a natural open space area. Site excavated from the construction of the apartment building will create low rising berms throughout the area. The landscape will be composed of drought tolerant plant species and seeded with native grasses and wild flowers.



SOURCE: TSD Engineering, Inc., 2017

FIGURE 3.0-8

PRELIMINARY LANDSCAPE PLAN

The western perimeter of the pool area would consist of a 5-foot low fence on top of a 2-foot retaining wall to provide the required safety and security between the emergency vehicle lane and the pool area. Gated access into the emergency vehicle lane would be provided near the clubhouse.

Picnic Shelter Area

This west-facing landscape space would be on the west side of Building 1, north of the pool area. This area is intended to provide for a picnic area. The surrounding landscape area would be planted with low to medium water use trees, shrubs, perennials, and ground covers that are sustainable under reflective heat conditions. A lawn grass area would provide opportunities for passive informal recreation (e.g., ball tossing, Frisbee, etc.) and lounging. A mixture of flowering and evergreen trees would provide shade, visual interest, and vertical height in this area dominated by the apartment building structures.

Informal Open Space Area

This approximately 0.51-acre open space area would be located between the northern end of Building 1 and Mercedes Lane. Soil excavated from the construction of the apartment buildings and the garage would be used to create low rolling berms throughout the area. This area would be seeded with native grasses and wild flowers with drought tolerant plant species along the perimeter of the area.

Other Landscaped Areas

The north and east perimeter of the project site along Mercedes Lane and Vine Street would provide narrow landscaped areas between the building structures and the existing sidewalks. In some areas the sidewalk area would be elevated above the ground floor units. In these areas a retaining wall would support the elevation change, creating upper and lower landscape areas. Low to medium water use trees, shrubs, perennials, and ground covers would be placed to buffer the ground floor units from the public street and provide textural interest and color. A dominant streetscape tree would provide a vertical edge around this perimeter of the project.

The perimeter landscape along Town Center Boulevard would consist primarily of narrow planters both raised and at ground level. These planters would be planted with pedestrian friendly plants and small scale broad leaf evergreen trees. Existing trees in planters along the street would remain. Potted container plants would be placed in and around the main entry to the project garage and leasing office.

The site perimeter along Town Center Lake would consist of an emergency vehicle access (EVA) lane and a natural transition area. The EVA would run parallel to the west side of Building 1. It would not be a paved surface but would consist of turf blocks of special hybrid grasses specifically cultivated to be cut as a lawn grass, but may be allowed to grow taller as a meadow grass. The EVA lane would provide a transition area between the more ornamental landscape around the apartment complex and the natural transition area (see below).

Between the EVA lane and the existing paved pathway along the lake, the generally sloped area would serve as a natural transition area and would be landscaped with pines, pistache and hawthorn trees. Under-story plantings would consist of drought tolerant native shrubs, ground covers, and ornamental grasses.

3.4.2 Building Design

As noted above, the two residential buildings would be between 42 and 52 feet in height, with some architectural elements reaching 60 feet. Parking would be provided in a 5-level parking structure. The parking structure would be located in the center of the project site and flanked on two sides by the proposed residential buildings. Project site plans are provided in **Figures 3.0-9** through **3.0-12**.

The design concept for the proposed project would include varied architectural finishes, including stone veneers and stucco. Decorative elements, including decorative wrought iron railing and awnings, would be incorporated to add visual interest. Building materials would be non-reflective. **Figures 3.0-13** through **3.0-15, Illustrative Project Elevations**, show the exterior elevations along Town Center Boulevard, at the corner of Town Center Boulevard and Vine Street, along Vine Street, at the corner of Vine Street and Mercedes Lane and views of the greenbelt/EVA lane from Mercedes Lane and Town Center Boulevard.

The proposed project would be designed in conformance with the proposed *El Dorado Hills Town Center East Urban Infill Residential Area Residential Design Guidelines and Development Standards* (EDH Design Guidelines). The guidelines will be used by the County to ensure that the proposed project will conform to the character of the surrounding area. Way-finding, security lighting, and perimeter fencing would be provided in conformance to EDH Design Guidelines and County standards.

3.5 PARKING, CIRCULATION, AND EMERGENCY ACCESS

Two vehicle access points would be provided to enter and exit the parking garage (see **Figure 3.0-7**, Site Plan). The main entrance would be from a piazza on Town Center Boulevard (see **Figure 3.0-16**, Town Center Piazza Rendering), with the secondary access point on Vine Street. These roads connect to major County roads, including White Rock Road to the south and Latrobe Road to the west. The proposed project would not alter vehicular circulation patterns in the project area.

The total garage area would be approximately 122,500 gsf. The parking garage would provide a total of 409 vehicle parking spaces and 22 motorcycle parking spaces for residents and visitors, with an additional five spaces of surface parking provided elsewhere on the project site.

A 25-foot wide EVA that connects Town Center Boulevard to Mercedes Lane is also proposed along the western property line, adjacent to Town Center Lake. Pedestrian paths would be provided on-site that lead to building entrance areas. These paths would also connect to the existing sidewalks along Town Center Boulevard and Vine Street that join the existing pedestrian paths within the TCE area.

Trash Management Plan:

(2) Trash pick up locations with the building
 Each contains (1) Trash Chute & (1) Recycling Chute
 - 1 room is located on the West Side
 - 1 room is located on the East Side
 Trash Service Provider will have access
 to pick up rooms to roll out containers
 and replace containers as required.

Each Trash Pickup Room contains the following:
 - (8) 3 yrd. containers with wheels

Trash Calculations:

The Compactor works at a 3:1 ratio;
 (1) Container = 9 cu.yrd of waste
 (1) Apartment = 1/2 cu.yr. waste per
 week

East Building:
 88 Apts x 0.5 cu.yrd per week = 44 cu.yrd / wk
 (5) containers available for Recyclables
 (1) Waste pickup per week required

West Building:
 128 Apts x 0.5 cu.yrd per week = 64 cu.yrd / wk
 (5) containers available for Recyclables
 (2) Waste pickup per week required

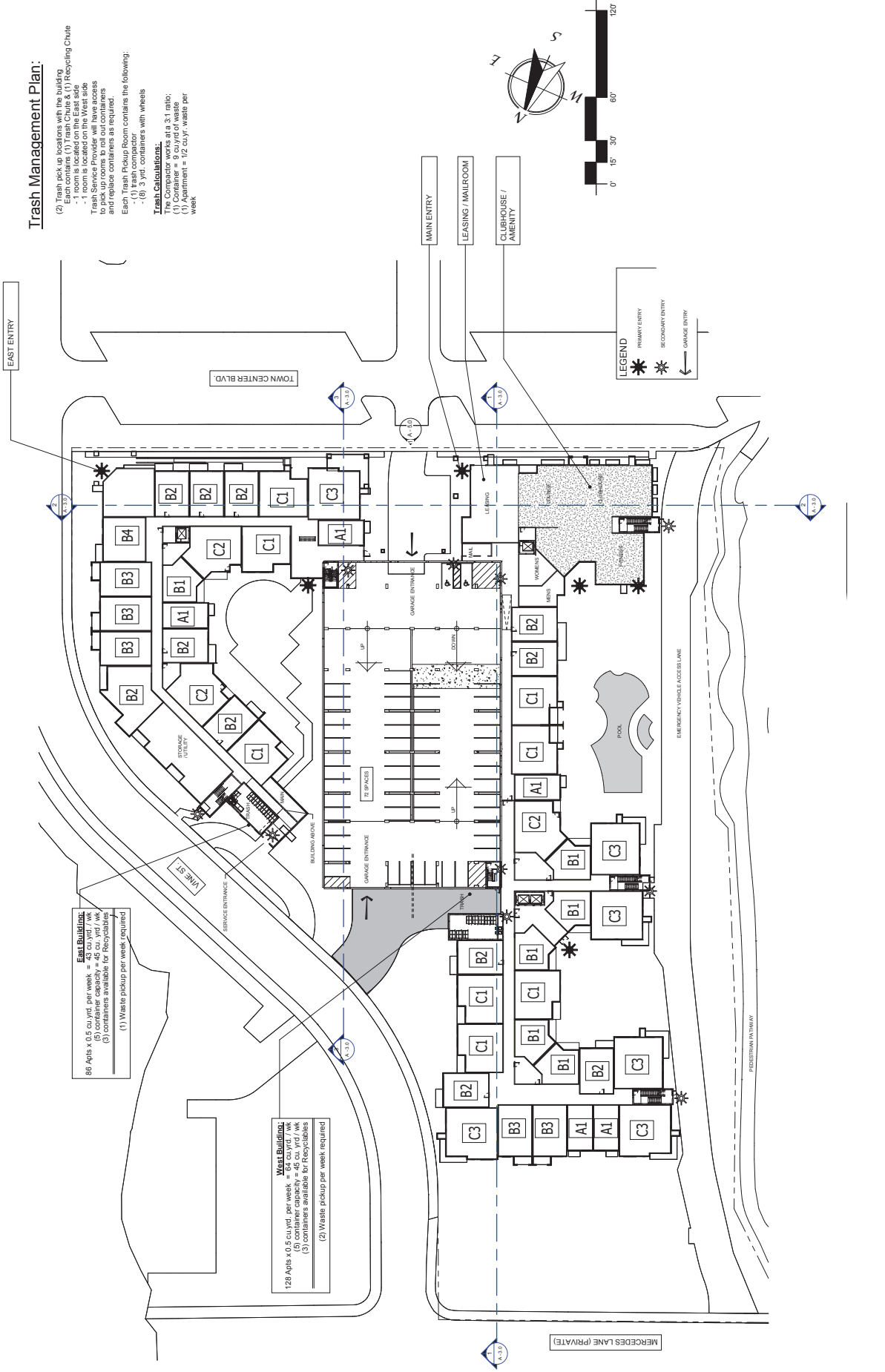


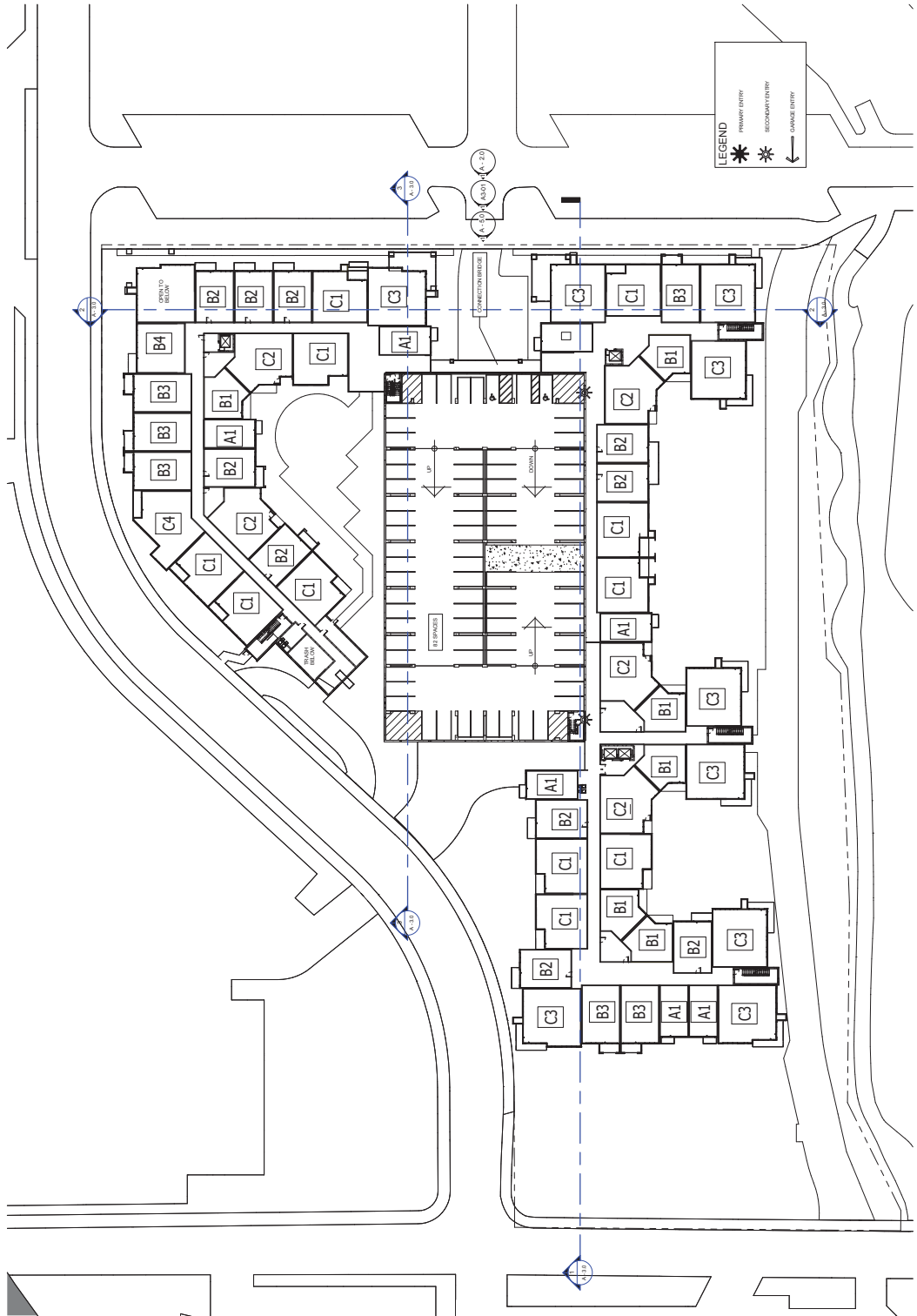
FIGURE 3.0-9
Project Site Plan — First Level

SOURCE: Kephart, 2017



EL DORADO HILLS APARTMENTS

TOWN CENTER
EL DORADO COUNTY, CA



SOURCE: Kephart, 2017

FIGURE 3.0-10

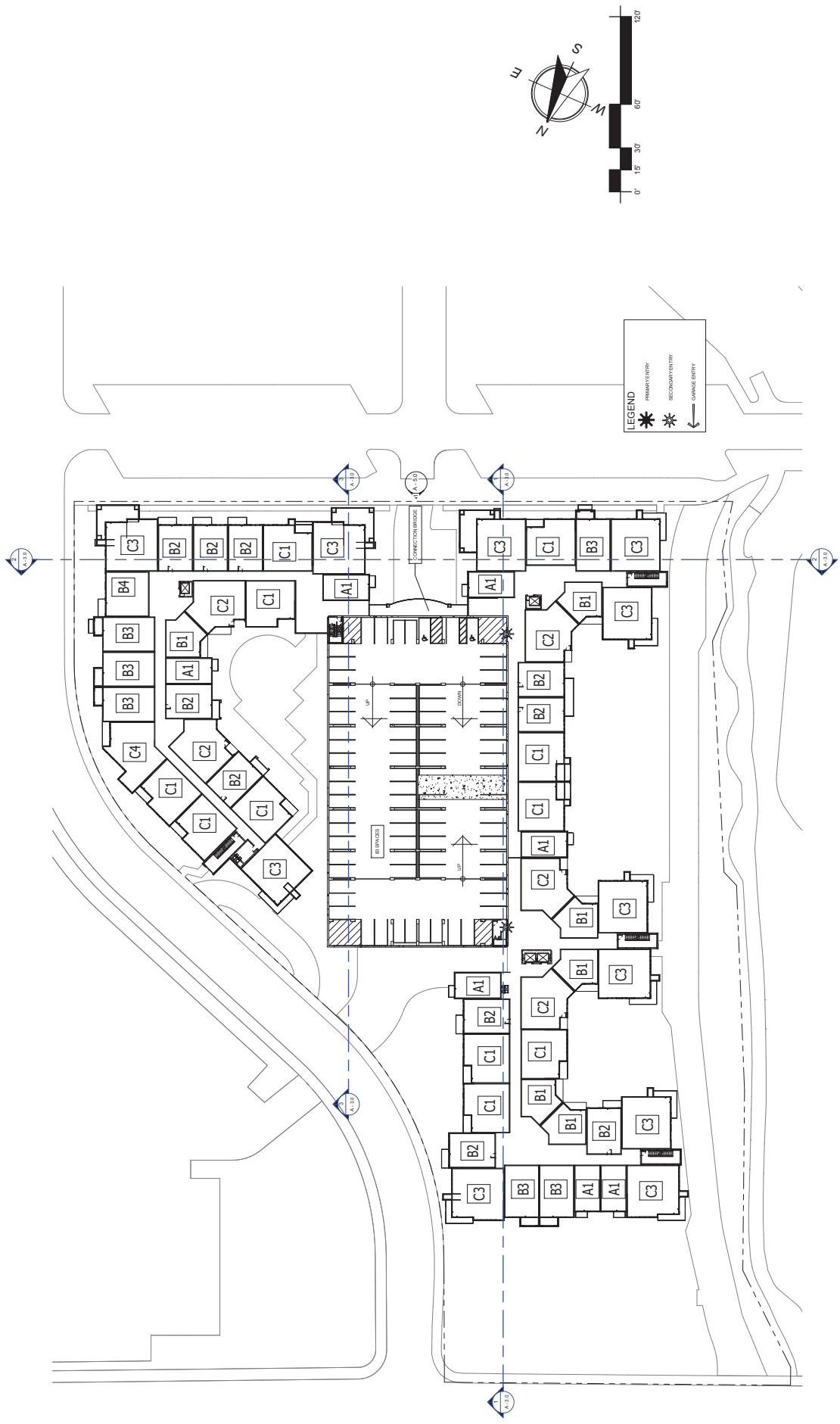
Project Site Plan — Second Level



1269.001-06/17

EL DORADO HILLS APARTMENTS

TOWN CENTER
EL DORADO COUNTY, CA



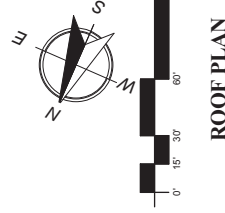
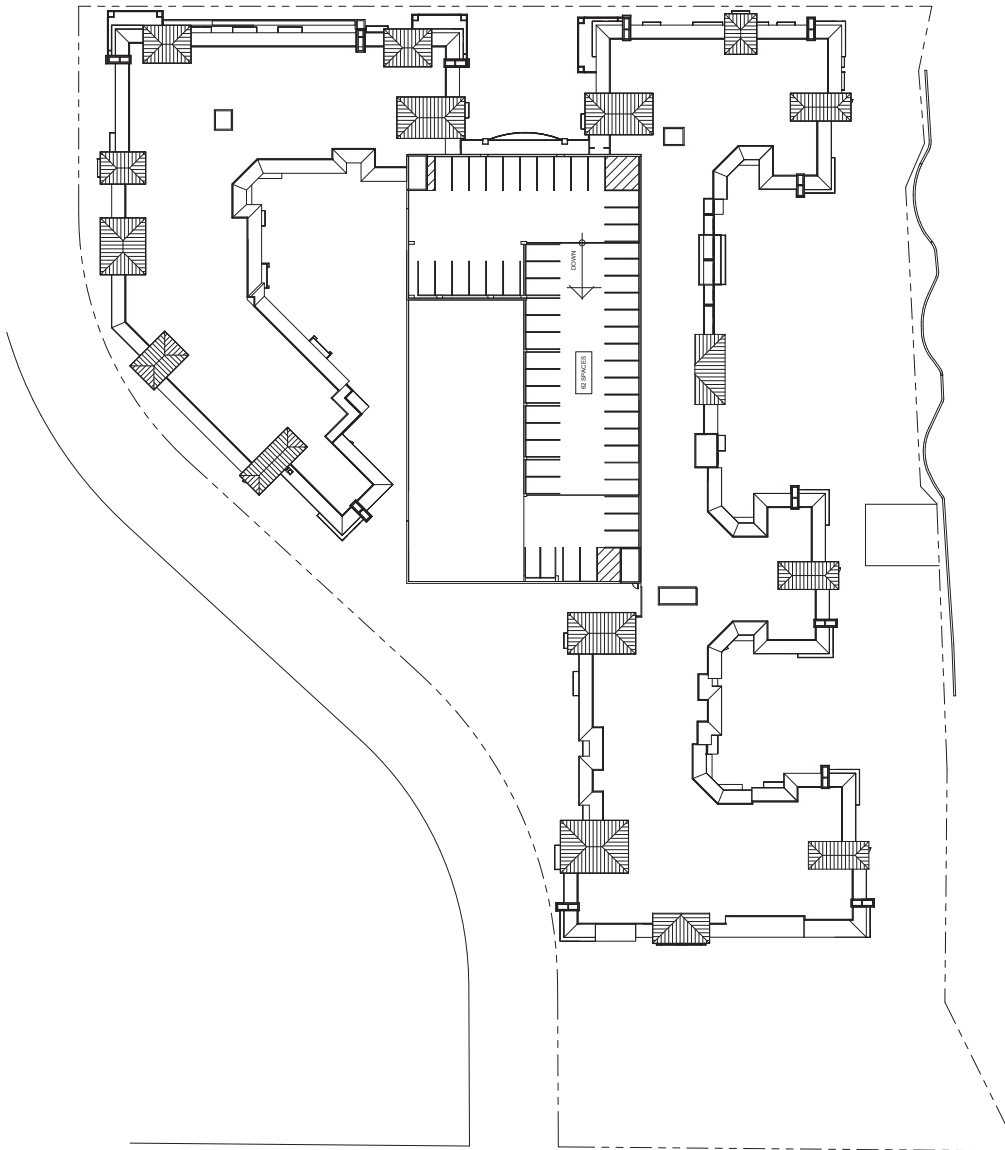
SOURCE: Kephart, 2017

FIGURE 3.0-11

Project Site Plan — Levels 3 and 4



1269.001-06/17



1 ROOF PLAN
1" = 30'-0"

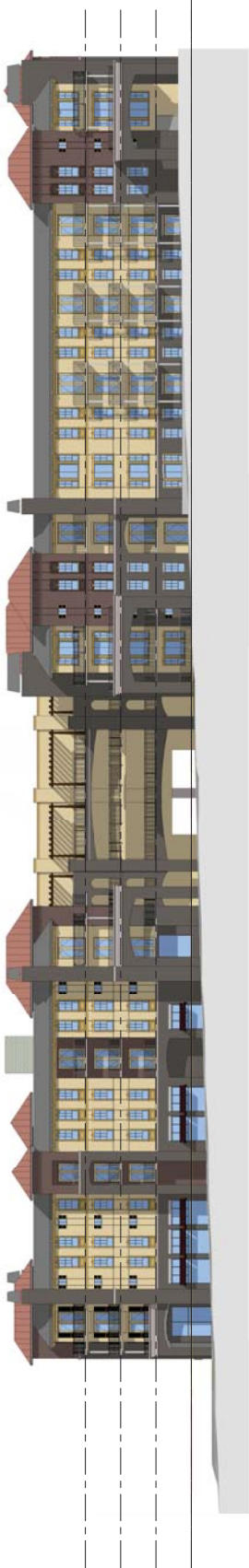
SOURCE: Kephart, 2017

FIGURE 3.0-12

Roof Plan



1269.001-06/17



1 TOWN CENTER BLVD ELEVATION
1/16" = 1'-0"



2 CORNER OF TOWN CENTER & VINE
1/16" = 1'-0"

MATERIAL LEGEND

[Color swatch]	STONE VENEER
[Color swatch]	STUCCO A
[Color swatch]	STUCCO B
[Color swatch]	STUCCO C
[Color swatch]	COMPOSITE SINGLE ROOFING
[Color swatch]	METAL ROOFING

ELEVATIONS

SOURCE: Kephart, 2017

FIGURE 3.0-13

Illustrative Project Elevations





① VINE ST. & MERCEDES
1" = 30'-0"



② VINE ST.
1" = 20'-0"

SOURCE: Kephart, 2017

MATERIAL LEGEND

	STONE VENEER
	STUCCO A
	STUCCO B
	STUCCO C
	COMPOSITE SINGLE ROOFING
	METAL ROOFING

FIGURE 3.0-14

Illustrative Project Elevations



① MERCEDES & GREENBELT
7/18" = 1'0"



② TOWN CENTER & GREENBELT
7/16" = 1'0"

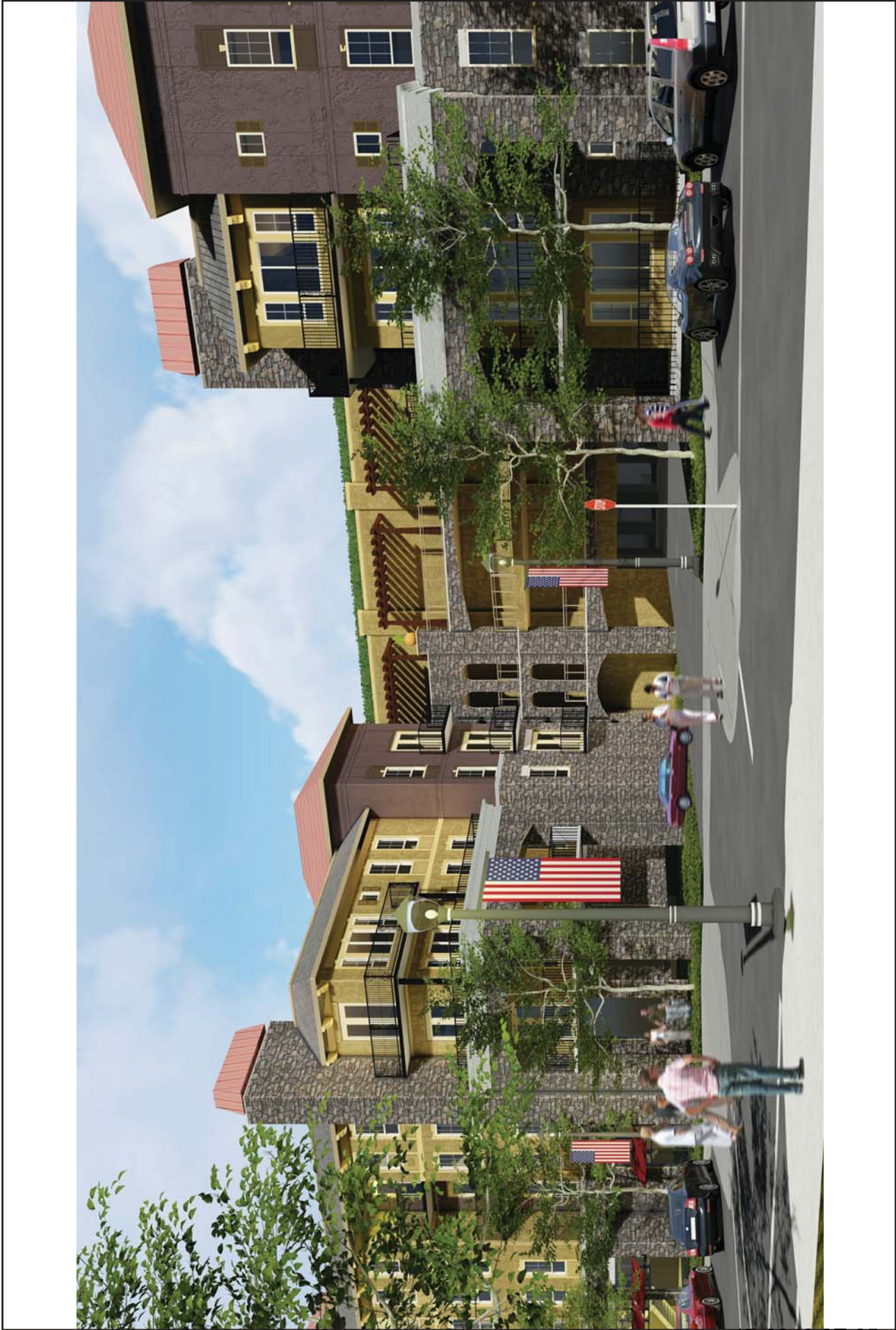
SOURCE: Kephart, 2017

MATERIAL LEGEND

	STONE VENER
	STUCCO A
	STUCCO B
	STUCCO C
	COMPOSITE SINGLE ROOFING
	METAL ROOFING

FIGURE 3.0-15

Illustrative Project Elevations



SOURCE: Kephart, 2017

FIGURE 3.0-16

Town Center Piazza Rendering



1269.001-06/17

3.6 UTILITIES

3.6.1 Potable and Irrigation Water

The El Dorado Irrigation District (EID) is an irrigation special district, organized and existing under the California Irrigation District Law (Water Code Section 20500, et seq.) and authorizing statutes (Water Code Section 22975, et seq.). EID, which serves nearly 110,000 residents in El Dorado County, would supply potable water to the proposed project. As shown in **Figure 3.0-17, Preliminary Utility Plan**, the project would extend a line from the 12-inch water main in Vine Street to a 4-inch point of connection near the entry driveway. This water line would provide potable domestic water service to the entire development. A second point of connection would be made from the 12-inch water main in Town Center Boulevard to provide a connection for fire service to the development via a 6-inch service line. A 12-inch service line would be extended between the 12-inch main lines in Town Center Boulevard and Mercedes Lane along the western edge of the project site to allow for the installation of three new fire hydrants; no domestic water service would be provided from this line.

Recycled water would be used for landscape irrigation on the project site. The project would extend the 6-inch recycled water main in Vine Street to a 1-1/2-inch point of connection near the entry driveway. This recycled water line would provide service to the entire development.

No off-site improvements to the existing water mains or the recycled water main are needed to serve the proposed project.

3.6.2 Wastewater

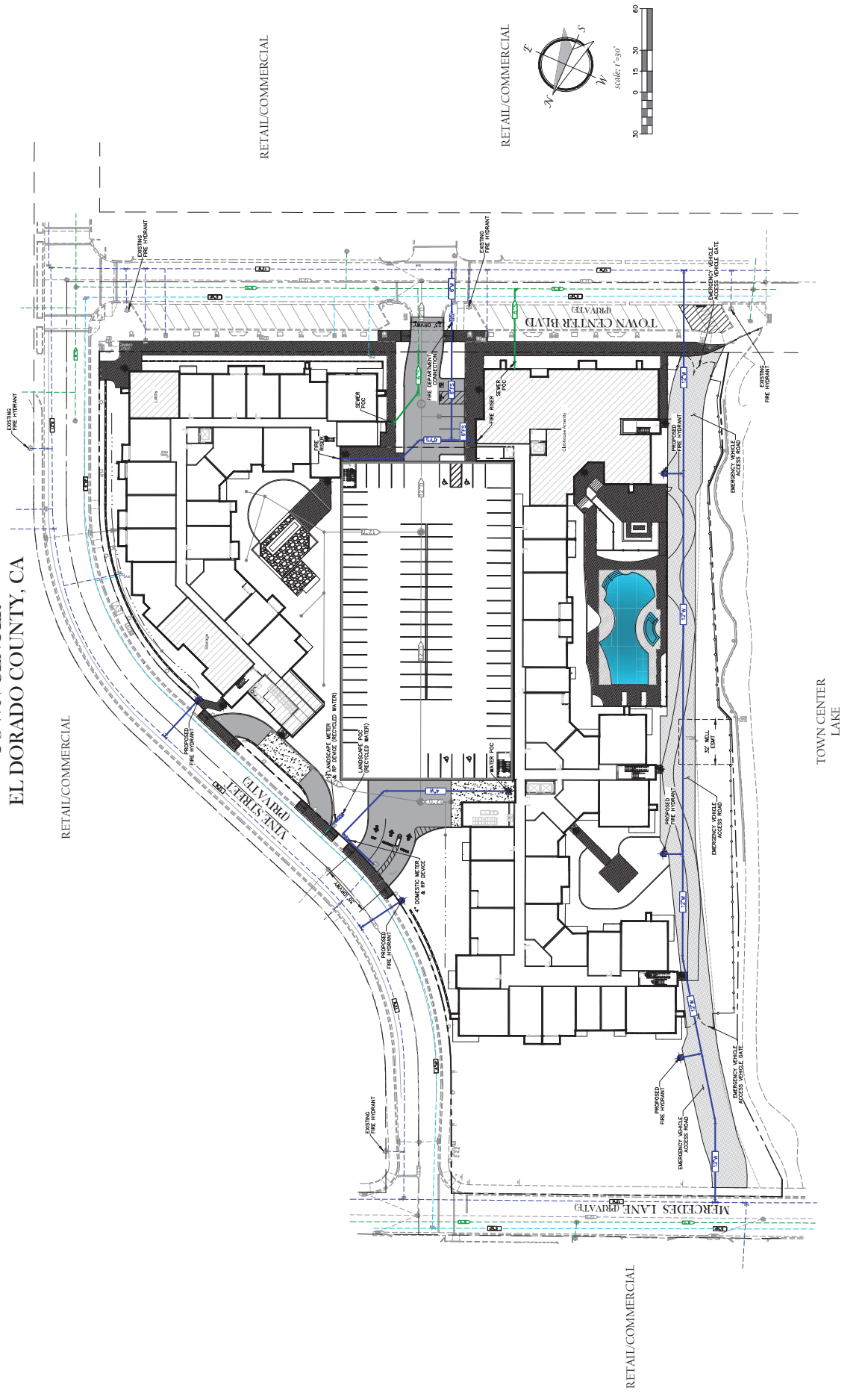
EID also provides wastewater collection and treatment services to the project area. The project would be served by the El Dorado Hills collection system, which consists of a series of lift stations, force mains, and gravity sewer mains that convey wastewater to the El Dorado Hills Wastewater Treatment Plant (EDHWWTP). As shown in **Figure 3.0-17**, the project would extend two lines from the 8-inch sewer main in Town Center Boulevard to two 6-inch points of connection (one for each building) near the main entry driveway to convey wastewater from the development. The 8-inch sewer main in Town Center Boulevard discharges into the 18-inch mainline El Dorado Hills Boulevard (EDHB) trunk gravity sewer line in the vicinity of White Rock Road and Post Street, sections of which might not have adequate capacity to handle project flows. As a result, off-site improvements to the EDHB trunk gravity sewer line may be required.

3.6.3 Storm Drainage

The site is currently served by private storm drainage facilities. A private entity owns and maintains a 12-inch storm drain in Town Center Boulevard. The proposed project would not alter the drainage system

PRELIMINARY UTILITY PLAN EL DORADO HILLS APARTMENTS

TOWN CENTER
EL DORADO COUNTY, CA



SOURCE: TSD Engineering, Inc., 2017

FIGURE 3.0-17

Preliminary Utility Plan



1269.001-06/17

along Town Center Boulevard. Storm water from proposed impervious surfaces on the site would be collected, treated, and discharged to the existing storm drain system. No off-site improvements to the existing storm drains are needed to serve the proposed project.

3.6.4 Electricity and Natural Gas

The Pacific Gas and Electric Company (PG&E) provides electricity and natural gas service to the El Dorado Hills community. PG&E charges connection and user fees for all new development, in addition to sliding rates for electrical and natural gas service based on use.

3.6.5 Sustainable Development Features

The proposed project proposes high-density residential on an infill site in close proximity to commercial development and employment centers. The project proposes to incorporate the following measures to: minimize energy and water consumption; improve indoor environmental quality; minimize waste disposed in landfills; and minimize vehicular traffic and associated air pollutant emissions.

Water

- Reclaimed irrigation water
 - The recycled water main will be extended from a 6-inch line in Vine Street. This recycled water line will provide service to the entire development.
 - Recycled water will be used for irrigation of all landscaped areas.
- New landscape plants will be drought tolerant, native to California or other Mediterranean climates, or other low water use species.
- High efficiency irrigation systems with water-efficient sprinkler heads, and smart controllers that use satellite weather data will be used.
- All water fixtures (faucets, showerheads, and toilets) will be low flow and/or WaterSense certified for low water use.
- All units will be equipped with Energy Star certified dishwashers for low water use.
- High-efficiency hot water boiler systems will be used for efficient hot water distribution.

Energy

- All buildings will exceed Title 24 energy requirements by a minimum of 10 percent.
- All apartments will be equipped with Energy Star certified appliances (dishwashers and refrigerators).

- Energy efficient LED light fixtures will be installed within the apartment buildings and for exterior lighting.
- All residential units will incorporate energy efficient Low-E windows.
- A minimum of 15 percent of the roof areas will be reserved for future photovoltaic (PV) solar installation. Infrastructure (conduit, structural elements, etc.) will be provided to facilitate the future PV solar installation.
- The parking garage will be designed for future Electric Vehicle (EV) charging station expansion.
- Temperature controllers will be installed for pool and spa heaters.

Materials

- More than 55 percent of all demolition materials and construction debris will be recycled.
- Durable, non-combustible materials, and fire resistant roofing will be used.
- Low/no VOC paints and coatings will be used in project construction and maintenance.
- Low VOC caulks, construction adhesives, and sealants will be used in project construction and maintenance.

Site Planning & Design

- The proposed project will be equipped with secure bike lockers for residents.

3.7 CONSTRUCTION ACTIVITIES AND SCHEDULE

Site clearing would be followed by excavation and grading. Site construction would include finish grading to establish necessary pads and foundations, construction of retaining walls and site encroachment, and installation of underground utility lines (i.e., water, recycled water, sewer, storm-drainage, and fire hydrants). Subsequent phases will include building construction, completion of exterior and interior improvements, and installation of landscaping. The project has been designed to balance earthwork on the site between cut and fill (see **Figure 3.0-18, Preliminary Grading and Drainage Plan**). However, during excavation of the building footings, plumbing, etc., some incidental excavated material will need to be hauled off site.

It is anticipated that the County Board of Supervisors would consider the Draft EIR for certification in fall 2017. If the proposed project were approved, project construction would occur over a period of 15 to 16 months. Construction would begin in spring 2018, with site grading and utility infrastructure work completed by late summer 2018. Construction of residential units is expected to commence in fall 2018 with completion by summer 2019, with full occupancy of the units shortly after that.

PRELIMINARY GRADING & DRAINAGE PLAN EL DORADO HILLS APARTMENTS

TOWN CENTER
EL DORADO COUNTY, CA



SOURCE: TSD Engineering, Inc., 2017



1269.001-06/17

FIGURE 3.0-18

Preliminary Grading and Drainage Plan

3.8 PROJECT APPROVALS

The project site is currently designated General Commercial-Planned Development (CG-PD) in the El Dorado Hills Specific Plan. As the proposed project would develop housing on the project site and would have a density of approximately 47 du/ac, the Spanos Corporation has applied to the County for the following four entitlements for the proposed project:

- 1) General Plan Amendment adding a new Policy (Policy 2.2.6.6) under Objective 2.2.6 (Site Specific Policy Section) to increase the maximum residential density allowed in the General Plan from 24 dwelling units per acre to a maximum of 47 dwelling units per acre specifically for the 4.565-acre project site within the TCE Planned Development area identified as Assessor's Parcel Numbers 121-290-60, 61, and 62.
- 2) El Dorado Hills Specific Plan Amendment incorporating multi-family residential use, density, and related standards for the project site. The project site would be designated as "Urban Infill Residential" within the Village T area of the El Dorado Hills Specific Plan (see **Figure 3.0-5**, Existing and Proposed Specific Plan Designations).
- 3) Rezoning of the project site from General Commercial-Planned Development (CG-PD) to Multi-Family Residential-Planned Development (RM-PD) and revisions to the RM-zone district development standards applicable to the proposed 214-unit apartment project (see **Figure 3.0-6**, Existing and Proposed Zoning).
- 4) Revision to the approved TCE Development Plan incorporating multi-family residential use, density, and related design and development standards for the proposed 214-unit apartment project within Planning Area 2 of the TCE Plan area (see **Figure 3.0-4**).

3.9 LEAD AND RESPONSIBLE AGENCIES

The County of El Dorado has the principal responsibility for approving the proposed project. For this reason, the County is the "Lead Agency" as defined by CEQA and is responsible for preparation of this EIR.

As defined by CEQA, "Responsible Agencies" are public agencies other than the Lead Agency that have discretionary approval over the project. The Draft EIR prepared for the proposed project would serve as the primary source of environmental information for each responsible agency. The following agencies are considered responsible agencies for the proposed project.

California Department of Transportation (Caltrans). Caltrans is a California government department that manages the state highway system and is actively involved with public transportation systems within the state. The project site is located approximately 500 feet south of U.S. 50. Although no permits or approvals are needed from Caltrans for the construction and operation of the proposed project, it is anticipated that Caltrans will review the Draft EIR and potentially provide comments to the County for consideration in the preparation of the Final EIR.

Regional Water Quality Control Board (RWQCB). The RWQCB is a state agency responsible for the implementation of programs for the protection of the waters of the state. Although no discretionary permits² are needed from the RWQCB for the construction and operation of the proposed project, it is anticipated that the RWQCB will review the Draft EIR and potentially provide comments to the County for consideration in the preparation of the Final EIR.

The El Dorado County Air Quality Management District (EDCAQMD). The EDCAQMD is responsible for monitoring ambient air pollutant levels throughout the west slope portion of El Dorado County and developing and implementing attainment strategies to ensure that future air quality will be within federal and state standards. Although no permits are needed from EDCAQMD for the construction and operation of the proposed project, it is anticipated that EDCAQMD will review the Draft EIR and potentially provide comments to the County for consideration in the preparation of the Final EIR.

El Dorado Irrigation District (EID). The EID is an irrigation special district, organized and existing under the California Irrigation District Law (Water Code Section 20500, et seq.) and authorizing statutes (Water Code Section 22975, et seq.). The EID oversees potable and recycled water supplies, as well as wastewater conveyance and management within the County. Although no permits or approvals are needed from EID for the construction and operation of the proposed project, it is anticipated that EID will review the Draft EIR and potentially provide comments to the County for consideration in the preparation of the Final EIR.

² The applicant will need to submit a Notice of Intent for coverage under the State National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Stormwater Runoff Associated with Construction Activity (General Construction Permit). This is a ministerial approval.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.0.1 INTRODUCTION

This chapter presents an analysis of each resource topic that has been identified through preliminary environmental analysis and the public scoping process as likely to be affected by the proposed El Dorado Hills Apartments project (“proposed project”) and related entitlements. Each topical section that follows describes the environmental setting of the proposed project as it relates to that specific resource topic; the impacts that could result from implementation of the proposed project; and mitigation measures that would avoid, reduce, or compensate for the significant impacts of the proposed project.

4.0.2 LEVELS OF SIGNIFICANCE

Under the California Environmental Quality Act (CEQA), a variety of terms are used to describe the levels of significance of adverse impacts. The definitions of terms used in this Draft EIR are presented below.

- **Significant and Unavoidable Impact.** An impact that exceeds the defined standards of significance and cannot be avoided or reduced to a less than significant level through implementation of feasible mitigation measures.
- **Significant Impact.** An impact that exceeds the defined standards of significance but can be avoided or reduced to a less than significant level through implementation of feasible mitigation measures.
- **Potentially Significant Impact.** A significant impact that may ultimately be determined to be less than significant; the level of significance may be reduced through implementation of policies or guidelines (that are not required by statute or ordinance), or through further definition of the proposed project detail in the future. Potentially significant impacts may also be impacts for which there is not enough information to draw a firm conclusion; however, for the purpose of this Draft EIR, they are considered significant. Such impacts are equivalent to Significant Impacts and require the identification of feasible mitigation measures.
- **Less Than Significant Impact.** Impacts that are adverse but that do not exceed the specified standards of significance.
- **No Impact.** The proposed project would not create an impact.

4.0.3 FORMAT OF RESOURCE TOPIC SECTIONS

Each resource topic considered in this chapter of the Draft EIR is addressed under six primary subsections: Introduction, Environmental Setting, Regulatory Considerations, Project Impacts and Mitigation Measures, Cumulative Impacts and Mitigation Measures, and References. An overview of the information included in these sections is provided below.

4.0.3.1 Introduction

The introduction section describes the topic to be analyzed and the contents of the analysis. It also provides the sources used to evaluate the potential impacts of the proposed project.

4.0.3.2 Environmental Setting

The environmental setting section for each resource topic provides a description of the applicable physical setting of the project area and its surroundings (e.g., existing land uses, existing soil conditions, existing transportation network and operating conditions).

4.0.3.3 Regulatory Considerations

The overview of regulatory considerations for each resource topic is organized by agency, including applicable federal, state, regional, and local policies.

4.0.3.4 Project Impacts and Mitigation Measures

This subsection lists the significance criteria that are used to evaluate impacts, followed by a discussion of the project-level impacts that would result from implementation of the proposed project. Impacts are numbered and shown in bold type, and the mitigation measures are numbered to correspond to the impact. Impacts and mitigation measures are numbered consecutively within each topical section.

4.0.3.5 Cumulative Impacts and Mitigation Measures

The cumulative impact analysis focuses on the change in the environment that would result from the incremental impact of the proposed project when added to the impacts of other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant impacts taking place over a period of time.

The *State CEQA Guidelines* suggest that the analysis of cumulative impacts for each resource topic can employ one of two methods to establish the effects of other past, current, and probable future projects. A lead agency may use a list of projects, including those outside the control of the agency, or alternatively, a summary of projections. These projections may be from an adopted general plan or related planning document, or from a prior environmental document that has been adopted or certified, and these documents may describe or evaluate regional or area-wide conditions contributing to the cumulative impact.

This Draft EIR evaluates cumulative impacts using a list of closely related past, present, and reasonably foreseeable future projects. The projects listed in **Table 4.0-1, Related Projects**, are included in the cumulative analysis for the proposed project. Of this list, five projects (presented in the tables in italics) are within 1.5 miles of the project site, with the closest reasonably foreseeable project located less than one mile to the north of the project site across U.S. 50. As the construction of some of these projects would overlap with that of the proposed project (2018 to 2019), the potential for the construction impacts of these projects to cumulate with the impacts of the proposed project are evaluated in this Draft EIR. These projects are also considered in the evaluation of cumulative operational impacts.

**Table 4.0-1
Related Projects**

Project	Location	Description	Anticipated Year Built¹
<i>Central El Dorado Hill Specific Plan</i>	<i>El Dorado Hills</i>	<i>Proposed 529 single-family units, 471 multi-family units, and 50,000 square feet of commercial use</i>	2037
Marble Valley Specific Plan	El Dorado Hills	Proposed 2,735 single-family units and 501 multi-family units, and 475,000 square feet of commercial use	2038
Lime Rock Valley Specific Plan	El Dorado Hills	Proposed Specific Plan for 800 single-family units	2038
Serrano	El Dorado Hills	Adopted Specific Plan including 6,162 single-family units	2028
<i>Valley View Specific Plan</i>	<i>El Dorado Hills</i>	<i>Adopted Specific Plan 2,840 single-family units</i>	2028
<i>Carson Creek Specific Plan</i>	<i>El Dorado Hills</i>	<i>Adopted 1,700 age restricted single-family units</i>	2025
Tilden Park	Shingle Springs	Proposed Planned Development consisting of 14 single-family units, 80 room hotel, a 120-seat restaurant, and 6,500 square feet of office use	2025
Bass Lake Hills Specific Plan	Cameron Park	Adopted Specific Plan for 1,458 single-family units.	2030
Promontory Specific Plan	El Dorado Hills	Adopted Specific Plan for 1,100 dwelling units and 7 acres of commercial use.	2020
<i>Rancho Dorado (aka. Saratoga Estates)</i>	<i>El Dorado Hills</i>	<i>Approved Tentative subdivision map for a total of 317-unit single family residential units</i>	2035
<i>Ridgeview</i>	<i>El Dorado Hills</i>	<i>Approved subdivision</i>	2025
Mill Creek (formerly San Stino Residential)	Shingle Springs	Proposed Tentative Subdivision Map 633 single-family units	2040

Source: El Dorado County, 2017

Italic indicates that the project is within 1.5 miles of the proposed project.

The cumulative impacts discussion describes the cumulative impacts of the proposed project and determines whether implementation of the proposed project in combination with other past, present, and reasonably foreseeable development would result in a significant cumulative impact, and, if so, whether the project's contribution to the significant cumulative impact would be cumulatively considerable.

Section 15130 of the *State CEQA Guidelines* provides direction regarding cumulative impact analysis as follows:

- an EIR should not discuss cumulative impacts that do not result in part from the proposed project;
- a lead agency may determine that an identified cumulative impact is less than significant, and shall briefly identify facts and analysis in the EIR supporting its determination;
- a lead agency may determine a project's incremental effect is not cumulatively considerable, and therefore is not significant, and shall briefly describe in the EIR the basis of its determination; and
- a lead agency may determine a project's cumulatively considerable contribution to a significant cumulative impact may be rendered less than cumulatively considerable and therefore residually not significant, if the project implements or funds its fair share of mitigation measure or measures designed to alleviate the cumulative impact.

4.0.3.6 References Section

This subsection lists the references used to prepare the analysis contained in each resource section of the EIR.

4.1.1 INTRODUCTION

This section presents existing air quality conditions in the project area (including the project site, the applicable air district jurisdiction, and the air basin) and analyzes the potential air quality impacts, both temporary (i.e., construction) and long term (i.e., operational), from the implementation of the proposed El Dorado Hills Apartments project (“proposed project”). The section also provides a description of the regulatory framework for air quality management on a federal, state, regional, and local level. The section is based on an *Air Quality and Greenhouse Gas Analysis* prepared by De Novo Planning Group, dated June 2017. The report is included in **Appendix 4.1** of this Draft EIR.

4.1.2 ENVIRONMENTAL SETTING

4.1.2.1 Climate and Meteorology

The project site is located in the western portion of the County of El Dorado that is part of the Mountain Counties Air Basin (MCAB). The MCAB comprises portions of Placer County and the County of El Dorado, and all of Plumas, Sierra, Nevada, Amador, Calaveras, Tuolumne, and Mariposa counties. The MCAB includes the central and northern Sierra Nevada Mountains. Elevations range from several hundred feet above mean sea level (MSL) in the foothills to over 10,000 feet above MSL along the Sierra crest. The project site is located within the El Dorado County portion of MCAB.

Ambient concentrations of air pollutant emissions are determined by the amount of pollutants emitted and the atmosphere’s ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as climate, meteorology, and topography, in addition to the level of emissions generated by existing air pollutant sources.

The MCAB generally experiences warm, dry summers and wet winters. Winter temperatures in the mountains can be below freezing for weeks at a time, and substantial depths of snow can accumulate, but in the western foothills, winter temperatures usually dip below freezing only at night, and precipitation is mixed as rain or light snow. In the summer, temperatures in the mountains are mild, with daytime peaks in the 70s to low 80s, but the western end of the county can routinely exceed 100 degrees.

Average annual precipitation generally increases with altitude, ranging from about 30 inches in the west to more than 60 inches near the crest of the Sierra Nevada. The prevailing wind direction over the county is westerly. However, the terrain of the area has a great influence on local winds, so that wide variability

in wind direction can be expected. In the foothills, regional airflow patterns are influenced by the mountainous and hill covered terrain, which directs surface air flows, causes shallow vertical mixing, and creates areas of high pollutant concentrations by hindering dispersion. Inversion layers, where warm air overlays cooler air, frequently occur and trap pollutants close to the ground.

From an air quality perspective, the topography and meteorology of the MCAB combine such that local conditions predominate in determining the effect of emissions in the basin. Regional airflows are affected by the mountains and hills, which direct surface air flows, cause shallow vertical mixing, and create areas of high pollutant concentrations by hindering dispersion. Inversion layers, where warm air overlays cooler air, frequently occur and trap pollutants close to the ground. In the winter, these conditions can lead to CO “hotspots” along heavily traveled roads and at busy intersections. During summer’s longer daylight hours, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy for the photochemical reaction between reactive organic compounds (ROG) and oxides of nitrogen (NO_x) that results in the formation of ozone. Because of its long formation time, ozone is a regional pollutant rather than a local hotspot problem.

In the summer, the strong upwind valley air flowing into the basin from the Central Valley to the west is an effective transport medium for ozone precursors and ozone generated in the Bay Area and the Sacramento and San Joaquin Valleys. These transported pollutants predominate as the cause of ozone in the MCAB and are largely responsible for the exceedances of the State and federal ozone ambient air quality standards in the MCAB. The California Air Resources Board (CARB) has officially designated the MCAB as “ozone impacted” by transport from those areas.

Air Pollutants and Health Effects

Both the State and federal governments have established health-based Ambient Air Quality Standards (AAQS) for six criteria air pollutants: carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), and suspended particulate matter (PM). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Long-term exposure to elevated levels of criteria pollutants may result in adverse health effects. However, emission thresholds established by an air district are used to manage total regional emissions within an air basin based on the air basin’s attainment status for criteria pollutants. These emission thresholds are established by the air district for individual projects that would contribute to regional emissions and pollutant concentrations and could adversely affect or delay the projected attainment target year for certain criteria pollutants.

Because of the conservative nature of the thresholds, and the basin-wide context of individual project emissions, there is no direct correlation between a single project and localized air quality-related health effects. One individual project that generates emissions exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as ozone precursors like nitrogen oxides (NO_x) and reactive organic gases (ROG).

Occupants of facilities such as schools, day care centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered to be more sensitive than the general public to air pollutants because these population groups have increased susceptibility to respiratory disease. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions, compared to commercial and industrial areas, because people generally spend longer periods of time at their residences, with greater associated exposure to ambient air quality conditions. Recreational use areas are also considered sensitive compared to commercial and industrial land uses due to greater exposure to ambient air quality conditions associated with exercise. Air pollutants and their health effects are summarized below in **Table 4.1-1, Sources and Health Effects of Air Pollutants.**

**Table 4.1-1
Sources and Health Effects of Air Pollutants**

Pollutant	Sources	Primary Health Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> Any source that burns fuel such as cars, trucks, construction, and farming equipment, and residential heaters and stoves 	<ul style="list-style-type: none"> Chest pain in heart patients¹ Headaches, nausea Reduced mental alertness Death at very high levels
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> See CO sources. 	<ul style="list-style-type: none"> Increased response to allergens
Ozone (O ₃)	<ul style="list-style-type: none"> Aggravation of respiratory and cardiovascular diseases. Irritation of eyes. Impairment of cardiopulmonary function. Plant leaf injury. 	<ul style="list-style-type: none"> Cough, chest tightness² Difficulty taking a deep breath Worsened asthma symptoms Lung inflammation
Toxic Air Contaminants	<ul style="list-style-type: none"> Cars and trucks (especially diesels) Industrial sources, such as chrome platers Neighborhood businesses, such as dry cleaners and service stations Building materials and products 	<ul style="list-style-type: none"> Cancer Chronic eye, lung, or skin irritation Neurological and reproductive disorders
Suspended Particulate Matter (PM _{2.5} and PM ₁₀)	<ul style="list-style-type: none"> Cars and trucks (especially diesels) Fireplaces, woodstoves Windblown dust from roadways, agriculture, and construction 	<ul style="list-style-type: none"> Hospitalizations for worsened heart disease Emergency room visits for asthma Premature death

Pollutant	Sources	Primary Health Effects
-----------	---------	------------------------

Source: California Air Resources Board (CARB) Fact Sheet: Air Pollution and Health, <http://www.arb.ca.gov/research/health/fs/fs1/fs1.htm>

¹ Health effects from CO exposures occur at levels considerably higher than ambient.

² Ozone is not generated directly by these sources. Rather, chemicals emitted by these precursor sources react with sunlight to form ozone in the atmosphere.

4.1.2.2 Regional Air Quality

The determination of whether a region's air quality is healthful or unhealthful is made by comparing contaminant levels in ambient air samples to national and state AAQS. The state and national ambient air quality standards for each of the monitored pollutants and their effects on health are summarized in **Table 4.1-2, Ambient Air Quality Standards**. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soil, water, visibility, materials, vegetation and other aspects of the general welfare. California standards are generally the same as or more stringent than federal standards.

**Table 4.1-2
Ambient Air Quality Standards**

Air Pollutant	Averaging Time	California Standards	National Standards ¹	
			Primary ^{2,3}	Secondary ^{2,4}
Ozone (O ₃)	1-hour	0.09 ppm (180 µg/m ³)	--	--
	8-hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 mg/m ³)	Same as primary --
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	--
	8-hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	--
Nitrogen Dioxide (NO ₂)	1-hour	0.18 ppm (339 µg/m ³)	100 ppb ⁷ (188 µg/m ³)	
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³) ⁵	Same as primary
	1-hour	0.25 ppm (655 µg/m ³)	0.075 ppm ⁷ (196 µg/m ³) ⁸	--
Sulfur Dioxide (SO ₂)	3-hour	--	-- ⁷	0.5 ppm ⁹ (1300 µg/m ³)
	24-hour	0.04 ppm (105 µg/m ³)	--	--
	Annual Arithmetic Mean	--	0.030 ppm	--
Respirable Particulate Matter (PM ₁₀)	24-hour	50 µg/m ³	--	--
	Annual Arithmetic Mean	20 µg/m ³	150 µg/m ³	Same as primary
Fine Particulate Matter (PM _{2.5})	24-hour	--	35 µg/m ³	Same as primary
	Annual Arithmetic Mean	12 µg/m ³	12.0 µg/m ³	15 µg/m ³
Lead	30-day Average	1.5 µg/m ³	--	--
	Calendar Quarter	--	1.5 µg/m ³	Same as primary

Air Pollutant	Averaging Time	California Standards	National Standards ¹	
			Primary ^{2,3}	Secondary ^{2,4}
	Rolling 3 month average	--	0.15 µg/m ³	Same as primary

Source: De Novo Planning, 2017; California Air Resources Board, Ambient Air Quality Standards Chart, 2015.

ppm = parts per million by volume; µg/m³ = microgram per cubic meter; mg/m³ = milligrams per cubic meter; ppb = parts per billion.

¹ Standards, other than for ozone and those based on annual averages, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

² Concentrations are expressed first in units in which they were promulgated. Equivalent units given in parenthesis.

³ Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health. Each state must attain the primary standards no later than three years after that state's implementation plan is approved by the U.S. Environmental Protection Agency (US EPA).

⁴ Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

⁵ The level of annual NO₂ standard is 53 ppb.

⁶ The national 1-hour ozone standard was revoked by US EPA on June 15, 2005. A new 8-hour standard was established in May 2008.

⁷ The form of the 1-hour NO₂ standard is the 3-year average of the 98th percentile of the daily maximum 1-hour average concentration.

⁸ On June 2, 2010 the US EPA established a new 1-hour SO₂ standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of the 1-hour daily maximum. The US EPA also revoked both the existing 24-hour and annual average SO₂ standards.

⁹ Not to be exceeded more than once per year.

Air quality of a region is considered to be in attainment of the National Ambient Air Quality Standards (NAAQS) if the measured ambient air pollutant levels are not exceeded more than once per year, except for O₃, PM₁₀, PM_{2.5}. Attainment of the NAAQS for O₃, PM₁₀, and PM_{2.5} is based on statistical calculations (averages or arithmetic means) over one- to three-year periods, depending on the pollutant.

Air quality of a region is considered to be in attainment of the state standards if the measured ambient air pollutant levels of O₃, CO, SO₂ (1- and 24-hour), NO₂, PM₁₀, PM_{2.5}, and visibility reducing particles are not exceeded, and all other standards are not equaled or exceeded at any time in any consecutive three-year period.

The CARB is required to designate areas of the State as attainment, non-attainment or unclassified for any State standard. An "attainment" designation for an area signifies that pollutant concentrations did not violate pollutant standards. A "non-attainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An "unclassified" designation signifies that data does not support either an attainment or nonattainment status. The law divides districts into moderate, serious and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone, CO, and NO₂ as either "does not meet the primary standards," or "cannot be classified" or "is better than national standards." For SO₂, areas are designated as "does not

meet the primary standards,” “does not meet the secondary standards,” “cannot be classified,” or “is better than national standards.” In 1991, new nonattainment designations were assigned to areas for PM10 based on the likelihood that they would violate national PM10 standards. All other areas are designated “unclassified.”

The MCAB does not meet CAAQS or NAAQS for ground level ozone, nor State standards for PM10 and national standards for PM2.5.

4.1.2.3 Local Air Quality

The air quality of any region is evaluated by comparing the concentrations of air pollutants present in the air to an appropriate ambient air quality standard. The standards represent the allowable pollutant concentrations designed to ensure that the public health and welfare are protected, while including a reasonable margin of safety to protect the more sensitive individuals in the population. The CARB is responsible for maintaining and monitoring the five air-quality stations (including three in MCAB and two in the Lake Tahoe Air Basin) located in the County of El Dorado (Baughman 2016). The EDCAQMD relies on the air-quality monitoring stations to measure ambient concentrations of the criteria pollutants.

While three of the air-quality monitoring stations are located in the County and the MCAB, the nearest monitoring station to the project site is located on Natoma Street in the City of Folsom in Sacramento County.¹ As the topography and elevation varies throughout the County, with higher elevations found in the eastern portion of the County, compared to the western portion, the air-quality monitoring station located directly north of the project site (while not within the boundaries of the MCAB) is more representative of the air quality near the project site. **Table 4.1-3, Highest Measured Air Pollutant Concentrations near the Project Site**, provides a summary of air pollutant monitoring data for this station. This table shows the highest air pollutant concentrations measured at the station over the three-year period from 2012 through 2015.

¹ This monitoring station is located within the boundaries of the Sacramento Metropolitan AQMD.

**Table 4.1-3
Highest Measured Air Pollutant Concentrations near the Project Site**

Pollutant	Year			
	2012	2013	2014	2015
OZONE (O₃)				
Maximum 1-hour concentration (ppm)	0.112	0.114	0.100	0.114
Maximum 8-hour concentration (ppm)	0.105	0.087	0.084	0.093
CARBON MONOXIDE (CO)				
Maximum 8-hour concentration (ppm)	N/A	N/A	N/A	N/A
NITROGEN DIOXIDE (NO₂)				
Maximum 1-hour concentration (ppm)	0.029	0.030	0.035	0.026
Annual average concentration (ppm)				
RESPIRABLE PARTICULATE MATTER (PM₁₀)				
Maximum 24-hour concentration, state (µg/m ³)	43.0	63.5	42.8	51.4
Annual arithmetic mean concentration (µg/m ³)	15.8	23.2	18.8	18.0
FINE PARTICULATE MATTER (PM_{2.5})				
Maximum 24-hour concentration (µg/m ³)	25.6	29.2	52.0	38.1
Annual arithmetic mean concentration (µg/m ³) ⁶	7.2	*	7.2	8.1

Source: CARB iADAM <https://www.arb.ca.gov/adam/topfour/topfourdisplay.php>

Folsom-Natoma Street Air Quality Monitoring Station used for all pollutant concentrations except PM₁₀.

Ambient air concentrations of carbon monoxide are not available for the range of years 2012-2015.

1. PM₁₀ concentrations obtained from Sacramento-Del Paso Manor air quality monitoring station.

ppm = parts per million by volume; µg/m³ = microgram per cubic meter.

Values reported in **bold** exceed ambient air quality standards.

Existing air quality concerns within the project area are related to increases in regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, and odors. The primary source of ozone (smog) pollution is motor vehicles, which account for 70 percent of the ozone in the region. Particulate matter is caused by dust, primarily dust from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

4.1.2.4 Sensitive Receptors

As noted previously, certain groups of people are more affected by air pollution than others. CARB has identified the following population groups as most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. The project is surrounded by commercial uses and no sensitive receptors

are located in close proximity of the project site. The nearest sensitive receptor is El Dorado Hills Kindercare, located approximately 900 feet to the northwest of the project site. Other sensitive receptors in the vicinity of the project site include residential uses (Sunset Mobile Home Park and the Cresleigh Subdivision) and a park (Creekside Greens Park) located approximately 0.25 miles south of the project site across White Rock Road. No hospitals or schools are located within the immediate vicinity of the project site. The closest schools (Oak Meadow Elementary School and William Brooks Elementary School) are both located approximately 0.8 miles to the northwest and northeast of the project site, respectively. The nearest hospital (Mercy Hospital of Folsom) is located approximately 4.5 miles northwest of the project site.

4.1.3 REGULATORY CONSIDERATIONS

Air quality within the MCAB is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly as well as individually to improve air quality through legislation, regulations, planning, policymaking, education, and a variety of programs. With respect to the proposed project, the EDCAQMD would administer most of the air quality requirements affecting the proposed project. The agencies primarily responsible for improving the air quality within MCAB are discussed below along with their individual responsibilities.

4.1.3.1 United States Environmental Protection Agency

Criteria Pollutants

The United States Environmental Protection Agency (US EPA) is responsible for implementing and enforcing the federal Clean Air Act (CAA) and developing the NAAQS. The NAAQS are summarized above in **Table 4.1-2** and the relevant health effects of the criteria pollutants are presented in **Table 4.1-1**. As part of its implementation responsibilities, the US EPA requires each state to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain and/or maintain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs.

The MCAB is currently classified by the US EPA as a nonattainment area for the 8-hour standard for O₃ and a nonattainment area for PM_{2.5}. Additionally, it has been designated as an attainment/unclassifiable area for the 1-hour and 8-hour standards for CO and the annual standard for NO₂, and as an unclassified area for the 24-hour and annual SO₂ standards. The MCAB is currently designated as unclassifiable for the 24-hour PM₁₀ standard. The status of MCAB with respect to attainment with the NAAQS is summarized in **Table 4.1-4, National Ambient Air Quality Standard Designations – MCAB**.

**Table 4.1-4
National Ambient Air Quality Standard Designations – MCAB**

Pollutant	Designation/Classification
Ozone (O ₃)	Nonattainment
Carbon Monoxide (CO)	Unclassified/Attainment
Nitrogen Dioxide (NO ₂)	Unclassified/Attainment
Sulfur Dioxide (SO ₂)	Unclassified
Respirable Particulate Matter (PM ₁₀)	Unclassified
Fine Particulate Matter (PM _{2.5})	Nonattainment
Lead (Pb)	Unclassified/Attainment
Sulfates (SO ₄)	Attainment
Hydrogen Sulfide (H ₂ S)	Unclassified
Vinyl Chloride	Unclassified
Visibility Reducing Particles	Unclassified

Source: California Air Resources Board, "Area Designations Maps/State and National," <http://www.arb.ca.gov/design/adm/adm.htm>. 2015

Hazardous Air Pollutants

Regulation of hazardous air pollutants (HAPs) under federal regulations is achieved through federal and state controls on individual sources. Federal law defines HAPs as non-criteria air pollutants with short-term (acute) and/or long-term (chronic or carcinogenic) adverse human health effects. The 1990 federal CAA Amendments offer a comprehensive plan for achieving significant reductions in both mobile and stationary source emissions of HAPs. Under the 1990 CAA Amendments, a total of 189 chemicals or chemical families were designated HAPs because of their adverse human health effects. Title III of the 1990 federal CAA Amendments amended Section 112 of the CAA to replace the former program with an entirely new technology-based program. Under Title III, the US EPA must establish maximum achievable control technology emission standards for all new and existing "major" stationary sources through promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAP). Major stationary sources of HAPs are required to obtain an operating permit from the local air district pursuant to Title V of the 1990 CAA Amendments. A major source is defined as one that emits at least 10 tons per year of any HAP or at least 25 tons per year of all HAPs. As a residential project, the proposed project would not generate any HAPs and would not be considered a major source.

4.1.3.2 California Air Resources Board (CARB)

CARB, a branch of the California Environmental Protection Agency (CalEPA), oversees air quality

planning and control throughout California. It is primarily responsible for ensuring implementation of the 1988 California Clean Air Act (CCAA), for responding to the federal CAA requirements, and for regulating emissions from motor vehicles and consumer products within the state. The CCAA and other California air quality statutes invest local air districts, such as the EDCAQMD, with the responsibility for regulating most stationary sources, and to a certain extent, area sources.

Criteria Pollutants

CARB has established ambient air quality standards for the state (i.e., California Ambient Air Quality Standards [CAAQS]) which apply to the same seven criteria pollutants as the federal CAA and also address sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. Based on monitored pollutant levels, the CCAA divides O₃ nonattainment areas into four categories (moderate, serious, severe, and extreme) to which progressively more stringent planning and emission control requirements apply.

The MCAB is a nonattainment area for the California 1-hour and 8-hour ozone standard. The MCAB is designated as nonattainment for the California 24-hour and annual PM₁₀ standards. The MCAB is designated as attainment or unclassifiable for all other CAAQS. The ozone precursors (reactive organic gases [ROG], and oxides of nitrogen [NO_x]), in addition to PM₁₀, are the criteria air pollutants of concern for projects located in the MCAB. The status of the MCAB with respect to attainment with the CAAQS is summarized in **Table 4.1-5, California Ambient Air Quality Standard Designations – MCAB**.

**Table 4.1-5
California Ambient Air Quality Standard Designations – MCAB**

Pollutant	Designation/Classification
Ozone (O ₃)	Nonattainment
Carbon Monoxide (CO)	Unclassified
Nitrogen Dioxide (NO ₂)	Attainment
Sulfur Dioxide (SO ₂)	Attainment
Respirable Particulate Matter (PM ₁₀)	Nonattainment
Fine Particulate Matter (PM _{2.5})	Unclassified
Lead (Pb)	Attainment
Sulfates (SO ₄)	Attainment
Hydrogen Sulfide (H ₂ S)	Unclassified
Vinyl Chloride	Unclassified
Visibility Reducing Particles	Unclassified

Source: California Air Resources Board, "Area Designations Maps/State and National," <http://www.arb.ca.gov/degis/adm/adm.htm>. 2015

Toxic Air Contaminants

California law defines toxic air contaminants (TACs) as air pollutants which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. A total of 245 substances have been designated TACs under California law; they include the federal HAPs adopted as TACs in accordance with Assembly Bill 2728. The Air Toxics Hot Spots Information and Assessment Act of 1987, Assembly Bill 2588 (AB 2588), seeks to identify and evaluate risk from air toxics sources; AB 2588 does not regulate air toxics emissions directly. Under AB 2588, sources emitting more than 10 tons per year of any criteria air pollutant must estimate and report their toxic air emissions to the local air districts. Local air districts then prioritize facilities on the basis of emissions, and high priority facilities are required to submit a health risk assessment and communicate the results to the affected public. Depending on risk levels, emitting facilities are required to implement varying levels of risk reduction measures.

TACs do not have ambient air quality standards, but are regulated by the US EPA, CARB, and the EDCAQMD. In 1998, CARB identified particulate matter from diesel-fueled engines as a TAC. CARB has completed a risk management process that identified potential cancer risks for a range of activities and land uses that are characterized by use of diesel-fueled engines. High-volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (distribution centers, truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high volume transit centers, and schools with a high volume of bus traffic. Health risks from TACs are a function of both concentrations of the TAC and the duration of exposure.

It is important to note that TACs are not considered criteria air pollutants and thus are not specifically addressed through the setting of ambient air quality standards. Instead, the US EPA and CARB regulate TACs through statutes and regulations that generally require the use of the maximum or best available control technology to limit emissions.

Naturally Occurring Asbestos

In addition to criteria pollutants, a pollutant of concern in the County of El Dorado is naturally occurring asbestos (NOA) due to the presence of ultramafic materials (materials that contain magnesium and iron and a very small amount of silica) in the soil in many parts of the county. Emissions of NOA have been attributed to soil-disturbing activities, including construction activities. NOA has been identified as a TAC by CARB, however, a quantitative significance threshold for NOA has not been established. The State regulates NOA through the State of California Asbestos Airborne Toxic Control Measure for

Construction, Grading, Quarrying, and Surface Mining Operations (2008), which addresses asbestos containing fugitive dust generated by construction and construction-related activities at the State level.

High Volume Roadways

Air pollutant exposures and their associated health burdens vary considerably within places in relation to sources of air pollution. Motor vehicle traffic is perhaps the most important source of intra-urban spatial variation in air pollution concentrations. Air quality research consistently demonstrates that pollutant levels are substantially higher near freeways and busy roadways, and human health studies have consistently demonstrated that children living within 100 to 200 meters (328 to 656 feet) of freeways or busy roadways have reduced lung function and higher rates of respiratory disease. At present, it is not possible to attribute the effects of roadway proximity on non-cancer health effects to one or more specific vehicle types or vehicle pollutants. Engine exhaust, from diesel, gasoline, and other combustion engines, is a complex mixture of particles and gases, with collective and individual toxicological characteristics.

Federal and State regulations control air pollutants at the regional level by limiting vehicle and stationary source emissions. However, air quality regulations have not limited the use of vehicles and generally have not protected sensitive land uses from air pollution “hot spots” associated with proximity to transportation facilities.

4.1.3.3 El Dorado County Air Quality Management District

The EDCAQMD is tasked with achieving and maintaining healthful air quality for its residents by establishing programs, plans, and regulations enforcing air pollution control rules, in order to attain State and federal ambient air quality standards and minimize public exposure to airborne toxins and nuisance odors. EDCAQMD encourages local jurisdictions to include General Plan policies or elements that, when implemented, would improve air quality.

The EDCAQMD has adopted several attainment plans to achieve State and federal air quality standards and comply with California and federal CAA requirements. EDCAQMD continuously monitors its progress in implementing attainment plans and must periodically report to CARB and the US EPA. EDCAQMD, in partnership with the five air districts in the Sacramento Metropolitan Area, CARB, and the Sacramento Area Council of Governments (SACOG), periodically revises its attainment plans to reflect new conditions and requirements in accordance with schedules mandated by the California and federal CAAs.

The California CAA requires a triennial assessment of the extent of air quality improvements and emissions reductions achieved with control measures. The 2006 and 2009 Triennial Assessment and Plan

Update developed by EDCAQMD was prepared pursuant to CARB guidance, complies with plan revision requirements, and compares and incorporates updated population, industry, and vehicle-related projections, as necessary. The 2009 Assessment Plan provided emissions projections for the years 2010, 2015, and 2020 for stationary, area, and on- and off-road mobile sources.

The 2013 Revision to the Sacramento Regional 8-Hour Ozone Attainment Plan is the current air plan for the EDCAQMD, and sets out stationary source control programs and statewide mobile source control programs for attainment of the 8-hour ozone standard.

EDCAQMD's primary means of implementing air quality plans is by adopting rules and regulations. Relevant EDCAQMD rules include but are not limited to the following (2012):

- **Rule 205 - Nuisance:** To restrict discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property.
- **Rule 207 - Particulate Matter:** To limit release or discharge into the atmosphere from any source or single processing unit, exclusive of sources emitting combustion contaminants only, particulate matter emissions in excess of 0.1 grains per cubic foot of dry exhaust gas at standard conditions.
- **Rule 215 - Architectural Coatings:** To limit the quantity of volatile organic compounds (VOC) in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured, blended, or repackaged for use within EDCAQMD.
- **Rule 223-1 - Fugitive Dust, Construction, Bulk Material Handling, Blasting, Other Earth Moving Activities, and Carryout and Trackout Prevention:** To reduce fugitive dust generated by construction and construction-related activities.
- **Rule 223-2 - Fugitive Dust, Asbestos Hazard Mitigation:** To reduce the amount of asbestos particulate matter entrained in the ambient air as a result of any construction or construction related activities, that disturbs or potentially disturbs naturally occurring asbestos by requiring actions to prevent, reduce or mitigate asbestos emissions.
- **Rule 224 - Cutback and Emulsified Asphalt Paving Materials:** To restrict discharge to the atmosphere of VOCs caused by the use or manufacture, mixing, storage and application of Cutback or Emulsified asphalt for paving, road construction or road maintenance.

- **Rule 300 - Open Burning:** To limit emissions to the atmosphere from open burning.
- **Rule 501.1 - General Permit Requirements:** To provide an orderly procedure for the review of new sources of air pollution and the orderly review of the modification and operation of existing sources through the issuance of permits.

CEQA Guide to Air Quality Assessment

The EDCAQMD published the *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts under the California Environmental Quality Act* in February 2002 (hereinafter *AQMD CEQA Guide*). This guide outlines quantitative and qualitative significance criteria, methodologies for the estimation of construction and operational emissions, and mitigation measures to reduce such impacts. The quantitative and qualitative significance criteria are similar to the criteria for and developed in coordination with the surrounding air quality districts. To reduce NO_x emissions and visible emissions from off-road diesel construction equipment, the following measures are recommended by the EDCAQMD:

- “All mass grading operations shall provide a plan for approval by the EDCAQMD demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at the time of construction; and the project representative shall submit a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction operations occur. At least 48 hours before the use of subject heavy-duty off-road equipment, the project representative shall provide the EDCAQMD with the anticipated construction time line including start date, and name and phone number of the project manager and onsite foreman. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, particulate matter traps, engine retrofit technology, after-treatment products, and/or other options as become available.”
- “All mass grading operations shall ensure that emissions from off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than 3 minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringlemann 2.0) shall be repaired immediately, and the EDCAQMD shall be notified within 48 hours of identification of noncompliant

equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction operations occur. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The EDCAQMD and/or officials may conduct periodic site inspections to determine compliance. The above recommendations shall not supersede other EDCAQMD or state rules and regulations.”

- “The primary contractor shall be responsible for ensuring that all heavy-duty equipment is properly tuned and maintained, in accordance with manufacturers’ specifications.”

Local Asbestos Concerns

As discussed above, NOA is a pollutant of concern in the County of El Dorado. The EDCAQMD is responsible for implementing and enforcing asbestos-related regulations and programs. This includes implementation of Title 17, Sections 93105 and 93106 of the California Code of Regulations (Asbestos Airborne Toxic Control Measure-Asbestos-Containing Serpentine) and the County’s Naturally Occurring Asbestos and Dust Protection Ordinance. Regulated activities include construction or digging on a site containing NOA in rock or soils and the sale and use of serpentine material or rock containing asbestos materials for surfacing.

EDCAQMD issued a map that can be used as a screening-level indicator of the likelihood of NOA being present on any given project site. The Asbestos Review Areas map shows the location of individual parcels and areas within the following four categories considered to be subject to elevated risk of containing NOA: (1) Found Area of NOA; (2) Quarter Mile Buffer for Found Area of NOA; (3) More Likely to Contain Asbestos; and (4) Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line.

If a project site is located outside of all four areas listed above, it may be considered to have a relatively lower probability of containing NOA and will be considered to have a less-than-significant impact. However, if the project is located within one of the above categories, the EDCAQMD Rule 223-2 requires an Asbestos Dust Mitigation Plan when more than 20 cubic yards of earth will be moved at a site identified as being in an Asbestos Review Area. According to the AQMD Asbestos Review Areas map the project site is located within a “Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line.”

4.1.3.4 Local Plans and Policies

County of El Dorado General Plan

The following presents guiding and implementing policies from the current County of El Dorado General Plan (2004) relevant to air quality and contained within the Public Health, Safety, and Noise Element.

GOAL 6.7: AIR QUALITY MAINTENANCE:

- A. Strive to achieve and maintain ambient air quality standards established by the U.S. Environmental Protection Agency and the California Air Resources Board.
- B. Minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors.

OBJECTIVE 6.7.4: PROJECT DESIGN AND MIXED USES: Encourage project design that protects air quality and minimizes direct and indirect emissions of air contaminants.

Policy 6.7.4.4 All discretionary development applications shall be reviewed to determine the need for pedestrian/bike paths connecting to adjacent development and to common service facilities (e.g., clustered mail boxes, bus stops).

Policy 6.7.4.6 The County shall regulate wood-burning fireplaces and stoves in all new development. Environmental Protection Agency (EPA)-approved stoves and fireplaces burning natural gas or propane are allowed. The County shall discourage the use of non-certified wood heaters and fireplaces during periods of unhealthy air quality.

Policy 6.7.4.7 The County shall inform the public regarding the air quality effects associated with the use of wood for home heating. The program should address proper operation and maintenance of wood heaters, proper wood selection and use, the health effects of wood smoke, weatherization methods for homes, and determining the proper size of heaters needed before purchase and professional installation. The County shall develop an incentive program to encourage homeowners to replace high-pollution emitting non-EPA-certified wood stoves that were installed before the effective date of the applicable EPA regulation with newer cleaner-burning EPA-certified wood stoves.

OBJECTIVE 6.7.6: AIR POLLUTION-SENSITIVE LAND USES: Separate air pollution sensitive land uses from significant sources of air pollution.

Policy 6.7.6.1 Ensure that new facilities in which sensitive receptors are located (e.g., schools, child care centers, playgrounds, retirement homes, and hospitals) are sited away from significant sources of air pollution.

Policy 6.7.6.2 New facilities in which sensitive receptors are located (e.g. residential subdivisions, schools, childcare centers, playgrounds, retirement homes, and hospitals) shall be sited away from significant sources of air pollution.

OBJECTIVE 6.7.7: CONSTRUCTION RELATED, SHORT-TERM EMISSIONS: Reduce construction related, short-term emissions by adopting regulations which minimize their adverse effects.

Policy 6.7.7.1 The County shall consider air quality when planning the land uses and transportation systems to accommodate expected growth, and shall use the recommendations in the most recent version of the EDCAQMD's Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act, to analyze potential air quality impacts (e.g., short-term construction, long-term operations, toxic and odor related emissions) and to require feasible mitigation requirements for such impacts.

4.1.4 IMPACTS AND MITIGATION MEASURES

4.1.4.1 Significance Criteria

For the purposes of this Draft EIR, air quality impacts of the proposed project would be considered significant if they would exceed the following Standards of Significance, which are based on Appendix G of the *State CEQA Guidelines*. According to Appendix G of the *State CEQA Guidelines*, a project would normally have a significant impact on air quality if it would:

- conflict with or obstruct implementation of the applicable air quality plan;
- violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

- expose sensitive receptors to substantial pollution concentrations; or
- create objectionable odors affecting a substantial number of people.

4.1.4.2 Issues adequately addressed in the Initial Study

As noted in the Initial Study, construction of the proposed project would require the use of diesel-fueled equipment and architectural coatings, both of which have associated odors. However, these odors would be short-term and temporary and would not be pervasive enough to affect a substantial number of people or be objectionable. Routine operation of the proposed project would not involve activities that typically produce odors, such as wastewater treatment, manufacturing, agriculture, etc. Occasional use of maintenance products on the project site could produce localized odors, but they would be temporary and limited in area. Consequently, short-term construction and long-term operation of the proposed project would not create objectionable odors that could affect a substantial number of persons, nor would the project expose project site occupants to substantial odors, and the impact would be less than significant. No further analysis is required in the EIR.

4.1.4.3 Methodology

Information presented in this impact analysis is based on the Air Quality/Greenhouse Gas Emissions Analysis – El Dorado Hills Apartments prepared by De Novo Planning. The California Emissions Estimator Model (CalEEMod) Version 2016.3.1 was used to estimate operational emissions of the proposed project. **Appendix 4.1** contains the full report.

4.1.4.4 Project Impacts and Mitigation Measures

Impact AIR-1: **Construction activities associated with the proposed project would result in a violation of an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable national or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). (Significant; Less than Significant with Mitigation)**

Site preparation and project construction would involve clearing, cut and fill activities, grading, and building activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase because most combustion and dust emissions are associated with the excavation, handling, and transport of soils on the site. If not properly controlled, these activities

would temporarily generate PM10, PM2.5, and to a lesser extent CO, SO2, NOx, and ROG. Impacts associated with construction equipment exhaust and dust emissions are discussed further below.

Construction Equipment Exhaust Emissions

The *AQMD CEQA Guide* provides two approaches for screening construction equipment exhaust emissions for significance: one is based on fuel use, the other on the incorporation of mitigation measures into the project design. If exhaust emissions are determined to be not significant under either approach, then further calculations to determine construction equipment exhaust emissions are not necessary.

Based on the EDCAQMD's experience with construction activities, and taking into account the temporary and non-continuous nature of construction emissions, ROG and NOx emissions during construction may be assumed to be not significant if:

- a. the project encompasses 12 acres or less of ground that is being worked at one time and at least one of the mitigation measures relating to such pollutants described in the *AQMD CEQA Guide* (or an equivalent measure) is incorporated into the project; or
- b. the project proponent commits to pay mitigation fees in accordance with the provisions of an established mitigation fee program in the District (or such program in another air district that is acceptable to District).

If ROG and NOx mass emissions are determined to be not significant under the provisions above, then it can be assumed that exhaust emissions of other air pollutants from the operation of equipment and worker commute vehicles are also not significant. In such event, the steps for estimating exhaust emissions of these other pollutants need not be undertaken.

The proposed project is 4.5 acres, which is less than the 12-acre threshold identified in (a) above, and the project would implement at least one mitigation measure relating to such pollutants as contained in the *AQMD CEQA Guide* and as presented below in **Mitigation Measure AIR-1a**. In addition, the project would implement **Mitigation Measure AIR-1b** to control ROG emissions from architectural coatings used during construction. As such, with mitigation, the proposed project would not result in a violation of the ambient air quality standards, and the project's construction equipment exhaust emissions and other construction-phase ROG emissions would result in a less than significant air quality impact.

Fugitive Dust (PM10) Emissions

Sources of fugitive dust (PM10) would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit dirt and

mud on local streets, which could be an additional source of airborne dust after it dries. PM10 emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM10 emissions would depend on soil moisture, the silt content of soil, wind speed, and the number of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site. These emissions would be temporary and limited to the immediate area surrounding the construction site.

For PM10 emissions, the screening approach is based on specific dust suppression measures that will prevent visible emissions beyond the boundaries of the project. According to the EDCAQMD, mass emissions of fugitive dust PM10 need not be quantified, and may be assumed to be not significant if the project includes mitigation measures that will prevent visible dust beyond the project property lines, in compliance with Rule 403.

The proposed project would implement the fugitive dust mitigation measures contained in the *AQMD CEQA Guide*, as set forth in **Mitigation Measures AIR-1c** and **1d** below. As such, with mitigation, the construction activities associated with the proposed project would not result in a violation of the ambient air quality standards, and the impact from the project's PM10 emissions during construction would be less than significant.

Mitigation Measures:

AIR-1a To ensure that the impact from the project's construction equipment exhaust remains less than significant, the project shall implement at least one of the following EDCAQMD construction mitigation measures:

- Require the prime contractor to provide an approved plan demonstrating that heavy-duty (i.e., greater than 50 horsepower) off-road vehicles to be used in the construction project, and operated by either the prime contractor or any subcontractor, will achieve, at a minimum, a fleet-averaged 15 percent NOx reduction compared to the most recent CARB fleet average. Implementation of this measure requires the prime contractor to submit a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during the construction project. In addition, the inventory list shall be updated and submitted monthly throughout the duration of when the construction activity occurs.
- Require the prime contractor to use an alternative fuel, other than Diesel, verified by the CARB or otherwise documented through emissions testing to have the greatest

NOx and PM10 reduction benefit available, provided each pollutant is reduced by at least 15 percent.

AIR-1b Prior to the start of construction activities, the project applicant shall coordinate with the El Dorado AQMD to ensure that only low-VOC architectural coatings are utilized during the construction phase of the proposed project, for both indoor and outdoor surfaces. All architectural coatings used during the construction phase shall have a maximum allowable VOC content limit of 50 g/L.

AIR-1c During construction activities, the project applicant shall implement the following Best Available Fugitive Dust Control Measures as outlined in Table C.4 in the *AQMD CEQA Guide*.

Fugitive Dust Source Category	Control Actions
Earth-moving (except construction cutting and filling areas, and mining operations)	1a. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the District; two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR 1a-1. For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving – construction fill areas	1b. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the District; for areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM method 1557 or other equivalent method approved by the District, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content; two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.
Earth-moving – construction cut areas and mining operations	1c. Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining areas unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	2a/b. Apply dust suppression in a sufficient quantity and frequency to maintain a stabilized surface; any areas which cannot be stabilized, as evidenced by wind driven dust, must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas – completed grading areas	2c. Apply chemical stabilizers within 5 working days or grading completion; OR 2d. Take action 3a or 3c specified for inactive disturbed surface areas.
Inactive disturbed surface areas	3a. Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible due to excessive slope or other safety conditions; OR 3b. Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR

	3c. Establish a vegetative ground cover within 21 days after active operations have ceased; ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR 3d. Utilize any combination of control actions 3a, 3b and 3c such that, in total, they apply to all inactive disturbed surface areas.
Unpaved roads	4a. Water all roads used for any vehicular traffic at least once per every two hours of active operations; OR 4b. Water all roads used for any vehicular traffic once daily and restrict vehicle speed to 15 mph; OR 4c. Apply chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	5a. Apply chemical stabilizers; OR 5b. Apply water to at least 80 percent of the surface areas of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR 5c. Install a three-sided enclosure with walls with no more than 50 percent porosity that extend, at a minimum, to the top of the pile.
Track-out control	6a. Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and width of at least 20 feet; OR 6b. Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
All categories	7a. Any other control measures approved by the District.

AIR-1d

During construction activities in high wind conditions, the project applicant shall implement the following Best Available Fugitive Dust Control Measures as outlined in Table C.5 in the *AQMD CEQA Guide*.

Fugitive Dust Source Category	Control Actions
Earth moving	1A. Cease all active operations, OR 2A. Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	1B. On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR 1B. Apply chemical stabilizers prior to a wind event; OR 2B. Apply water to all unstabilized disturbed areas 3 times per day; if there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR 3B. Take the actions specified in Table B.6, Item 3c; OR 4B. Utilize any combination of control actions specified in Table 1, Items 1B, 2B and 3B, such that, in total, they apply to all disturbed surfaced areas.
Unpaved roads	1C. Apply chemical stabilizers prior to a wind event; OR 2C. Apply water twice per hour during active operation; OR 3C. Stop all vehicular traffic.
Open storage piles	1D. Apply water twice per hour; OR

Fugitive Dust Source Category	Control Actions
	2D. Install temporary coverings.
Paved road track-out	1E. Cover all haul vehicles; OR 2E. Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for operation on both public and private roads.
All categories	1F. Any other control measures approved by the District.

Significance after Mitigation: As indicated above, **Mitigation Measures AIR-1a, -1b, -1c, and -1d** would be implemented to ensure the proposed project controls equipment exhaust emissions to levels required by the EDCAQMD and complies with all applicable fugitive dust mitigation measures included in the *AQMD CEQA Guide*. As such, with mitigation, the proposed project would not result in emissions that could cause a violation of the ambient air quality standards, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable national or State ambient air quality standard. The project's construction equipment exhaust and fugitive dust emissions would result in a less than significant air quality impact.

Impact AIR-2: **Operation of the proposed project would result in a violation of an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable national or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). (Significant; Less than Significant with Mitigation)**

The proposed project would be a direct and indirect source of air pollution, in that it would generate and attract vehicle trips in the region (mobile source emissions) and it would increase area source emissions and energy use emissions. The mobile source emissions would be entirely from vehicles, while the area source and energy use emissions would be primarily from the use of natural gas as fuel, hearth fuel combustion, landscape fuel combustion, consumer products, and architectural coatings (used during the life of the project for property maintenance).

ROG and NOX Emissions

CalEEMod v.2016.3.1 was used to estimate operational emissions of ROG and NOx that would be associated with the proposed project. **Table 4.1-6, Operational Emissions (Unmitigated Maximum Daily lbs/day)**, shows the emissions, which include mobile source, area source, and energy use emissions of

criteria pollutants that would result from operations of the proposed project. The estimated emissions are highly conservative as they do not take into account the sustainable design features that are a part of the proposed project (see **Section 3.6.5**).

**Table 4.1-6
Operational Emissions (Unmitigated Maximum Daily lbs/day)**

Emission Source	ROG	NOx
	Summer	
Area	334.46	6.60
Energy Use	0.03	0.27
Mobile	7.26	11.78
Total	341.75	18.65
<i>Threshold of Significance</i>	82	82
<i>Exceeds Threshold?</i>	Yes	No
	Winter	
Area	334.46	6.60
Energy Use	0.03	0.27
Mobile	6.38	13.20
Total	340.87	20.06
<i>Threshold of Significance</i>	82	82
<i>Exceeds Threshold?</i>	Yes	No

Source: De Novo Planning, 2017

As shown in the table above, operational NOx emissions would be below the thresholds of significance for the individual emission categories (i.e., area, energy, and mobile sources), as well as the total for these categories. ROG emissions for the Area Source category, as well as the total for all categories, would exceed the project-level operational threshold of significance. The impact would be significant.

CalEEMod was used to estimate project-level operational emissions for the proposed project with the implementation of mitigation measures. The primary source of operational emissions that was targeted for mitigation in the model was the area source emissions, which are estimated at 334.46 lbs/day without mitigation; however, mitigation measures targeting other sources were also applied. Mitigation was entered into the model to reduce the total operational area source emissions. Mitigation included a combination of project design features (i.e., location, walkability, accessibility, transit), mobile source mitigation (traffic calming, pedestrian access), and area source mitigation (no wood burning).

Table 4.1-7, Operational Emissions (Mitigated Maximum Daily lbs/day), shows the project-level operational emissions, which include area, energy use, and mobile source emissions that would result

from operations of the proposed project with mitigation.

**Table 4.1-7
Operational Emissions (Mitigated Maximum Daily lbs/day)**

Emission Source	ROG	NOx
Summer		
Area	7.33	3.40
Energy Use	0.03	0.25
Mobile	5.60	7.12
Total	12.96	10.77
<i>Threshold of Significance</i>	82	82
<i>Exceeds Threshold?</i>	No	No
Winter		
Area	7.33	3.40
Energy Use	0.03	0.25
Mobile	4.61	7.94
Total	11.96	11.58
<i>Threshold of Significance</i>	82	82
<i>Exceeds Threshold?</i>	No	No

Source: De Novo Planning, 2017

As shown in the table above, all emissions are reduced to a level that does not exceed the project-level operational thresholds of significance. With the implementation of **Mitigation Measure AIR-2**, which requires the implementation of several of the project's sustainable development features that are listed in **Chapter 3.0** as well as additional mitigation measures, the proposed project would have a less than significant impact related to operational emissions of criteria pollutants.

Emissions of Other Criteria Pollutants

EDCAQMD has put forth screening techniques to identify projects that can be conservatively assumed not to be associated with significant emissions of other criteria pollutants, namely, CO, particulates, SO₂, NO₂ sulfates, lead, and H₂S. Application of air pollution modeling techniques need not be applied to emissions that can be addressed through screening.

CO and Particulates

The AQMD CEQA Guide provides an emissions estimation technique for CO and particulates to determine the significance of the pollutant emissions. The following emissions calculations were made

following the procedures as prescribed in Section 6.3.2 of the *AQMD CEQA Guide*. The results of these calculations show that the proposed project would result in lower emissions than the applicable AAQS standards. Therefore, there would be a less than significant impact for CO and particulates. **Tables 4.1-8, Operational Emissions – Pollutant Concentration/Significance Determination (CO), and 4.1-9, Operational Emissions – Pollutant Concentration/Significance Determination (PM10),** below, provide the results of this analysis.

**Table 4.1-8
Operational Emissions – Pollutant Concentration/Significance Determination (CO)**

1. Background Concentration	2.64 µg/m ³
2. Project-related Pollutant Concentration	0.7 µg/m ³
3. Anticipated Total Concentration	3.34 µg/m ³
4. Ambient Air Quality Standard	20 µg/m ³
5. Significance Determination: Significant if >0	-16.66 (Less than Significant)

Source: *De Novo Planning, 2017*

**Table 4.1-9
Operational Emissions – Pollutant Concentration/Significance Determination (PM10)**

1. Background Concentration	18 µg/m ³
2. Project-related Pollutant Concentration	0
3. Anticipated Total Concentration	18 µg/m ³
4. Ambient Air Quality Standard	50 µg/m ³
5. Significance Determination: Significant if >0	-32 (Less than Significant)

Source: *De Novo Planning, 2017*

SO₂ and NO₂

For directly emitted SO₂ or NO₂, the EDCAQMD indicates that project-related concentrations need only be estimated if the project is one that contains components that are known to produce SO₂ or NO₂, such as sources that burn sulfur-based fuels or that have components such as power plants or oil refineries, or projects that generate more heavy-duty vehicle trips than occur generally. Since the proposed project would not utilize sulfur-based fuels or generate heavy-duty vehicle trips than occur generally, this would

represent a less than significant impact.

Lead, Sulfates, and H2S

The EDCAQMD indicates that lead, sulfates, and H2S emissions may be assumed to be not significant except for industrial sources that have specific processes resulting in direct emissions of lead, sulfates, or H2S, such as a foundry, acid plant, or pulp mill. The proposed project is a residential project and does not include any of these industrial sources. As such, the proposed project would not result in significant emissions for lead, sulfates, and H2S, and the impact would be less than significant.

Visibility Impacts

The EDCAQMD indicates that it may be assumed that visibility impacts from development projects in the MCAB portion of the county are not significant; such impacts will be controlled to the maximum extent feasible through state and national regulatory programs governing vehicle emissions, and through mitigation required for ozone precursors and particulate matter. As such, the proposed project would result in a less than significant impact related to visibility.

Mitigation Measures:

AIR-2 To ensure that project emissions remain below applicable thresholds, the project applicant shall implement the following sustainable design features and mitigation measures:

1. Exceed Title 24 by 10 percent
2. Install high-efficiency lighting
3. Install energy-efficient appliances
4. Use only natural gas hearths (i.e. fireplaces)(sealed natural gas only, no wood burning)
5. Install low flow bathroom faucets
6. Install low flow kitchen faucets
7. Install low flow toilets
8. Install low flow showers

9. Use water-efficient irrigation system
10. Design and construct the parking garage to allow for the installation of electric vehicle charging facilities when the demand for the charging facilities is demonstrated.
11. Provide bicycle storage with convenient access

Significance after Mitigation: As shown above in **Table 4.1-7**, implementation of measures listed in **Mitigation Measure AIR-2** would reduce the summer period ROG operational emissions to be less than significant.

Impact AIR-3: **The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. (*Less than Significant*)**

Regional air quality plans are developed to meet requirements of both the federal and California CAAs. The federal CAA requires that areas not attaining the air quality standards develop an attainment plan demonstrating how control strategies help the area meet reasonable further progress goals and attain the air quality standards. The California CAA also requires a triennial assessment of the extent of air quality improvements and emissions reductions achieved with control measures.

The Sacramento Regional Ozone Air Quality Attainment Plan (AQAP) was developed to bring the region (which includes the MCAB) into attainment as required by the federal and California CAAs. The AQAP assumes annual increases in air pollutant emissions resulting from regional growth; however, the AQAP also assumes the incremental increase in emissions will be partially offset through the implementation of stationary, area, and indirect source control measures contained within the AQAP. These measures consist of the EDCAQMD's rules and regulations and other development- and transportation-related mitigation measures.

The *AQMD CEQA Guide* sets forth methodology that a lead agency may use to demonstrate a development project's consistency with the AQAP for ROG and NO_x emissions. According to the *AQMD CEQA Guide* (Chapter 8.0), "Development projects in the MCAB portion of the county are considered consistent with the AQAP if:

1. The project does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), and projected emissions of ROG and NO_x from the proposed project are equal to

or less than the emissions anticipated for the site if developed under the existing land use designation;

2. The project does not exceed the “project alone” significance criteria.
3. The lead agency for the project requires the project to implement any applicable emission reduction measures contained in and/or derived from the AQAP (Appendix E); and
4. The project complies with all applicable district rules and regulations.”

To the extent that a project exceeds any of the four criteria listed above, the *AQMD CEQA Guide* provides additional guidance, and notes that if the project requires a general plan or zoning amendment, “the project’s transportation-related ROG and NOX emissions should be estimated for both the existing and proposed general plan or zoning designations. A similar estimate of any ROG and NOx directly emitted from operations before and after the amendment should be made. If the combined transportation-related and direct emissions are estimated to be greater for the proposed land use designation, the project will have a significant cumulative air quality impact.”

The proposed project is evaluated below utilizing this guidance provided by the EDCAQMD:

1. The project does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), and projected emissions of ROG and NOx from the proposed project are equal to or less than the emissions anticipated for the site if developed under the existing land use designation;
- The project site is part of the TCE project and is designated for General Commercial Uses. Development of retail uses, as well as a hotel use, has previously been considered for this site. Each of these uses would be allowed under the existing General Plan designation and Zoning Ordinance zoning; however, the proposed residential use is not an allowed use under the existing designation or zoning. The proposed project would require a General Plan Amendment and Rezone to enable a residential use to be located at this site. Because the project would require a general plan amendment, a retail scenario² was developed to determine if project emissions would be greater or less than a project that is consistent with the designated land use (i.e., retail) and does not require a general plan amendment or rezoning. Based on CalEEMod emissions outputs (provided in **Appendix 4.1**), the

² As presented in detail in **Appendix 4.1**, the retail scenario analyzed for the project site included the development of seven retail buildings ranging in size from 2,750 square feet to 24,700 square feet. The total square footage of the retail development analyzed is 74,350 square feet. This amount of retail space is substantially lower than the amount of retail that could be entitled for this site under its current land use designation and zoning. However, this retail scenario is considered a realistic scenario as its development density is consistent with that of the adjoining commercial development in the TCE.

proposed residential project would result in 12.75 percent lower emissions of ROG and 24.97 percent lower emissions of NOx compared to the retail scenario.

2. The project does not exceed the “project alone” significance criteria.

- As shown under **Impact AIR-2**, with mitigation, the proposed project’s operational emissions do not exceed the “project alone” significance criteria. As shown under **Impact AIR-1**, with the incorporation of mitigation measures that are required by the EDCAQMD, the proposed project’s construction emissions do not exceed the “project alone” significance criteria.

3. The lead agency for the project requires the project to implement any applicable emission reduction measures contained in and/or derived from the AQAP.

- The proposed project is an infill development of the larger Town Center project, and many emission reduction measures have already been incorporated into the project. In addition, **Mitigation Measures AIR-1a** through **-1d** and **AIR-2** would be implemented to reduce the project’s construction and operational air pollutant emissions. These mitigation measures are derived from and consistent with the *AQMD CEQA Guide*. The emission reduction measures (both the project design features and **Mitigation Measures AIR-1a** through **-1d** and **AIR-2**) are consistent with the objectives, goals, and policies of the Sacramento Regional Ozone AQAP.

4. The project complies with all applicable district rules and regulations.

- The *AQMD CEQA Guide* was used to review the proposed project relative to the EDCAQMD’s rules and regulations. The proposed project complies with all applicable rules and regulations.

Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. The impact would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact AIR-4: **Project operations would not expose project site sensitive receptors to substantial pollutant concentrations. (*Less than Significant*)**

The proposed project includes residences that are considered sensitive receptors. There are existing sources of TAC emissions near the project site that could adversely affect these project site receptors. The effects of these sources on the project site receptors were analyzed in two categories: (1) effects of nearby

roadways, and (2) effects of stationary sources.³

CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* (2007) to provide information to local planners and decision-makers about land use compatibility issues associated with emissions from industrial, commercial and mobile sources of air pollution. The CARB Handbook indicates that mobile sources continue to be the largest overall contributors to the State's air pollution problems, representing the greatest air pollution health risk to most Californians. The most serious pollutants on a statewide basis include diesel exhaust particulate matter (diesel PM), benzene, and 1,3-butadiene, all of which are emitted by motor vehicles. These mobile source TACs are largely associated with freeways and high traffic roads. Non-mobile source air toxics are largely associated with industrial and commercial uses. **Table 4.1-10, CARB Minimum Separation Recommendations of Siting Sensitive Land Uses**, provides the California Air Resources Board minimum separation recommendations on siting sensitive land uses.

Table 4.1-10
CARB Minimum Separation Recommendations of Siting Sensitive Land Uses

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	<ul style="list-style-type: none"> • Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For

³ In *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, the California Supreme Court held that "CEQA generally does not require an analysis of how existing environmental conditions will impact a project's future users or residents." The Court identified certain exceptions to this general rule (e.g., where a project would "exacerbate" existing environmental hazards), which generally do not apply to the instant project. Although CEQA does not require an agency to consider the impact of existing conditions on future project users, the analysis of the impact of nearby roadways and stationary sources on project residents is included for informational purposes.

Source Category	Advisory Recommendations
ethylene	operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. <ul style="list-style-type: none"> • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

Sources: "Air Quality And Land Use Handbook: A Community Health Perspective" (CARB 2005)

There are two gasoline dispensing facilities located in the vicinity of the project site. This includes a Valero gas station located at the northwestern corner of Town Center Boulevard and Post Street and a Chevron gas station located at the southwestern corner of Town Center and Post Street. These are considered typical fuel dispensing facilities. The CARB recommends that lead agencies provide a 50-foot separation for typical gas dispensing facilities. The closest fuel dispensing station at the Valero gas station is located 956 feet from the project site boundary. The closest fuel dispensing station at the Chevron gas station is located 984 feet from the project site boundary. The proposed project is consistent with the CARB *Minimum Separation Recommendations on Siting Sensitive Land Uses* (2005) for gasoline dispensing facilities.

There is one freeway located in the vicinity of the project site. This includes U.S. 50 located directly north of the project site. CARB recommends that lead agencies avoid siting new sensitive land uses within 500 feet of a freeway. U.S. 50 is located 511 feet from the project site boundary. The proposed project is consistent with the CARB *Minimum Separation Recommendations on Siting Sensitive Land Uses* (2005) for freeways. There are no high-traffic roads (urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles per day) within 500 feet of the project site.

Because the proposed project is adequately separated from existing TAC sources, the project would not expose project site residents to substantial concentrations of TACs, and the impact would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact AIR-5: **Project construction would expose sensitive receptors to substantial pollutant concentrations. (Potentially Significant; Less than Significant with Mitigation)**

Project construction activities would have the potential to expose sensitive receptors to substantial

pollutant concentrations of naturally occurring asbestos.

The USEPA Region 9 office is working in areas of California to address concerns about potential effects of naturally occurring asbestos. The term “asbestos” is used to describe a variety of fibrous minerals that, when airborne, can result in serious human health effects. Naturally Occurring Asbestos (NOA) is commonly associated with ultramafic rocks and serpentinite. NOA can take the form of long, thin, separable fibers. Natural weathering or human disturbance can break NOA down to microscopic fibers, easily suspended in air. There is no health threat if asbestos fibers in soil remain undisturbed and do not become airborne. When inhaled, these thin fibers irritate tissues and resist the body's natural defenses. Asbestos, a known carcinogen, causes cancers of the lung and the lining of internal organs, as well as asbestosis and other diseases that inhibit lung function. Chrysotile, which is also known as “white asbestos” and found in serpentine rocks, is probably the most common NOA. However, other types of asbestos, such as tremolite-actinolite, can also be found throughout California.

Soil in El Dorado Hills has been known to have NOA. The EDCAQMD has prepared the parcel-based map “Asbestos Review Areas, Western Slope” which shows areas of known NOA and areas likely to have NOA, as well as 0.25-mile buffers around known and likely NOA areas. The project site lies within the Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line on the County's Asbestos Review Areas Map. The project site was graded as part of the previous development in the Town Center; however, it is not known whether the soil material at the time of grading had NOA, or if any material containing NOA is currently on the project site. Because the project site lies within the Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line on the County's Asbestos Review Areas Map, an Asbestos Hazard Dust Mitigation Plan must be prepared to ensure that adequate dust control and asbestos hazard mitigation measures are implemented during project construction. Additionally, the project must obtain AQMD approval prior to commencing construction activities. **Mitigation Measure AIR-5** is set forth below to ensure that any construction activities that may result in the release of asbestos would include appropriate measures contained within an Asbestos Hazard Dust Mitigation Plan so that exposure to construction workers and the public is minimized to acceptable State and local levels. With the implementation of **Mitigation Measure AIR-5**, the potential impact would be reduced to a less than significant level.

Mitigation Measures:

AIR-5 Prior to any grading activities, the project applicant shall prepare an Asbestos Hazard Dust Mitigation Plan and shall comply with applicable state and local regulations regarding asbestos, including CARB's asbestos airborne toxic control measure (ATCM) (Title 17, CCR § 93105 and 93106) and EDCAQMD Rule 223-2 Fugitive Dust – Asbestos Hazard Mitigation, to ensure that exposure to construction workers and the public is reduced to an acceptable level.

Significance after Mitigation: With implementation of an Asbestos Hazard Dust Mitigation Plan, potential impacts to construction workers and the public would be reduced to a less than significant level.

Impact AIR-6: The proposed project would not create objectionable odors affecting a substantial number of people. (*Less than Significant*)

Project construction would generate localized emissions of diesel exhaust during equipment operation and truck activity. The odor associated with these emissions may be noticeable from time to time to persons in the nearby commercial development. However, the emissions would be temporary, short-term, and localized and are not likely to result in confirmed odor complaints. Furthermore, EDCAQMD-recommended control measures would be implemented to minimize diesel exhaust emissions emitted on the project site during construction. The odor impact from construction-phase emissions would be less than significant. The proposed project does not include any land uses that could subject existing receptors in the project vicinity to substantial odors.

There are no sources of substantial odors near the project site that could subject the new residents of the site to substantial odors. There would be no impact on the new residents related to exposure to odors.

Mitigation Measures: No mitigation measures are required.

4.1.4.5 Cumulative Impacts and Mitigation Measures

Cumulative Impact C-AIR-1: The proposed project, in conjunction with other past, present and reasonably foreseeable future development, would not result in significant cumulative air quality impacts. (*Less than Significant*)

As discussed above, El Dorado County is in non-attainment for ozone, PM10, and PM2.5. The

EDCAQMD's primary criterion for determining whether a project has significant cumulative impacts is whether the project is consistent with an approved plan or mitigation program of District-wide or regional application in place for the pollutants emitted by the project. This criterion is applicable to both the construction and operation phases of a project for ROG and NO_x (ozone precursors), and PM₁₀/PM_{2.5} (particulates).

ROG and NO_x

The Sacramento Regional Ozone Air Quality Attainment Plan (AQAP) was developed to bring the region (including the MCAB) into attainment as required by the federal and California Clean Air Acts. The AQAP assumes annual increases in air pollutant emissions resulting from regional growth; however, the AQAP also assumes the incremental increase in emissions will be partially offset through the implementation of stationary, area, and indirect source control measures contained within the AQAP. These measures consist of the EDCAQMD's rules and regulations and other development- and transportation-related mitigation measures. If a project can demonstrate consistency with the AQAP for ROG and NO_x emissions, it can be categorized as not having a significant cumulative air quality impact with respect to ozone.

As discussed under **Impact AIR-3**, the proposed project would require a General Plan Amendment and rezoning to allow for the development of a residential project on the project site. However, as demonstrated above, this change in land use would not result in an increase in emissions of ROG and NO_x that is greater than the increase in emissions that would result if the site were developed with retail uses consistent with the site's current Specific Plan designation and zoning. Additionally, the project would not result in significant project-level air quality impacts with implementation of all feasible mitigation measures, which are derived from and consistent with EDCAQMD guidance. Therefore, implementation of the proposed project would not result in a significant cumulative air quality impact with respect to ROG and NO_x emissions.

Particulates

The AQMD CEQA Guide states that a project would not be considered significant for cumulative impacts of particulates if the following conditions are met:

1. For projects that are principally development projects, or where the majority of the emissions of these pollutants is attributable to motor vehicle sources:
 - a. The project is not significant for "project alone" emissions of these pollutants;

- b. The project complies with all applicable rules and regulations of the District; and
- c. The project is not cumulatively significant for ROG, NO_x, and CO based on the criteria previously set forth.

As discussed under **Impact AIR-2**, given the residential nature of the project, it would not generate trips by heavy-duty diesel vehicles in greater proportion than such trips occur generally on public roadways, and its impact relative to particulate emissions would be less than significant. The project would not generate a significant impact from “project-alone” emissions of particulates. The proposed project would have a less than significant impact with regard to construction-related particulate emissions, after implementation of mitigation measures.

Furthermore, as the analysis above shows, the project is not cumulatively significant for ROG, NO_x, and CO.

Therefore, implementation of the proposed project would not result in a significant cumulative air quality impact with respect to particulate emissions.

Mitigation Measures: No mitigation measures are required.

4.1.5 REFERENCES

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4.2 BIOLOGICAL RESOURCES

4.2.1 INTRODUCTION

This section evaluates the potential impacts to biological resources from the construction and occupancy of the proposed El Dorado Hills Apartments project (“proposed project”). The biological resources addressed in this section include special-status plants and wildlife, sensitive habitats, and conservation plans. Regulations and policies for the protection of biological resources in the County of El Dorado are also described. Information presented in this section is based on a biological assessment prepared for the project by Salix Consulting, Inc. This report is included in **Appendix 4.2** of this Draft EIR.

4.2.2 ENVIRONMENTAL SETTING

4.2.2.1 Project Site and Surrounding Land Uses

The project site is located in the unincorporated community of El Dorado Hills in western El Dorado County (see **Figure 3.0-1, Project Location**). The site is a little over 500 feet south of U.S. Highway 50 (U.S. 50), about 23 miles east of downtown Sacramento, and 60 miles southwest of Lake Tahoe. Folsom Lake is located approximately 4 miles to the northwest.

The approximately 4.56-acre project site is located at the northwest corner of the intersection of Town Center Boulevard and Vine Street within the Town Center East (TCE) Commercial Center in El Dorado Hills. The site ranges in elevation from approximately 605 to 620 feet above mean sea level and slopes gently east to west.

The area surrounding the project site is developed and consists mainly of retail/commercial uses. An automobile dealership is to the north of the project site, across Mercedes Lane. Other retail/commercial uses are located to the east, across Vine Street, and to the south, across Town Center Boulevard. Town Center Lake is immediately adjacent to the project site to the west, and is a man-made lake that was developed as mitigation for the development of TCE. It provides the only open space area near the project site. Transportation corridors traverse the project vicinity, creating barriers to wildlife movement.

4.2.2.2 Project Site Biological Communities

The project site is vacant and undeveloped, with indications of previous disturbance, including mass grading. Field surveys were conducted on March 30 and April 8, 2016 by Salix Consulting to identify biological communities present on the site and record plant and wildlife species observed on and adjacent to the project site.

Flora

Vegetation on the project site is characterized as disturbed, non-native annual grassland dominated by weedy invasive species and annual grasses (see **Figure 4.2-1, Aerial Photo**). Common plants found on the project site include winter vetch (*Vicia villosa*), rose clover (*Trifolium hirtum*), annual yellow sweetclover (*Melilotus indicus*), Italian ryegrass (*Festuca perennis*), Spanish clover (*Acmispon americanus var. americanus*), windmill pink (*Silene gallica*), and ripgut grass (*Bromus diandrus*).

Two small cottonwood trees (*Populus fremontii ssp. fremontii*) are present on the eastern and southern fence lines, each about 15 feet tall. Landscaping with shrubs and young trees is present along the western boundary along the walkway between the project site and Town Center Lake. On the southern and northern sides, scattered small landscape trees occur, and one small tree is present on the east side. All of these shrubs and trees are located on the margins of the property, adjacent to roads, parking lots, or the walkway.

Fauna

The project site provides very little habitat for wildlife due to the dominance of non-native weedy plants and the resultant lack of habitat, cover, forage opportunities, or structural complexity. Common species found during the spring 2016 field surveys included Canada geese (*Branta canadensis*) and great-tailed grackle (*Quiscalus mexicanus*). The geese and grackles were observed flying between the adjacent Town Center Lake and other ponds in the broader area. Red-winged blackbird (*Agelaius phoeniceus*) and Brewer's blackbird (*Euphagus cyanocephalus*) were also observed on the project site. Because of the location of the property in close proximity to the adjacent Town Center Lake, wildlife usage is primarily associated with species attracted to the water body which may opportunistically forage on site. Common urban species such as sparrows, doves and pigeons would also be expected to forage on-site. Only one mammal was observed, a foraging black-tailed jackrabbit (*Lepus californicus*). No other mammals, such as ground squirrels or gophers, were detected. The lack of prey greatly diminishes the potential use of the property by foraging raptors or other predators which could otherwise be expected to hunt over open grasslands. Additionally, the project site lacks nesting or denning habitats.

4.2.2.3 Special-Status Species

Special-status plant and wildlife species are defined in this report as those that are state or federally listed as Rare, Threatened or Endangered or are candidates or proposed for such listing, a federal Bird of Conservation Concern, a state Species of Special Concern, a state Fully Protected Animal, plants included on Lists 1 and 2 of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS Inventory), or a species that may otherwise be considered "Rare" under Section 15380 of the *State CEQA Guidelines*.

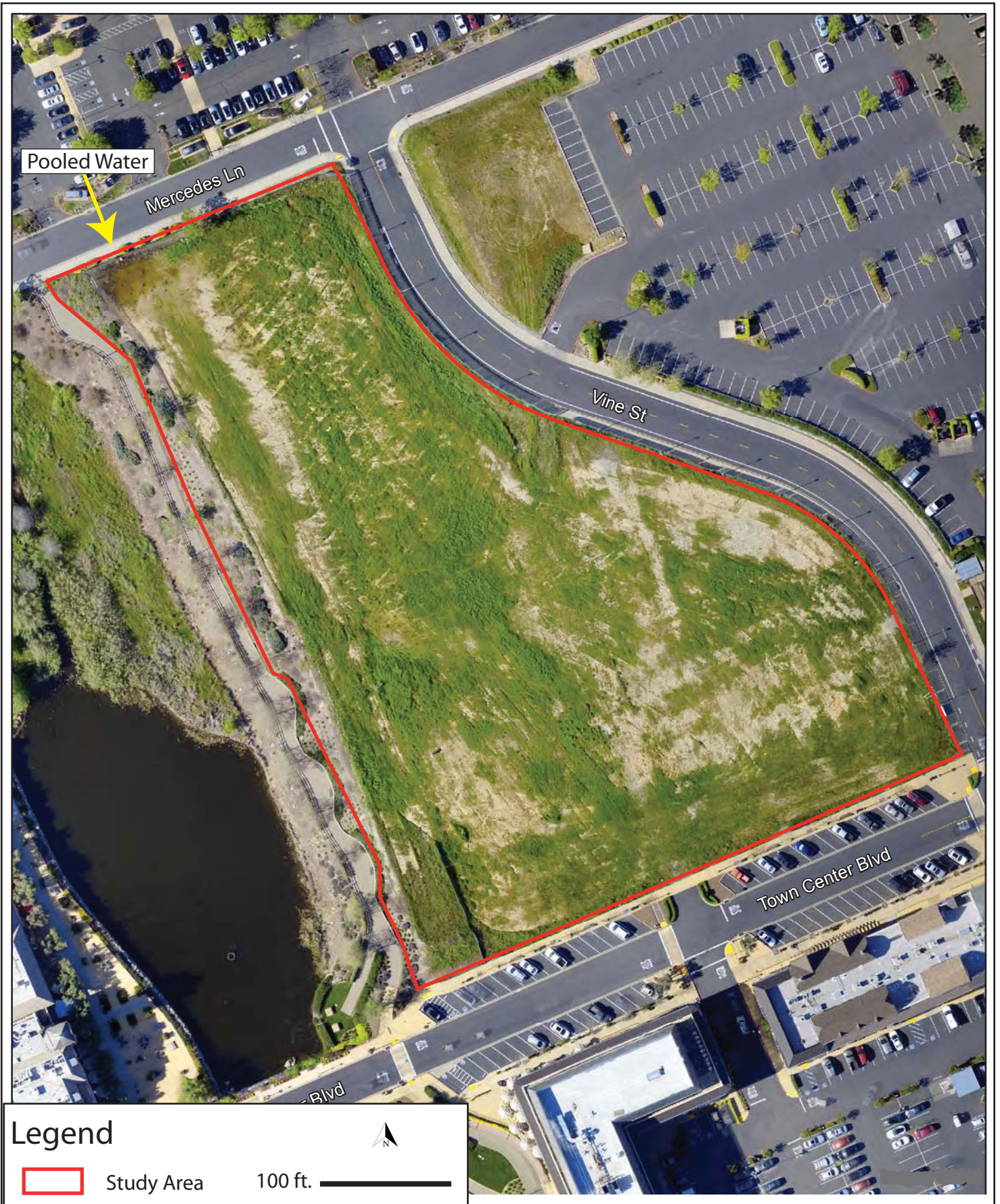


FIGURE 4.2-1

Aerial Photo of Project Site
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Reported occurrences of special-status plants and wildlife species are documented in the California Natural Diversity Data Base (CNDDDB).¹ To identify special-status plant or wildlife species that have been reported as occurring in the vicinity of the project site, the CNDDDB was reviewed for the USGS 7.5-minute quadrangle on which the project site is located (Clarksville) and the eight surrounding quadrangles (Rocklin, Folsom, Folsom SE, Pilot Hill, Coloma, Shingle Springs, Buffalo Creek and Latrobe).

Special-Status Wildlife Species

The CNDDDB search identified 25 special-status wildlife species within a 5-mile radius of the project site (see **Appendix 4.2**). Many of these species require aquatic or vernal pool habitats, conditions that do not occur on the project site. Due to the disturbed condition of the project site, none of the previously reported wildlife species would utilize the site as primary habitat or territories, for the specific reasons discussed below.

- The site lacks aquatic habitats to support Central Valley steelhead, California red-legged frog, western spadefoot toad, western pond turtle, giant garter snake, bald eagle, and California black rail.
- The site lacks vernal pools and similar habitats that support special status invertebrate species unique to these habitats (vernal pool fairy shrimp and vernal pool tadpole shrimp). Special status invertebrates occur primarily on the valley floor and on hardpan soils. The project site is situated in the Sierran foothills and not on hardpan soils. There are no known nearby occurrences of special status invertebrates, and the site has no potential to support them.
- The site lacks the friable soils necessary to support coast horned lizard.
- The site lacks elderberry shrubs (*Sambuca nigra*) to support the Valley elderberry longhorn beetle.
- The site lacks suitable nesting habitat for birds, since it lacks large/tall trees, woodlands, or dense vegetation.

Five special-status birds are reported in the CNDDDB as occurring in the region. These are not expected to utilize the project site, as discussed below.

Bald eagle (*Haliaeetus leucocephalus*) - **California endangered; fully-protected species.** This species requires large bodies of water, or free-flowing rivers with nearby perches, including snags, large-limbed tall trees, or rocks near water. Due to the lack of suitable nesting and foraging sites, there is no potential for bald eagle to nest on the project site.

¹ California Department of Fish and Wildlife. California Department of Fish and Wildlife Natural Diversity Data Base. Commercial Version.

White-tailed kite (*Elanus leucurus*) - California fully-protected. This kite is typically found in grassy foothill slopes interspersed with oaks (including interior live oak, agricultural areas, and marshy bottomlands). Nests of white-tailed kite are constructed near the top of oaks, willows, or other tall trees from 20 to 100 feet above ground, in single isolated trees or trees within larger stands. White-tailed kites generally forage in undisturbed open grasslands, farmlands, meadows, and emergent wetlands, in areas with a high prey base. These kites are also known to forage over areas along roads, including highways. Nests of white-tailed kite are constructed near the top of oaks, willows, or other tall trees from 20 to 100 feet above ground. The CNDDDB documents nesting occurrences of white-tailed kite within the project region (CDFW 2016). However, based on the lack of habitat available in the project area, there is no potential for occurrence of white-tailed kite within the study area.

Burrowing owl (*Athene cunicularia*) - California Species of Special Concern (nesting and some wintering sites). Burrowing owl occurs in association with open, dry grasslands, deserts, agricultural areas, and rangeland throughout the Central Valley. The species often occurs where numerous burrowing mammals are present and frequently occupy California ground squirrel burrows (Shuford and Gardali 2008). Burrowing owls may also use man-made structures such as debris piles, culverts, and cement piles for cover. The CNDDDB documents burrowing owl as occurring within a five-mile radius of the study area (CNDDDB 2016). There are no recorded occurrences of the species on or near the project site. No evidence of occurrence of this species was observed during the field assessment, and no suitable habitat, such as ground squirrel burrows, was observed throughout the highly disturbed area. Thus, there is no potential for burrowing owl to occur on the project site.

Swainson's hawk (*Buteo swainsoni*) - California Threatened. This hawk is an uncommon breeding resident and migrant in the Central Valley, where breeding and nesting primarily occurs in riparian woodland habitats and oak savannah and often near water (Beedy et al. 2013). Some nesting in urban woodland areas has also been recorded. Suitable foraging habitat for Swainson's hawk includes annual grassland, agricultural fields, fallow fields, low-growing row or field crops, and dry-land and irrigated pasture. The CNDDDB documents one previous observation of an adult Swainson's hawk within 5 miles of the study area (3.5 miles southwest of the project site along White Rock Road in Sacramento County in 1979 and 1982). Due to the absence of suitable nesting or foraging habitat for the species, there is no potential for Swainson's hawk to nest or forage on the project site. Swainson's hawk is confined to the valley floor in this region and is not known from the foothills area where the project site is located.

Special-Status Plant Species

The database search found that 21 special-status plant species have been documented in the vicinity of the project site. However, no special-status plant species have potential to occur on the project site due to

the disturbed condition of the site and/or the lack of suitable substrates and habitats. Specifically, the special-status plant species identified as occurring in the vicinity require vernal pools, marshes, or other wetland habitats, or gabbro/serpentine soils; the project site lacks these conditions.

The results of the database search are summarized in **Table 4.2-1, Special Status Species Reported for Nine Quad Area Surrounding the El Dorado Hills Apartments Project Site.**

4.2.2.4 Wildlife Movement Corridors

Wildlife corridors are described as pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or manmade obstacles such as urbanization. Fragmentation of natural habitat creates isolated “islands” of habitat that may not provide sufficient area or resources to accommodate sustainable populations for a number of species, adversely affecting both genetic and species diversity.

The project site does not contain any natural habitats that would support or protect wildlife movement. Furthermore, it is surrounded by development. Therefore, the site is not part of an established wildlife movement corridor.

4.2.2.5 Waters of the United States and Waters of the State

Wetlands, creeks, streams, and permanent and intermittent drainages are subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under Section 404 of the Federal Clean Water Act. The CDFW also generally has jurisdiction over these resources pursuant to Sections 1602-1603 of the California Fish and Game Code. The project site is vacant and previously disturbed, and does not contain any jurisdictional waters.

The northwestern corner of the project site contained ponded water during the March 30, 2016 site visit (see **Figure 4.2-1, Aerial Photo**), but was dry during the second site visit on April 8, 2016.² Rainwater is prevented from flowing naturally off the property by an elevated berm along Mercedes Lane, paralleling the northern project boundary, and therefore retains water for short durations. Soil test pits excavated by Salix Consulting, Inc. did not indicate a reducing soil condition although annual wetland vegetation was growing in a portion of the ponded area (reducing soil would have indicated hydric soil conditions). Two wetland plant species found at this location were purslane speedwell (*Veronica peregrina subsp. xalapensis*)

² Another wet area was observed near the western central portion of the site by previous consultants who surveyed the site in 2014. However, that area was not observed during the April 2016 site visit conducted by Salix Consulting. The site is routinely disced for fire control and the area was leveled during routine maintenance.

**Table 4.2-1
Special Status Species Reported for Nine Quad Area
Surrounding the El Dorado Hills Apartments Project Site**

Species	Status*			Habitat	Occurrence Potential
	Federal	State	CNPS		
Plants					
Red Hills soaproot <i>Chlorogalum grandiflorum</i>	-	-	1B.2	Chaparral; cismontane woodland [serpentinite or gabbroic].	None. Site lacks gabbro/serpentine soils.
Jepson's Onion <i>Allium jepsonii</i>	-	-	1B.2	Cismontane woodland; lower montane coniferous forest; [serpentinite or volcanic]	None. Site lacks serpentine soils.
Stebbins' morning-glory <i>Calystegia stebbinsii</i>	FE	CE	1B.1	Chaparral (openings); cismontane woodland; [serpentinite or gabbroic].	None. Site lacks gabbro/serpentine soils.
Pine Hill flannelbush <i>Fremontodendron decumbens</i>	FE	CR	1B.2	Chaparral; cismontane woodland; [gabbroic or serpentinite].	None. Site lacks gabbro/serpentine soils.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	-	-	1B.2	Marshes and swamps (assorted shallow freshwater)	None. Site lacks marshes/ swamps.
Big-scale balsamroot <i>Balsamorhiza macrolepis</i>	-	-	1B.2	Cismontane woodland; valley and foothill grassland [sometimes serpentinite].	None. Site lacks suitable habitat.
Layne's ragwort <i>Packera layneae</i>	FT	CR	1B.2	Chaparral; cismontane woodland; [gabbroic or serpentinite].	None. Site lacks gabbro/serpentine soils.
El Dorado County mules ears <i>Wyethia reticulata</i>	-	-	1B.2	Chaparral; cismontane woodland; lower montane coniferous forest [clay or gabbroic]	None. Site lacks gabbro/serpentine soils
Dwarf downingia <i>Downingia pusilla</i>	-	-	2B.2	Valley and foothill grassland (mesic); vernal pools	None. Site lacks vernal pools and similar habitat.
Legenere <i>Legenere limosa</i>	-	-	1B.1	Vernal pools and similar wetlands	None. Site lacks vernal pools and similar habitat.
Ahart's dwarf rush <i>Juncus leiospermus ahartii</i>	-	-	1B.2	Vernal pools	None. Site lacks vernal pools and similar habitat.
Bogg's Lake hedge-hyssop <i>Gratiola heterosepala</i>	-	CE	1B.2	Marshes and swamps (lake margins); vernal pools. Below 1200m.	None. Site lacks vernal pools and similar habitat.

Species	Status*			Habitat	Occurrence Potential
	Federal	State	CNPS		
Sacramento Valley Orcutt grass <i>Orcuttia viscida</i>	FE	CE	1B.1	Vernal pools.	None. Site lacks vernal pools and similar habitat.
Slender Orcutt grass <i>Orcuttia tenuis</i>	FT	CE	1B.1	Vernal pools	None. Site lacks vernal pools and similar habitat.
Pincushion navarretia <i>Navarretia myersii myersii</i>	-	-	1B.1	Vernal pools.	None. Site lacks vernal pools and similar habitat.
Pine Hill ceanothus <i>Ceanothus roderickii</i>	FE	CR	1B.1	Chaparral; cismontane woodland; [serpentinite or gabbroic].	None. Site lacks gabbro/serpentine soils
Eldorado bedstraw <i>Galium californicum sierrae</i>	FE	CR	1B.2	Chaparral; cismontane woodland; lower montane coniferous forest [gabbroic]	None. Site lacks gabbro/serpentine soils
Red Hills soaproot <i>Chlorogalum grandiflorum</i>	-	-	1B.2	Chaparral; cismontane woodland; [serpentinite or gabbroic]	None. Site lacks gabbro/serpentine soils
Starved daisy <i>Erigeron miser</i>	-	-	1B.3	Upper montane coniferous forest (rocky, usually granite)	None. Site lacks suitable habitat. Outside range of species.
Parry's horkelia <i>Horkelia parryii</i>	-	-	1B.2	Chaparral; cismontane woodland; [especially Ione formation]	None. Site lacks gabbro/serpentine soils
Tuolumne button-celery <i>Eryngium pinnatisectum</i>	-	-	1B.2	Cismontane woodland; valley and foothill grassland; vernal pools [mesic]	None. No vernal pools or similar wetlands onsite.
Invertebrates					
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	-		Vernal pools and other temporary bodies of water in southern and Central Valley of CA. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	None. No vernal pools or similar wetlands onsite.
Midvalley fairy shrimp <i>Branchinecta mesovallensis</i>	--	sa		Vernal pools and other temporary bodies, including roadside puddles. Tolerate shallower pools and less ponded area than other fairy shrimp, with low to moderate dissolved salts. Commonly on riverbank geologic formations and low terrace, basin rim and volcanic mudflow landforms.	None. No vernal pools or similar wetlands onsite.

Species	Status*		CNPS	Habitat	Occurrence Potential
	Federal	State			
Vernal pool tadpole shrimp <i>Lepidurus packardi</i>	FE	-		Vernal pools and swales in the Sacramento Valley with clear to highly turbid water; pools commonly found in grass-bottomed swales of unplowed grasslands; some pools mud-bottomed and highly turbid.	None. No vernal pools or similar wetlands onsite.
Insects					
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	sa		For most of its life cycle, requires host plant (<i>Sambucus nigra</i>) with stem diameters at ground level of 1" or greater. Shrubs must be located less than 3,000 ft. elevation.	No elderberry shrubs present onsite. Last area report in 2013 over 15 miles to the NW.
Fish					
Steelhead, Central Valley ESU <i>Oncorhynchus mykiss irideus</i>	FT	-		Occurs below man-made impassable barriers in the Sacramento and San Joaquin rivers and tributaries. Yuba River has essentially the only remaining wild steelhead fishery in Central Valley.	No suitable habitat present.
Delta smelt <i>Hypomesus transpacificus</i>	FT	CT		Endemic to Sacramento-San Joaquin delta in coastal and brackish waters, seasonally in Suisun and San Pablo Bays. Usually spawns in dead-end sloughs, shallow channels.	No suitable habitat present. Outside range of species.
Amphibians					
California red-legged frog <i>Rana draytonii</i>	FT	SSC		Ponds and deeper pools along streams with emergent or overhanging vegetation. Surface water to at least June.	No suitable habitat present onsite.
Foothill yellow-legged frog <i>Rana boylei</i>	-	SSC		Found in partially-shaded, shallow streams with rocky substrates. Needs some cobble-sized rocks as a substrate for egg-laying. Requires water for 15 weeks for larval transformation.	No suitable habitat present onsite.

Species	Status*		CNPS	Habitat	Occurrence Potential
	Federal	State			
Western spadefoot <i>Spea hammondi</i>	-	SSC		Found primarily in grassland habitats, but may occur in valley and foothill woodlands. Requires vernal pools, seasonal wetlands, or stock ponds for breeding and egg-laying.	No suitable habitat is present onsite.
Reptiles					
Giant garter snake <i>Thamnophis gigas</i>	FT	CT		Primarily associated with marshes and sloughs, less with slow-moving creeks, and absent from larger rivers.	No suitable habitat present onsite.
Western pond turtle <i>Actinemys marmorata</i>	-	SSC		Inhabits ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Needs suitable backing sites and upland habitat for egg-laying.	No suitable habitat present onsite, however, turtles could occur in the adjacent Town Center Lake.
Coast horned lizard <i>Phrynosoma blainvillii</i>	-	SSC		Open lowlands, washes, sandy areas with exposed gravelly-sandy substrate containing scattered shrubs. Edge of Sacramento Valley and in Sierra foothills. Also observed in riparian woodland clearings and dry uniform chamise chaparral.	No suitable habitat present onsite. Site lacks friable soils and is highly disturbed.
Birds					
White-tailed kite <i>Elanus leucurus</i>	-	CFP		Found in lower foothills and valley margins with scattered oaks and along river bottomlands or marshes adjacent to oak woodlands. Nests in trees with dense tops.	No nesting or foraging habitat onsite.
Bald eagle <i>Haliaeetus leucocephalus</i>		CE, CFP		Occurs along shorelines, lake margins, and rivers. Nests in large old-growth or dominant trees with open branches.	No nesting or foraging habitat present onsite.
California black rail <i>Laterallus jamaicensis coturniculus</i>	-	CT		Inhabits salt, fresh, and brackish water marshes with little daily and/or annual water fluctuations. In freshwater habitats, preference is for dense bulrush and cattails.	No suitable habitat (wetlands) present onsite.

Species	Status*		Habitat	Occurrence Potential
	Federal	State		
Swainson's hawk <i>Buteo swainsoni</i>		CT	Breeds in open areas with scattered trees; prefers riparian and sparse oak woodland habitats. Requires nearby grasslands, grain fields, or alfalfa for foraging. Rare breeding species in Central Valley.	No suitable nesting habitat or foraging habitat present onsite.
Golden eagle <i>Haliaeetus leucocephalus</i>		CFP	Found in rolling foothill grassland with scattered trees. Nests on cliffs and in large trees in open areas.	No suitable nesting habitat or foraging habitat present onsite.
Burrowing owl <i>Athene cunicularia</i>		SSC	Found in annual and perennial grasslands. Nests in burrows dug by small mammals, primarily ground squirrels	No suitable burrowing habitat present onsite.
Bank swallow <i>Riparia riparia</i>		CT	Colonial nester near riparian and other lowland habitats. Requires vertical banks or cliffs with fine-textured, sandy soils near streams, rivers, and lakes.	No suitable habitat (river) present onsite.
Tri-colored blackbird <i>Agelaius tricolor</i>		CE	Colonial nester in dense cattails, tules, brambles, or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	No suitable habitat present onsite.
Purple martin <i>Progne subis</i>	-	SSC	Breeds in riparian woodland, open coniferous forest. Secondary cavity nester. Requires nest sites close to open foraging areas of water or land	No suitable nesting habitat onsite.
Grasshopper sparrow <i>Ammodramus savannarum</i>	-	SSC	Breeds in grasslands and savannahs in rolling hills. Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Loosely colonial when nesting.	No suitable habitat present onsite.

Species	Federal	Status*		Habitat	Occurrence Potential
		State	CNPS		
Mammals					
Pallid bat <i>Antrozous pallidus</i>	-	SSC		Occurs in grasslands, woodlands, deserts, and urban habitats. Open habitat required for foraging. Common in dry habitats with rocky outcrop, cliffs, and crevices for roosting. Roosts include caves, mines, bridges, and occasionally hollow trees, buildings.	No suitable roosting structures present onsite.
Fisher – West Coast DPS <i>Pekania pennanti</i>	FPT	CCT/SSC		Occurs in intermediate to large-tree stage coniferous forests and riparian woodlands with high percent level of canopy closure.	No suitable habitat present onsite.
American badger <i>Taxidea taxus</i>	-	SSC		Occurs in dry, open soils in herbaceous, shrub, and forest habitats. Needs friable, uncultivated soil. Preys on rodents.	No suitable habitat present onsite.
<hr/>					
*Status Codes:					
<u>Federal</u>			<u>State</u>		
FE	Federal Endangered		CC	California Candidate	
FPT	Federal Proposed Threatened		CE	California Endangered	
FT	Federal Threatened		CFP	California Fully Protected	
			CR	California Rare	
			CT	California Threatened	
			SSC	California Species of Concern	
			sa	California Special Animal (species with no official federal or state status, but are included on CDFG's Special Animals list)	
<hr/>					
<u>CNPS</u>					
Rank 1B	Rare, Threatened, or Endangered in California				
Rank 2	R, T, or E in California, more common elsewhere				
	¹ -Seriously threatened in California				
	² -Fairly threatened in California				

and hyssop loosestrife (*Lythrum hyssopifolia*). Ponding at this location is an artifact of seasonal grading and a very low berm at the corner of the property. This location does not qualify as a wetland or as waters of the United States

4.2.3 REGULATORY CONSIDERATIONS

4.2.3.1 Federal and State Laws and Regulations

Federal Endangered Species Act

Under the federal Endangered Species Act (FESA), the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as Threatened or Endangered (16 United States Code [USC] 1533[c]). 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 "take" provision of the FESA applies to actions that would result in injury, death, or harassment of a single member of a species protected under the Act. In addition, the agency is required to determine whether the 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 from the U.S. Fish and Wildlife Service (USFWS) would be required under Section 7 or Section 10 of the FESA. Section 7 applies if there is a federal nexus (e.g., the project is on federal land, the lead agency is a federal entity, a permit is required from a federal agency, or federal funds are being used). Section 10 applies if there is no federal nexus.

There are no FESA-listed species or their habitats that occur on or near the project site that would be affected by project implementation.

Clean Water Act

The Federal Water Pollution Control Act of 1972, often referred to as the Clean Water Act, is the nation's primary law for regulating discharges of pollutants into waters of the United States. The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The regulations adopted pursuant to the Act deal extensively with the permitting of actions in waters of the United States, including wetlands. The U.S. Environmental Protection Agency (US EPA) has primary authority under the Clean Water Act to set standards for water quality and for effluents, but the USACE has primary responsibility for permitting the discharge of dredge or fill materials into streams, rivers, wetlands, and other waters of the United States.

There are no regulated wetlands or other waters of the United States on the project site.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (16 USC, Section 703, Supplement I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. The Act encompasses whole birds, parts of birds, and bird nests and eggs.³

There are no mature trees or other suitable habitat for nesting birds (i.e., burrowing owls) on the project site, although small trees are present along the project site perimeter and additional nesting habitat is present along the Town Center Lake edge near the project site.

California Endangered Species Act

Under the California Endangered Species Act (CESA), the CDFW has the responsibility for maintaining a list of Threatened and Endangered species (California Fish and Game Code Section 2070). The CDFW also maintains a list of “candidate species,” which are species formally under review for addition to either the list of Endangered species or the list of Threatened species. In addition, the CDFW maintains lists of “species of special concern,” which serve as watch lists. Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed Endangered or Threatened species could be present on the project site and determine whether the proposed project could have a potentially significant impact on such species.

There are no CESA Endangered or Threatened species, or California species of special concern, on or near the project site that would be affected by project implementation.

California Native Plant Protection Act

State listing of plant species began in 1977 with the passage of the California Native Plant Protection Act (NPPA), which directed the CDFW to carry out the legislature’s intent to “preserve, protect, and enhance Endangered plants in this state.” The NPPA gave the California Fish and Wildlife Commission the power to designate native plants as Endangered or Rare and to require permits for collecting, transporting, or selling such plants. The CESA expanded upon the original NPPA and enhanced legal protection for plants. There are three listing categories for plants in California: Rare, Threatened, and Endangered.

³ The Act covers hundreds of birds, including varieties of loon, grebe, albatross, booby, pelican, cormorant, heron, stork, swan, goose, duck, vulture, eagle, hawk, falcon, fail, plover, avocet, sandpiper, phalarope, gull, tern, murre, puffin, dove, cuckoo, roadrunner, owl, swift, hummingbird, kingfisher, woodpecker, swallow, jay, magpie, crow, wren, thrush, mockingbird, vireo, warbler, cardinal, sparrow, blackbird, finch, and many others.

There are no state-listed plants on the project site.

California Fish and Game Code

The California Fish and Game Code provides a variety of protections for species that are not federally or state-listed as Threatened, Endangered, or of special concern.

- Section 3503 protects all breeding native bird species in California by prohibiting the take,⁴ possession, or needless destruction of nests and eggs of any bird, with the exception of non-native English sparrows and European starlings (Section 3801).
- Section 3503.5 protects all birds of prey (in the orders Falconiformes and Strigiformes) by prohibiting the take, possession, or killing of raptors and owls, their nests, and their eggs.
- Section 3513 of the code prohibits the take or possession of migratory nongame birds as designated in the Migratory Bird Treaty Act or any parts of such birds except in accordance with regulations prescribed by the Secretary of the Interior.
- Section 3800 of the code prohibits the taking of nongame birds, which are defined as birds occurring naturally in California that are not game birds or fully protected species.
- Section 3511 (birds), Section 5050 (reptiles and amphibians), and Section 4700 (mammals) designate certain wildlife species as fully protected in California.

4.2.3.2 Local Plans and Policies

County of El Dorado General Plan

The following presents guiding and implementing policies from the current County of El Dorado General Plan (2004) relevant to biological resources and contained within the Conservation and Open Space Element.

GOAL 7.3: WATER QUALITY AND QUANTITY: Conserve, enhance, and manage water resources and protect their quality from degradation.

OBJECTIVE 7.3.3: WETLANDS: Protection of natural and man-made wetlands, vernal pools, wet meadows, and riparian areas from impacts related to development for their importance to wildlife habitat, water purification, scenic values, and unique and sensitive plant life.

⁴ "Take" in this context is defined in Section 86 of the California Fish and Game Code as to "hunt, pursue, catch, capture, or kill, or to attempt to hunt, pursue, catch, capture, or kill."

Policy 7.3.3.4

The Zoning Ordinance shall be amended to provide buffers and special setbacks for the protection of riparian areas and wetlands. The County shall encourage the incorporation of protected areas into conservation easements or natural resource protection areas. Exceptions to riparian and wetland buffer and setback requirements shall be provided to permit necessary road and bridge repair and construction, trail construction, and other recreational access structures such as docks and piers, or where such buffers deny reasonable use of the property, but only when appropriate mitigation measures and Best Management Practices are incorporated into the project.

Exceptions shall also be provided for horticultural and grazing activities on agriculturally zoned Conservation and Open Space Element El Dorado County General Plan Page 144 (Amended December 2015) July 2004 lands that utilize “best management practices (BMPs)” as recommended by the County Agricultural Commission and adopted by the Board of Supervisors.

Until standards for buffers and special setbacks are established in the Zoning Ordinance, the County shall apply a minimum setback of 100 feet from all perennial streams, rivers, lakes, and 50 feet from intermittent streams and wetlands. These interim standards may be modified in a particular instance if more detailed information relating to slope, soil stability, vegetation, habitat, or other site- or project-specific conditions supplied as part of the review for a specific project demonstrates that a different setback is necessary or would be sufficient to protect the particular riparian area at issue.

For projects where the County allows an exception to wetland and riparian buffers, development in or immediately adjacent to such features shall be planned so that impacts on the resources are minimized. If avoidance and minimization are not feasible, the County shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible.

OBJECTIVE 7.3.5: WATER CONSERVATION: Conservation of water resources, encouragement of water conservation, and construction of wastewater disposal systems designed to reclaim and re-use treated wastewater on agricultural crops and for other irrigation and wildlife enhancement projects.

Policy 7.3.5.1 Drought-tolerant plant species, where feasible, shall be used for landscaping of commercial development. Where the use of drought tolerant native plant species is feasible, they should be used instead of non-native plant species.

GOAL 7.4: WILDLIFE AND VEGETATION RESOURCES. Identify, conserve, and manage wildlife, wildlife habitat, fisheries, and vegetation resources of significant biological, ecological, and recreational value.

OBJECTIVE 7.4.1: RARE, THREATENED, AND ENDANGERED SPECIES: The County shall protect State and federally recognized rare, threatened, or endangered species and their habitats consistent with Federal and State laws.

Policy 7.4.1.6 All development projects involving discretionary review shall be designed to avoid disturbance or fragmentation of important habitats to the extent reasonably feasible. Where avoidance is not possible, the development shall be required to fully mitigate the effects of important habitat loss and fragmentation. Mitigation shall be defined in the Integrated Natural Resources Management Plan (INRMP) (see Policy 7.4.2.8 and Implementation Measure CO-M). The County Agricultural Commission, Plant and Wildlife Technical Advisory Committee, representatives of the agricultural community, academia, and other stakeholders shall be involved and consulted in defining the important habitats of the county and in the creation and implementation of the INRMP.

OBJECTIVE 7.4.2: IDENTIFY AND PROTECT RESOURCES: Identification and protection, where feasible, of critical fish and wildlife habitat including deer winter, summer, and fawning ranges; deer migration routes; stream and river riparian habitat; lake shore habitat; fish spawning areas; wetlands; wildlife corridors; and diverse wildlife habitat.

Policy 7.4.2.5 Setbacks from all rivers, streams, and lakes shall be included in the Zoning Ordinance for all ministerial and discretionary development projects.

General Plan - Important Biological Corridor

The El Dorado County General Plan designates the Important Biological Corridor (IBC) (Figures 5.12-14, 5.12-5 and 5.12-7, El Dorado County, 2003). Lands located within the IBC overlay district are subject to the following provisions, as long as they do not interfere with agricultural practices:

- Increased minimum parcel size;

- Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
- Lower thresholds for grading permits;
- Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
- Increased riparian corridor and wetland setbacks;
- Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/California Department of Fish and Wildlife);
- Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;
- Building permits discretionary or some other type of “site review” to ensure that canopy is retained;
- More stringent standards for lot coverage, floor area ratio (FAR), and building height; and
- No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).

El Dorado County Zoning Ordinance

Section 130.30.030 of the County’s Zoning Ordinance contains the following provisions related to setbacks for the protection of wetlands and sensitive riparian habitats.

G. Protection of Wetlands and Sensitive Riparian Habitat

1. **Content.** This subsection establishes standards for avoidance and minimization of impacts to wetlands and sensitive riparian habitat as provided in General Plan Policies 7.3.3.4 (Wetlands) and 7.4.2.5 (Identify and Protect Resources).
2. **Applicability.** The standards in this subsection apply to all ministerial or discretionary development proposed adjacent to any perennial streams, rivers or lakes, any intermittent streams and wetlands, as shown on the latest 7.5 minute, 1:24,000 scale United States Geological Survey (USGS) Quadrangle maps, and any sensitive riparian habitat within the county. Activities regulated under this subsection include those activities also regulated under the federal Clean Water Act (33 U.S.C. § 1251 et seq.) and California Fish and Game Code (Sections 1600-1607). These standards do not apply to culverted creeks and engineered systems developed or approved by the County or other public agency for collection of storm or floodwaters, or systems other than natural creeks designed to deliver irrigation or water supplies. Additional standards applicable to the design of new developments or subdivisions are found in the Design and Improvement Standards Manual (DISM)/Land Development Manual (LDM), or successor document.
3. **Use Regulations.**

- a. New ministerial and discretionary development shall avoid or minimize impacts to perennial streams, rivers or lakes, intermittent streams and wetlands, and any sensitive riparian habitat to the maximum extent practicable. Where avoidance and minimization are not feasible, the county shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible.
- b. Any new development which does not avoid impacts to wetlands and sensitive riparian habitat shall prepare and submit a Biological Resource Evaluation identifying the location of all features regulated under this section.
- c. An applicant shall obtain all required permits from state or federal agencies having jurisdiction, and shall fully implement any mitigation program required as a condition of such permit. Where the area impacted is not within federal or state jurisdiction, the county shall require appropriate mitigation as recommended in a biological resource evaluation.
- d. Ministerial development, including single family dwellings and accessory structures, shall be set back a distance of 25 feet from any intermittent stream, wetland or sensitive riparian habitat, or a distance of 50 feet from any perennial lake, river or stream. This standardized setback may be reduced, or grading within the setback may be allowed, if a biological resource evaluation is prepared which indicates that a reduced setback would be sufficient to protect the resources.
- e. All discretionary development which has the potential to impact wetlands or sensitive riparian habitat shall require a biological resource evaluation to establish the area of avoidance and any buffers or setbacks required to reduce the impacts to a less than significant level. Where all impacts are not reasonably avoided, the biological resource evaluation shall identify mitigation measures that may be employed to reduce the significant effects. These mitigation measures may include the requirement for compliance with the mitigation requirements of a state or federal permit, if required for the proposed development activity.
- f. Any setback or buffer required by this subsection shall be measured from the ordinary high water mark of a river, perennial or intermittent stream, and the ordinary high water mark or spillway elevation of a lake or reservoir.
- g. Except where otherwise provided in this section, filling, grading, excavating or obstructing streambeds is prohibited except where necessary for placement of storm drain and irrigation outflow structures approved by the county; placement of public and private utility lines; construction of bridges and connecting roadways; maintenance activities necessary to protect public health and safety; and creek restoration and improvement projects.
- h. All new septic system construction shall comply with standards established by the Environmental Management Department, or applicable state and federal regulations for setbacks from lakes, rivers and streams.

- i. Projects within the joint jurisdiction of the County and the Tahoe Regional Planning Agency (TRPA) shall be subject to setbacks established by TRPA.
4. Exceptions; Uses allowed. The following uses are allowed:
- a. Native landscaping;
 - b. Fencing, consistent with the provisions of Subsection 130.30.050.B (Fences, Walls, and Retaining Walls - Front Yards), that does not interfere with the flow of waters or identified wildlife migration corridors;
 - c. Roads or driveways used primarily for access or for the maintenance of a property;
 - d. Utilities;
 - e. Storm drains into riparian areas and creeks;
 - f. Trails and passive recreational activities not involving the establishment of any structures;
 - g. Boat ramps, docks, piers, and related features used for private purposes, subject to applicable local, state, or Federal regulations.
 - h. Construction and maintenance of bridges, culverts, rip-rap, and other drainage facilities.
 - i. Agricultural activities that utilize best management practices (BMPs), as recommended by the Ag Commission and adopted by the Board.

4.2.4 IMPACTS AND MITIGATION MEASURES

4.2.4.1 Significance Criteria

In accordance with Appendix G of the *State CEQA Guidelines*, the impact of the proposed project on biological resources would be considered significant if it would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS;
- 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;

- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan; or
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

4.2.4.2 Issues adequately addressed in the Initial Study

As noted in the Initial Study and shown on the County's Integrated Natural Resources Management Plan (INRMP) Initial Inventory Map (Exhibit 10), the project site is not within the boundaries of a Priority Conservation Area, an Important Biological Corridor, an adopted Habitat Conservation Plan (HCP), a Natural Community Conservation Plan (NCCP), or any other conservation plan, including those specifically listed in Exhibit 10. As such, the proposed project would not conflict with an adopted HCP or NCCP. There would be no impact and no further analysis of this issue is necessary in the EIR.

4.2.4.3 Methodology

The analysis below compares identified impacts to the standards of significance stated above and determines the impact's level of significance under CEQA. If the impact is determined to be significant, the analysis identifies feasible mitigation measures to eliminate the impact or reduce it to a less than significant level. If the impact cannot be reduced to a less than significant level after implementation of all feasible mitigation measures, then the impact is identified as significant and unavoidable.

4.2.4.4 Project Impacts and Mitigation Measures

Impact BIO-1: **The proposed project would not adversely affect candidate, sensitive, or special-status species or their habitat. (No Impact)**

As explained in **Section 4.2.2** above, no candidate, sensitive, or special-status plants or wildlife species were found or are expected to occur on the project site because of lack of suitable habitat. Furthermore, the proposed project would not eliminate habitat important to the long-term survival of any candidate, sensitive, or special-status species. Therefore, no impacts to candidate, sensitive, or special-status plant or wildlife species would result from the construction and operation of the project.

Mitigation Measures: No mitigation measures are required.

Impact BIO-2: The proposed project would not directly or indirectly affect any riparian habitat, sensitive natural community, or wetlands nor interfere with the movement of any wildlife species, but project construction noise could affect nesting birds. (Potentially Significant; Less than Significant with Mitigation)

The project site does not contain riparian or wetland habitat or other sensitive natural community and would therefore not directly affect such resources. The project site is adjacent to the man-made Town Center Lake, which was developed as mitigation for the development of the Town Center. Although this is not a natural lake, the lake does provide habitat for aquatic and wetland species of plants and animals. Runoff from the project site during construction could contain sediment and result in excess siltation of the lake, which in turn could impact aquatic species by creating increased turbidity and siltation. Other contaminants, such as fuels and lubricants, could also be inadvertently discharged into the lake from construction runoff, adversely affecting biological resources in the lake. This would be considered a potentially significant impact. However, as discussed in the Hydrology and Water Quality section beginning on page 43 of the Initial Study, and as authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) Permit Program, which controls water pollution by regulating point sources that discharge pollutants into waters of the United States, is in place. All construction projects that disturb 1.0 or more acre of land are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a storm water pollution prevention plan (SWPPP). The SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of Best Management Practices (BMPs) that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants. Additionally, SWPPPs must address development post-construction requirements pursuant to municipality standards, or state standards if the municipality does not have standards. Compliance with and implementation of the legally required standard conditions detailed above would ensure the proposed project would not violate any water quality standards or waste discharge requirements that could adversely affect biological resources in the lake. Impacts would be less than significant.

The project site does not contain natural habitats or important biological resources and is surrounded by existing development and roads on three sides. As such, it does not provide habitat connectivity between

undeveloped lands and is not part of a regional wildlife movement corridor. Therefore, there would be no impact to wildlife movement from the development of the proposed project.

As noted above, the federal MBTA and California Fish and Game Code provide for the protection of numerous bird species, including the protection of birds during the time that they are breeding or nesting. Although mature trees provide suitable nesting habitat for most bird species, some bird species also nest in smaller trees and on the ground. The site does not contain any mature trees but does support a few small trees, including cottonwoods, along the site perimeter. The project site does not contain any suitable habitat for ground nesting birds (e.g., burrowing owls). Therefore the project would not directly affect any ground nesting birds. However, the small trees on the project site perimeter and the trees present along the edge of the Town Center Lake near the project site could be used by nesting birds. Should project construction occur during the breeding season (February 1 through August 31), loud noise associated with construction activity would have the potential to disturb nesting occurring in close proximity to the construction zone and result in the abandonment of an active nest. The loss of an active nest is considered a potentially significant impact.

Mitigation Measure BIO-2 would be implemented to mitigate impacts to special-status birds and non-special status birds protected under the MBTA and the Fish and Game Code to a less than significant level.

Mitigation Measures:

BIO-2 For the protection of birds species protected by the Migratory Bird Treaty Act and the California Fish and Game Code, project activities shall occur during the non-breeding bird season to the extent feasible (September 1 – January 31). However, if site clearance, grading, or initial ground-disturbing activities must occur during the breeding season (February 1 through August 31), a survey for active bird nests shall be conducted by a qualified biologist no more than 14 days prior to the start of these activities. The survey shall be conducted in a sufficient area around the work site to identify the location and status of any nests that could potentially be affected by project activities.

If active nests of protected species are found within project impact areas or close enough to these areas to affect breeding success, a work exclusion zone shall be established around each nest by a qualified biologist. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes vary dependent upon bird species, nest location, existing visual buffers and ambient sound levels, and other factors; an

exclusion zone radius may be as small as 50 feet (for common, disturbance-adapted species) or as large as 250 feet or more for raptors. Exclusion zone size may also be reduced from established levels if supported with nest monitoring by a qualified biologist indicating that work activities outside the reduced radius are not adversely impacting the nest.

Significance after Mitigation: Less than significant

Impact BIO-3: The proposed project would not conflict with local policies protecting biological resources. (No Impact)

The project site does not contain biological resources protected by the policies of El Dorado County.

El Dorado County General Plan Policies 7.3.3.4 and 7.4.2.5 require setbacks from wetlands, rivers, streams and lakes. Specifically, El Dorado County General Plan Policy 7.3.3.4 provides:

“The Zoning Ordinance shall be amended to provide buffers and special setbacks for the protection of riparian areas and wetlands. The County shall encourage the incorporation of protected areas into conservation easements or natural resource protection areas.

Exceptions to riparian and wetland buffer and setback requirements shall be provided to permit necessary road and bridge repair and construction, trail construction, and other recreational access structures such as docks and piers, or where such buffers deny reasonable use of the property, but only when appropriate mitigation measures and Best Management Practices are incorporated into the project. Exceptions shall also be provided for horticultural and grazing activities on agriculturally zoned lands that utilize “best management practices (BMPs)” as recommended by the County Agricultural Commission and adopted by the Board of Supervisors.

Until standards for buffers and special setbacks are established in the Zoning Ordinance, the County shall apply a minimum setback of 100 feet from all perennial streams, rivers, lakes, and 50 feet from intermittent streams and wetlands. These interim standards may be modified in a particular instance if more detailed information relating to slope, soil stability, vegetation, habitat, or other site- or project-specific conditions supplied as part of the review for a specific project demonstrates that a different setback is necessary or would be sufficient to protect the particular riparian area at issue. For projects where the County allows an exception to wetland and riparian buffers, development in or immediately adjacent to such features shall be planned so that impacts on the resources are

minimized. If avoidance and minimization are not feasible, the County shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible.”

General Plan Policy 7.4.2.5 provides:

“Setbacks from all rivers, streams, and lakes shall be included in the Zoning Ordinance for all ministerial and discretionary development projects.”

As noted earlier in this section, El Dorado County has provided some guidance in the Zoning Ordinance Chapter 130.30. General Development Standards, Section 130.30.030 - Setback Requirements and Exceptions, but no numeric standard is provided.

G. Protection of Wetlands and Sensitive Riparian Habitat

- b. Any new development which does not avoid impacts to wetlands and sensitive riparian habitat shall prepare and submit a Biological Resource Evaluation identifying the location of all features regulated under this section.

- e. All discretionary development which has the potential to impact wetlands or sensitive riparian habitat shall require a biological resource evaluation to establish the area of avoidance and any buffers or setbacks required to reduce the impacts to a less than significant level. Where all impacts are not reasonably avoided, the biological resource evaluation shall identify mitigation measures that may be employed to reduce the significant effects. These mitigation measures may include the requirement for compliance with the mitigation requirements of a state or federal permit, if required for the proposed development activity.

Town Center Lake is a man-made water body and the above provisions do not apply to the waterbody. Nonetheless, because riverine and wetland habitat associated with the lake are present immediately adjacent to the western side of the project site, a biological resource evaluation was completed for the proposed project which indicates that sensitive biological resources such as special-status wildlife species are not present in the area of the Town Center Lake. Furthermore, the project would not construct any facilities that would require any work in the lake or the removal of the riparian habitat present along the lake adjacent to the project site. An existing paved walkway and landscaped area lies between the project site and these aquatic habitats, providing a setback of approximately 30 feet. In addition, the project development is set back further from the property line. As described in **Chapter 3.0, Project Description**, the site perimeter along Town Center Lake would consist of an emergency vehicle access (EVA) lane and a natural transition area. The EVA would run parallel to the west side of Building 1. It would not be a paved surface but would consist of turf blocks of special hybrid grasses specifically cultivated to be cut as

a lawn grass, but may be allowed to grow taller as a meadow grass. Between the EVA lane and the existing paved pathway along the lake, the generally sloped area would serve as a natural transition area and would be landscaped with pines, pistache, and hawthorn trees. Under-story plantings would consist of drought tolerant native shrubs, ground covers, and ornamental grasses. Therefore, the project would be adequately set back from the lake.

El Dorado County Policy 7.4.1.6 requires avoidance of habitat disturbance or fragmentation. The project site is disturbed and does not itself provide important habitat, nor is it located in an area containing such habitats.

El Dorado County Policy 7.3.5.1 requires use of drought-tolerant plant species in landscaping, where feasible. The landscape plan for the project incorporates drought-tolerant plant species.

In summary, the proposed project would not conflict with local policies for the protection of biological resources. No impact would occur.

Mitigation Measures: No mitigation measures are required.

4.2.4.5 Cumulative Impacts and Mitigation Measures

Cumulative Impact C-BIO-1: The proposed project, in conjunction with other past, present and reasonably foreseeable future development, would not result in significant cumulative impacts on biological resources. (*Less than Significant*)

Cumulative development includes closely related past, present, and reasonably foreseeable development that could affect the same biological resources as the proposed project in such a way that a significant cumulative impact could occur. The project vicinity has been substantially built-out, including commercial development on three sides of the project site and permanent open space on the fourth side. Freeways and other major transportation corridors crisscross the area. Pockets of undeveloped land are isolated from each other and from the project site, further reducing biological values.

Given the previously disturbed condition of the proposed project, the proposed project would not result in a substantial loss of undeveloped land or wildlife habitat or any impacts on special-status plant or wildlife species on the project site, nor would it contribute to the cumulative loss of such biological

resources. Consequently, the project would not contribute substantially towards cumulative impacts to sensitive biological resources in the project region.

Mitigation Measures: No mitigation measures are required.

4.2.5 REFERENCES

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- Shuford, W. David and Thomas Gardali. 2008. *California Bird Species of Special Concern – A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California*.

4.3 CULTURAL AND TRIBAL CULTURAL RESOURCES

4.3.1 INTRODUCTION

This section analyzes and evaluates the potential impacts of the proposed El Dorado Hills Apartments project (“proposed project”) on known and unknown cultural resources, on unknown fossil deposits of paleontological importance, and tribal cultural resources.

Cultural resources include districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. Historical (or architectural) resources are standing buildings (e.g., houses, barns, outbuildings, cabins) and intact structures (e.g., dams, bridges). Archaeological resources are locations where human activity has measurably altered the earth or left deposits of prehistoric or historic-era physical remains (e.g., stone tools, bottles, former roads, house foundations). Paleontological resources include mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains that are more than 5,000 years old and occur mainly in Pleistocene (from 2.6 million to 11,700 years ago) or older sedimentary rock units.

A tribal cultural resource is defined in Public Resources Code Section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of its size and scope, sacred place, or object with cultural value to a California Native American tribe that is either listed or eligible for listing in the California Register of Historical Resources, or is included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

The primary source of information for this section is the *Archaeological Resources Assessment Report* prepared for the proposed project by Basin Research Associates. This report is included in **Appendix 4.3** of this Draft EIR.

4.3.2 ENVIRONMENTAL SETTING

This section describes the methods used to develop the cultural setting and baseline conditions for the project site.

4.3.2.1 Research and Site Reconnaissance

Records Search

The general study area of the proposed project encompasses El Dorado County and the adjacent counties. A prehistoric and historic site record and literature search for the project site and an area within a 0.25-

mile radius (project study area) was completed by the California Historic Resources Information System, North Central Information Center, California State University, Sacramento (CHRIS/NCIC File No. ELD-16-23). Specialized listings for cultural resources consulted during the records search include:

- Historic Properties Directory for El Dorado County with the most recent updates of the NRHP; CRHR; California Historical Landmarks; and, California Points of Historical Interest;
- National Register of Historic Places listings for El Dorado County, California;
- Archeological Determinations of Eligibility for El Dorado County;
- California Historical Landmarks;
- California History Plan;
- California Inventory of Historic Resources;
- Five Views: An Ethnic Sites Survey for California;
- California Historical Resources –El Dorado County [including National Register, State Landmark, California Register, and Point of Interest];
- Various El Dorado County and El Dorado Hills Specific Plan documents:
 - El Dorado Hills Specific Plan EIR (Jones & Stokes 1987) including Chapter 13, Cultural Resource Assessment by Peak & Associates;
 - El Dorado Hills Specific Plan;
 - Cultural Resources in the Conservation and Open Space Element of the 2004 El Dorado County General Plan: A Plan for Managed Growth and Open Roads; A Plan for Quality Neighborhoods and Traffic Relief; and
- Historic maps and USGS topographic quadrangle maps.

Recorded Archaeological Sites

No archaeological sites and/or built environment have been recorded in or adjacent to the project site. Five historic era sites have been recorded within 0.25 miles of the project site.

- P-09-000012 –a road to the Clarksville Cemetery.
- P-09-000015 – dry laid rock wall along part of White Rock Road.
- P-09-000809 – segment of the old White Rock Road/Sacramento-Placerville Road, Mormon Hill Road, Lincoln Highway.

- P-09-001670 – Mormon Hill Historic District including mines/quarries/tailings and farms/ranches as well as P-09-004204, the Clarksville Cemetery.
- P-09-004204 – Clarksville Cemetery, also known as the Mormon Tavern Cemetery [or the Old Mormon Cemetery] within the Mormon Hill Historic District [P-09-001670].

Compliance Reports

Twenty-three (23) archaeological reports are on file at the CHRIS/NCIC for the area within 0.25 miles of the project site. However, only three reports associated with the El Dorado Hills Specific Plan on file with the CHRIS/NCIC include the project site location.

- Cultural Resource Assessment of the El Dorado Hills Project, El Dorado County California.
- A Determination of Eligibility and Effect on the Cultural Resources within the El Dorado Hills Project Area.
- Addendum To: A Determination of Eligibility and Effect on the Cultural Resources within the El Dorado Hills Project Area.

Listed Historic Properties

No listed local, state or federal historically or architecturally significant structures, landmarks or points of interest have been identified in or adjacent to the project site.

El Dorado Hills Specific Plan

The project site is within the Village T area of the El Dorado Hills Specific Plan. The Specific Plan area was subject to an archaeological literature and field review in 1986 and 1987 by Peak & Associates for the EIR for El Dorado Hills Specific Plan.

Twenty-nine (29) archaeological sites and 31 isolated features were recorded for the Specific Plan area. Site types/components included both prehistoric and historic archaeological resources, features, structures and buildings. No archaeological testing was conducted within the Village T area; however, to date no prehistoric or historic archaeological resources have been identified on or near the project site.

Individual Group and Agency Participation

On April 19, 2016, Basin Research Associates consulted with the Native American Heritage Commission (NAHC) to identify the names of Native American groups or individuals that might have knowledge or concern about potential resources within the vicinity of the proposed project. On April 27, 2016, NAHC provided a list of five Native American tribes to contact for information that Basin Research Associates

provided to El Dorado County. In addition, El Dorado County has identified a list of six Native American individuals and organizations through the Senate Bill (SB) 18 and Assembly Bill (AB) 52 processes. The SB 18 process provides an opportunity for selected Native American tribes and representatives to formally consult directly with the County about the impacts of the project on traditionally important resources. AB 52, which was approved in September 2014 and became effective on July 1, 2015, requires that CEQA lead agencies consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribes. On April 24, 2017,¹ El Dorado County sent these Native American individuals and organizations letters requesting these groups provide any information or concerns regarding cultural resources that could be affected by the proposed project. Responses were received from the Chairman of the United Auburn Indian Community of the Auburn Rancheria and the Chairperson of the Shingle Springs Band of Miwok Indians; consultation with both of these tribal representatives is ongoing.

Archaeological Field Reconnaissance

On April 15, 2016, an archaeologist meeting the Standards of the Secretary of the Interior for Archaeology conducted a pedestrian survey of the project site. Field transects were oriented north-south and spaced approximately three meters apart. Native and invasive grasses and flowering plants were present throughout. As a result surface visibility varied within the project area with approximately 25-50 percent of the site obscured by vegetation.

The project site had been subject to mass-grading as part of development in Town Center East. Observed sediment consisted of light yellowish brown clayey silt with cobbles, pebbles, and gravel, with a higher concentration of rock at the southern end of the project site. The cobbles, pebbles, and gravel appeared to represent material from a former alluvial fan leading to the existing, and now channelized, water feature immediately adjacent to the project site.

No evidence of prehistoric or historic artifacts or occupation or potentially significant architectural features were observed during the field survey. The historic Clarksville Cemetery, also known as the Old Mormon Cemetery, is located approximately 850 feet north-northeast of the project site.

4.3.2.2 Prehistoric Background

Prehistoric site types include midden deposits (culturally affected soil generally caused by human occupation), bedrock mortars, lithic scatters, ground stone fragments, quarries, as well as petroglyphs and/or pictographs, etc. Sites with prehistoric components are generally located along drainages, on flat

¹ Copies of this correspondence are included in **Appendix 4.3** of this Draft EIR.

ridges and terraces, in areas that contain oak woodlands with rock outcrops and usually on elevated ground slightly away from the water courses.

Early investigations at the Oroville Dam along the Feather River in Butte County have defined the cultural sequences for the region known as the Mesilla, Bidwell, Sweetwater, Oroville, and Historic cultural complexes. The Oroville assemblage and Auburn Ravine material culture appear to reflect prehistoric era diffusion from the higher Sierra and Great Basin and also the Sacramento Valley (Basin 2016).

Mesilla Complex 1000 B.C. and A.D. 1

This complex reflected a highly mobile group, who occupied the foothills, possibly seasonally. The atlatl and dart, as well as processed food tools such as bowl mortars and milling stones, indicate the hunting-gathering economic organization of this complex. The presence of Haliotis and Olivella shell beads, along with charmstones, bone pins, and spatulae show contact with Sacramento Valley cultures.

Bidwell Complex A.D. 1 and 800

The Bidwell complex phase involved relatively permanent villages with smaller task groups, some of whom moved out to hunt deer and smaller game, fish (with nets), while other groups undertook the processing of hard seeds and acorns (milling stones and likely wooden mortars), and still other task groups collected freshwater mussels. Large slate and basalt projectile points continued, and carved steatite vessels for cooking were added to the food processing inventory while handstones still predominated over mortar and pestles. The dead were buried in flexed, dorsal or lateral positions.

Sweetwater Complex A.D. 800-1500

Olivella bead and Haliotis ornament types coupled with the industry of steatite cups, platter, bowls, and tubular smoking pipes are markers of this phase. Small, lightweight projectile points reflect the use of bow and arrow by A.D. 800. About ca. A.D. 1000, interments “evolved” from flexed to extended or semi-extended.

Oroville Complex A.D. 1500 to Epidemic of 1833

The Oroville Complex phase has been attributed to the protohistoric Maidu. Bedrock mortars, likely used earlier, were important for acorn processing, while other seed-grinding implements remained unchanged. Oroville Complex markers consist of incised bird bone tubes, gorge hooks, gaming bones, and clamshell disk beads. A number of different types of structures including large circular dance houses were present. Burials were tightly flexed on their sides, occasionally under stone cairns.

Historic Complex 1833 onward

The initial contact period during the early 19th century resulted in the epidemic of 1829-1833 with an estimated mortality of approximately 75 percent, resulting in Native American village abandonment. As a consequence, the material record of the survivors and their subsequent acculturation as well as their immediate descendants is notably sparse.

4.3.2.3 Ethnographic Background

The aboriginal inhabitants of the project area belonged to a Native American group known as the Nisenan, sometimes referred to as the Southern Maidu, who occupied the drainages of the Yuba, Bear, and American rivers and the lower drainages of the Feather River from the Sacramento River on the west to the crest of the Sierra Nevada in the east. The northern boundary has not been clearly delineated while the southern extent is a few miles south of the American River (Basin 2016). The Nisenan were Penutian speakers; three Nisenan dialects were distinguished by Kroeber (1925) – the Northern Hill Nisenan, Southern Hill Nisenan (or Foothill), and the Valley Nisenan (Basin 2016).

The locations of ethnographic Hill and Valley Nisenan villages were similar, though the foothill Nisenan village sites were smaller. Hill Nisenan villages were located on ridges and large flats along major streams while Valley Nisenan villages were built on low, natural rises along streams and rivers or on gentle slopes with a southern exposure. The village or community group controlled a certain territory and for the most part village locations followed large streams and ridges in the mountains. Villages varied in size from three to seven houses to 40 to 50 houses with an acorn granary. These areas were generally associated with bedrock mortars for acorn processing. A dance house was also a feature of major villages. Family groups often lived away from the main village. In addition to villages, other occupation and use sites included seasonal camps, quarries, ceremonial grounds, trading sites, fishing stations, cemeteries, river crossings, battlegrounds, well-established trails, and physiographic features (Basin 2016).

No known Native American villages, trails, traditional use areas or contemporary use areas have been identified in, adjacent to or near the project site.

In 1833, a great epidemic, probably malaria, swept through the Sacramento Valley with an estimated 75 percent mortality among native populations. In contrast the mountain groups, including the Nisenan, appear to have been spared. In addition, the Valley Nisenan endured missionization by the Spanish and vagaries associated with early European settlement. Captain John Sutter settled in Nisenan territory in 1839 and, in part due to the decimated populations and cultural disruption, made alliances with Miwok

on the Cosumnes River followed by the surviving remnants of the Valley Nisenan. These surviving populations became a source of labor for Sutter and others in the region (Basin 2016).

The Hill/Mountain Nisenan were impacted irreparably by the aftermath of the discovery of gold in January 1848 near the Nisenan village of Culloma (former Sutter’s Mill, present-day Coloma) at about 18.6 miles northeast of the project site, and in March 1848 at Mormon Island (Sacramento County) on the south fork of the American River (now under Folsom Lake north of the project site).

Thousands of miners killed native populations and destroyed their villages in the pursuit of gold. The Nisenan who survived subsequently engaged in agriculture, logging, ranching and “domestic pursuits.” Despite the impact of the gold rush and United States government policies, descendants of the Nisenan reside in Placer, Nevada, Yuba, and El Dorado Counties (Basin 2016).

4.3.2.4 Historic Period

No recorded Hispanic and/or American Period resources were identified on the project site as part of the CHRIS/NCIC records search conducted for the proposed project.

Hispanic Period (Spanish Colonial and Mexican National)

Between 1769 and 1821, the Spanish philosophy of government in northwestern New Spain² was directed at the founding of presidios, missions, and secular towns with the land held by the Spanish Crown. The later Mexican Period (1822-1848) policy stressed individual ownership of the land (Basin 2016). No known Spanish expedition trails/routes were known within the project area. In addition, none of the Spanish Era concessions (title held by crown) or Mexican Era land grants made between 1841 and 1846 included grants within El Dorado County.

In the 1820s, American and Hudson’s Bay Company trappers began trapping and establishing camps in Nisenan territory. Later, a number of these so called ‘Mountain Men’ proceeded along the periphery of the Sacramento River and also ventured along the American River. Fremont³ and his party travelled along the South Fork of the American River in 1844 (Basin 2016).

² The northwestern New Spain included California, Arizona, Nevada, New Mexico, and Texas.

³ John Charles Fremont—a lieutenant in the Army Topographical Corps—commissioned by the U. S. government to explore and map the Pacific Northwest in order to guide pioneers into the unknown West.

American Period

The first major historical event to impact the project area was the Gold Rush in 1848 along with trails and roads to/from the gold fields and provisioning. This was followed by the admission of the State of California to the United States of America on September 9, 1850. Further growth in the region was stimulated by the establishment of agricultural and ranching operations, the construction of local railroad lines and the opening of the transcontinental railroad in 1869.

El Dorado County is one of the original 27 California counties. The Middle Fork of the American River forms the northern county boundary, the South Fork of the American River flows about mid-county; and, the Cosumnes River/South Fork of the Cosumnes River forms the southern county boundary. Coloma, the initial county seat, was replaced by Placerville in 1857. The county population has increased coincident with the growth of metropolitan/greater Sacramento, the state capitol of California and the county seat of Sacramento County, located approximately 20 miles west of the project site (Basin 2016).

The 1856 General Land Office plat (GLO) shows “Clarkson’s Village,” Clarksville on the north side of a trail/road (present-day White Rock Road) through the general study area. Clarksville is likely mapped as “Clarkson” on Goddard’s 1857 Map of the State of California (Basin 2016). Clarksville, located approximately 1.7 miles east/northeast of the project site, served as a way station on the old Clarksville-White Rock Emigrant Road for emigrants and was a gold rush mining town that quickly developed into a regional trading center for nearby communities. In 1874, a Grange was established at Clarksville. The “Clarksville” post office was established in July 1855 and discontinued in August 1924, only to be re-established in February 1927 and later moved to Folsom City in May 1934 (Basin 2016).

The U.S. 50 Highway from Sacramento to Placerville passed through Clarksville until 1939. The decline of Clarksville as a service center for the region was due to the re-routing of the highway north of the town as well as the construction of a modern supermarket and other facilities elsewhere (Basin 2016).

The Coloma Road, marked out in 1847-1848 by Sutter and his men along the South Fork of the American River, ran from Sutter’s Fort (Sacramento) to present-day Folsom and into El Dorado County. Its approximate alignment was later followed by the railroad and U.S. Highway 50 (Basin 2016).

The Placerville & Sacramento Valley Railroad alignment through the general study area was in operation from 1864 onward. At the time, the alignment proceeded from Sacramento/Folsom to White Rock, about 2.3 miles southwest of the project site, and continued south to its terminus at Latrobe, about 8.0 miles south/southeast of the project site. Later construction extended the rails to Shingle Springs. As a result of rail transportation bypassing the town, Clarksville lost most of its freighting business (Basin 2016).

El Dorado Hills, a relatively recent El Dorado County community, is located 22 miles east of Sacramento and continues to expand. In September 1962, the post office was established in El Dorado County as an independent rural station and shortly thereafter in 1966 became a rural branch. In 1977, it was reclassified as community post office of Folsom (located in Sacramento County, about 8 miles northwest of the project site) (Basin 2016).

4.3.3 REGULATORY CONSIDERATIONS

4.3.3.1 Federal Laws and Regulations

National Historic Preservation Act, Section 106

The National Historic Preservation Act (NHPA) establishes the National Register of Historic Places (NRHP), and defines federal criteria for determining the historical significance of archaeological sites, historic buildings and other resources. To be determined eligible for the NRHP, a potential historic property must meet one of four historical significance criteria (listed below), and also must possess sufficient deposition, architectural, or historic integrity to retain the ability to convey the resource's historic significance. Resources determined to meet these criteria are eligible for listing in the NRHP and are termed historic properties. A resource may be eligible at the local, state, or national level of significance.

Properties are eligible for the NRHP if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and they:

- A. Are associated with events that have made a significant contribution to the broad patterns of our history;
- B. Are associated with the lives of a person or persons of significance in our past;
- C. Embody the distinctive characteristics of a type, period or method of construction, or represent the work of a master, or possess high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Have yielded or may be likely to yield information important in prehistory or history.

These factors are known as "Criteria A, B, C, and D."

A resource that lacks integrity or does not meet one of the NRHP criteria of eligibility is not considered a historic property under federal law, and effects to such a resource are not considered significant under the NHPA. Archaeological sites are generally evaluated under Criterion D, which concerns the potential to yield information important in prehistory or history.

Because the project does not require any federal permits, compliance with the NHPA will not be necessary.

4.3.3.2 State Laws and Regulations

California Environmental Quality Act

Under CEQA, public agencies must consider the effects of their actions on both “historical resources” and “unique archaeological resources.” Pursuant to California Public Resources Code (PRC) Section 21084.1, a “project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” PRC 21083.2 requires agencies to determine whether a proposed project would have an effect on “unique archaeological resources.”

“Historical resource” is a term of art with a defined statutory meaning (see PRC 21084.1 and State CEQA Guidelines Sections 15064.5(a) and 15064.5(b)). The term embraces any resource listed in or determined to be eligible for listing in the California Register of Historic Resources (CRHR). The CRHR includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California State Landmarks and Points of Historical Interest.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be “historical resources” for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC 5024.1 and 14 CCR 4850). Unless a resource listed in a survey has been demolished or has lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource potentially eligible for the CRHR.

In addition to assessing whether historical resources potentially impacted by a proposed project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project’s impacts to historical resources (PRC 21084.1 and State CEQA Guidelines Section 15064.5(a)(3)). In general, a historical resource, under this approach, is defined as any object, building, structure, site, area, place, record, or manuscript that:

- a. Is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California; and
- b. Meets any of the following criteria:
 1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;

2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history (State CEQA Guidelines Section 15064.5(a)(3)).

These factors are known as “Criteria 1, 2, 3, and 4” and parallel Criteria A, B, C, and D under the NHPA (discussed earlier). The fact that a resource is not listed or determined to be eligible for listing does not preclude a lead agency from determining that it may be a historical resource (PRC 21084.1 and State CEQA Guidelines Section 15064.5(a)(4)).

CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource, as described above, and “unique archaeological resources.” Under CEQA, an archaeological resource is considered “unique” if it:

- Contains information needed to answer important scientific research questions and 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 (PRC 21083.2(g)).

CEQA states that if a proposed project would result in an impact that might cause a substantial adverse change in the significance of a historical resource, then an EIR must be prepared and mitigation measures should be considered. A “substantial adverse change” in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (State CEQA Guidelines Section 15064.5(b)(1)).

The State CEQA Guidelines (Section 15064.5(c)) also provide specific guidance on the treatment of archaeological resources, depending on whether they meet the definition of a historical resource or a unique archaeological resource. If the site meets the definition of a unique archaeological resource, it must be treated in accordance with the provisions of PRC 21083.2.

State CEQA Guidelines Section 15126.4(b) sets forth principles relevant to means of mitigating impacts on historical resources. It provides as follows:

- (1) Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant.
- (2) In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur.
- (3) Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered and discussed in an EIR for a project involving such an archaeological site:
 - (A) Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
 - (B) Preservation in place may be accomplished by, but is not limited to, the following:
 1. Planning construction to avoid archaeological sites;
 2. Incorporation of sites within parks, greenspace, or other open space;
 3. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site.
 4. Deeding the site into a permanent conservation easement.
 - (C) When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code. If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation.
 - (D) Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center.

Section 15064.5(f) deals with potential discoveries of cultural resources during project construction. That provision states that, “[a]s part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.

State CEQA Guidelines Section 15064.5(e), requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as identified in a timely manner by the NAHC. Section 15064.5 of the State CEQA Guidelines directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

Senate Bill 18

Senate Bill (SB) 18 requires cities and counties to contact, and consult with California Native American tribes prior to making land use decisions. The bill requires local governments to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of general plans (defined in Government Code §65300 et seq.). For projects proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes that are on the contact list maintained by the Native American Heritage Commission (NAHC) for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.995 of the Public Resources Code that are located within the city or county’s jurisdiction.

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

Assembly Bill 52

AB 52, which was approved in September 2014 and became effective on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. A provision of the bill, chaptered in CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a Tribal Cultural Resource (TCR) is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:
 - a. Included or determined to be eligible for inclusion in the CRHR; or
 - b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

- a. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
- b. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe(s) pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource. As described above, the County is consulting with two tribes regarding the project’s impacts to TCRs, and appropriate mitigation, if any, for those impacts.

4.3.3.3 Local Plans and Policies

County of El Dorado General Plan

The following presents guiding and implementing policies from the current County of El Dorado General Plan (2004) relevant to cultural resources and contained within the Conservation and Open Space Element.

GOAL 7.5: CULTURAL RESOURCES: Ensure the preservation of the County's important cultural resources.

OBJECTIVE 7.5.1: PROTECTION OF CULTURAL HERITAGE: Creation of an identification and preservation program for the County's cultural resources.

Policy 7.5.1.3 Cultural resource studies (historic, prehistoric, and paleontological resources) shall be conducted prior to approval of discretionary projects. Studies may include, but are not limited to, record searches through the North Central Information Center at California State University, Sacramento, the Museum of Paleontology, University of California, Berkeley, field surveys, subsurface testing, and/or salvage excavations. The avoidance and protection of sites shall be encouraged.

Policy 7.5.1.6 The County shall treat any significant cultural resources (i.e., those determined California Register of Historical Resources/National Register of Historic Places eligible and unique paleontological resources), documented as a result of a conformity review for ministerial development, in accordance with CEQA standards.

4.3.4 IMPACTS AND MITIGATION MEASURES

4.3.4.1 Significance Criteria

In accordance with Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, the impact of the proposed project related to cultural and tribal cultural resources would be considered significant if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;

- Cause a substantial adverse change in the significance of archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of formal cemeteries; or
- 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 America tribe, and that is:
 - Listed or eligible for listing in the CRHR, 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 the Public Resources Code Section 5024.1. In applying criteria set forth in subdivision (c) of the Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.3.4.2 Issues adequately addressed in the Initial Study

All cultural and tribal cultural resources thresholds are addressed below.

4.3.4.3 Methodology

The analysis below compares identified impacts based on information from the *Archaeological Resources Assessment Report* prepared for this project to the standards of significance stated above and determines the impact's level of significance under CEQA. If the impact is determined to be significant, the analysis identifies feasible mitigation measures to eliminate the impact or reduce it to a less-than-significant level. If the impact cannot be reduced to a less-than-significant level after implementation of all feasible mitigation measures, then the impact is identified as significant and unavoidable. The project's potential contribution to cumulative impacts is also identified.

4.3.4.4 Project Impacts and Mitigation Measures

Impact CUL-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. (No Impact)

The project site is vacant and undeveloped. No listed, determined or pending CRHR resources have been identified in or adjacent to the project site as part of the records search conducted for the proposed project. In addition, no local, state or federal historically or architecturally significant structures,

landmarks, or points of interest have been identified within or adjacent to the project site (Basin 2016). As there are no features of the built environment on the project site or significant historical resources adjacent to the project site, implementation of the proposed project would have no impact on historical resources.

Mitigation Measures: No mitigation measures are required.

Impact CUL-2: **The proposed project could cause a substantial change in the significance of an archaeological resource pursuant to Section 15064.5. (*Potentially Significant; Less than Significant with Mitigation*)**

The project site is vacant and mass-grading undertaken as part of the development in the Town Center East has resulted in extensive surface and subsurface disturbance (Basin 2016). Records searches did not identify any archaeological resources within or adjacent to the project site. In addition, no known Hispanic Period expeditions or structures have been reported and no American Period archaeological sites have been recorded or reported in or adjacent to the project site.

During the field survey, no evidence of significant prehistoric or historically significant archaeological resources was observed at the project site. However, based on previous studies and archaeological field inventories, the project site is located in a general area of moderate sensitivity for prehistoric and historic resources (Basin 2016). Construction associated with the proposed project could result in the inadvertent exposure of buried prehistoric or historic archaeological materials that could be eligible for inclusion on the CRHR (Public Resources Code Section 5024.1) and/or meet the definition of a unique archeological resource as defined in Section 21083.2 of the Public Resources Code. Any inadvertent damage to prehistoric and/or historic-period archaeological resources represents a potentially significant impact. Implementation of **Mitigation Measure CUL-2** would ensure that impacts of the proposed project on currently unknown prehistoric and historic-period archaeological resources would be less than significant, should any be encountered during construction.

Mitigation Measures:

CUL-2 El Dorado County shall note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources, including prehistoric Native American burials.

The project applicant shall inform the United Auburn Indian Community of the Auburn Rancheria and the Shingle Springs Band of Miwok Indians of the project construction schedule and allow for a tribal monitor to be present at the project site during grading activities in native soil.

The project applicant shall retain a Professional Archaeologist to provide a pre-construction briefing to supervisory personnel of the excavation contractor to alert them to the possibility of exposing significant prehistoric archaeological resources within the project site. The briefing shall discuss any archaeological objects that could be exposed, the need to stop excavation at the discovery, and the procedures to follow regarding discovery protection and notification of the project applicant and archaeological team. The Professional Archaeologist shall develop and distribute for job site posting an "ALERT SHEET" summarizing potential find types and the protocols to be followed as well as points of contact to alert in the event of a discovery. The tribal monitor will be provided an opportunity to attend the pre-construction briefing.

The Professional Archaeologist shall be available on an "on-call" basis during ground disturbing construction in native soil to review, identify and evaluate cultural resources that may be inadvertently exposed during construction. The archaeologist shall temporarily divert, redirect, or halt ground disturbance activities at a potential discovery to allow the identification, review and evaluation of a discovery to determine if it is a historical resource(s) and/or unique archaeological resource(s) under CEQA.

If the Professional Archaeologist determines that any cultural resources exposed during construction constitute a historical resource and/or unique archaeological resource, he/she shall notify the project applicant and other appropriate parties of the evaluation and recommend mitigation measures to mitigate to a less-than significant impact in accordance with California Public Resources Code Section 15064.5. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing and data recovery among other options. Contingency funding and a time allotment sufficient for recovering an archeological sample or to employ an avoidance measure may be required. The completion of a formal Archaeological Monitoring Plan (AMP) may be recommended by the archaeologist if significant archaeological deposits are exposed during ground disturbing construction. Development and implementation of the AMP will be determined by the County of El Dorado and treatment of any significant cultural resources shall be undertaken with the approval of the project applicant and the County.

A Monitoring Closure Report shall be filed with the County of El Dorado at the conclusion of ground disturbing construction if archaeological resources were encountered and/or recovered.

Significance after Mitigation: Less than significant

Impact CUL-3: **The proposed project would not directly or indirectly destroy a unique paleontological resource or site of unique geologic feature. (No Impact)**

Paleontological remains are found in sedimentary rock formations. El Dorado County's geology is predominantly igneous (volcanic) in nature and the type of sedimentary deposits where such remains might be present are virtually nonexistent. The project site is underlain by the Jurassic-aged Copper Hill Volcanics that are composed primarily of mafic to andesitic pyroclastic rocks, lava, and pillow lava with subordinate felsic porphyritic and pyroclastic rocks. These rocks date from about 200-145 million years ago. The Copper Hill Volcanics are unlikely to contain paleontological resources (Wallace-Kuhl 2013).

A search of the University of California, Museum of Paleontology (UCMP) database was conducted on May 6, 2017. The database did not list any paleontological resources from the Copper Hill Volcanics. The UCMP database did not list any paleontological localities of any kind for the USGS Clarksville, Calif. 1980 quadrangle (Basin 2017). Therefore, the proposed project would have no impact on paleontological resources.

Mitigation Measures: No mitigation measures are required.

Impact CUL-4: **The proposed project could disturb human remains, including those interred outside of formal cemeteries. (Potentially Significant; Less than Significant with Mitigation)**

As discussed above, the project site is not located in an area with known prehistoric or historic period archaeological resources. As a result, it is unlikely that any human remains are present in the areas that would be affected by excavation. However, should such remains be discovered and damaged during project construction, the impact would be considered potentially significant. With the implementation of **Mitigation Measure CUL-4**, which outlines procedures to be followed in the event that previously unidentified human remains are discovered, the impact would be reduced to a less than significant level.

Mitigation Measures:

CUL-4 The treatment of human remains and any associated or unassociated funerary objects discovered during any soil-disturbing activity within the project site shall comply with applicable State laws. This shall include immediate notification of the El Dorado County Sheriff-Coroner and the County of El Dorado.

In the event of the Coroner's determination that the human remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC shall identify a Most Likely Descendant (MLD) of the deceased Native American (PRC Section 5097.98). The MLD may then make recommendations to the landowner or the person responsible for the excavation work, for the means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. Development activity on the impacted site will halt until the landowner has conferred with the MLD about their recommendations for treatment of the remains, and the coroner has determined that the remains are not subject to investigation under California Government Code Section 27491.

The project applicant, archaeological consultant, and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The California PRC allows 48 hours to reach agreement on these matters. If the MLD and the other parties do not agree on the reburial method, the project will follow PRC Section 5097.98(b) 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."

Significance after Mitigation: Less than significant

Impact CUL-5: **The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource. (*Potentially Significant; Less than Significant with Mitigation*)**

AB 52 requires that lead agencies consider the effects of projects on tribal cultural resources and conduct consultation with federally and non-federally recognized Native American tribes early in the environmental review process. According to AB 52, it is the responsibility of the tribes to formally request of a lead agency that they be notified of projects in the lead agency's jurisdiction so that they may request consultation. On April 24, 2017⁴ El Dorado County sent out notification letters about the proposed project to Native American tribes identified by the NAHC and through the Senate Bill (SB) 18 and Assembly Bill (AB) 52 processes. Letters were received from two tribes (the United Auburn Indian Community of the Auburn Rancheria and the Shingle Springs Band of Miwok Indians) requesting formal consultation. The tribes asked to discuss the topics listed in Public Resources Code Section 21080.3.2(a), including the type of environmental review to be conducted for the project, project alternatives; the project's significant effects, and mitigation measures for any direct, indirect, or cumulative impacts the project may cause to tribal cultural resources. In addition, the tribes requested that tribal representatives observe and participate in all cultural resource surveys and that if tribal cultural resources are identified within the project area that tribal monitors be present for all ground disturbing activities. Pursuant to AB 52, consultation with the tribes is ongoing on all issues, including the proposed mitigation, and the County will make the required findings regarding mitigation when consultation concludes.

The County has determined that the analysis included in the Draft EIR satisfies the requests made by the tribes, and that with the implementation of **Mitigation Measures CUL-2** and **CUL-4**, the proposed project would have a less than significant impact on tribal cultural resources, should they be encountered during excavation. As a result, the proposed project would not adversely affect any known or unknown tribal cultural resources in the area. The impact would be less than significant.

Mitigation Measures: Implement **Mitigation Measures CUL-2** and **CUL-4**.

Significance after Mitigation: Less than significant

⁴ Copies of this correspondence are included in **Appendix 4.3** of this EIR.

4.3.4.5 Cumulative Impacts and Mitigation Measures

Cumulative Impact C-CUL-1: Cumulative development could cause a substantial change in the significance of a historical resource or unique archaeological resource pursuant to Section 15064.5 or impact tribal cultural resources, but with the incorporation of mitigation measures, the proposed project would not contribute substantially to the cumulative impacts. (Potentially Significant; Less than Significant with Mitigation)

Development in the region could result in the damage or destruction of known archaeological and historical resources, as well as any existing undiscovered subsurface artifacts. The general study area that includes El Dorado County is known to include both prehistoric and historic cultural resources. Although no prehistoric or historically significant archaeological resources or potentially significant architectural resources were discovered during the field survey, there is a moderate possibility that prehistoric and historic resources are located in the vicinity.

Numerous laws, regulations, and statutes seek to protect cultural resources. These would apply to all development within the study area. In addition, the El Dorado County General Plan includes policies for the protection of cultural resources from unnecessary impacts. These policies include protection of historical resources and Native American remains. As discussed in **Impacts CUL-1** and **CUL-2**, no known historic resources or archaeological resources are present on the project site that could be affected by the proposed development. In addition, as discussed in **Impact CUL-4**, it is unlikely that any human remains are present in the areas that would be affected by excavation. However, previously unknown archaeological resources or human remains could be encountered and/or disturbance of resources and human remains could occur during site grading and excavation. By ensuring that cultural resources discovered within the project site are properly recorded and handled, with implementation of **Mitigation Measure CUL-2**, the contribution of the proposed project to cumulative impacts on archaeological resources would not be cumulatively considerable. In addition, by ensuring that human remains and any associated or unassociated funerary objects are treated in compliance with applicable State laws by implementation of **Mitigation Measure CUL-4**, the contribution of the proposed project to cumulative impacts on human remains would not be cumulatively considerable. The impact would be less than significant.

Mitigation Measures: Implement **Mitigation Measures CUL-2** and **CUL-4**.

Significance after Mitigation: Less than significant

4.3.5 REFERENCES

Basin Research Associates. 2016. Archaeological Resources Assessment Report. El Dorado Hills Apartments, Unincorporated El Dorado Hills, El Dorado County. May.

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County of El Dorado. 2004. *El Dorado County General Plan - Conservation and Open Space Element*. Adopted July 19, 2004. Last amended December 2015.

Wallace-Kuhl. 2013. Geotechnical Engineering Report. El Dorado Hills Apartments. December 4.

4.4 GREENHOUSE GAS EMISSIONS

4.4.1 INTRODUCTION

This section discusses the existing global, national, and statewide conditions related to greenhouse gases (GHG) and global climate change and evaluates the potential impacts on global climate from the implementation of the proposed El Dorado Hills Apartments project (“proposed project”). The section also provides a discussion of the applicable federal, state, regional, and local agencies that regulate, monitor, and control GHG emissions. Information presented in this section is based on an *Air Quality and Greenhouse Gas Emissions Analysis* prepared by De Novo Planning Group, dated June, 2017. The report is included in **Appendix 4.1** of this Draft EIR.

4.4.2 ENVIRONMENTAL SETTING

4.4.2.1 Background

Global climate change refers to any significant change in climate measurements, such as temperature, precipitation, or wind, lasting for an extended period (i.e., decades or longer). Climate change may result from:

- Natural factors, such as changes in the sun’s intensity or slow changes in the Earth’s orbit around the sun;
- Natural processes within the climate system (e.g., changes in ocean circulation, reduction in sunlight from the addition of GHG and other gases to the atmosphere from volcanic eruptions); and
- Human activities that change the atmosphere’s composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, desertification).

In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. Impacts are due to observed climate change, irrespective of its cause, indicating the sensitivity of natural and human systems to changing climate (IPCC 2013). Continuing changes to the global climate system and ecosystems, and to California, are projected to include:

- Rapidly diminishing sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere’s ability to hold more water vapor at higher temperatures (IPCC 2013);
- Rising average global sea levels primarily due to thermal expansion and the melting of glaciers, ice caps, and the Greenland and Antarctic ice sheets;

- Changing weather patterns, including changes to precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;
- Changing levels in snowpack, river flow and sea levels indicating that climate change is already affecting California's water resources (Cal EPA 2010);
- An increasing number of days conducive to ozone formation by 25 to 85 percent (depending on the future temperature scenario) in high ozone areas located in the Southern California area and the San Joaquin Valley by the end of the 21st century (Cal EPA 2006);
- Increasing potential for erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Delta and associated levee systems due to the rise in sea level (Cal EPA 2006);
- Dry seasons that start earlier and end later, evoking more frequent and intense wildland fires (Cal EPA 2010); and
- Increasing demand for electricity due to rising temperatures (Cal EPA 2010).

The natural process through which heat is retained in the troposphere¹ is called the "greenhouse effect." The greenhouse effect traps heat in the troposphere through a threefold process as follows: (1) short-wave radiation in the form of visible light emitted by the Sun is absorbed by the Earth as heat; (2) long-wave radiation is re-emitted by the Earth; and (3) GHGs in the upper atmosphere absorbing or trapping the long-wave radiation and re-emitting it back towards the Earth and into space. This third process is the focus of current climate change actions.

While water vapor and carbon dioxide (CO₂) are the most abundant GHGs, other trace GHGs have a greater ability to absorb and re-radiate long-wave radiation. To gauge the potency of GHGs, scientists have established a Global Warming Potential (GWP) for each GHG based on its ability to absorb and re-emit long-wave radiation over a specific period. The GWP of a gas is determined using CO₂ as the reference gas, which has a GWP of 1 over 100 years.² For example, a gas with a GWP of 10 is 10 times more potent than CO₂ over 100 years. The use of GWP allows GHG emissions to be reported using CO₂ as a baseline. The sum of each GHG multiplied by its associated GWP is referred to as "carbon dioxide equivalents" (CO₂e). This essentially means that 1 metric ton of a GHG with a GWP of 10 has the same climate change impacts as 10 metric tons of CO₂.

¹ The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface from 6 to 7 miles.

² All Global Warming Potentials are given as 100-year values.

4.4.2.2 Greenhouse Gases

State law defines GHGs to include the following six compounds:

- **Carbon Dioxide (CO₂).** Carbon dioxide primarily is generated by fossil fuel combustion from stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources over the past 250 years, the concentration of carbon dioxide in the atmosphere has increased 35 percent. Carbon dioxide is the most widely emitted GHG and is the reference gas (GWP of 1) for determining the GWP of other GHGs. In 2004, 82.8 percent of California's GHG emissions were carbon dioxide (California Energy Commission 2007).
- **Methane (CH₄).** Methane is emitted from biogenic sources (i.e., resulting from the activity of living organisms), incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. In the United States, the top three sources of methane are landfills, natural gas systems, and enteric fermentation. Methane is the primary component of natural gas, which is used for space and water heating, steam production, and power generation. The GWP of methane is 21.
- **Nitrous Oxide (N₂O).** Nitrous oxide is produced by natural and human-related sources. Primary human-related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of nitrous oxide is 310.
- **Hydrofluorocarbons (HFCs).** HFCs typically are used as refrigerants in both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is growing particularly as the continued phase-out of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) gains momentum. The GWP of HFCs ranges from 140 for HFC-152a to 6,300 for HFC-236fa.
- **Perfluorocarbons (PFCs).** Perfluorocarbons are compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. Perfluorocarbons are potent GHGs with a GWP several thousand times that of carbon dioxide, depending on the specific PFC. Another area of concern regarding PFCs is their long atmospheric lifetime (up to 50,000 years) (Energy Information Administration 2007). The GWPs of PFCs range from 5,700 to 11,900.
- **Sulfur Hexafluoride (SF₆).** Sulfur hexafluoride is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. Sulfur hexafluoride is the most potent GHG that has been evaluated by the Intergovernmental Panel on Climate Change, with a GWP of 23,900. However, its global warming contribution is not as high as the GWP would indicate due to its low mixing ratio, as compared to carbon dioxide (4 parts per trillion [ppt] in 1990 versus 365 parts per million [ppm] of CO₂)

4.4.2.3 Contributions to Greenhouse Gas Emissions

United States

Based on 2012 data, United States was the number two producer of global GHG emissions. The primary GHG emitted by human activities in the United States was CO₂, representing approximately 82 percent of

the total US GHG emissions (US EPA 2016a). Carbon dioxide from fossil fuel combustion, the largest source of GHG emissions, accounted for approximately 78 percent of US GHG emissions (IPCC 2014).

State of California

The California Air Resources Board (CARB) compiles GHG inventories for the State of California. Based on the current 2000-2014 GHG inventory data (published June 2016), in 2014 California emitted 441.5 MMTCO_{2e}, including emissions resulting from imported electrical power (CARB 2016).

The primary contributors to GHG emissions in California are transportation, electric power production from both in-state and out-of-state sources, industry, agriculture and forestry, and other sources, which include commercial and residential activities.

Between 1990 and 2015, the population of California grew by approximately 9.3 million (from 29.8 to 39.1 million) (CCSCE 2016; DOF 2016a). This represents an increase of approximately 30 percent from 1990 population levels. In addition, the California economy, measured as gross state product, grew from \$773 billion in 1990 to \$2.5 trillion in 2015, representing an increase of approximately 225 percent (over twice the 1990 gross state product) (DOF 2016b). Despite the population and economic growth, California's net GHG emissions grew by only 4.8 percent (approximately) between 1990 and 2014 (CARB 2016).

4.4.3 REGULATORY CONSIDERATIONS

4.4.3.1 Intergovernmental Panel on Climate Change

The World Meteorological Organization (WMO) and United Nations Environmental Program (UNEP) established the IPCC in 1988. The goal of the IPCC is to evaluate the risk of climate change caused by human activities. Rather than performing research or monitoring climate, the IPCC relies on peer-reviewed and published scientific literature to make its assessment. While not a regulatory body, the IPCC assesses information (i.e., scientific literature) regarding human-induced climate change and the impacts of human-induced climate change, and recommends options to policy makers for the adaptation and mitigation of climate change. The IPCC reports its evaluations in special reports called "assessment reports." The latest assessment report (i.e., Fifth Assessment Report, consisting of three working group reports and a synthesis report based on the first four Assessment Reports) was published in 2013.³ In its 2013 report, the IPCC stated that "Each of the last three decades has been successively warmer at the

³ The IPCC's Fifth Assessment Report is available online at <https://www.ipcc.ch/report/ar5/>

Earth's surface than any preceding decade since 1850. In the Northern Hemisphere, 1938-2012 was *likely* the warmest 30-year period of the last 1,400 years" (IPCC 2013).

4.4.3.2 Federal

In *Massachusetts vs. EPA*, the Supreme Court held that the United States Environmental Protection Agency (US EPA) has the statutory authority under Section 202 of the Clean Air Act (CAA) to regulate GHGs from new motor vehicles. The court did not hold that the US EPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs from motor vehicles cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. Upon the final decision, the President signed Executive Order 13432 on May 14, 2007, directing the US EPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responded to the Supreme Court's decision.

Energy Independence and Security Act

Signed on December 19, 2007 by President Bush, the Energy Independence and Security Act of 2007 (EISA) was enacted "[t]o move the United States toward greater energy independence and security, to increase the production of clean renewable fuels, to protect consumers, to increase the efficiency of products, buildings, and vehicles, to promote research on and deploy greenhouse gas capture and storage options, and to improve the energy performance of the Federal Government, and for other purposes."

As stated in an EPA summary, "EISA reinforces the energy reduction goals for federal agencies put forth in Executive Order 13423, as well as introduces more aggressive requirements" (US EPA 2016b). Key EISA provisions include the Corporate Average Fuel Economy standards, the combined fuel economy average standards, the renewable fuel standards, the appliance/lighting efficiency standards, and repeal of oil and gas tax incentives. Highlights of these key provisions include the following:

- Corporate Average Fuel Economy (CAFE). The law authorized the Secretary of the Department of Transportation to establish a corporate average fuel economy (CAFE) trading program that allows manufacturers whose automobiles exceed prescribed average fuel economy standards to earn credits that can be sold to other manufacturers or applied within their fleets to categories of automobiles that fail to achieve such standards.
- Combined fuel economy standard. The law required the combined fuel economy average for model year 2020 to be at least 35 miles per gallon for the total fleet of passenger and non-passenger automobiles manufactured in the US for that model year.
- Renewable Fuels Standard (RFS). The RFS program is a national policy that requires a certain volume of renewable fuel to replace or reduce the quantity of petroleum-based transportation fuel, heating oil

or jet fuel. The program applies to refiners or importers of gasoline or diesel fuel. The law set a modified standard for total renewable fuels that starts at 11.1 billion gallons in 2009 and rises to 36 billion gallons by 2022.

- **Energy Efficiency Equipment Standards.** The law includes a variety of new standards for lighting and for residential and commercial appliance equipment. The equipment includes residential refrigerators, freezers, refrigerator-freezers, metal halide lamps, and commercial walk-in coolers and freezers.
- **Repeal of Oil and Gas Tax Incentives.** The law includes repeal of two tax subsidies in order to offset the estimated cost to implement the CAFE provision. (US EPA 2016b)

Executive Order 13514

On October 5, 2009, the President signed Executive Order (EO) 13514, which provided a strategy for sustainability and greenhouse gas reductions for federal agencies. That EO has since been revoked and replaced by EO 13693, which is described in detail below.

Clean Air Act

On December 7, 2009, the US EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator found that the current and projected concentrations of the six key well-mixed GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator found that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

While these findings did not impose additional requirements on industry or other entities, this action was a prerequisite to finalizing the US EPA's proposed GHG emissions standards for light-duty vehicles, which were jointly proposed by the US EPA and DOT. On April 1, 2010, the US EPA and NHTSA issued final rules requiring that by the 2016 model-year, manufacturers must achieve a combined average vehicle emission level of 250 grams of CO₂ per mile, which is equivalent to 35.5 miles per gallon as measured by US EPA standards. These agencies are currently in the process of developing similar regulations for the 2017 through 2025 model years.

4.4.3.3 State

Title 24 Building Standards Code

The California Energy Commission first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The latest revisions were adopted in 2013 and became effective on July 1, 2014.

Part 11 of the Title 24 Building Standards Code is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality (California Building Standards Commission 2010). The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Part 11 was last updated in 2013 and the updated CALGreen Code became effective July 1, 2015. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code.

Assembly Bill 1493

In response to the transportation sector’s contribution of more than half of California’s CO₂ emissions, Assembly Bill 1493 (AB 1493, Pavley) was enacted on July 22, 2002. AB 1493 requires ARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles whose primary use is noncommercial personal transportation. ARB adopted the standards in September 2004. The new standards were to be phased in during the 2009 through 2016 model years. The near term (2009–2012) standards were expected to result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the midterm (2013–2016) standards were expected to result in a reduction of about 30 percent.

Before these regulations may go into effect, the US EPA must grant California a waiver under the federal CAA, which ordinarily preempts state regulation of motor vehicle emission standards. On June 30, 2009, the US EPA formally approved California's waiver request. However, in light of the September 15, 2009, announcement by the US EPA and NHTSA regarding the national program to reduce vehicle GHG emissions, California and states adopting California emissions standards have agreed to defer to the proposed national standard through model year 2016 if granted a waiver by the US EPA. The 2016 endpoint of the two standards is similar, although the national standard ramps up slightly more slowly than required under the California standard. The Pavley standards require additional reductions in CO₂ emissions beyond 2016 (referred to as Phase II standards). While the Phase II standards have yet to be fully developed, CARB has made it clear that the state intends to pursue additional reductions from motor vehicles in the 2017 through 2025 timeframe under AB 32.

Executive Order S-3-05 and the Climate Action Team

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals: GHG emissions should be reduced to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050. The Secretary of Cal/EPA is required to coordinate efforts of various agencies in order to collectively and efficiently reduce GHGs. Some of the agency representatives involved in the GHG reduction plan include the Secretary of the Business, Transportation, and Housing Agency; the Secretary of the Department of Food and Agriculture; the Secretary of the Resources Agency; the Chairperson of ARB; the Chairperson of the CEC; and the President of the Public Utilities Commission.

Representatives from each of the aforementioned agencies comprise the Climate Action Team. The Cal/EPA secretary is required to submit a biannual progress report from the Climate Action Team to the governor and state legislature disclosing the progress made toward GHG emission reduction targets. In addition, another biannual report must be submitted illustrating the impacts of global warming on California's water supply, public health, agriculture, coastline, and forests, and reporting possible mitigation and adaptation plans to combat these impacts. Some strategies currently being implemented by state agencies include ARB introducing vehicle climate change standards and diesel anti-idling measures, the CEC implementing building and appliance efficiency standards, and the Cal/EPA implementing their green building initiative. The Climate Action Team also recommends future emission reduction strategies, such as using only low-GWP refrigerants in new vehicles, developing ethanol as an alternative fuel, reforestation, solar power initiatives for homes and businesses, and investor-owned utility energy efficiency programs. According to the report, implementation of current and future emission reduction strategies have the potential to achieve the goals set forth in Executive Order S-3-05.

Assembly Bill 32

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted Assembly Bill 32 (AB 32, Nuñez and Pavley), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. AB 32 represents the first enforceable statewide program to limit GHG emissions from all major industries, with penalties for noncompliance. AB 32 requires the state to undertake several actions. The major requirements are discussed below.

CARB Early Action Measures

CARB is responsible for carrying out and developing the programs and requirements necessary to achieve the goal of AB 32—the reduction of California's GHG emissions to 1990 levels by 2020. The first action under AB 32 resulted in ARB's adoption of a report listing three specific early-action greenhouse gas emission reduction measures on June 21, 2007. On October 25, 2007, CARB approved six additional early-action GHG reduction measures under AB 32. ARB has adopted regulations for all early action measures. The early-action measures are divided into three categories:

- Group 1 – GHG rules for immediate adoption and implementation
- Group 2 – Several additional GHG measures under development
- Group 3 – Air pollution controls with potential climate co-benefits

The first three early-action regulations, adopted June 21, 2007, meeting the narrow legal definition of “discrete early-action GHG reduction measures” are:

- A low-carbon fuel standard to reduce the “carbon intensity” of California fuels;
- Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of “do-it-yourself” automotive refrigerants; and
- Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The six additional early-action regulations, adopted on October 25, 2007, also meeting the narrow legal definition of “discrete early-action GHG reduction measures,” are:

- Reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology;
- Reduction of auxiliary engine emissions of docked ships by requiring port electrification;
- Reduction of perfluorocarbons from the semiconductor industry;

- Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products);
- The requirement that all tune-up, smog check and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency; and
- Restrictions on the use of sulfur hexafluoride (sf₆) from non-electricity sectors if viable alternatives are available.

State of California Greenhouse Gas Inventory (Assembly Bill 1803) and 2020 Limit

Assembly Bill 1803 (AB 1803, codified at Health and Safety Code section 39607.4) made ARB responsible for developing and maintaining an inventory of GHG emissions. As required under AB 32 and AB 1803, on December 6, 2007, ARB approved the 1990 greenhouse gas emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 MMTCO_{2e}. ARB also projected the state's 2020 GHG emissions under "business as usual" (BAU) conditions—that is, emissions that would occur without any plans, policies, or regulations to reduce GHG emissions. ARB used an average of the state's GHG emissions from 2002 through 2004 and projected the 2020 levels based on population and economic forecasts. The projected net emissions totaled approximately 596 MMTCO_{2e}. Therefore, ARB established that the state must reduce its 2020 BAU emissions by approximately 29 percent in order to meet the 1990 target.

The inventory revealed that in 1990, transportation, with 35 percent of the state's total emissions, was the largest single sector, followed by industrial emissions, 24 percent; imported electricity, 14 percent; in-state electricity generation, 11 percent; residential use, 7 percent; agriculture, 5 percent; and commercial uses, 3 percent. AB 32 does not require individual sectors to meet their individual 1990 GHG emissions levels; the total statewide emissions are required to meet the 1990 threshold by 2020.

CARB Mandatory Reporting Requirements

In addition to the 1990 emissions inventory, on December 6, 2007 ARB adopted regulations requiring the mandatory reporting of GHG emissions for large facilities. The mandatory reporting regulations require annual reporting from the largest facilities in the state, which account for approximately 94 percent of point source GHG emissions from industrial and commercial stationary sources in California. About 800 separate sources fall under the reporting rules and include electricity-generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 tons of carbon dioxide each year from on-site stationary combustion sources. Transportation sources, which account for 37 percent of California's total GHG emissions, are not covered by these regulations but will continue to be tracked through existing means.

AB 32 Climate Change Scoping Plan

AB 32 requires CARB to adopt a scoping plan indicating how reductions in significant GHG sources will be achieved through regulations, market mechanisms, and other actions. After receiving public input on their discussion draft of the scoping plan, the CARB Governing Board approved the *Climate Change Scoping Plan (Scoping Plan)* on December 11, 2008. Key elements of the Scoping Plan include the following recommendations:

- expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- achieving a statewide renewable energy mix of 33 percent;
- developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- establishing targets for transportation-related GHG for regions throughout California and pursuing policies and incentives to achieve those targets;
- adopting and implementing measures pursuant to existing state laws and policies, including California’s clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the state’s long-term commitment to AB 32 implementation.

Table 4.4-1, AB 32 Scoping Plan Measures (SPMs), lists ARB’s preliminary recommendations for achieving GHG emissions reductions under AB 32 along with a brief description of the requirements and applicability.

**Table 4.4-1
AB 32 Scoping Plan Measures (SPMs)**

Scoping Plan Measure	Description
SPM-1: California Cap-and-Trade Program linked to Western Climate Initiative	Implement a broad-based cap-and-trade program that links with other Western Climate Initiative Partner programs to create a regional market system. Ensure California’s program meets all applicable AB 32 requirements for market-based mechanisms. Capped sectors include transportation, electricity, natural gas, and industry. Projected 2020 business-as-usual emissions are estimated at 512 metric tons of CO ₂ equivalents (MTCO _{2e}); preliminary 2020 emissions limit under cap-and-trade program are estimated at 365 MTCO _{2e} (29 percent reduction).
SPM-2: California Light-Duty Vehicle GHG Standards	Implement adopted Pavley standards and planned second phase of the program. AB 32 states that if the Pavley standards (AB 1493) do not remain in effect, ARB shall implement equivalent or greater alternative regulations to control mobile sources.
SPM-3: Energy Efficiency	Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts. The Scoping Plan considers green building standards as a framework to achieve reductions in other sectors, such as electricity.

Scoping Plan Measure	Description
SPM-4: Renewables Portfolio Standard	Achieve 33 percent Renewables Portfolio Standard by both investor-owned and publicly owned utilities.
SPM-5: Low Carbon Fuel Standard	ARB identified the Low Carbon Fuel Standard as a Discrete Early Action item and the final regulation was adopted on April 23, 2009. In January 2007, Governor Schwarzenegger issued Executive Order S-1-07, which called for the reduction of the carbon intensity of California's transportation fuels by at least 10 percent by 2020.
SPM-6: Regional Transportation-Related Greenhouse Gas Targets	Develop regional greenhouse gas emissions reduction targets for passenger vehicles. SB 375 requires ARB to develop, in consultation with metropolitan planning organizations (MPOs), passenger vehicle greenhouse gas emissions reduction targets for 2020 and 2035 by September 30, 2010. SB 375 requires MPOs to prepare a sustainable communities strategy to reach the regional target provided by ARB.
SPM-7: Vehicle Efficiency Measures	Implement light-duty vehicle efficiency measures. ARB is pursuing fuel-efficient tire standards and measures to ensure properly inflated tires during vehicle servicing.
SPM-8: Goods Movement	Implement adopted regulations for port drayage trucks and the use of shore power for ships at berth. Improve efficiency in goods movement operations.
SPM-9: Million Solar Roofs Program	Install 3,000 MW of solar-electric capacity under California's existing solar programs.
SPM-10: Heavy/Medium-Duty Vehicles	Adopt heavy- and medium-duty vehicle and engine measures targeting aerodynamic efficiency, vehicle hybridization, and engine efficiency.
SPM-11: Industrial Emissions	Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
SPM-12: High Speed Rail	Support implementation of a high-speed rail (HSR) system. This measure supports implementation of plans to construct and operate a HSR system between Northern and Southern California serving major metropolitan centers.
SPM-13: Green Building Strategy	Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
SPM-14: High GWP Gases	Adopt measures to reduce high global warming potential gases. The Scoping Plan contains 6 measures to reduce high-GWP gases from mobile sources, consumer products, stationary sources, and semiconductor manufacturing.
SPM-15: Recycling and Waste	Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.
SPM-16: Sustainable Forests	Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The federal government and California's Board of Forestry and Fire Protection have the regulatory authority to implement the Forest Practice Act to provide for sustainable management practices. This measure is expected to play a greater role in the 2050 goals.
SPM-17: Water	Continue efficiency programs and use cleaner energy sources to move water. California will also establish a public goods charge for funding investments in water efficiency that will lead to as yet undetermined reductions in greenhouse gases.
SPM-18: Agriculture	In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020. Increase efficiency and encourage use of agricultural biomass for sustainable energy production. ARB has begun research on nitrogen fertilizers and will explore opportunities for emission reductions.

Source: California Air Resources Board, *Climate Change Scoping Plan, 2008*

In October 2010, ARB identified ongoing programs and adopted regulations for 29 individual measures to reduce GHG emissions in accordance with Scoping Plan strategies. The Scoping Plan was re-approved

by ARB in August 2011. Subsequently, the *First Update to the Climate Change Scoping Plan* was approved in May 2014.

In September 2012, ARB adopted a California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms, which established the cap-and-trade program to manage greenhouse gas emissions for California. The cap-and-trade program is a key element that will enable California to achieve the GHG emission goals of AB 32. The cap-and-trade program is a market-based approach wherein the government determines an overall emission target or “cap” for a particular set of facilities. The cap is the total amount of emissions that all of the facilities can produce. Tradable emissions allowances totaling the overall emissions cap are distributed, either by auction or given out, amongst the particular set of facilities. The emissions allowances can be traded amongst the facilities.

The Renewables Portfolio Standard (RPS) Program was established in 2002 under Senate Bill (SB) 1078, which required 20 percent of the electricity used by California to come from renewable energy sources by 2017. This was accelerated by SB 107 in 2006, which required 20 percent of electricity retail sales to come from renewable energy sources by 2010, and then by Executive Order S-14-08 in 2008, which required 33 percent of electricity sold by retail sellers to be produced by renewable energy in 2020. In April 2011, SB X1-2 required that all electricity retailers adopt the new RPS goals and provide 20 percent renewable sources by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020.

As previously mentioned, ARB approved the *First Update to the Climate Change Scoping Plan* on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions. The First Update defines ARB’s climate change priorities for the next five years and develops an integrated framework for achieving both air quality and climate goals in California beyond 2020. It also evaluates how to align the State’s “longer-term” GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

Senate Bill 97 (State CEQA Guidelines)

In August 2007, the legislature enacted SB 97 (Dutton), which directed the Governor’s Office of Planning and Research (OPR) to develop guidelines under the California Environmental Quality Act (CEQA) for the mitigation of GHG emissions.

On June 19, 2008, OPR issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents (OPR 2008). The advisory indicated that a project’s GHG emissions, including those associated with vehicular traffic and construction activities should be identified and estimated. The advisory further recommended that the lead agency determine significance of the impacts

and impose all mitigation measures that are necessary to reduce GHG emissions to a less than significant level. The advisory did not recommend a specific threshold of significance. Instead, OPR requested that ARB recommend a method for setting thresholds that lead agencies may adopt (OPR 2009).

To formulate CEQA Guideline Amendments for GHG emissions, OPR submitted the *Proposed Draft CEQA Guideline Amendments for Greenhouse Gas Emissions* to the Secretary for Natural Resources on April 13, 2009. The Natural Resources Agency conducted formal rulemaking procedures in 2009 and adopted the CEQA Guideline Amendments on December 30, 2009. They became effective in March 2010.

Senate Bill 375

The California legislature passed SB 375 (Steinberg) on September 1, 2008. SB 375 requires ARB to set regional GHG reduction targets after consultation with local governments. The target must then be incorporated within that region's regional transportation plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). SB 375 also requires each region's regional housing needs assessment (RHNA) to be adjusted based on the Sustainable Communities Strategy in its RTP. Additionally, SB 375 reforms the environmental review process to create incentives to implement the strategy, especially transit priority projects. The governor signed SB 375 into law on September 30, 2008.

On January 23, 2009, ARB appointed a Regional Targets Advisory Committee (RTAC) to provide recommendations and methodologies to be used in the target setting process. The RTAC provided its recommendations in a report to ARB on September 29, 2009. On August 9, 2010, ARB staff issued the *Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375* (ARB 2010). ARB staff proposed draft reduction targets for the four largest MPOs (Bay Area, Sacramento, Southern California, and San Diego) of 7 to 8 percent for 2020 and reduction targets between 13 to 16 percent for 2035. Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and low carbon fuel standard regulations. ARB adopted the final targets on September 23, 2010.

Executive Order B-30-15

On April 29, 2015, Governor Brown Jr. issued an executive order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. According to the state, California is on track to meet or exceed the current target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32. The new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050, established by EO S-3-05.

Senate Bill 350

On October 7, 2015, Senate Bill 350: Clean Energy and Pollution Reduction Act (SB 350) was signed into law, establishing new clean energy, clean air and greenhouse gas reduction goals for 2030 and beyond. Building off of AB 32, SB 350 established California's 2030 greenhouse gas reduction target of 40 percent below 1990 levels. To achieve this goal, SB 350 set ambitious 2030 targets for energy efficiency and renewable electricity, among other actions aimed at reducing greenhouse gas emissions. SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard (RPS) eligible resources, including solar, wind, biomass, geothermal, and others. In addition, SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030.

Senate Bill 32

Senate Bill 32 (SB 32) was signed into law on August 31, 2016. This bill requires CARB to adopt rules and regulations to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030.

Assembly Bill 197

On September 8, 2016, Assembly Bill 197 (AB 197) was signed into law. This bill requires CARB to make available the emissions of greenhouse gases, criteria pollutants, and toxic air contaminants for each facility that reports to the state board and air districts. In addition, this bill requires that CARB make available the emissions of greenhouse gases, criteria pollutants, and toxic air contaminants throughout the state, broken down to a local and sub-county level for stationary sources and to at least a county level for mobile sources, as specified.

4.4.3.4 Regional Programs

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District's (SMAQMD) mission is to achieve clean air goals by leading the region in protecting public health and the environment through innovative and effective programs, dedicated staff, community involvement, and public education. To achieve this goal the SMAQMD interacts with the local, state, and federal government agencies, the local business community, environmental groups, and private citizens.

On October 27, 2005, the SMAQMD Board of Directors authorized staff to develop a Climate Change Protection Program that would include outreach and education, data collection and analysis, and provide

support and leadership for local, state, and national efforts to reduce GHG emissions. The AQMD Board of Directors adopted the Climate Change Protection Program on March 23, 2006. The Program addresses climate change within the context of the District's air quality mission.

On August 28, 2008, the SMAQMD Board of Directors authorized the District Air Pollution Control Officer to direct staff to begin program development on several enhancements to the District's Climate Protection Program. These enhancements include: (1) the creation of a GHG emissions bank; (2) the creation of a program to facilitate GHG mitigation for CEQA purposes; (3) an enhanced reporting system; and (4) assurances that climate protection measures do not cause increases in criteria pollutants.

The SMAQMD Board of Directors adopted GHG thresholds on October 23, 2014, via resolution AQMD2014-028. The threshold for land development and construction projects is 1,100 metric tons/year for both the construction and operational phase.

Sacramento Area Council of Governments Metropolitan Transportation Plan/Sustainable Communities Strategy

The Sacramento Area Council of Governments Metropolitan Transportation Plan/Sustainable Communities Strategy (SACOG MTP/SCS) provides a long-range framework to minimize transportation impacts on the environment, improve regional air quality, protect natural resources, and reduce GHG emissions. The MTP/SCS is consistent with SB 375, which requires SACOG to adopt an SCS that outlines policies to reduce per capita GHG emissions from passenger vehicles. The SCS policies include a mix of strategies that target smart growth, mixed-used design, alternative transportation, transit, mobility and access, network expansion, and transportation investment. Implementation of the SCS is intended to improve the efficiency of the transportation system and achieve a variety of housing types throughout the SACOG region that meet market demands in a balanced and sustainable manner.

4.4.3.5 Local Plans and Policies

County of El Dorado General Plan

The County of El Dorado General Plan (2004) does not specifically include policies or goals to reduce GHG emissions. However, the General Plan provides county-wide goals and policies aimed at improving energy efficiency, improving transportation efficiency, and reducing air emissions, which could reduce or sequester GHGs. The following presents policies contained in the Transportation and Circulation and Public Services and Utilities elements:

Transportation and Circulation Element

GOAL TC-1: To plan for and provide a unified, coordinated, and cost-efficient countywide road and highway system that ensures the safe, orderly, and efficient movement of people and goods.

Policy TC-1p The County shall encourage street designs for interior streets within new subdivisions that minimize the intrusion of through traffic on pedestrians and residential uses while providing efficient connections between neighborhoods and communities.

Policy TC-1q The County shall utilize road construction methods that seek to reduce air, water, and noise pollution associated with road and highway development.

Public Services and Utilities Element

GOAL 5.6: GAS, ELECTRIC, AND OTHER UTILITY SERVICES: Sufficient utility service availability consistent with the needs of a growing community.

OBJECTIVE 5.6.2: ENCOURAGE ENERGY-EFFICIENT DEVELOPMENT: Encourage development of energy-efficient buildings, subdivisions, development, and landscape designs.

Policy 5.6.2.1 Require energy conserving landscaping plans for all projects requiring design review or other discretionary approval.

Policy 5.6.2.2 All new subdivisions should include design components that take advantage of passive or natural summer cooling and/or winter solar access, or both, when possible.

Environmental Vision for El Dorado County Resolution No 29-2008

The El Dorado County Board of Supervisors adopted Resolution No. 29-2008, the “Environmental Vision for El Dorado County,” on March 25, 2008. The resolution sets forth goals and calls for implementation of positive environmental changes to reduce global impact, improve air quality and reduce dependence on landfills, promote alternative energies, increase recycling, and encourage local governments to adopt green and sustainable practices. As it relates to global climate change and GHG emissions, the resolution establishes goals that include, but are not limited to:

Transportation, Traffic, and Transit

- Reduce carbon emissions and GHGs

- Promote carpooling and reduce vehicle miles traveled
- Promote pedestrian and bicycling commuting
- Expand transit opportunities
- Promote programs and designs that reduce traffic congestion

Planning and Construction

- Promote the design of sustainable communities
- Encourage pedestrian/cycling-incentive planning
- Encourage energy-efficient development

Energy

- Promote the use of alternative fuels and fuel conservation programs
- Promote clean, energy efficient heating and cooling

4.4.4 IMPACTS AND MITIGATION MEASURES

4.4.4.1 Significance Criteria

The impacts related to GHG emissions resulting from the implementation of the proposed project would be considered significant if they would exceed the following significance criteria, in accordance with Appendix G of the *State CEQA Guidelines*:

- generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Various Air Districts within the Sacramento region have recently updated their thresholds for evaluating the significance of a project's GHG emissions. The El Dorado County Air Quality Management District (EDCAQMD) recommends that GHG emissions thresholds from nearby Air Districts, such as the Placer County Air Pollution Control District (PCAPCD) be utilized in the environmental review of projects in El Dorado County. The PCAPCD thresholds were updated in 2016 by PCAPCD with the justification for the thresholds provided in the *PCAPCD CEQA Thresholds of Significance Justification Report* in October 2016. As noted in the justification report, these thresholds were developed by PCAPCD following a review of the GHG significance thresholds adopted by other air districts; a review of land development projects in

the County over the last thirteen years (2003-2015); a consideration of the statewide GHG emission reduction goal by 2030, and the special geographic features in Placer County. Due to general similarities between Placer and El Dorado Counties in their geographies and growth trends, and because the PCAPCD thresholds appropriately consider the State-targeted reduction of 40 percent below 1990 levels by 2030, EDCAQMD has determined that these thresholds are appropriate to use in order to evaluate the significance of GHG emissions of projects proposed in El Dorado County.

Based on correspondence with EDCAQMD, this analysis utilizes the recently updated greenhouse gas thresholds from the nearby PCAPCD for the purposes of GHG emissions analysis. The PCAPCD provides the following significance thresholds for evaluating a project's GHG impacts:

- Bright-line Threshold of 10,000 metric tons of CO₂e per year for the construction and operational phases of land use projects as well as the stationary source projects,
- Efficiency Matrix for the operational phase of land use development projects when emissions exceed the De Minimis Level, and
- De Minimis Level for the operational phases of 1,100 metric tons of CO₂e per year.

GHG emissions from projects that exceed 10,000 MTCO₂e/yr would be deemed to have a cumulatively considerable contribution to global climate change. For a land use project, this level of emissions is equivalent to a project size of approximately 646 single-family dwelling units, or a 323,955 square feet commercial building.

The De Minimis Level for the operational phases of 1,100 MTCO₂e/year represents an emissions level which can be considered as less than cumulatively considerable and be excluded from the further GHG impact analysis. This level of emissions is equivalent to a project size of approximately 71 single-family units, or a 35,635 square feet commercial building.

Projects with GHG emissions which exceed the De Minimis Level of 1,100 MTCO₂e/year, but are less than 10,000 MTCO₂e/year can still be found less than cumulatively considerable when the result of project related efficiency analysis would meet one of conditions in the efficiency matrix for the applicable land use setting and land use type provided. The efficiency matrix is provided in **Table 4.4-2, Greenhouse Gas Emissions Thresholds Efficiency Matrix**, below.

**Table 4.4-2
Greenhouse Gas Emissions Thresholds Efficiency Matrix**

Residential		Non-residential	
Urban	Rural	Urban	Rural
MTCO ₂ e/capita		MTCO ₂ e/capita	
4.5	5.5	26.5	27.3

Source: EDCAQMD, 2017

Given that the proposed project is a residential project within an urban setting, the appropriate efficiency matrix threshold for the proposed project is 4.5 MTCO₂e/capita/year.

4.4.4.2 Issues adequately addressed in the Initial Study

All GHG emissions thresholds listed above are addressed below.

4.4.4.3 Methodology

GHG emissions were computed for the full build out scenario of the proposed project. Specifically, construction emissions were computed for an assumed 15 month construction period (Summer 2018 to Fall 2019) and operational emissions were estimated for 2020, the first complete year of project occupancy. The California Emissions Estimator Model Version 2016.3.1 (CalEEMod) was used to estimate GHG emissions. Modeling output that includes assumptions is provided in **Appendix 4.1**.

4.4.4.4 Project Impacts and Mitigation Measures

Impact GHG-1: **The proposed project would generate greenhouse gas emissions, either directly or indirectly, that would not have a significant impact on the environment. (*Less than Significant*)**

Construction GHG Emissions

During construction, the proposed project would directly contribute to climate change through its contribution of GHGs from the exhaust of construction equipment and construction workers' vehicles. The manufacture of construction materials used by the proposed project would indirectly contribute to climate change (upstream emission source). Upstream emissions are emissions that are generated during the manufacture of products used for construction (e.g., cement, steel, and transport of materials to the region). The upstream GHG emissions for this project, which may also include perfluorocarbons and

sulfur hexafluoride, are not estimated in this impact analysis because they are not within the control of the County or the applicant and the lack of data precludes their quantification without speculation.

Total construction emissions are presented in **Table 4.4-3, Estimated Construction GHG Emissions.**

**Table 4.4-3
Estimated Construction GHG Emissions**

Construction Year	CO ₂ e
2018	288.24
2019	317.89
Total	606.13

Source: De Novo Planning Group, 2017

As shown above in **Table 4.4-3** construction activities would result in total emissions of 606.13 MTCO₂e and would not exceed EDCAQMD's recommended mass emissions threshold of significance (bright-line threshold of 10,000 MTCO₂e per year) for construction-phase GHG emissions. Therefore, GHG emissions from project-related construction would result in a less than significant impact.

Operational GHG Emissions

The CalEEMod model was used to estimate operational GHG emissions associated with the proposed project. CalEEMod provides emissions for transportation (mobile), areas sources, electricity consumption, natural gas combustion, electricity usage associated with water usage and wastewater discharge, and solid waste transport and disposal.

To estimate emissions, specifics on project size (number of units), construction data, information on sources such as fireplaces, and operations were "input" to the model. Default values for trip lengths were used in the model. Trip generation data used in the model was based on the project's traffic impact analysis. Various measures that reduce emissions (called "mitigation inputs" in the model) can be selected, including mix of uses, local serving transit, presence of bike and pedestrian facilities, affordable housing components, transportation demand management, parking supply, and on-road trucks. CalEEMod also allows corrections for pass-by trips and corrects for double-counting.

The modeling included mitigation inputs implemented by **Mitigation Measure AIR-2** for the year 2020, including the following:

Mobile Source Mitigation

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Provide Traffic Calming Measures

Energy Source Mitigation

- Exceed Title 24 by 10 percent
- Install High Efficiency Lighting
- Install Energy Efficient Appliances

Area Source Mitigation

- Use only Natural Gas Hearths

Water Mitigation

- Install Low Flow Bathroom Faucets
- Install Low Flow Kitchen Faucets
- Install Low Flow Toilets
- Install Low Flow Showers
- Use Water Efficient Irrigation System

Computed Operational GHG Emissions

As shown in **Table 4.4-4, Operational GHG Emissions (2020)**, below, the proposed project would result in approximately 1,466.33 MTCO_{2e}/year of GHG emissions with mitigation incorporated.

**Table 4.6-4
Operational GHG Emissions (2020)**

Source	2020 Project Emissions (MTCO _{2e} /year)
Area sources	155.26
Energy use	344.73
Mobile sources	875.58
Solid waste	49.51
Water	41.25
Total Project Emissions	1,466.33
Bright-line Threshold	10,000
	<i>Exceed?</i> No
De Minimis Level Threshold	1,100
	<i>Exceed?</i> Yes
GHG Per Capita Efficiency Threshold	4.5
Project Per Capita Emissions	2.98
	<i>Exceed?</i> No

Source: De Novo Planning Group, 2017

GHG emissions would not exceed the bright-line threshold but would exceed the De Minimis Level threshold. Therefore, this analysis estimated the GHG efficiency rate for the proposed project to compare to the GHG efficiency threshold (4.5 MTCO_{2e}/capita) in 2020. The project would provide housing for an estimated 492 individuals (based on 214 units and 2.3 individuals per unit), but no land uses that provide employment.⁴ The GHG emissions per service population for the proposed project would be 2.98 MTCO_{2e}/capita in 2020 (1,466.33 MTCO_{2e} divided by 492 persons), which would be lower than the efficiency threshold of 4.5 MTCO_{2e}/capita. Thus, the project's operational emissions would result in a less than significant impact. Furthermore, the proposed project would implement **Mitigation Measure AIR-2** which would ensure that GHG emissions remain below levels considered significant.

Mitigation Measures: Implement Mitigation Measure AIR-2.

⁴ Table 2-2, Land Use Densities and Residential Population Ranges in the Land Use Section of the General Plan sets Persons per Housing Unit for the Multi-Family Residential Land Use Designation at 2.3 persons per household.

Significance after Mitigation: Not applicable

Impact GHG-2: **The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. (*Less than Significant*)**

The County of El Dorado has not adopted a climate action plan or general plan policies specifically for the purpose of reducing GHG emissions. However, the County adopted Resolution 29-2008, and there are regional plans that are applicable to the County that are focused on the reduction of GHG emissions, as well as AB 32, the state law that requires the state as a whole to reduce GHG emissions. The project's consistency with these plans and laws, as well as the adopted resolution, is evaluated below.

Environmental Vision for El Dorado County Resolution No 29-2008

Although not specifically a plan to reduce GHG emissions, the Environmental Vision includes goals to address positive environmental changes. The Environmental Vision focuses on three primary areas relevant to GHG emissions: transportation, traffic, and transit; planning and construction; and energy.

Transportation, Traffic, and Transit

The proposed project is an urban infill project located within the Town Center East area. The majority of the surrounding Town Center East is developed with commercial/retail establishments, offering an opportunity to reduce trips, as many destinations would be within walking distance. The project also includes bicycle infrastructure to promote the use of bikes for short trips. Combined, these transportation features would reduce vehicle miles traveled and traffic congestion. As such, the project is consistent with the transportation, traffic and transit goals.

Planning and Construction

As noted in **Section 3.0**, the project would include a number of sustainable design features to minimize energy and water consumption, improve indoor environmental quality, minimize waste disposed in landfills, and minimize vehicular traffic and associated air pollutant emissions. The project would also have bicycle lockers for residents.

During construction, more than 55 percent of all demolition materials and construction debris will be recycled. Durable, non-combustible materials, and fire resistant roofing will be used. Low/no VOC paints

and coatings will be used in project construction and maintenance. Low VOC caulks, construction adhesives, and sealants will be used in project construction and maintenance.

Energy

The project would promote energy efficiency. As noted in **Section 3.0**, as part of the proposed project, all buildings will exceed Title 24 energy requirements by a minimum of 10 percent. All apartments will be equipped with Energy Star certified appliances (dishwashers and refrigerators). Energy efficient LED light fixtures will be installed within the apartment buildings and for exterior lighting. All residential units will incorporate energy efficient Low-E windows. A minimum of 15 percent of the roof areas will be reserved for future photovoltaic (PV) solar installation. Infrastructure (conduit, structural elements, etc.) will be provided to facilitate the future PV solar installation. The parking garage will be designed for future Electric Vehicle (EV) charging station expansion. Temperature controllers will be installed for pool and spa heaters.

In sum, the proposed project would be consistent with the goals of the Environmental Vision.

SACOG MTP/SCS

As noted above, the SACOG MTP/SCS provides a long-range framework to minimize transportation impacts on the environment, improve regional air quality, protect natural resources, and reduce GHG emissions. The MTP/SCS is consistent with SB 375, which requires SACOG to adopt an SCS that outlines policies to reduce per capita GHG emissions from passenger vehicles.

SACOG states that for the purposes of determining SCS consistency, the policies of the MTP/SCS are embedded in the metrics and growth forecast assumptions of the MTP/SCS. Projects consistent with the growth forecast assumptions of the MTP/SCS are consistent with the MTP/SCS and its policies (SACOG 2016). The MTP/SCS forecasts 70,813 new housing units in the unincorporated portion of El Dorado County by 2036. The majority of this growth, 35,149 housing units, would be located in Established Communities, as described in the MTP/SCS (SACOG 2016). The proposed project would be located in an Established Community. In addition, the project uses would be consistent with the general land use, density, and intensity information provided for this Community Type in Appendix E-3 of the MTP/SCS. Therefore, the project would be consistent with the MTP/SCS.

AB 32, SB 32 and SB 350

AB 32 is the basis for reduction of GHG emissions statewide in California. Local agencies, such as the EDCAQMD, base their planning on the requirements included in AB 32, which include a reduction of GHG emissions to 1990 rates by 2020. The GHG significance thresholds used in this document are

specifically aimed at meeting AB 32 requirements, and so plans and projects that meet those thresholds can be assumed to meet the requirements of AB 32. As the per capita GHG emissions from the proposed project are below the efficiency threshold for project-level GHG emissions, the project is in compliance with AB 32. Furthermore, the proposed project is an infill project and would be located immediately adjacent to commercial/retail space, which would reduce vehicle trips by the project residents. In addition, the project includes the following energy reducing features that would provide greater energy efficiencies than factored into the calculation of the GHG emissions from the proposed project:

- All buildings would exceed Title 24 energy requirements by a minimum of 10 percent.
- Energy Star certified appliances (dishwashers and refrigerators).
- Energy efficient LED light fixtures would be installed within the buildings and for exterior lighting.

Therefore, the proposed project would be consistent with AB 32. With respect to more recent state laws (SB 32 and SB 350) which require that the state's 2030 emissions be further curtailed to be 40 percent below the state's 1990 emissions, CARB and EDCAQMD have not come forth with regulations and programs to address the new state laws, and any evaluation of the project's consistency with future regulations and programs would involve speculation. However, as noted earlier in this section, the thresholds of significance used in this Draft EIR were developed by PCAPCD taking into consideration the state mandates with respect to 2030 emissions. The analysis in **Impact GHG-1** shows that the project's per capita emissions would be substantially below the efficiency threshold. Furthermore, the proposed project would implement **Mitigation Measure AIR-2**, which would further ensure that the project's GHG emissions remain below levels considered significant. Therefore the proposed project would not conflict with SB 32 and SB 350.

In summary, the project not conflict with any plans, policies, or regulations for reducing GHG emissions, and the impact would be less than significant.

Mitigation Measures: Implement **Mitigation Measure AIR-2**.

Significance after Mitigation: Not applicable

4.4.4.5 Cumulative Impacts and Mitigation Measures

Cumulative Impact C-GHG-1: The proposed project would not result in a significant cumulative GHG impact. (*Less than Significant*)

The impact from a project's GHG emissions is essentially an incremental contribution to a significant, worldwide cumulative impact. As the California Supreme Court has explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself. The challenge for CEQA purposes is to determine whether the impact of the project's emissions of greenhouse gases is cumulatively considerable, in the sense that 'the incremental effects of [the] individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.' ([Pub. Resources Code] § 21083, subd. (b)(2); see Guidelines, § 15064, subd. (h)(1).) 'With respect to climate change, an individual project's emissions will most likely not have any appreciable impact on the global problem by themselves, but they will contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe. The question therefore becomes whether the project's incremental addition of greenhouse gases is "cumulatively considerable" in light of the global problem, and thus significant.'" (*CBD v. DFW, supra*, 62 Cal.4th at p. 219, quoting Crockett, *Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California's Search for Regulatory Certainty in an Uncertain World* (July 2011) 4 Golden Gate U. Env'tl. L.J. 203, 207-208.) The analysis under **Impact GHG-1** shows that the per capita GHG emissions associated with the proposed project would be substantially lower than the efficiency threshold set forth by the Air District. Therefore the project's contribution to the global cumulative impact would not be considerable. The impact would be less than significant. Furthermore, the proposed project would implement **Mitigation Measure AIR-2** which would further ensure that the project's GHG emissions remain below levels considered significant.

Mitigation Measures: Implement **Mitigation Measure AIR-2**.

Significance after Mitigation: Not applicable

4.4.5 REFERENCES

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4.5 LAND USE AND PLANNING

4.5.1 INTRODUCTION

This section addresses the land use and planning impacts of the proposed project, focusing in particular on the consistency of the proposed El Dorado Hills Apartments project (“proposed project”) with applicable local and regional land use policies. The proposed project is subject to the County’s General Plan (Land Use and Housing Elements), the County’s Zoning Ordinance, the El Dorado Hills Specific Plan, and the Town Center East Development Plan.

4.5.2 ENVIRONMENTAL SETTING

4.5.2.1 Existing Project Site Land Uses

The project site consists of three parcels, Assessor’s Parcel Numbers 121-290-60, 121-290-61, and 121-290-62. The site is vacant and undeveloped, but indications of previous disturbance, including mass grading, are present. The project site ranges in elevation from approximately 605 to 620 feet above mean sea level and slopes gently from east to west. The vegetation on the project site is characterized as disturbed, non-native annual grassland; no large shrubs or trees are present on the site.

4.5.2.2 Existing Adjacent Land Uses

As shown in **Figure 4.5-1, Surrounding Land Uses**, the area surrounding the project site is fully developed and consists mainly of retail/commercial uses. An automobile dealership is to the north of the project site, across Mercedes Lane. Other retail/commercial uses are located to the east across Vine Street, which include restaurants and a movie theater (the Regal Cinemas El Dorado 14 and IMAX), and to the south, across Town Center Boulevard, which includes a Target store and other retail, restaurant, and commercial businesses. Town Center Lake is immediately adjacent to the project site to the west. An El Dorado Sheriff’s Department field office is located approximately 1,200 feet to the west, along Town Center Boulevard. The Blue Shield of California campus is further west, across Latrobe Road. U.S. Highway 50 (U.S. 50) is located a little over 500 feet north of the project site.

The project site is located approximately 23 miles east of downtown Sacramento and 60 miles southwest of Lake Tahoe. Folsom Lake is located approximately 4 miles to the northwest.

4.5.2.3 Existing Land Use Designations and Zoning

All three parcels that make up the project site are currently designated Adopted Plan (AP), as the site is located within the adopted El Dorado Hills Specific Plan (EDHSP). When initially adopting the nearly



Legend

- Project Site
- Retail/Commercial Uses
- US Highway 50
- Town Center Lake

200 ft

SOURCE: Google Earth, 2016

FIGURE 4.5-1

Surrounding Land Uses



4,000-acre EDHSP, the County of El Dorado designated the area that includes the project site as Villages T and U. Known collectively as the El Dorado Hills Town Center, Village T is now known as Town Center East (TCE). The TCE area is further divided into three Planning Areas. The project site is located in Planning Area 2, which has been designated for commercial development. The site is designated Commercial (C) in the EDHSP. The existing land use designations are illustrated in **Figure 4.5-2** through **Figure 4.5-4** below.

The project site is currently zoned General Commercial-Planned Development (CG-PD). Residential uses are not permitted within the AP-EDHSP-C designation or CG-PD zone.

4.5.2.4 Adjacent Land Use Designations and Zoning

Lands located immediately adjacent to the project site (e.g., auto dealership to the north, retail/commercial development to the south and east, and the Town Center Lake to the west), are designated AP-EDHSP-C in the General Plan.

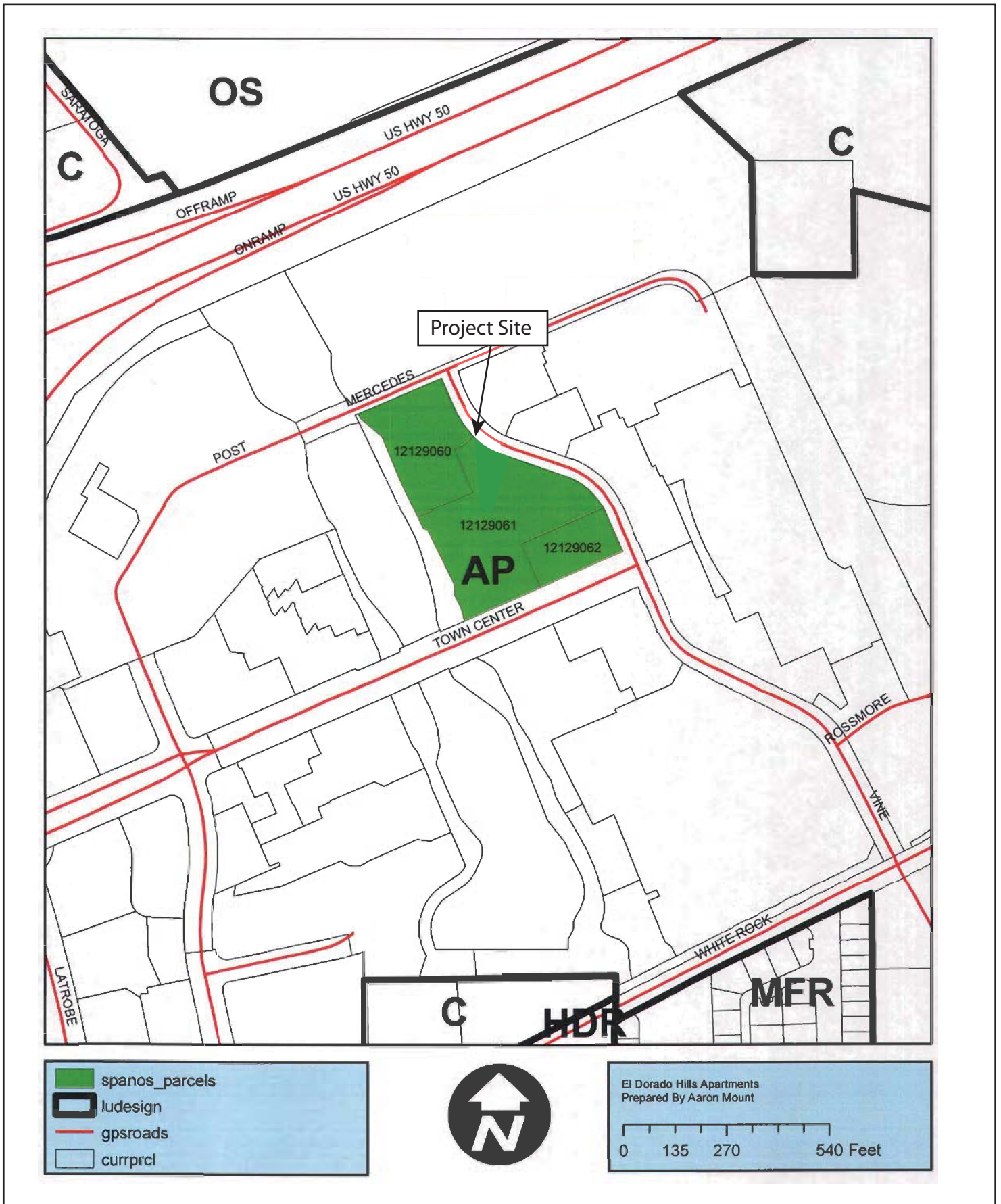
4.5.3 REGULATORY CONSIDERATIONS

4.5.3.1 Regional Plans

Sacramento Area Council of Governments 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy

The Sacramento Area Council of Governments (SACOG) is an association of local governments in the six-county Sacramento Region. Its members include the counties of El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba and the 22 cities within those counties. SACOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues. In addition to preparing the region's long-range transportation plan, SACOG approves the distribution of affordable housing in the region and assists in planning for transit, bicycle networks, clean air, and airport land uses.

SACOG is designated by the state and federal governments as the Metropolitan Planning Organization (MPO) and is responsible for developing a long-range regional transportation plan (the Metropolitan Transportation Plan, or MTP) in coordination with its members. The MTP incorporates county-wide transportation planning developed by the Placer County Transportation Planning Agency and the El Dorado County Transportation Commission, under memoranda of understanding (MOUs) between those agencies and SACOG. The law further requires the MTP to cover at least a 20-year planning horizon, and be updated at least every four years.



SOURCE: County of El Dorado

FIGURE 4.5-2

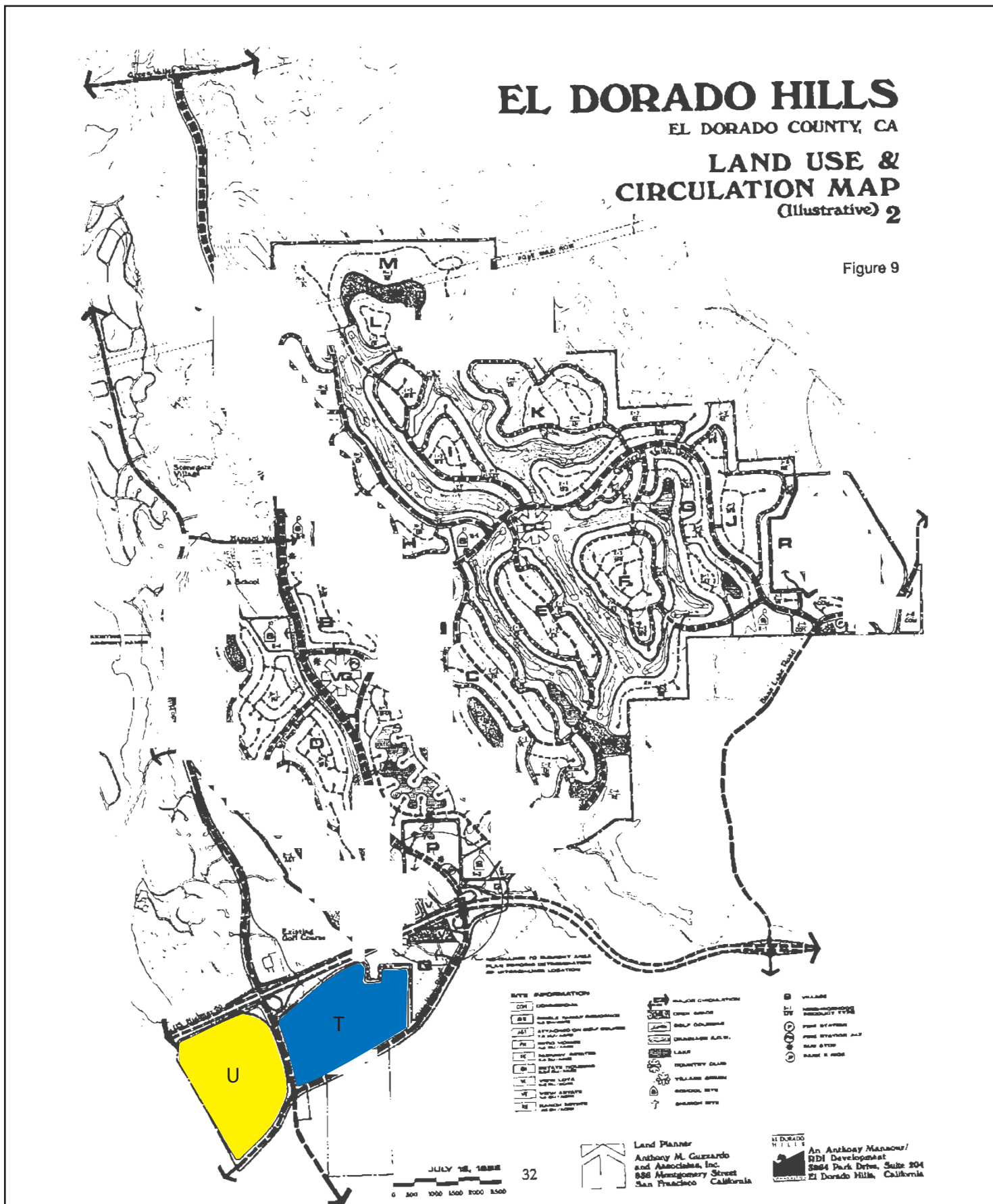
EL DORADO HILLS

EL DORADO COUNTY, CA

LAND USE & CIRCULATION MAP

(Illustrative) 2

Figure 9



SOURCE: County of El Dorado

FIGURE 4.5-3

El Dorado Hills Specific Plan Villages T and U
 17-0846 2E 196 of 391

TOWN CENTER

KEY MAP

EAST



1-16-2015

SOURCE: County of El Dorado

FIGURE 4.5-4

In 2008, California passed the Sustainable Communities and Climate Protection Act, Senate Bill 375 (SB 375). This law requires MPOs to develop a Sustainable Communities Strategy (SCS) as part of the MTP, which identifies policies and strategies to reduce greenhouse gas emissions from passenger vehicles to targets set by the California Air Resources Board (CARB). SACOG views the SCS not as a separate and distinct element of the MTP, but rather as integral to the entire plan.

The 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for the Sacramento region pro-actively links land use, air quality, and transportation needs. The MTP/SCS supports the Sacramento Region Blueprint, which implements smart growth principles, including housing choice, compact development, mixed-use development, natural resource conservation, use of existing assets, quality design, and transportation choice. It also provides increased transportation options while reducing congestion, shortening commute times, and improving air quality.

If a city, county, or public agency in the Sacramento region wants to use federal transportation funding for transportation projects or programs, those projects must be included in the MTP/SCS project list. The MTP/SCS includes transportation improvements and investments that will serve the Sacramento region's projected land use pattern and population growth. All transportation projects that are regionally significant for potential air quality impacts must also be included in the MTP/SCS.

The MTP/SCS includes goals and policies largely applicable to local and regional transportation and mobility projects, and, in some cases, land use projects. A discussion of the MTP/SCS and its relevance to the proposed project is provided below.

4.5.3.2 Local Plans and Policies

County of El Dorado 2004-2025 General Plan

The County of El Dorado 2004–2025 General Plan was most recently updated in December 2016. The General Plan is primarily a policy document that sets goals and policies concerning the community and gives direction to growth and development. In particular, the General Plan includes goals and policies for land use, community design, transportation and circulation, housing, public services and utilities, open space, recreation, conservation, health, safety, and noise, agriculture and forestry preservation, and economic development. These policies are designed to direct new development and redevelopment so that it meets County standards and is consistent with County goals.

Land Use Element

The Land Use Element in the General Plan, most recently updated in December 2015, recognizes three types of planning concept areas within the county: Community Regions, Rural Centers, and Rural Regions. The project site is located within the Community Region boundary of El Dorado Hills. The purpose of the Community Region is to provide opportunities for continued population growth and economic expansion within the urban limit line (the urban limit line demarcates appropriate areas for urban/suburban development) while preserving the character and extent of existing rural centers and urban communities, emphasizing both the natural setting and built design elements that contribute to the quality of life and economic health of the County.

Parcels located in unincorporated areas of the County are assigned a General Plan land use designation and zoning designation. General Plan land use designations identify generalized permitted land uses, such as Commercial (C) or Medium Density Residential (MDR). Several zoning designations may be consistent with a single land use designation. For example, a parcel designated Medium Density Residential could be zoned Residential One Acre, Residential Two Acres, or Residential Three Acres. The Adopted Plan (AP) land use designation is used in the General Plan to designate areas for which specific land use plans have been adopted, including the EDHSP. As stated above, the project site land use designation in the General Plan is AP-EDHSP-C.

General Plan land use policies applicable to the proposed project are listed below in **Table 4.5-2, General Plan Land Use Element Consistency Analysis**.

Housing Element

The State Housing Element Law, enacted in 1969, mandates that local governments in California adopt housing elements as part of their general plans and submit draft and adopted elements to the California Department of Housing and Community Development (HCD) for review of compliance with state law. The County General Plan 2013–2021 Housing Element, reviewed and approved by HCD in November, 2013, guides the County’s decisions related to unincorporated El Dorado County’s housing needs through October 2021.

Analysis of the proposed project’s consistency with the relevant Housing Element policies is provided below in **Table 4.5-3, General Plan Housing Element Consistency Analysis**.

County of El Dorado Zoning Ordinance

The County's Zoning Ordinance is included in Title 130 of the El Dorado County Code. The Zoning Ordinance sets forth regulations governing permitted uses, lot areas, lot widths, yards, building heights, and other important features to guide development within the zoning districts. The County approved a comprehensive update to the Zoning Ordinance, which became effective January 2016. The project site is zoned General Commercial-Planned Development (CG-PD).

El Dorado Hills Specific Plan and Town Center East Development Plan

The project site is located within the boundaries of a 4,000-acre master planned community identified as the EDHSP. The EDHSP was approved in July 1988, along with a certified Environmental Impact Report (EIR [SCH No. 86122912]), by the El Dorado County Board of Supervisors (Board).

The project site is located within the TCE area (formerly Village T) of the EDHSP. In August 1995, the Board approved the TCE Development Plan. The TCE Development Plan provided a land use and policy framework for the 925,000-square foot commercial center. The TCE Development Plan allowed for flexibility in the types of commercial uses permitted in the Plan area as long the size (e.g., square footage) of the proposed uses did not exceed the thresholds included in the Plan. Since approval of the TCE Development Plan, development of the TCE area has occurred in phases. All roads (both public and private), site accesses, and amenities (such as Town Center Lake and trails) within the TCE area have been constructed, and the majority of the planned buildings have been built. The project site is one of the few remaining vacant properties in the TCE area.

Although the EDHSP and TCE Development Plan are both still in effect as planning documents, as they are over 20 years old they do not necessarily reflect land use planning goals and policies currently included in the County's updated General Plan components, particularly with respect to sustainable infill residential development.

The project would be designed in conformance with the proposed El Dorado Hills Town Center East Urban Infill Residential Area Residential Design Guidelines and Development Standards (Design Guidelines). The Design Guidelines have been reviewed by County staff and will be approved by County officials as part of the project entitlements. The purpose of the Design Guidelines is to identify project-specific modifications to the TCE Development Plan to accommodate development of the project site for multi-family residential uses in a manner that would be consistent with the visual character of surrounding commercial and retail development. It is also intended to ensure consistency with the zoning code (as amended by the project) and General Plan policies. Analysis of the proposed project's consistency with general policies in the EDHSP and the Design Guidelines is provided below in **Table**

4.5-4, El Dorado Hills Specific Plan Policy Consistency Analysis, and Table 4.5-5, Draft El Dorado Hills TCE Urban Infill Residential Area Design Guidelines and Development Standards Consistency Analysis.

4.5.4 IMPACTS AND MITIGATION MEASURES

4.5.4.1 Significance Criteria

In accordance with Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, the impact of the proposed project related to land use and planning would be considered significant if it would:

- physically divide an established community;
- conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect; or
- conflict with any applicable habitat conservation plan or natural community conservation plan.

4.5.4.2 Issues adequately addressed in the Initial Study

As noted in the Initial Study, the project site is located within the TCE area, which has a variety of shopping and entertainment venues. The TCE area is bordered to the west and south by single-family residential development, and to the south by multi-family residential development (Sunset Mobile Home Park), and a master planned community (Valley View Specific Plan). Other existing single-family residential development (La Cresta Village, Serrano) is located north of U.S. 50. The proposed project would develop the project site to be consistent with the surrounding area by adding a residential development immediately surrounded by commercial uses. The proposed project would increase connectivity in the TCE area by providing new connections to existing roadways and pedestrian improvements. For these reasons, the project would not physically divide an established community, and no further analysis of this issue is necessary.

As discussed in the Initial Study and as shown on the County's Integrated Natural Resources Management Plan (INRMP) Initial Inventory Map (Exhibit 10),¹ the project site is not within the boundaries of a Priority Conservation Area, an Important Biological Corridor, an adopted Habitat Conservation Plan (HCP), or a Natural Community Conservation Plan (NCCP), or any other conservation plan, including those specifically listed in Exhibit 10. As such, the proposed project would not conflict with an adopted HCP or NCCP. No further analysis of this issue is necessary.

¹ INRMP Initial Inventory Map (Exhibit 10, posted 04/04/2008) accessed April 8, 2015, http://www.edc.gov.us/Government/Planning/INRMP/Final_Initial_Composite_040408.aspx

4.5.4.3 Methodology

To determine the potential for the proposed project to result in conflicts with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect, the proposed project's consistency with the applicable plans and policies was evaluated.

4.5.4.4 Project Impacts and Mitigation Measures

Impact LU-1: **The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. (*Less than Significant*)**

The project applicant is proposing to develop the site with a 4-story, 214-unit apartment complex, composed of two apartment buildings, a parking structure, outdoor recreation areas, and an informal open space area. A 5-level parking structure located in the middle of the complex would accommodate 409 vehicle parking spaces and 22 motorcycle parking space for residents and visitors, with an additional five spaces of surface parking also provided on the site. The residential buildings would be between 42 and 52 feet in height, with some architectural elements reaching 60 feet. The parking structure would be 60 feet in height..

The project site is currently designated Adopted Plan (AP) EDHSP-Commercial (C) in the County of El Dorado General Plan. As no residential uses are permitted under the existing land use designation and zoning, four approvals would be necessary to facilitate construction and occupancy of the proposed project. The project applicant has requested amendments to the County General Plan and EDHSP to change the land use designation of the project site. The project would also require rezoning and revisions to the TCE Development Plan. **Table 4.5-1, Proposed Project Land Use Approvals**, includes the four requested approvals that are necessary for project implementation. The analysis below focuses on the consistency of the proposed project and applicable land use plans.

**Table 4.5-1
Proposed Project Land Use Approvals**

Applicable Plan	Requested Approval
1. County of El Dorado General Plan	General Plan Amendment adding a new Policy (Policy 2.2.6.6) under Objective 2.2.6 (Site Specific Policy Section) to increase the maximum residential density allowed in the General Plan from 24 dwelling units per acre to a maximum of 47 dwelling units per acre specifically for the 4.565-acre project site within the Town Center East (TCE) Planned Development area identified as Assessor's Parcel Numbers 121-290-60, 61 and 62.
2. El Dorado Hills Specific Plan	El Dorado Hills Specific Plan Amendment incorporating multi-family residential use, density, and related standards for the project site. The project site would be designated as "Urban Infill Residential" within the TCE Planning Area 2 of the EDHSP area. (Refer to Figure 4.5-4).
3. Zoning Code	Rezoning of the project site from General Commercial-Planned Development (CG-PD) to Multi-Family Residential-Planned Development (RM-PD) and revisions to the RM-zone district development standards applicable to the proposed 214-unit apartment project. (Refer to Figure 3.0-6, Existing and Proposed Zoning .)
4. Town Center East Development Plan	Revision to the approved TCE Development Plan incorporating multi-family residential use, density, and related design and development standards for the proposed 214-unit apartment project within Planning Area 2 of the EDHSP area. (Refer to Figure 4.5-4).

Sacramento Area Council of Governments 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy

The proposed project is located within the SACOG MTP/SCS planning area. Although the proposed project is not a transportation project that has applied for or would need federal funding, and thus is not included on the MTP/SCS project list, the proposed project will be consistent with the relevant MTP/SCS policies, including the Sacramento Region Blueprint principles (e.g., smart growth principles, reducing congestion, and compact development). The project site is an infill site located in the El Dorado Hills TCE area, which is a mixed-use development. The proposed project would place housing adjacent to existing commercial uses and would integrate pedestrian, bicycle, transit, open space and outdoor use. By locating housing adjacent to commercial and employment land uses, the project would minimize vehicle trips associated with commuting to work and shopping. The density of the project would be consistent with the principles of compact development. Thus, implementation of the proposed project would not conflict with SACOG's MTP/SCS, and the impact would be less than significant.

El Dorado County General Plan Land Use Element

Consistency with the General Plan Land Use Designation

The County of El Dorado 2004-2025 General Plan land use designation for the project site is AP-EDHSP-C. Residential uses are not permitted under this land use designation. As the proposed project is a

multifamily residential development and would have a density of approximately 47 du/ac, the applicant has applied to the County for a General Plan Amendment (GPA) to change the land use designations on the project site to Multi-Family Residential-Planned Development (RM-PD). Specifically, the General Plan Amendment will add Policy 2.2.6.6 under Objective 2.2.6 (Site Specific Policy Section) to read as follows:

2.2.6.6 Within Village T as shown in the El Dorado Hills Specific Plan, the development and implementation of extensive commercial, residential and office development provides a unique opportunity to serve the needs of residential uses sited within a short enough distance to allow biking, walking and other alternative modes of transportation to avail themselves of goods and services. This Specific Policy designates the approximately ±4.565 acre site comprised of Parcels 1, 2 and 3 as shown on parcel map for Town Center East, Parcel 3.4 filed September 29, 2008 in Book 50 of Parcel Maps at page 44, Official Records of El Dorado County, California (APN Nos. 121-290-60, 61 and 62) as 'Urban Infill Residential Area.' This area, because of its proximity to extensive commercial, retail, office and similar development in the balance of the El Dorado Hills Town Center, is deemed to be appropriate for dense infill development. The density of development allowed in this area may exceed the density of development set forth in other sections of this General Plan or zoning regulations up to a density of 47 units per acre upon the approval of a PD Development Plan approval and findings that the requested level of development is appropriate. Notwithstanding any other provisions of this General Plan or the El Dorado Hills Specific Plan or the zoning ordinance, the development restrictions and standards to apply in the Urban Infill Residential Area, including height limits, shall be those in the approved PD Development Plan.

In addition, the EDHSP would be amended to allow for the incorporation of the multi-family residential use, density, and related standards for the project site. Upon approval of the EDHSP amendment, the project site would be designated as "Urban Infill Residential" within the TCE Planning Area 2 of the EDHSP. As the EDHSP has been adopted and incorporated into the County's General Plan, the amendment to the EDHSP would be reflected in the County's General Plan.

With the approval of the GPA and the EDHSP amendments described above, the proposed project would be consistent with the General Plan and EDHSP land use designation for the project site. The environmental impacts that could result from the approval of the proposed GPA and EDHSP amendments are analyzed in **Sections 4.1** through **4.10** of this Draft EIR. As the analysis shows, with mitigation, all significant environmental impacts associated with the development of the proposed multi-family residential project supported by the proposed GPA and EDHSP amendments would be reduced to a less than significant level.

Consistency with General Plan Land Use Goals and Policies

The proposed project would develop a multi-family residential project on the vacant site in support of the vision for the El Dorado Hills Community Region. The proposed project is intended to maximize

residential development within walking distance of the TCE area and provide opportunities for continued population growth and economic expansion within the urban limit line. Further, the proposed project would be an infill residential development and complement the surrounding uses, emphasizing both the natural setting and built design elements that contribute to the quality of life and economic health of the County. A detailed analysis of the proposed project's consistency with applicable General Plan land use policies is provided in **Table 4.5-2, General Plan Land Use Element Consistency Analysis**.

**Table 4.5-2
General Plan Land Use Element Consistency Analysis**

Applicable Policies	Project Consistency
<p>Objective 2.1.1: Community Regions</p> <p>Policy 2.1.1.2: Establish Community Regions to define those areas which are appropriate for the highest intensity of self-sustaining compact urban-type development or suburban type development within the County based on the municipal spheres of influence, availability of infrastructure, public services, major transportation corridors and travel patterns, the location of major topographic patterns and features, and the ability to provide and maintain appropriate transitions at Community Region boundaries. These boundaries shall be shown on the General Plan land use map.</p>	<p>Consistent. The proposed project is a compact residential development project that would be located in the TCE area and proximate to employment and commercial centers, within the El Dorado Community Region. The project site is an infill site with commercial development located to the north, south, and east. U.S. 50 is located approximately 511 feet north of the project site. Infrastructure and public services are available in the area.</p>
<p>Objective 2.2.5: General Policy Section</p> <p>Policy 2.2.5.2: Development projects shall be located and designed in a manner that avoids incompatibility with adjoining land uses that are permitted by the policies in effect at the time the development project is proposed. Development projects that are potentially incompatible with existing adjoining uses shall be designed in a manner that avoids any incompatibility or shall be located on a different site.</p>	<p>Consistent. The project site is an infill site. While the site has been previously disturbed, the site is vacant. Retail/commercial uses are immediately adjacent to the north, south, and east. The scale, character, and design of the residential buildings will complement the surrounding uses.</p>
<p>Objective 2.8.1: Lighting</p> <p>Policy 2.8.1.1: Development shall limit excess nighttime light and glare from parking area lighting, signage, and buildings. Consideration will be given to design features, namely directional shielding for street lighting, parking lot lighting, sport field lighting, and other significant light sources, that could reduce effects from nighttime lighting. In addition, consideration will be given to the use of automatic shutoffs or motion sensors for lighting features in rural areas to further reduce excess nighttime light.</p>	<p>Consistent. The proposed project would be constructed on an infill site. Given the commercial/retail uses surrounding the project site, there are no nearby uses sensitive to nighttime light levels. The proposed project would be required to comply with the El Dorado Hills Design Guidelines (refer to Table 4.5-5 below for a complete analysis of the proposed project and the EDHDC), including residential lighting guidelines that require lighting to be designed consistent with the County's policies and ordinances.</p>

Source: County of El Dorado General Plan, Land Use Element, 2004

County of El Dorado 2013-2021 Housing Element

The proposed project would develop a multi-family residential project on the vacant site. **Table 4.5-3, General Plan Housing Element Consistency Analysis**, lists the relevant 2013 Housing Element policies and provides an analysis of the proposed project's consistency with these policies. As shown this table,

the proposed project would be consistent with the policies included in the 2013 Housing Element, and the impact would be less than significant.

**Table 4.5-3
General Plan Housing Element Consistency Analysis**

Applicable Policies	Project Consistency
Goal HO-1: To provide for housing that meets the needs of existing and future residents in all income categories	
Policy HO-1.1: When adopting or updating programs, procedures, or Specific Plans or other planning documents, the County shall ensure that the goals, policies, and implementation programs are developed with the consideration of achieving and maintaining the County's regional housing allocation.	Consistent. The proposed project is a multi-family residential project that would assist the West Slope unincorporated areas of the County in reaching their "fair share" of projected housing needs by providing 214 housing units, including a mix of studio, one-bedroom, and two-bedroom units.
Policy HO-1.5: The County shall direct higher density residential development to Community Regions and Rural Centers.	Consistent. The project site is located in a Community Region. The project applicant is requesting that the County approve an amendment to the General Plan to increase the maximum residential density allowed from 24 dwelling units per acre to a maximum of 47 dwelling units per acre specifically for the project site.
Goal HO-5: To increase the efficiency of energy and water use in new and existing homes	
Policy HO-5.1: The County shall require all new dwelling units to meet current state requirements for energy efficiency and shall encourage the retrofitting of existing units.	Consistent. The proposed project will comply with and exceed the 2013 Title 24 regulations relating to water and energy efficiency by 10 percent.

Source: County of El Dorado General Plan, Housing Element, 2013

County of El Dorado Zoning Code

The project site is currently zoned General Commercial-Planned Development (CG-PD). As described above, the proposed project would develop the site with a 4-story, 214-unit multi-family residential development, and therefore would be inconsistent with the existing zoning. The project applicant is requesting a rezone of the project site to Multi-Family Residential-Planned Development (RM-PD) and revisions to the RM-zone district development standards applicable to the proposed project. Should the rezone be approved by the County, the proposed project would be consistent with the zoning for the project site. The environmental impacts that could result from the approval of the proposed zone change are analyzed in Sections 4.1 through 4.10 of this Draft EIR. As the analysis shows, with mitigation, all significant environmental impacts associated with the development of the proposed multi-family residential project supported by the proposed zone change would be reduced to a less than significant level.

El Dorado Hills Specific Plan and Town Center East Development Plan

The project site is located within the boundaries of the EDHSP, specifically within the TCE area. While Government Code section 65890.1 and the County’s General Plan Housing Element encourage land use patterns that balance the location of employment generating uses with residential uses in order to reduce commuting, high density residential uses are not currently permitted within the TCE area of the EDHSP area. To facilitate construction and operation of the proposed project, the applicant is requesting that the EDHSP be amended to incorporate multi-family residential use, density and related standards for the project site; and that the TCE Development Plan be amended to incorporate multi-family residential use, density, and related standards for the project site and to designate the project site as “Urban Infill Residential.”

The EDHSP includes polices that are intended to provide direction and guidance to decision makers in the implementation of the plan. **Table 4.5-4, El Dorado Hills Specific Plan Policy Consistency Analysis**, lists the policies that are applicable to the proposed project, and discusses how the project would be consistent with those policies.

**Table 4.5-4
El Dorado Hills Specific Plan Policy Consistency Analysis**

Applicable Policies	Project Consistency
1.4.1 General Policies	
1.4.1.1 Site Development and Grading	
a. Grading for roadways, driveways, building pads, and onsite improvements shall be minimized	Consistent. The project site has been previously graded, and therefore only minimal grading will be required during project construction.
b. Grading volumes of cut-and-fill material shall be minimized and balanced onsite wherever possible. Larger grading volumes may be acceptable where improved visual and environmental effects would result.	Consistent. The project has been designed to balance earthwork on the site between cut and fill (see Figure 3.0-20, Preliminary Grading and Drainage Plan). However, during excavation of the building footings, plumbing, etc., some incidental excavated material will need to be hauled off site.
h. landscaping in improved common areas shall be of drought-resistant varieties.	Consistent. All new landscape plants will be drought tolerant.
i. To preserve the vegetative character of the Plan Area, the planting of native trees, shrubs, and ground cover shall be encouraged in all new landscaping.	Consistent. At least 60 percent of the proposed project’s plant palette will be composed of native California or low water use plant materials
k. Site design, building orientation, and street and lot patterns shall follow solar orientation principles to the maximum extent practicable.	Consistent. A minimum of 15 percent of the roof areas will be reserved for future photovoltaic (PV) solar installation. In addition, the proposed buildings will be designed with flat roofs which would allow future solar panels to be angled to maximize exposure from the sun.

Applicable Policies	Project Consistency
<p>o. Where feasible, and given the physical constraints of the Plan Area, subdivisions and other new development shall be designed to facilitate solar use as a means of reducing total energy consumption. The design elements that shall be considered include the following:</p> <ul style="list-style-type: none"> • solar orientation • shade control • wind management • solar access <p>1.4.1.3 Air Quality</p> <p>Construction contracts will include provisions for watering or using other dust control methods on all exposed earth surfaces during clearing, grading, earthmoving, cleanup of mud and dirt carried from the construction site onto adjacent streets, and for paving, planting, use of soil binders, or repeated soaking to maintain a crusty surface to reduce wind-blown dust potential.</p> <p>1.4.1.4 Noise</p> <p>c. Interior noise levels will be mitigated to a level of 45 dB Ldn or below to be acceptable to the planning director. Noise levels would be diminished by construction barriers, reduced vehicle speeds, restriction of truck traffic, increased setbacks, advantageous use of natural topographic barriers, construction materials, or any combination of the above.</p> <p>All development, including grading and construction of buildings, will be limited to daytime hours from 7 AM to 7 PM or sunset, whichever is earlier, Monday through Friday. This requirement will be indicated on grading permits and building permits.</p> <p>All construction equipment, including heavy earthmoving equipment and compressors, will be fitted with adequate mufflers and safe enclosures.</p> <p>All development will be required to be in compliance with state laws relating to speed control and noise emissions as a condition of the tentative map. This information will be shown on the improvement plans.</p> <hr/> <p><i>Source: County of El Dorado Hills Specific Plan, 1988</i></p>	<p>Consistent. As discussed above, future solar panels would be angled to maximize the exposure from the sun. In addition, landscaped areas will include the provision of street and shade trees to provide shade and comfort to reduce the heat island effect.</p> <p>Consistent. The proposed project would implement the fugitive dust mitigation measures contained in the <i>El Dorado County Air Quality Management CEQA Guide</i> (see Mitigation Measures AIR-1c and 1d). These measures require the use of watering or other methods for dust control.</p> <p>Consistent. The existing ambient noise level and the projected ambient noise level at the project site under cumulative conditions are below the maximum allowable noise exposure from transportation sources (60 dBA Ldn) for residential land use under the County General Plan. As the exterior to interior noise reduction of newer residential units with typical construction materials and closed windows is generally 25 dBA, the proposed project would experience interior noise levels below 35 dBA Ldn.</p> <p>Consistent. Construction activities on the project site would be limited by grading permit requirements to the hours of 7 AM to PM, Monday through Friday, and 8 AM to 5 PM, on weekends, and on federally recognized holidays. In addition, the proposed project would be fitted with adequate mufflers and safe enclosures to the maximum extent feasible and would comply with all laws regulating construction noise. It should be noted, that without mitigation, construction noise would not exceed County exterior noise standards at nearby sensitive receptors (see Table 4.6-10)</p>

Further, to ensure the proposed project's architectural style is consistent with the style of the existing commercial structures located in the TCE area, the EDHSP would be amended to include the proposed Design Guidelines. **Table 4.5-5, Draft El Dorado Hills TCE Urban Infill Residential Area Design Guidelines and Development Standards Consistency Analysis**, provides a side by side comparison of the proposed project's characteristics and the goals and objectives included in the Design Guidelines. As shown this table, the proposed project would be consistent with the goals and objectives included in the Design Guidelines.

Should the amendments be approved by the County, the proposed project would be consistent with the EDHSP and the TCE Development Plan. The environmental impacts that could result from the approval of the amendments are analyzed in **Sections 4.1** through **4.10** of this Draft EIR. As the analysis shows, with mitigation, all significant environmental impacts associated with the development of the proposed multi-family residential project supported by the proposed amendments would be reduced to a less than significant level.

Table 4.5-5
Draft El Dorado Hills TCE Urban Infill Residential Area Design Guidelines and Development Standards Consistency Analysis

Goals and Objectives	Project Consistency
2. Residential Architectural Guidelines: Architectural Goals and Objectives	
2.1 Architectural Goals and Objectives	
<p>2.1.1 Sustainable Design: Buildings should be designed to minimize energy use and provide a healthy, desirable living environment (see Section 3.4 for specific requirements).</p>	<p>Consistent. The proposed structures will exceed Title 24 energy requirements by a minimum of 10 percent. In addition, all apartments will be equipped with Energy Star certified appliances (dishwashers and refrigerators), energy efficient LED light fixtures (for interior and exterior lighting), and energy efficient Low-E windows. Further, a minimum of 15 percent of the roof areas will be reserved for future photovoltaic (PV) solar installation, the parking garage will be designed for future Electric Vehicle (EV) charging station expansion, and temperature controllers will be installed for pool and spa heaters.</p>
<p>2.1.2 Quality and Character: Architecture should be consistent and compatible with the context of the existing community and neighborhood. The buildings should be compatible with the existing buildings within both Town Center East and Town Center West. Elements of the buildings should incorporate the use of high quality materials and create buildings that are similar in quality to the existing Town Center developments. Submittal of proposed plans are to be reviewed by the Town Center East Design Review Committee.</p>	<p>Consistent. The overall architectural character would reflect simple, utilitarian form through the use of modern materials and contemporary architecture, consistent with the style of TCE. Architectural massing would be simple and regular. Changes in roof plane, recesses in the façade, varied building setbacks, and other architectural techniques would be used to give the buildings interest and avoid the appearance of long, unchanging facades. Covered, shaded, and protected areas (e.g., through the use of porches, patios, verandas, courtyards, loggias, trellises, or arbors) would create visual depth and interest. All proposed plans for the apartment complex would be reviewed by the TCE Design Review Committee.</p>
<p>2.1.3 Livability: Building unit and space layout and design should be orchestrated to create an enjoyable living environment, reflecting present-day conveniences and lifestyles for its future inhabitants.</p>	<p>Consistent. The proposed project's design includes a well-designed community that consists of a variety of residential unit types. Further, the proposed project would maximize density with accessibility to commercial and retail uses, and integrate pedestrian, bicycle, transit, open space and outdoor uses to encourage active centers.</p>
<p>2.1.4 Neighborhood Visual Impact: The living faces of buildings should be located around the perimeter of the site and parking located on the interior of the site to maximize visibility of architectural character and minimize the impact of parking as seen from the surrounding streets and from the Town Center East Central Creek Corridor.</p>	<p>Consistent. The proposed 5-level parking structure would be located in the middle of the complex and be surrounded by the two residential buildings.</p>

Goals and Objectives	Project Consistency
<p>2.1.5 Promotion of Use of Outdoor Spaces: Site design should create and promote a healthy and safe walking environment through the use of paths, landscaping, and signage. Site design, layout, and siting also should serve to create a seamless transition between the project internal open spaces and the Town Center East public open spaces.</p>	<p>Consistent. The northern and eastern perimeters of the project would provide narrow landscape areas between the proposed buildings and the existing sidewalks. In some areas the sidewalk area would be elevated above the ground floor units. In these areas a retaining wall would support the elevation change, creating upper and lower landscape areas. The perimeter landscape along Town Center Boulevard would consist primarily of narrow planters both raised and at ground level. These planters would be planted with pedestrian friendly plants and small scale broad leaf evergreen trees. Existing trees in planters along the street would remain. An EVA lane would be located adjacent to the existing pedestrian path adjacent to the Town Center Lake.</p>
<p>2.2. Architectural Character</p>	<p>Consistent. The residential buildings would be between 42 and 52 feet in height, with some architectural elements reaching 60 feet. The design concept for the proposed project would include varied architectural finishes, including stone veneers, and stucco. Decorative elements, including decorative wrought iron railing and awnings, would be incorporated to add visual interest. Building materials would be non-reflective. Figures 3.0-9 through 3.0-11, Illustrative Project Elevations, show the exterior elevations along the Town Center Boulevard, at the corner of Town Center Boulevard and Vine Street, along Vine Street, at the corner of Vine Street and Mercedes Lane and views of the greenbelt/Emergency Vehicle Access (EVA) lane from Mercedes Lane and Town Center Boulevard.</p>
<p>2.2.1: Buildings shall have substance and durability in both reality and appearance. A sense of “permanence” should characterize the image projected by all structural elements on site.</p>	<p>Consistent. As stated above, the overall architectural character would reflect simple, utilitarian form through the use of modern materials and contemporary architecture, consistent with the style of TCE. Architectural massing would be simple and regular. Changes in roof plane, recesses in the façade, varied building setbacks, and other architectural techniques would be used to give the buildings interest and avoid the appearance of long, unchanging facades. Covered, shaded, and protected areas (e.g., through the use of porches, patios, verandas, courtyards, loggias, trellises, or arbors) would create visual depth and interest.</p>
<p>2.2.2: Architectural massing should be simple and regular, reflecting forms and character of earlier historic buildings in the region and within the Town Center.</p>	<p>Consistent. The proposed project’s layout includes an interior courtyard, a picnic shelter area located along the western portion of the site, a separate pool area, and an informal open space area located in the northwestern portion of the site.</p>
<p>2.2.3: Layout and placement of building footprints should be orchestrated to create plazas, courtyards, and/or open private areas for tenants and their guests both in site interior areas and on sides connecting with the Central Creek Corridor system.</p>	<p>Consistent. The proposed project includes a picnic shelter area as well as mature landscaping throughout the project site. Due to the building footprints, the interior courtyard area will be relatively shady during most of the daytime hours. Shade trees will be located along the northern, western, and eastern portions of the project site and would provide protection from the sun. Private balconies will be included in a number of multi-family units.</p>
<p>2.2.4: Architecture and site design shall respond to the regional climate by providing “indoor- outdoor” transitional spaces. Covered, shaded, and protected areas create visual depth and interest while providing shelter and appropriate pedestrian-scaled outdoor spaces for the residents and visitors. Some examples might include porches, patios, verandas, courtyards, loggias, trellises or arbors that create a covered walkway or gathering area to protect pedestrians from sun and provide aesthetic value.</p>	<p>Consistent. The proposed project’s building types, landscaping, and elevations are shown in the project’s site plans.</p>
<p>2.3 Site Planning</p>	<p>Consistent. The overall architectural character would reflect simple, utilitarian form through the use of modern materials and contemporary architecture, consistent with the style of</p>
<p>2.3.1 Site Planning: “Site planning shall enhance and integrate building architecture, landscape architecture, color and signage through all stages of design.” (Town Center Design Guidelines)</p>	
<p>2.4 Architectural Design and Materials</p>	
<p>2.4.1 Design Variation: The effect of large monolithic building forms should be avoided by changes in color, texture and materials. Changes in roof plane, recesses in the façade, varied</p>	

Goals and Objectives	Project Consistency
<p>building setbacks, distinguishing chimneys or elevators, and other architectural techniques should be used to give the buildings interest and avoid the adverse effect of long unchanging facades</p>	<p>TCE. Architectural massing would be simple and regular. Changes in roof plane, recesses in the façade, varied building setbacks, and other architectural techniques would be used to give the buildings interest and avoid the appearance of long, unchanging facades. Covered, shaded, and protected areas (e.g., through the use of porches, patios, verandas, courtyards, loggias, trellises, or arbors) would create visual depth and interest.</p>
<p>2.4.2 Building Entries: “Individual projects shall provide a well-articulated, identifiable entry sequence from street to building.” (Town Center Design Guidelines) Entries should be enhanced by landscaping, paving, and effective signage features and be logically located and easily recognizable.</p>	<p>Walls and fences would be designed to be compatible with surrounding and adjacent architecture and would not exceed eight feet unless approved by the Design Review Committee. Building utilities and equipment would be screened with fences, walls, dense plantings, or decorative architectural features. Signage would be complementary in character, materials, and style to other buildings within the TCE development.</p>
<p>2.4.3 Design Materials: Design elements should include interesting use of varied and durable materials and colors that respond to the surroundings, both natural and man-made. Classic elements such as stucco, heavy timbers, brick or stone veneer are examples that replicate the surroundings and elements common to El Dorado County. Green materials that withstand local environmental conditions are strongly encouraged.</p>	<p>Consistent. The proposed project’s design will include a piazza. Vehicles and pedestrians will be able to access the site via the piazza.</p>
<p>2.4.4 Roof Materials: Roof materials should be consistent with historical influences commonly seen in the Northern California and should be compatible with the overall style and character of the building façade. Wood shakes, composite shingles, and metal channeled roofing materials are examples of appropriate decorative roof areas. Flat roofs screened from street view by use of parapets or other roof forms are exempt from these requirements. Red clay tiles of the Spanish influence in Southern California are not acceptable. Consideration should be given to roof colors and materials that exceed Energy Star requirements to reduce the heat island effect.</p>	<p>Consistent. The proposed project will include an earth tone color palette. Classic elements such as stucco, heavy timbers, brick or stone veneer are examples of varied and durable materials and colors that would be used to blend with the surrounding natural and built environment.</p>
<p>2.4.5 Building Colors: Exterior colors and materials should be used to define the building form, details and massing. For the most part, more natural earth tones for large building elements should be maintained, with the potential for use of brighter colors as small detail accents.</p>	<p>Consistent. The proposed project’s roofing will comprise materials similar to that of the surrounding buildings. The proposed project will utilize two types of roofing materials: composite shingle roofing and metal roofing.</p>
	<p>Consistent. The proposed project includes an earth tone color palette. Classic elements such as stucco, heavy timbers, brick or stone veneer are examples of varied and durable materials and colors that would be used to blend with the surrounding natural and built environment. Building exterior colors would define building form, details, and massing through the use of natural earth tones for large building elements with brighter tones providing small detail accents.</p>

Goals and Objectives	Project Consistency
<p>2.5 Residential Lighting Guidelines</p>	
<p>2.5.1: Lighting shall be designed to be consistent with the County's policies and Lighting provisions as found in the County Ordinance and in the Town Center East Development Plan—Appendix 4: "Specific Lighting Criteria."</p>	<p>Consistent. All lighting on the project site will be required to comply with the County's Lighting Ordinance and the TCE Development Plan's guidelines included in the "Specific Lighting Criteria."</p>
<p>2.5.2: Lighting fixtures shall be designed to deflect light and glare from the viewsheds of adjacent parks and open space areas. Light from development in the Specific Plan Area shall not extend beyond the boundaries of the Plan Area. Cutoff type fixtures are preferred to minimize light spillage and glare. All lighting will comply with most recent Title 24 and CalGreen requirements.</p>	<p>The County requires the use of cutoff-type fixtures to minimize light spillage and glare. The proposed project would include exterior lighting including pole lighting in the common area and security wall lighting. A preliminary Photometric Plan has been prepared for the project based on selected lighting fixtures, and included with the Planned Development Application. As shown on the Photometric Plan, the proposed lighting would be consistent with the County lighting ordinance, which includes shielding to avoid potential glare affecting day or nighttime views for people who live or travel through the area.</p> <p>Consistent. The proposed project would be constructed on an infill site. Given the commercial/retail uses surrounding the project site, there are no nearby uses sensitive to nighttime light levels. All lighting would exceed the 2013 Title 24 requirements by 10 percent and comply with the CalGreen requirements. As stated above, a preliminary Photometric Plan has been prepared for the project based on selected lighting fixtures, and included with the Planned Development Application. As shown on the Photometric Plan, the proposed lighting would be consistent with the County lighting ordinance, which includes shielding to avoid potential glare affecting day or nighttime views for people who live or travel through the area.</p>
<p>2.5.3: Lighting levels of outdoor lighting should not draw attention to the light source. Lighting fixtures in open parking areas shall be mounted with the light source parallel to the ground.</p>	<p>Consistent. Lighting on the project site will utilize cutoff-type fixtures to minimize light spillage and glare. The proposed project would include exterior lighting including pole lighting in the common area and security wall lighting. A preliminary Photometric Plan has been prepared for the project based on selected lighting fixtures, and included with the Planned Development Application. As shown on the Photometric Plan, the proposed lighting would be consistent with the County lighting ordinance, which includes shielding to avoid potential glare affecting day or nighttime views for people who live or travel through the area</p>
<p>2.5.4: Street Lighting: Any additional public and private street lighting fixtures, if required, shall be consistent with standards shown in Appendix 4 of the Town Center East Development Plan.</p>	<p>Consistent. The proposed public and private street lighting would be consistent with the standards shown in Appendix 4 of the TCE Development Plan.</p>
<p>2.5.5: Exterior architectural lighting shall use indirect light sources. Typically permissible lighting includes wall washing, overhead down lighting, interior lighting that extends outside, and decorative wall-mounted lights that are integral with the building.</p>	<p>Consistent. Lighting for the proposed project will be consistent with County lighting policies and ordinances and will require the use of cutoff-type fixtures to minimize light spillage and glare.</p>
<p>2.5.6: Wall-mounted security area lighting may be used in screened service areas when direct light and glare can be contained within these areas.</p>	<p>Consistent. The proposed project would incorporate wall-mounted security area lighting. All lighting on the project site would comply with the County lighting ordinance and the EDH Design Guidelines.</p>
<p>2.5.7: Project common areas, courtyards, arcades, swimming pool areas, and seating areas shall be adequately lighted to promote pedestrian use and safety. Special lighting effects may be created in these areas, provided it is consistent with the character and function of the area.</p>	<p>Consistent. Common areas, public spaces, walkways, and the 5-level parking garage would be adequately lighted.</p>

Goals and Objectives	Project Consistency
<p>2.5.8: Pedestrian stairs or ramps shall be adequately illuminated to draw attention to elevation changes and handrails. Bollards may also be used to supplement other pedestrian area lighting.</p>	<p>Consistent. The project site is located in a well-lit commercial area with high levels of ambient nighttime lighting, including street lights, architectural and security lighting, indoor building illumination (light emanating from the interior of structures which passes through windows), and automobile headlights.</p>
<p>2.5.9: Photometric Plans--If an Architecture and Site (A&S) application is required in the future for modifications that would affect lighting, site lighting photometric plans shall be included in the site plan application.</p>	<p>Consistent A preliminary Photometric Plan has been prepared for the project based on selected lighting fixtures, and included with the Planned Development Application. As shown on the Photometric Plan, the proposed lighting would be consistent with the County lighting ordinance, which includes shielding to avoid potential glare affecting day or nighttime views for those that live or travel through the area</p>
<p>2.5.10: Landscape lighting shall be designed for energy efficiency. LED fixtures will be used in common areas but prohibited on structures. Lighting design is encouraged to use ENERGY STAR qualified hard-wired fixtures. All hard-wired lighting shall employ programmable photo-control or astronomical time-switch controls that automatically switch off when daylight is available.</p>	<p>Consistent. Energy efficient LED and fluorescent light fixtures will be installed within the apartment buildings and for exterior lighting, including in landscaped areas. All hard-wired lighting will be programmable photo-controlled and/or have astronomical time-switch controls which are responsive to natural lighting.</p>
<p>2.6 Residential Landscape Guidelines</p>	
<p>2.6.1 Basic Objective: Landscaping will be planned, designed, and implemented to achieve results that reflect intelligent, aesthetic and sustainable practices. Prudent landscape design and implementation will result in reduced energy consumption, reduced greenhouse gas emissions, and the ability of the built landscape environment to sustain itself functionally and ecologically more successfully than landscapes designed under other "conventional" methods. These community landscape elements include guidelines that define the character, aesthetics and functionality of the streetscape, amenity areas, open space system, walkways and other planted areas within the Plan Area. The overall quality of landscape design for the urban infill residential area as described in these Guidelines shall be guided by the implementation of landscape standards applied consistently throughout the Plan Area.</p>	<p>Consistent. The proposed project would provide ornamental landscaping within the interior common areas and along the perimeter that would be consistent with the existing landscaping in the TCE area. At least 60 percent of the plant palette will be composed of native California or low water use plant materials and will be appropriate to the climate zone. Landscaped areas will include the provision of street and shade trees on the project site to provide shade, comfort, and aesthetic enhancement throughout the project site and to reduce the heat island effect.</p>
<p>2.6.2 Landscape Character and Theme: "The Center shall present a uniform landscaping, lighting, and signage treatment to ensure a desirable, attractive and safe environment," (EDH Specific Plan)</p>	<p>Consistent. At least 60 percent of the proposed project's plant palette will be composed of native California or low water use plant materials and will be appropriate to the climate zone. The proposed project's landscaping will include street and shade trees, shrubs, and a limited amount of turf.</p>
<p>The landscaping component is to be designed to reflect the environment and character of this region in El Dorado County, with special attention to the natural look that gives the area its distinct identity. The landscape element of the urban infill residential area should achieve a visual balance between informal open space landscaping and more formal landscape elements— such as streetscape trees, project entry statements, and the project amenity areas--that help define and enhance the character of the residential community.</p>	

Goals and Objectives	Project Consistency
<p>2.6.3 Low Impact Development: The landscape program should coordinate design efforts with site civil engineering design, and to the extent practical, reinforce the principles of Low Impact Development (LID) for storm drainage, runoff infiltration and groundwater recharge for the project open space areas by such measures as: (1) management of rainfall by using landscape design techniques and materials that infiltrate, filter, store, evaporate, and/or detain runoff as close to its source as feasible, (2) direction of storm water capture through small, cost-effective landscape features located at the site level, and/or (3) treatment devices as approved by the County.</p>	<p>Consistent. The proposed project would be designed to include water quality BMPs, such as drainage easements, the routing of stormwater runoff to specially designated water quality treatment facilities for removal of pollutants of concerns, and the management of rainfall through landscape design.</p>
<p>2.6.4 Heat Island Mitigation: Parking areas (with the exception of parking structures), plazas, other hardscape areas and other potential "heat islands" should be mitigated by trees, vegetation, and other landscape screening/shading devices to (1) reduce heating and cooling energy use, (2) filter air pollution and greenhouse gas emissions, (3) remove air pollutants, sequester and store carbon, and (4) help lower the risk of heat-related illnesses.</p>	<p>Consistent. The proposed project includes landscaped areas and open areas, and includes the provision of street and shade trees on the project site to provide shade, comfort, and aesthetic enhancement throughout the project site and to reduce the heat island effect.</p>
<p>2.6.5 Strategic Climate Control: Use of strategic shading techniques, plant selection, plant placement and use of deciduous tree species prudently in the landscape will reduce solar heat gain in the summer and maximize passive solar warming in winter months, especially for lower floor units of a high density, multi-story residential project. Where possible, careful and strategic planting and structure shading is encouraged around buildings and other project areas to (1) create south and west-facing shade during hot seasons and (2) allow sunlight in during cool seasons.</p>	<p>Consistent. The proposed project includes landscaped areas and open areas, and includes the provision of street and shade trees on the project site to provide shade, comfort, and aesthetic enhancement throughout the project site and to reduce the heat island effect.</p>
<p>2.6.6 Fire Access: Planting shall be strategically located around buildings and throughout the project site such that fire vehicle and equipment access is facilitated. Landscape design and proposed tree locations shall be coordinated with the local Fire Marshal to ensure that adequate building access is provided to accommodate the Fire Department's needs.</p>	<p>Consistent. The project site is surrounded by developed, urban uses and is not immediately adjacent to areas that may be susceptible to wildland fire hazard. Further, the site would be graded, and appropriate building standards and setbacks would be maintained. Fire vehicles will be able to access all portions of the project site. The proposed project's plans will be submitted to the El Dorado Hills Fire Department for review.</p>
<p>2.6.7 Aesthetics and Identity: The urban infill residential area's landscaping should also emphasize design that establishes a strong identity and character of quality and distinction that typifies a high quality Town Center community. This includes such components as outdoor furniture, fences and walls, project entry features, plant selection, distinctive focal features, thematic lighting, screening/mitigation of undesirable views, site directional and identification signage, and other elements associated with tasteful landscape aesthetics.</p>	<p>Consistent. The proposed project's landscaping will include trees and shrubs. Walls and fences would be designed to be compatible with surrounding and adjacent architecture and would not exceed eight feet unless approved by the Design Review Committee. Building utilities and equipment would be screened with fences, walls, dense plantings, or decorative architectural features. Signage would be complementary in character, materials, and style to other buildings within the TCE development.</p>
<p>2.6.8 Landscape Art: "Works of art are encouraged in the development of outdoor spaces. The use of pools, sprays, fountains and sculptures and other elements of visual interest such as flags, banners, hangings, etc., are encouraged to be used where appropriate. (Town Center Design Guidelines)</p>	<p>Consistent. The proposed project will include a pool area, open space area, and interior courtyard. In addition the project site is immediately adjacent to the Town Center Lake.</p>
<p>2.6.9 Streetscapes: Streetscape design and implementation along Town Center Drive shall remain conformed to the existing Town Center landscape plan, guidelines and standards as established and installed along Town Center Boulevard.</p>	<p>Consistent. The proposed project's streetscape design along Town Center Drive will comply with the existing Town Center landscape plan, guidelines, and standards. All proposed plans for the apartment complex will be reviewed by the TCE Design Review</p>

Goals and Objectives	Project Consistency
<p>2.6.10 Walls and Fences: “All walls and fences shall be of a design compatible with adjacent architecture. Height of walls and fences shall be as required for their intended use...” (Town Center Design Guidelines)</p>	<p>Consistent. Walls and fences would be designed to be compatible with surrounding and adjacent architecture and would not exceed eight feet unless approved by the Design Review Committee.</p>
<p>2.6.11 Interior Courtyards, Pools and Common Areas: “Opportunities shall be provided for outdoor and indoor public activity areas, including space for cultural events, organizational meetings, recreational areas, and public seating accommodations.” (EDH Specific Plan)</p>	<p>Consistent. The proposed project includes several common areas, including a pool area, open space area, and interior courtyard.</p>
<p>High density residential housing necessitates an intelligent and effective treatment and design of open space areas and common courtyards. Appropriate shading, screening, and landscape furniture should be used to create a “human scale” within these areas surrounded by buildings. Arbors, decorative retaining walls, dining areas, patios, fire pits, benches, tables, well-designed swimming pools, and other features should be used to define and create inviting spaces and encourage outdoor use within the high density community. (see Section 3.2.4 above)</p>	
<p>2.6.12 Paving and Hardscape: Where appropriate or practical, the use of special paving materials such as, interlocking pavers, exposed aggregate, or other such materials is recommended in areas of high pedestrian activity or community gathering to create design interest and a sense of quality in these key locations. If soil conditions allow, paving areas may utilize permeable paving techniques to reduce storm water run-off.</p>	<p>Consistent. While still in the preliminary stages, unique paving materials, such as pavers, aggregate, decomposed granite will be used in open space areas (e.g., picnic area and interior courtyard area) when appropriate.</p>
<p>2.6.13 Landscape Furniture: “All street furniture (bus shelters, benches, trash receptacles, etc.) within the Plan Area should utilize a common design theme as provided for in the Design guidelines.” (EDH Specific Plan)</p>	<p>Consistent. All site plans will be submitted to the TCE Design Review Committee prior to the issuance of any building permits. All street furniture belonging to the proposed project will be required to be consistent with the existing street furniture located throughout the TCE area.</p>
<p>2.6.14 Landscape Plant Palette: “The Design Guidelines provide for a plant species mix which is complementary to the native species and yet compatible with the scope and scale of the development.” (Town Center Design Guidelines)</p>	<p>Consistent. As shown in Figure 3.0-8, Preliminary Landscape Plan, at least 60 percent of the plant palette will be comprised of native California or low water use plants. A breakdown of the proposed plant material is included in the preliminary landscape plan.</p>
<p>The proposed landscape planting schedule associated with planting plans shall be provided with landscape plans and shall include a breakdown by material type (i.e., trees, shrubs, etc.) and each plant species listed shall include the associated water use expectation (i.e., “Very Low,” “Low,” “Medium,” etc.).</p>	
<p>Residential Development Standards</p>	
<p>3.1 Permitted Uses: The following permitted use(s) is added to those uses listed in Section 6.2 of the existing Town Center East PD Plan’s Development Standards and those uses shown in this area in the El Dorado Hills Specific Plan (Dec. 23, 1987). Use added: High Density Residential-Multifamily apartments with densities up to a maximum of 47 dwelling units per gross acre.</p>	<p>Consistent. The project applicant is requesting the approval of four entitlements. Approval of the entitlements would result in the project being rezoned to RM-PD with a maximum density of 47 dwelling units per acre.</p>

Goals and Objectives	Project Consistency
<p>3.2 Maximum Residential Building Height--60 feet: Buildings within the urban infill area Residential Area may be multiple stories, up to a maximum of four (4) stories in height. Building heights shall be measured, calculated, and determined according to standards set forth in the County Zoning Ordinance ("Zoning Ordinance") found in Section 130.30.040. Exceptions to this height requirement includes such structures as chimneys, spires, elevators, mechanical and stair housings, flag poles, towers, vents, and similar structures which are not used for human activity. These structures may exceed the 60-foot limitation by a maximum of an additional 12 feet.</p>	<p>Consistent. The residential buildings would be between 42 and 52 feet in height, with some architectural elements reaching 60 feet. The parking structure would be 60 feet in height.</p>
<p>3.3 Maximum Parking Structure Height--60 feet, 5 Tiers: The measurement of the first tier starts at the lowest level of the garage and continues 360 degrees to the immediate level above. Subsequent tiers are measured starting at the completion of the previous tier.</p>	<p>Consistent. The 5-level parking structure would be 60 feet in height.</p>
<p>3.4 Minimum Setbacks: Minimum setback measurements shall be to the main building line from the property line. Projections beyond the building face, such as patios, stoops, balconies, and overhangs are permitted to have a zero setback from the property line.</p> <ul style="list-style-type: none"> • 3.4.1 Minimum Setback from Town Center Boulevard - 0 feet • 3.4.2 Minimum Setback from Vine Street (private) - 4 feet • 3.4.3 Minimum Setback from Mercedes Lane (private) - 4 feet • 3.4.4 Minimum Setback from Central Creek Corridor Property Line - 30 feet 	<p>Consistent. The proposed project will comply with the minimum setbacks included in Policy 3.4.</p>
<p>3.4.5 Maximum Building Site Coverage: 55 percent of total site</p>	<p>Consistent. The proposed structures (e.g., two multi-family buildings and parking garage) will cover approximately 50 percent of the project site.</p>
<p>3.4.6 Maximum Impervious Surface: 80 percent of total site</p>	<p>Consistent. Approximately 44 percent of the site will be comprised of pervious surfaces.</p>
<p>3.5 Provision of Common Open Space—Background: Article 8 of the Zoning Ordinance—"Glossary"— defines "Common Open Space" as follows:</p> <p>"Common. Open space within a development plan that is designated and intended for the use or enjoyment of all of the owners or occupants of the development. Common open space may contain such complementary structures and improvements as are necessary, desirable, or appropriate for the benefit and enjoyment of the owners or occupants of the development. Ownership of common open space is held by a homeowners association or similar organization, and access is usually restricted to property owners and residents of the development and their guests (see also 'Private Recreation Area')." Note: The term "complementary structures" above is interpreted to designate, but not be limited to, such items as arbors, gazebos, landscape overhead structures, fountains, fitness apparatus, outdoor game features, built-in benches and tables, and other such amenities.</p> <p>Furthermore, under Article 8, "Private Recreation Area" is defined as follows:</p>	<p>Consistent. The proposed project provides areas of common space including the pool area, interior courtyard, and open space area.</p>

Goals and Objectives	Project Consistency
<p>“Recreation facilities owned and operated by a homeowners’ association or similar entity for the benefit of property owners within a subdivision or multi-unit residential complex. It may include, but is not limited to, swimming pools, indoor or outdoor sport courts, meeting rooms, clubhouse, and any facilities required to maintain said recreation areas.</p>	
<p>3.6 Provision of Common Open Space—Residential Standard: Under the above definitions, a minimum of 30 percent of the total site shall be set aside for open space that is commonly owned or publicly dedicated.</p>	<p>Consistent. Approximately 30 percent of the project site will be set aside for public open space.</p>
<p>3.7 Specific Development Standards</p>	
<p>3.7.1: Vehicular driveway access to and from the site shall occur off of Town Center Boulevard and/or Vine Street.</p>	<p>Consistent. Vehicles will be able to access the site via Vine Street and Town Center Boulevard.</p>
<p>3.7.2: Common access drives shall be sized to accommodate anticipated traffic.</p>	<p>Consistent. The proposed project’s two vehicle access points will accommodate all anticipated traffic.</p>
<p>3.7.3 Driveway Size: The dimensions of all driveways and aisles shall be adequate to serve the number and design requirements of the parking spaces provided, and shall be in conformance with County standards where no stated or depicted Town Center East Design Guideline standard is established.</p>	<p>Consistent. The dimensions of all driveways and aisles will be in conformance with the County standards where no stated or depicted TCE Design Guideline standards are established.</p>
<p>3.7.4: Off-street parking shall be required for residents and guests within the parking garage or within the Piazza Area. Off-street parking shall be provided as specified in Section 130.35.030 of the Zoning Ordinance, as follows:</p>	<p>Consistent. A 5-level parking structure located in the middle of the complex would accommodate 409 parking spaces and 22 motorcycle parking spaces for residents and visitors, with an additional five spaces of surface parking provided on the site.</p>
<ul style="list-style-type: none"> • Studio and one bedroom units – 1.5 spaces per unit • 2 or more bedroom units – 2 spaces per unit • Guest parking – 1 space per 4 units, except that the County “may reduce or eliminate the required number of guest spaces if (a) Adequate street parking is available, or (b) The site is within 500 feet of a transit/bus stop.” 	
<p>3.7.5: Buildings’ main orientation shall be toward Town Center Boulevard.</p>	<p>Consistent. The proposed project’s main entrance faces onto Town Center Boulevard.</p>
<p>3.7.6 Pedestrian Connections: A pedestrian promenade with continuous street trees shall be provided on Town Center Boulevard, as shown in the existing Development Plan. Pedestrian connections shall be provided to and from other areas of Town Center East along Town Center Boulevard.</p>	<p>Consistent. Pedestrian paths would be provided on-site that lead to building entrance areas, including along Town Center Boulevard. These paths would also connect to the existing sidewalks along Town Center Boulevard and Vine Street which join the existing pedestrian paths within the TCE area.</p>
<p>At least one accessible route shall connect all buildings, facilities, elements and spaces in the project area, subject to ADA standards.</p>	
<p>3.7.7: The Above-grade Parking Garage shall be planted with vegetation as appropriate to accomplish an effective buffer in front of garage walls. Alternatively, parking structures may be exposed to the street when articulated with additional architectural detailing and/or when an architectural-grade concrete or decorative veneer is used. Parking spaces are to be designed and constructed according to local County standards (unless modified by this Development Plan) and level of quality.</p>	<p>Consistent. As shown in Figure 3.0-8, Preliminary Landscape Plan, trees and shrubs will shield the northwestern and northeastern walls. The piazza and both apartment buildings will provide a buffer along the southeastern garage wall, while the southwestern wall will abut one of the two apartment buildings.</p>

Goals and Objectives	Project Consistency
<p>3.7.8: Walls and Fences shall be designed to be compatible with surrounding and adjacent architecture. Heights of walls and fences shall be as required for their intended use and shall not exceed 8 feet unless approved by the Design Review Committee.</p>	<p>Consistent. Walls and fences would be designed to be compatible with surrounding and adjacent architecture and would not exceed eight feet unless approved by the Design Review Committee. Building utilities and equipment would be screened with fences, walls, dense plantings, or decorative architectural features.</p>
<p>3.8 Green Building Standards</p>	
<p>3.8.1: Buildings shall comply with all mandatory measure of the 2010 California Green Building Standards Code and all subsequent amendments.</p>	<p>Consistent. The proposed project will comply with all mandatory measures included in the 2010 California Green Building Standards Code and exceed the 2013 Title 24 standards by 10 percent.</p>
<p>3.8.2: Project planning and design shall address and conform to the goals of California Assembly Bill 32 and California Senate Bill 375.</p>	<p>Consistent. The proposed project’s design will comply with the goals of AB 32 and SB 375 by developing an infill site adjacent to existing commercial uses and public transit.</p>
<p>3.8.3: At later phases of project design development, the applicant shall include a full listing of specific green elements that would be incorporated into the project.</p>	<p>Consistent. The project applicant will be required to submit a full listing of the proposed project’s green elements prior to the issuance of any building permits.</p>
<p>3.9 Signage</p>	
<p>3.9.1 General: Signage is an important feature that contributes to the neighborhood and community character. Signage design within the Plan Area shall be designed to be complementary in character, materials, and style to other buildings within the Town Center East area. Signage, which may be lighted, should be of high quality materials and be only of sufficient number to adequately (1) define, (2) direct, or (3) identify.</p>	<p>Consistent. Signage would be complementary in character, materials, and style to other buildings within the TCE development.</p>
<p>3.9.2 References: Because residential uses are being introduced to Town Center East for this Plan Area, signage shall conform to the appropriate measures of the El Dorado Hills Town Center “Master Signage Program” as described in Appendix 5—Section 2.0 (“Signage Concept”), Section 3.0 (“General Design Requirements”), Section 6.1.2 (“Lot/Pad User Identification Monument Signs”), and Section 6.1.3 (“Lot/Pad User On-Building Identification Sign”) of the Town Center East Development Plan. Signage shall also conform, where relevant, to the County Zoning Ordinance and the El Dorado Hills Specific Plan.</p>	<p>Consistent. All signage included in the proposed project will be required to comply with the El Dorado Hills Town Center Master Signage Program and will be complementary in character, materials, and style to other buildings within the TCE development.</p>
<p>3.9.3 Building Signage: Building ID signage is permitted to be 2-sided, illuminated vertical blade type. Project Applicant shall stipulate design and quantity and be submitted for Design Review Committee and agency review.</p>	<p>Consistent. All proposed plans for the apartment complex would be reviewed by the TCE Design Review, including signage plans. Signage would be complementary in character, materials, and style to other buildings within the TCE development.</p>
<p>3.10 Screening</p>	
<p>3.10.1: Building utilities, HVAC equipment, transmission devices, transformers, backflow preventers, trash areas (excluding solar panels) , large satellite dishes, ground-mounted mechanical equipment, and other similar mechanical or utility equipment, shall be screened with fences, walls, dense planting, or decorative architectural features. Roof top equipment is to be screened with either parapets or other roof forms.</p>	<p>Consistent. All utility equipment panels and devices will be screened or enclosed.</p>
<p>3.10.2: Line of site drawings indicating screening of equipment from the right-of-way on the opposite side from all streets and topography from the buildings are to be provided with project site plan review submittal.</p>	<p>Consistent. The final site plan will include drawings indicating screening of equipment from the right-of-way on the opposite side from all streets and topography from the buildings.</p>
<p>3.10.3: Utility service areas, such as electrical panels, shall be placed within enclosures that are architecturally, integrated into the building design.</p>	<p>Consistent. All utility service areas would be enclosed to ensure they are not visible from the perimeter of the project site.</p>

Goals and Objectives	Project Consistency
3.11 Water Conserving Landscape Measures	
<p>3.11.1 Plant materials planned for the area shall conform to State and regional water conservation standards and also shall be based on the Department of Water Resources (DWR) "Water Use Classification of Landscape Species" (WUCOLS) guide. "Low" to "very low" water demand plant materials are encouraged to constitute the majority of plant materials incorporated into the project. However, hardiness, functionality, micro-climates, maximum allowed water use (see 6.3.4) and aesthetics all should be considered when selecting a palette of plant materials. Natives and non-natives may be mixed together in an effort to balance sustainability and the aesthetic vision of the designer. (see sections following for further information)</p>	<p>Consistent. The proposed project's plant palette will be selected based on their proposed location and micro-climate expectations. The plant palette would utilize at least 60 percent native California or low water use plant materials appropriate to the climate zone region.</p>
<p>3.11.2 Lawn and Turf Area Reductions: While it is acknowledged that lawn and turf areas are necessary for certain active recreational and aesthetic purposes, use of turf areas will be restricted to a maximum of 50% of the landscape in order to reduce irrigation water and energy usage. If an area is intended for active pedestrian use (i.e., formal or informal play, recreation, etc.), then lawn and turf may be used</p>	<p>Consistent. High water use lawn grass area would be limited to not more than 50 percent of the landscape, and would be irrigated by a low volume pop-up rotary system.</p>
<p>3.11.3 Automatic Irrigation: All irrigated landscaped areas will be maintained with an automatic irrigation system. All irrigation valves shall be connected to an automatic "smart" irrigation control system.</p>	<p>Consistent. Common area and perimeter area landscape irrigation would consist of a combination of water conserving low volume rotary sprays (where appropriate in large ground cover areas), traditional drip irrigation, and/or an in-line drip irrigation system. The irrigation system shall be designed to meet the most current State and local agency water conservation policies/standards.</p>
<p>3.11.4 Water-Conserving Irrigation: Irrigation methods and water budgets will follow the State Water Conservation Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU) guidelines, together with guidelines from Assembly Bill 1881, in order to create a framework for landscape water conservation. Irrigation designs and practices will employ low-flow, water-efficient spray heads and emitters wherever feasible.</p>	<p>Consistent. Common area and perimeter area landscape irrigation would consist of a combination of water conserving low volume rotary sprays (where appropriate in large ground cover areas), traditional drip irrigation, and/or an in-line drip irrigation system. The irrigation system shall be designed to meet the most current State and local agency water conservation policies/standards.</p>
<p>3.11.5 Calculations Basis: Annual rainfall used to calculate Maximum Applied Water Allowance shall be based on location specific data for the Hydrologic Region provided by the California State Climatologist, Department of Water Resources. The formula, from the California Department of Water Resources "Water Budget Workbook" for calculating a project's MAWA is:</p>	<p>Not Applicable: The proposed project will follow the formula found in the California Department of Water Resources "Water Budget Workbook" for calculating a project's MAWA.</p>
<ul style="list-style-type: none"> • MAWA= (ET_o) x 0.62 x [(0.7xLA)+(0.3xSLA)] in which: • ET_o = Evapotranspiration rate for El Dorado Hills area (47.3 per State Model Water Efficient Landscape Ordinance Camino Station) • 0.7= ET adjustment factor; • LA = Landscape area (in square feet) requiring irrigation; • 0.62= conversion factor for MAWA in gallons/yr. • SLA = A Special Landscape Area of the landscape dedicated solely to edible plants , areas irrigated with recycled water, water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface. 	

Goals and Objectives	Project Consistency
<p>3.11.6 Submittal of Water Conservation Plan: Landscape improvement plans shall include a water conservation budget that conforms to the local and State water conservation programs, including calculations to demonstrate the project's Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU), shall be submitted to the County at time of the project Improvement Plans Review.</p>	<p>Consistent. The design of the landscape/irrigation system is intended to meet the State of California's Landscape Water Conservation Model Ordinance. Toward this end the project would include the following practices:</p> <ul style="list-style-type: none"> • High water use lawn grass area will be limited to no more than 50 percent of the landscape and shall be irrigated by a low volume pop-up rotary system. • Plant materials will be selected based on their proposed location and micro-climate expectations. • Hydrozone irrigation techniques will be incorporated. • The plant palette will utilize at least 60 percent native California or low water use plant materials appropriate to the climate zone region. • Common area and perimeter area landscape irrigation will consist of a combination of water conserving low volume rotary sprays (where appropriate in large ground cover areas), traditional drip irrigation, and/or an in-line drip irrigation system. • The irrigation system shall be designed to meet the most current State and local agency water conservation policies/standards.
<p>3.12 General Planning Provisions</p>	
<p>3.12.1 Minimum Plant Sizes at Installation:</p> <ul style="list-style-type: none"> • Trees: --Minimum 15-gallon size; Street Trees--Minimum 24-inch box; • Shrubs: Overall--Minimum 2-gallon size. In prominent areas (project entries, Amenity Center, courtyards, etc.), minimum 5-gallon size. • Perennials, Ornamental Grasses and Ground Cover: Minimum 1-gallon size, spaced to attain full coverage within 3 years. 	<p>Consistent. The proposed project's plant materials would meet the minimum plant size requirements.</p>
<p>3.12.2 Hydrozones: Plants with similar water use needs shall be grouped together in distinct hydrozones, and where irrigation is required, the distinct hydrozones shall be irrigated with separate valves. Low and moderate water use plants can be mixed, but that overall hydrozone should be classified as "moderate" water use if the moderate use plants exceed 25% of that zone. High water use plants should be limited in use, and, where use is necessary or desired as a part of the design, shall not be mixed with low or moderate water use plants.</p>	<p>Consistent. The proposed project would incorporate hydrozone irrigation techniques.</p>
<p>3.12.3 Slope Planting: Areas to be planted with turf shall not be used in slopes in excess of 4:1. All planter areas in excess of 3:1 slopes shall be treated with erosion control geotextile materials and plant materials appropriate to steep slope conditions. All planting areas shall be graded to drain at a 2% minimum gradient.</p>	<p>Consistent. Turf areas associated with the proposed project will not be located on sloped areas in excess of 4:1.</p>
<p>3.12.4 Invasive Plants: Known invasive plants are prohibited in the Plan Area.</p>	<p>Consistent. As shown in Figure 3.0-8, Preliminary Landscape Plan, no invasive plant species would be included on the project site.</p>

Source: Draft El Dorado Hills Town Center East Urban Infill Residential Area Residential Design Guidelines and Development Standards, 2017

As the foregoing analysis shows, the proposed project would be consistent with the policies applicable to the project site. With the approval of the proposed GPA, EDHSP and TCE Development Plan amendments, the proposed project would be consistent with the County General Plan and EDHSP. As noted above, the environmental impacts that could result from the approval of the amendments are analyzed in **Sections 4.1** through **4.10** of this Draft EIR. The analysis shows that with mitigation, all significant environmental impacts associated with the development of the proposed multi-family residential project supported by the proposed amendments would be reduced to a less than significant level.

Mitigation Measures: No mitigation measures are required.

4.5.4.5 Cumulative Impacts and Mitigation Measures

Cumulative Impact C-LU-1: **The proposed project, in conjunction with other past, present and reasonably foreseeable future development, would not result in significant cumulative impacts related to land use and planning. (*Less than Significant*)**

The TCE area is predominately developed, and the proposed project would occur on an infill site. The planned development occurring within the TCE area, which includes the project site, is development that is consistent with the plan for this area. Therefore, although the approved and pending projects would alter the land uses in the project area, this cumulative development would not be inconsistent with the County's vision for this area.

As discussed in **Table 4.0-1, Related Projects**, future development in western El Dorado County would result in the addition of approximately 18,290 single-family units and 970 multi-family units (including the project's 214 multi-family units), and these additional units would help improve the County's jobs/housing balance. In addition, future development in the County would be reviewed for consistency with the General Plan designations and policies by the County, in accordance with the requirements of CEQA, the State Zoning and Planning Law, and the State Subdivision Map Act, all of which require findings of plan and policy consistency prior to approval of entitlements for development. For this reason, impacts associated with inconsistency of future development in the County with adopted plans and policies would not be significant. As shown in the analysis above, the proposed project would not conflict with any local or regional plans adopted for avoiding environmental impacts. The proposed project would not contribute to any cumulative land use impacts, and this impact would be less than significant.

Further, of the future projects included in **Table 4.0-1**, only five projects (presented in the tables in italics) are within 1.5 miles of the project site, with the closest reasonably foreseeable project located less than 1 mile to the north of the project site across U.S. 50. The proposed project would not contribute to any cumulative land use impacts resulting from the implementation of the projects across U.S. 50.

Mitigation Measures: No mitigation measures are required.

4.5.5 REFERENCES

County of El Dorado. 2016. *Draft El Dorado Hills Town Center East Urban Infill Residential Area Residential Design Guidelines and Development Standards*

County of El Dorado. 2013. *El Dorado County General Plan - Housing Element*. Adopted October 29.

County of El Dorado. 2004. *El Dorado County General Plan - Land Use Element*. Adopted July 19. Last amended December 2015.

Sacramento Area Council of Governments. 2016. *Metropolitan Transportation Plan/Sustainable Communities Strategy*

4.6.1 INTRODUCTION

This section presents existing noise conditions in the project area, including the project site, and analyzes the potential noise impacts, both temporary (i.e., construction) and long term (i.e., operational), from the implementation of the proposed El Dorado Hills Apartments project (“proposed project”).

4.6.2 ENVIRONMENTAL SETTING

Fundamentals of Sound and Environmental Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. **Table 4.6-1, Representative Environmental Noise Levels**, below, illustrates representative noise levels for the environment.

**Table 4.6-1
Representative Environmental Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Threshold of Pain	-140-	Threshold of Pain
Jet Take-off at 300 feet	-125-	
	-110-	Rock Band
Jet Fly-over at 100 feet	-100-	
Jackhammer at 45 feet		
Gas Lawnmower at 3 feet	-90-	
		Food Blender at 3 feet
Diesel Truck going 50 mph at 50 feet	-80-	Garbage Disposal at 3 feet
Noisy Urban Area during Daytime		
Gas Lawnmower at 100 feet	-70-	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	-60-	
		Large Business Office
Quiet Urban Area during Daytime	-50-	Dishwasher in Next Room
Quiet Urban Area during Nighttime	-40-	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime		
	-30-	Library
Quiet Rural Area during Nighttime		Bedroom at Night, Concert Hall (background)
	-20-	
		Broadcast/Recording Studio
	-10-	
Lowest Threshold of Human Hearing	-0-	Lowest Threshold of Human Hearing

Source: United States Occupational Safety & Health Administration, Noise and Hearing Conservation Technical Manual, 1999, California Department of Transportation, 1998.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- **Equivalent Noise Level:** L_{eq} represents the average noise level on an energy basis for a specific time period. For example, the L_{eq} for one hour is the energy average noise level during that hour. The

average noise level is based on the energy content (acoustic energy) of sound. L_{eq} can be thought of as a continuous noise level of a certain period equivalent in energy content to a fluctuating noise level of that same period. L_{eq} is expressed in units of dBA.

- L_{max} – The maximum instantaneous noise level experienced during a given period of time.
- L_{min} – The minimum instantaneous noise level experienced during a given period of time.
- Community Noise Equivalent Level: CNEL is an adjusted noise measurement scale of average sound level during a 24-hour period. Due to increased noise sensitivities during evening and night hours, human reaction to sound between 7:00 P.M. and 10:00 P.M. is as if it were actually 5 dBA higher than had it occurred between 7:00 A.M. and 7:00 P.M. From 10:00 P.M. to 7:00 A.M., humans perceive sound as if it were 10 dBA higher. To account for these sensitivities, CNEL is obtained by adding an additional 5 dBA to evening noise levels between 7:00 P.M. and 10:00 P.M. and 10 dBA to nighttime noise levels between 10:00 P.M. and 7:00 A.M. Because of this, 24-hour CNEL figures are always higher than their corresponding actual 24-hour averages.

Effects of Noise

The degree to which noise can impact an environment ranges from levels that interfere with speech and sleep to levels that can cause adverse health effects. However, human response to noise is subjective and can vary from person to person. Factors that influence individual responses include the intensity, frequency, and pattern of noise; the amount of background noise present before any additional noise; and the nature of work or human activity exposed to the source noise.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 45 dBA, moderate in the 45–60 dBA range, and high above 60 dBA. According to the National Institute of Health (NIH), extended or repeated exposure to sounds at or above 85 decibels can cause hearing loss (NIDCD 2017). Examples of low daytime levels are isolated natural settings with noise levels as low as 20 dBA and quiet suburban residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55–60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60–75 dBA) or dense urban or industrial areas (65–80 dBA).

Audible Noise Changes

People with normal hearing sensitivity can recognize small perceptible changes in sound levels of approximately 3 dBA. Changes of at least 5 dBA can be readily noticeable and may even cause

community reactions. Sound level increases of 10 dBA or greater are perceived as a doubling in loudness and can provoke a community response from those so affected (FTA 2006).

Noise is most audible when traveling by direct line-of-sight, i.e., an unobstructed visual path between noise source and receptor. Barriers that break line-of-sight between sources and receivers, such as walls and buildings, can greatly reduce source noise levels by allowing noise to reach receivers by diffraction only. Other factors such as the weather and reflecting or shielding also intensify or reduce the noise level at any given location.

In addition, noise levels from a particular source generally decline as distance to the receptor increases. Noise from stationary or point sources is reduced by about 6 dBA for every doubling of distance. Noise levels decrease as the distance from noise source to receiver increases. For each doubling of distance, noise from stationary sources (“point sources”) can decrease by approximately 6 dBA over hard surfaces (i.e., reflective surfaces such as parking lots) and 7.5 dBA over soft surfaces (i.e., absorptive surfaces such as soft dirt and grass). For example, if a point source produces a noise level of 89 dBA at a reference distance of 50 feet, the noise level would be approximately 83 dBA at a distance of 100 feet, 77 dBA at 200 feet, etc. Noise generated by mobile sources can decrease by approximately 3 dBA over hard surfaces and 4.5 dBA over soft surfaces for each doubling of distance.

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 dBA with closed windows. The exterior-to-interior reduction of newer homes is generally 30 dBA or more.

Fundamentals of Vibration

Characteristics of Vibration

Vibration is an oscillatory motion through a solid medium in which the motion’s amplitude can be described in terms of displacement, velocity, and acceleration. Unlike noise, vibration is not a common environmental problem, as it is unusual for vibration from vehicular sources to be perceptible. Common sources of vibration include trains, buses, and construction activities.

Vibration Definitions

Peak particle velocity (PPV) can be used to describe vibration impacts to both buildings and humans. PPV represents the maximum instantaneous peak of a vibration signal, and it is usually measured in inches per second (Caltrans 2013).

Root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on land uses. RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration (FTA 2006).

Effects of Vibration

High levels of vibration may cause physical personal injury or damage to buildings. However, ground-borne vibration levels rarely affect human health. Instead, most people consider ground-borne vibration to be an annoyance that can affect concentration or disturb sleep. Ground-borne vibration can also interfere with certain types of highly sensitive equipment or machines, especially imaging devices used in medical laboratories.

Perceptible Vibration Changes

Unlike noise, ground-borne vibration is not an environmental issue that most people experience every day. Background vibration levels in residential areas are usually well below the threshold of perception for humans, which is around 0.01 inches per second (FTA 2006). Perceptible indoor vibrations are most often caused by sources within buildings themselves, such as slamming doors. Typical outdoor sources of ground-borne vibration include construction equipment, trains, and traffic on rough roads. Traffic vibration from smooth and well-maintained roads is typically not perceptible.

Noise Sensitive Land Uses

For purposes of this analysis, noise sensitive receptors include residences, places of worship, schools, hospitals, parks, and businesses where there is an expectation of quiet. The nearest noise sensitive receptors within 1,000 feet of the proposed project are:

- Regal Cinemas 14 located approximately 220 feet to the east of the project site
- Holiday Inn Express located approximately 430 feet to the southwest of the project site
- Lakehills Covenant Church located approximately 900 feet to the east of the project site

- El Dorado Hills Kindercare located approximately 900 feet to the northwest of the project site.

Other sensitive receptors in the vicinity of the project site include residential uses (Sunset Mobile Home Park and the Cresleigh Subdivision) and a park (Creskide Greens Park) located approximately 0.25 miles south of the project site across White Rock Road. No hospitals or schools are located within the immediate vicinity of the project site. The closest schools (Oak Meadow Elementary School and William Brooks Elementary School) are both located approximately 0.8 miles to the northwest and northeast of the project site, respectively. The nearest hospital (Mercy Hospital of Folsom) is located approximately 4.5 miles northwest of the project site. Other sensitive receptors, including residences and a school, are located along roadways that would be used by project related vehicular traffic.

Existing Noise Environment

The primary existing noise source throughout the project area is motor vehicle traffic. Localized intermittent sources of noise include sounds from parking lots and curbside parking activities, mechanical equipment, car sirens, and delivery trucks. Other sources of localized periodic noise include a seasonal Farmer's Market which is held within the Town Center and occasional fireworks displays.

Roadway Noise

The existing ambient noise levels were estimated for the segments of roadways near the project site based on average daily traffic volumes provided in the traffic study for this project (Fehr & Peers 2017). The traffic noise was modeled using the Federal Highway Administration Highway (FHWA) Traffic Noise Model Version 2.5 (TNM 2.5). The highest traffic volumes during either the AM or PM peak hour were used as inputs into the model. The results of the noise modeling are presented in **Table 4.6-2, Existing Roadway Modeled Noise Levels**. As shown, the modeled roadway noise levels range from approximately 52.2 dBA Ldn along Town Center Boulevard at the boundary of the project site to about 67.7 dBA Ldn at the property line of the residences adjacent to Latrobe Road, just northeast of the intersection with Golden Foothill Parkway/Monte Verde Drive. It is noted that noise levels along these roadways are likely higher than this level due to the contribution of noise from other sources. However, traffic is the dominant noise source in the area.

**Table 4.6-2
Existing Roadway Modeled Noise Levels**

Roadway Segment	Sensitive Receptor (Distance to Roadway Centerline)	Estimated dBA, Ldn at Nearest Sensitive Receptor
Town Center Boulevard East of Post Street	Project Site (60 feet)	52.2
Latrobe Road South of White Rock Road	Residence (100 feet)	67.7
White Rock Road from Post Street to Valley View Parkway	Residence (50 feet)	66.6
Valley View Parkway South of White Rock Road	Residence (90 feet)	61.6
Silva Valley Parkway North of U.S. 50	Oak Meadow Elementary School (150 feet)	63.8

Source: Impact Sciences, 2017.

It should be noted that the noise level modeled along Town Center Boulevard is similar to noise long- and short-term measurements taken in 2014 as part of the noise study prepared by J.C. Brennan & Associates (2014). The on-site 24-hour noise measurement for the project site was 55.9 dBA Ldn, and day time short-term measurements ranged from 51.4 to 55.0 dBA Leq.

Stationary and Area Sources

Stationary and area noise sources include parking lots, mechanical equipment, such as air conditioners and ventilation systems, and landscape maintenance. These noise sources result in environmental effects when they are in proximity of land uses where people are likely to be sensitive to noise.

4.6.3 REGULATORY CONSIDERATIONS

4.6.3.1 Federal Laws and Regulations

Currently, no federal noise standards regulate environmental noise associated with short-term construction or the long-term operations of development projects.

4.6.3.2 State Laws and Regulations

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise exposure, and noise insulation.

Though not adopted by law, the *State of California General Plan Guidelines 2003*, published by the Governor's Office of Planning and Research (2003), provide guidance for the compatibility of projects

within areas of specific noise exposure. Acceptable and unacceptable community noise exposure limits for various land use categories have been determined to help guide new land use decisions in California communities (OPR 2003). In many local jurisdictions, these guidelines are used to derive local noise standards and guidance.

4.6.3.3 Local Plans and Policies

County of El Dorado General Plan

The following presents guiding and implementing policies from the current County of El Dorado General Plan (2004) relevant to noise and contained within the Public Health, Safety, and Noise Element.

GOAL 6.5: ACCEPTABLE NOISE LEVELS: Ensure that County residents are not subjected to noise beyond acceptable levels.

OBJECTIVE 6.5.1: PROTECTION OF NOISE-SENSITIVE DEVELOPMENT: Protect existing noise-sensitive developments (e.g., hospitals, schools, churches and residential) from new uses that would generate noise levels incompatible with those uses and, conversely, discourage noise-sensitive uses from locating near sources of high noise levels.

Policy 6.5.1.1 Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 6-1 (presented as **Table 4.6-3** in this Draft EIR) or the performance standards of Table 6-2 (presented as **Table 4.6-4** in this Draft EIR), an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 6.5.1.3 Where noise mitigation measures are required to achieve the standards of Table 6-1 (presented as **Table 4.6-3** in this Draft EIR) and Table 6-2 (presented as **Table 4.6-4** in this Draft EIR), the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all practical design-related noise mitigation measures have been integrated into the project and the noise barriers are not incompatible with the surroundings.

Policy 6.5.1.5 Setbacks shall be the preferred method of noise abatement for residential projects located along U.S. Highway 50. Noise walls shall be discouraged within the foreground viewshed of the U.S. Highway 50 and shall be discouraged in favor

of less intrusive noise mitigation (e.g., landscaped berms, setbacks) along other high volume roadways.

Policy 6.5.1.8

New development of noise sensitive land uses will not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources which exceed the levels specified in Table 6-1 (presented as **Table 4.6-3** in this Draft EIR) unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in Table 6-1 (presented as **Table 4.6-3** in this Draft EIR).

Policy 6.5.1.9

Noise created by new transportation noise sources, excluding airport expansion but including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 6-1 (presented as **Table 4.6-3** in this Draft EIR) at existing noise-sensitive land uses.

Table 4.6-3
Maximum Allowable Noise Exposure for Transportation Noise Sources

Land Use	Outdoor	Interior Spaces	
	Activity Areas ¹	L _{dn} /CNEL, dB	L _{eq} , dB ²
Residential	60 ³	45	--
Transient Lodging	60 ³	45	--
Hospitals, Nursing Homes	60 ³	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60 ³	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Source: El Dorado County General Plan, Noise Element, Table 6-1, 2004.

1. In Communities and Rural Centers, where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB L_{dn} shall be applied at the building façade, in addition to a 60 dB L_{dn} criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L_{dn} shall be applied at a 100-foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB L_{dn} may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.

2. As determined for a typical worst-case hour during periods of use.

3. Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Table 4.6-4
Noise Level Performance Protection Standards for Noise Sensitive Land Uses Affected by Non-Transportation¹ Sources

Noise Level Descriptor	Daytime 7 a.m. – 7 p.m.		Evening 7 p.m. – 10 p.m.		Night 10 p.m. – 7 a.m.	
	Community	Rural	Community	Rural	Community	Rural
Hourly L_{eq} , dB	55	50	50	45	45	40
Maximum level, dB	70	60	60	55	55	50

Source: El Dorado County General Plan, Noise Element, Table 6-2, 2004.

Each of the noise levels specified above shall be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

In Community areas the exterior noise level standard shall be applied to the property line of the receiving property. In Rural Areas the exterior noise level standard shall be applied at a point 100' away from the residence. The above standards shall be measured only on property containing a noise sensitive land use as defined in Objective 6.5.1. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all effected property owners and approved by the County.

¹ For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Control of noise from facilities of regulated public facilities is preempted by California Public Utilities Commission (CPUC) regulations. All other noise sources are subject to local regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, schools, hospitals, commercial land uses, other outdoor land use, etc.

Policy 6.5.1.11

The standards outlined in Table 6-3 (presented as **Table 4.6-5** in this Draft EIR) shall not apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends, and on federally-recognized holidays. Further, the standards outlined in Table 6-3 shall not apply to public projects to alleviate traffic congestion and safety hazards.

Table 4.6-5
Maximum Allowable Noise Exposure for Non-transportation Noise Sources in Community Regions and Adopted Plan Areas – Construction Noise

Land Use Designation ¹	Time Period	Noise Level (dB)	
		Leq	L _{max}
Higher-Density Residential (MFR, HDR, MDR)	7 am – 7 pm	55	75
	7 pm – 10 pm	50	65
	10 pm – 7 am	45	60
Commercial and Public Facilities (C, R&D, PF)	7 am – 7 pm	70	90
	7 pm – 7 am	65	75
Industrial (I)	Any Time	80	90

Source: El Dorado County General Plan, Noise Element, Table 6-3, 2004.

1 Adopted Plan areas should refer to those land use designations that most closely correspond to the similar General Plan land use designations for similar development

Policy 6.5.1.12

When determining the significance of impacts and appropriate mitigation for new development projects, the following criteria shall be taken into consideration:

- A. Where existing or projected future traffic noise levels are less than 60 dBA Ldn at the outdoor activity areas of residential uses, an increase of more than 5 dBA Ldn caused by a new transportation noise source will be considered significant;
- B. Where existing or projected future traffic noise levels range between 60 and 65 dBA Ldn at the outdoor activity areas of residential uses, an increase of more than 3 dBA Ldn caused by a new transportation noise source will be considered significant; and
- C. Where existing or projected future traffic noise levels are greater than 65 dBA Ldn at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA Ldn caused by a new transportation noise will be considered significant.

Policy 6.5.1.13

When determining the significance of impacts and appropriate mitigation to reduce those impacts for new development projects, including ministerial development, the following criteria shall be taken into consideration:

- A. In areas in which ambient noise levels are in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new non-transportation noise sources that exceed 5 dBA shall be considered significant; and
- B. In areas in which ambient noise levels are not in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new non-transportation noise sources that exceed 3 dBA shall be considered significant.

El Dorado County Ordinance Code

According to Section 130.37, Noise Standards, of the El Dorado County Ordinance Code, construction (e.g., construction, alteration or repair activities) during daylight hours are exempt from County noise standards provided that all construction equipment is fitted with factory installed muffling devices and maintained in good working order.

4.6.4 IMPACTS AND MITIGATION MEASURES

4.6.4.1 Significance Criteria

In accordance with Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, the impacts of the proposed project related to noise and vibration would be considered significant if the project would:

- 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;
- Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- Result in exposure of people residing or working in the project area to excessive noise levels if the project is located within an area covered by an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport; or
- Result in exposure of people residing or working in the project area to excessive noise levels if the project is located in the vicinity of a private airstrip.

Operational Noise Thresholds

Operational noise thresholds consider both the County's transportation noise exposure limits identified in **Table 4.6-3** and non-transportation noise exposure limits for sensitive uses identified in **Table 4.6-4**, and community response to changes in noise levels. Off-site noise-sensitive uses in the vicinity of the project site include mobile homes, single-family residences, and parks.

Non-Transportation-related Noise

A significant non-transportation-related noise impact would occur if exterior locations at these sensitive locations were to experience non-transportation noise levels above 55 Leq and 70 Lmax between 7 AM and 7 PM, 55 Leq and 70 Lmax between 7 PM and 10 PM, and 55 Leq and 70 Lmax between 10 PM and 7 AM due to the proposed project.

Transportation-related Noise

Changes in noise levels of less than 3 dBA are typically not noticed by the human ear. Changes from 3 to 5 dBA would be noticed by some individuals who are sensitive to changes in noise. A 5 dBA increase is readily noticeable. Based on this information, and Policy 6.5.1.12 of the General Plan, the following thresholds were used in this EIR to evaluate the significance of the project-related transportation noise increases:

- An increase of 5 dBA or greater in noise level that occurs from project-related traffic would be considered significant where existing or projected future traffic noise levels are less than 60 dBA.
- An increase of 3 dBA or greater in noise level that occurs from project-related traffic would be considered significant where existing or projected future traffic noise levels range between 60 and 65 dBA Ldn.
- An increase of 1.5 dBA or greater in noise level that occurs from project-related traffic would be considered significant where existing or projected future traffic noise levels are greater than 65 dBA Ldn.

Construction Noise Thresholds

Construction thresholds consider the County's maximum construction noise exposure limits identified in **Table 4.6-5**. However, as detailed in General Plan Policy 6.5.1.11 and Section 130.37 of the El Dorado County Ordinance Code, construction occurring between the hours of 7 AM and 7 PM, Monday through Friday, and between 8 AM and 5 PM on weekends and federally recognized holidays is exempt from the standards listed in **Table 4.6-5**. Therefore, a significant impact would occur if construction activities occurred outside of the hours set forth in **Table 4.6-5**, or on federally recognized holidays.

4.6.4.2 Issues adequately addressed in the Initial Study

As noted in the Initial Study, groundborne vibration or noise would primarily be generated during construction of the proposed project as a result of traffic associated with the transport of heavy materials and equipment to and from the construction site, as well as active construction operations at the project site. These temporary increases in groundborne vibration levels would be of short duration, and would occur primarily during daytime hours. Construction activities are limited by grading permit requirements to the hours of 7:00 AM to 7:00 PM, Monday through Friday, and 8:00 AM to 5:00 PM, on weekends, and on federally recognized holidays. As no vibration-sensitive land uses or older structures exist in the immediate vicinity of the project site (the nearest sensitive receptor is located 220 feet from the project site), a temporary increase in groundborne vibration levels would not create any significant impacts, and no further analysis is necessary in this EIR.

As discussed in the Initial Study, the Cameron Airpark Airport is located approximately 4.6 miles northeast of the project site. It is a public use airport with two runways and an average of 99 daily operations. The project site is not within the Airport Influence Area of the Cameron Airpark Airport established in the Land Use Compatibility Plan. There would be no impact. No further analysis is required in this EIR.

4.6.4.3 Methodology

Short-term noise-level measurements were taken on the project site on March 24, 2014 (J.C. Brennan & Associates 2014). The lowest ambient sound level reading (51.4 dBA) was applied to nearby noise-sensitive receptors as a baseline ambient sound level for evaluating noise impacts.

Noise levels associated with project-related construction activities were calculated using the FHWA Roadway Construction Noise Model (RCNM) and combined with existing ambient noise level readings to determine new ambient noise levels with construction activities.

Noise from stationary sources includes noise generated by residential activity, such as heating, ventilation, and air conditioning (HVAC), and on-site parking noise. Average noise levels for such activities were added to a worst-case existing ambient sound level reading of 51.4 dBA to provide a worst-case scenario sound level increase to compare to County thresholds.

Traffic noise in the project area was modeled using average daily traffic (ADT) which was derived by averaging peak hour counts from the project's transportation impact assessment (Fehr & Peers 2017) and applying a growth multiplier of 10. These average daily traffic volumes were input into the FHWA

TNM2.5 model (**Appendix 4.6**) to estimate transportation noise levels with and without the project. The estimated noise levels were compared to thresholds provided by General Plan Policy 6.5.1.12.

4.6.4.4 Project Impacts and Mitigation Measures

Impact NOI-1: **The proposed project would generate increased traffic in the project vicinity but the increase in traffic would not cause a substantial permanent increase in noise levels at off-site sensitive receptors. (*Less than Significant*)**

The proposed project would generate daily vehicle trips that would affect roadways between the project site and the nearest freeway as well as other local roads. As shown in **Table 4.6-2**, sensitive receptors that include residences and a school are located along some of the study area roadways. The impact of this additional traffic on ambient noise levels along the study area roadways was modeled with FHWA TNM 2.5, comparing an existing year no project scenario to an existing year with project scenario. As shown in **Table 4.6-6, Operational Roadway Noise Levels – Existing Plus Project Conditions**, the largest ambient noise level increase as a result of project traffic would be 2.7 dBA, occurring on Town Center Boulevard, east of Post Street (i.e., near the project site). The increase along all other study area roadways would be much smaller (on the order of 0 to 0.7 dBA).

**Table 4.6-6
Operational Roadway Noise Levels – Existing Plus Project Conditions**

Roadway Segment	Estimated dBA, Ldn at Adjacent Sensitive Receptors			
	Existing No Project	Existing Plus Project	Project Change	Significant Impact?
Town Center Boulevard East of Post Street	52.2	54.9	2.7	No
Latrobe Road South of White Rock Road	67.7	67.7	0.0	No
White Rock Road from Post Street to Valley View Parkway	66.6	67.3	0.7	No
Valley View Parkway South of White Rock Road	61.6	62.0	0.4	No
Silva Valley Parkway North of U.S. 50	63.8	64.3	0.5	No

Source: Impact Sciences, 2017.

This increase in ambient noise levels is below the threshold of audibility and would not cause ambient noise levels measured at the property lines of affected land uses to rise by an audible 3 dBA. Additionally, this increase in ambient noise would not exceed the El Dorado County General Plan threshold of a 5.0 dBA noise level increase where traffic noise is less than 60 dBA Ldn. At all other roadway segments, project-related mobile noise increases would have an even lesser impact. As a result, the project's off-site vehicular noise impacts would be considered less than significant.

Mitigation Measures: No mitigation measures are required.

Impact NOI-2: The proposed project would add new stationary and area noise sources to the project site but noise from these new noise sources would not cause a substantial permanent increase in ambient noise levels that could affect off-site sensitive receptors. (*Less than Significant*)

HVAC Systems

The HVAC systems that would be installed for the proposed project would typically result in noise levels of approximately 45 dBA L_{eq} at 100 feet from the equipment (MBA 2011). **Table 4.6-7, HVAC Noise Levels**, provides the maximum noise levels that would be experienced by sensitive receptors and other land uses within 1,000 feet of the project site from the operation of HVAC equipment associated with the project.

**Table 4.6-7
HVAC Noise Levels**

Sensitive Receptor	Distance from Site (feet)	Maximum HVAC Noise Level (dB(A))	Existing Ambient Noise Level (dB(A), L_{eq})	New Ambient Noise Level (dB(A), L_{eq})	Increase
Regal Cinemas	220	29.2	51.4	51.4	0.0
Holiday Inn Express	430	26.3	51.4	51.4	0.0
Lakehills Covenant Church	900	7.9	51.4	51.4	0.0
El Dorado Hills Kindercare	900	7.9	51.4	51.4	0.0

Source: Impact Sciences, 2017.

As shown in the table above, HVAC equipment associated with the proposed project would not generate an audible 3 dBA increase in ambient noise levels at the closest sensitive receptors. Other more distant sensitive receptors (e.g., Sunset Mobile Home Park, the Cresleigh Subdivision, Creekside Greens Park) would experience even lower noise level increases, which would not be audible. The resultant noise levels would not exceed the County's exterior noise level standards (**Table 4.6-3**) applicable to these non-residential and residential uses. Therefore, this impact would be less than significant.

Parking Facilities

It is anticipated that sources of noise from the parking garage included in the project would include tires squealing, engines accelerating, doors slamming, and car alarms. Noise levels at the parking garage would fluctuate with the amount of automobile and human activity at the site. During times when the largest number of people would enter and exit the project site, the noise levels at the parking facility onsite would range from 60 to 70 dBA L_{eq} . **Table 4.6-8, Parking Noise Levels**, provides the maximum noise levels that would be experienced by sensitive receptors within 1,000 feet of the project site from the operation of the parking facility associated with the project.

**Table 4.6-8
Parking Noise Levels**

Sensitive Receptor	Distance from Site (feet)	Maximum Parking Noise Level (dB(A))	Existing Ambient Noise Level (dB(A), Leq)	New Ambient Noise Level (dB(A), Leq)	Increase
Regal Cinemas	220	48.1	51.4	53.1	1.7
Holiday Inn Express	430	45.3	51.4	52.4	1.0
Lakehills Covenant Church	900	26.9	51.4	51.4	0.0
El Dorado Hills Kindercare	900	26.9	51.4	51.4	0.0

Source: Impact Sciences, 2017.

As shown in the table above, a noise level of 70 dBA L_{eq} would cause a maximum sound level increase of 1.0 dBA L_{eq} at the nearby Holiday Inn Express and 1.7 dBA L_{eq} at the adjacent Regal Cinemas. These increases are not considered perceptible.

On-site noise generated by parking activities at the parking structure on the project site would be further shielded from nearby sensitive receptors by the project buildings, which would be located on two sides of the parking garage. As discussed above, parking noise would not be anticipated to be perceptible at off-site sensitive receptors without any shielding. Therefore, the parking noise analysis provided above is considered conservative. Thus, impacts associated with noise generated as a result of parking activity at the proposed project would not adversely affect the sensitive receptors near the project site, and this impact would be less than significant.

Combined On-Site Operational Noise

As discussed above, noise emanating from HVAC equipment would not cause a measureable increase in ambient noise levels. When HVAC noise levels are combined with parking noise levels, the maximum increase in noise levels remains at 1.0 dBA L_{eq} and 1.7 dBA L_{eq} at the Holiday Inn Express and Regal Cinemas, respectively (**Appendix 4.6**). As discussed above, this would not increase noise levels by an audible 3 dBA increase, therefore impacts associated with noise generated as a result of the combined parking and HVAC activity at the proposed project would not adversely affect the sensitive receptors near the project site, and this impact would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact NOI-3: **Implementation of the proposed project would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity during construction. However, due to compliance with County's Noise Ordinance, the noise increase would not be considered significant. (*Less than Significant*)**

Construction of the proposed project would generate noise from a variety of on- and off-site activities, and would include the use of on-site heavy equipment such as bulldozers, as well as smaller equipment such as saws, hammers, and pneumatic tools. Secondary noise could also be generated by construction worker vehicles and vendor deliveries. Typical sound levels associated with construction equipment are shown in **Table 4.6-9, Maximum Noise Levels Generated by Typical Construction Equipment**. For this analysis, construction noise impacts were modeled using the noise reference level for a grader, which can produce average peak noise levels of 85 dBA at a reference distance of 50 feet.¹ Because graders, tractors, bulldozers and other similar tractor-type vehicles are expected to be the loudest and most extensively used pieces of heavy equipment during construction of the proposed project, this analysis examines a "worst-case-scenario;" the noise impacts of all other construction activities and equipment would not exceed those analyzed here.

¹ Federal Highway Administration, Highway Construction Noise Handbook, 2006.

Table 4.6-9
Maximum Noise Levels Generated by
Typical Construction Equipment, L_{max}

Type of Equipment	Actual Measured Noise Level (dBA at 50 feet)
Air Compressor	78
Backhoe	78
Concrete Mixer Truck	79
Crane	81
Dozer	82
Generator	81
Grader	85 ¹
Paver	77
Pump	81
Roller	80
Tractor	84 ¹
Welder	74

Source: FHWA, Highway Construction Noise Handbook, 2006.

1 FHWA does not have data on actual measured noise levels, therefore FHWA provides a specification limit for maximum noise emitted.

Worst-case construction noise levels are anticipated to occur during the site preparation phase of construction. During this phase, it is anticipated that there will be three bulldozers and four tractors operating on-site (De Novo 2017). Estimated construction noise levels are shown in **Table 4.6-10, Construction Noise Levels (Site Preparation)**. The maximum new ambient noise levels from construction would be 65.9 dBA L_{eq} occurring at Regal Cinemas. Other sensitive receptors located further away from the project site, including the church and childcare facility, would experience lower ambient noise levels. All of the new ambient noise levels would be below the maximum allowable noise levels presented in Table 6-3 of the General Plan (presented as **Table 4.6-5** in this Draft EIR).

With regard to off-site construction-related noise impacts, haul trucks would access and exit the project site via Town Center Boulevard and head north on Latrobe Road to access U.S. 50. The project's hauling activities would temporarily increase ambient noise levels at sensitive receptors along the haul route. However, a 3 dBA increase in roadway noise levels requires an approximate doubling of roadway traffic volume, assuming that travel speed and fleet mix remain constant. Though the addition of haul trucks would alter the fleet mix of the haul route, their addition to local roadways would not double the traffic volumes, or increase traffic to levels capable of producing readily noticeable 5.0 dBA increases.

**Table 4.6-10
Construction Noise Levels (Site Preparation)**

Sensitive Receptor	Distance from Site (feet)	Maximum Construction Noise Level (dB(A))	Existing Ambient Noise Level (dB(A), Leq)	New Ambient Noise Level (dB(A), Leq)	Maximum Allowable Noise Exposure – Construction (dB(A), Leq)
Regal Cinemas	220	65.7	51.4	65.9	70
Holiday Inn Express	430	62.9	51.4	63.2	70
Lakehills Covenant Church	900	44.5	51.4	52.2	55
El Dorado Hills Kindercare	900	44.5	51.4	52.2	55

Source: Impact Sciences, 2017.

El Dorado County General Plan Policy 6.5.1.11 and Ordinance Code Section 130.37 exempt construction noise from quantitative County thresholds. The project would comply with the County noise ordinance, and the construction of the proposed project would occur between the hours of 7 AM and 7 PM, Monday through Friday, and between 8 AM and 5 PM on weekends and federally recognized holidays. Furthermore, as the analysis above shows, even with the addition of the project's construction noise, the ambient noise levels at the nearest receptors would remain below the maximum ambient noise levels allowed for those uses under the General Plan. As a result, construction-related noise impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact NOI-4: **The proposed project would not expose on-site sensitive receptors to noise levels in excess of standards established in the County General Plan. (Less than Significant)**

The proposed project would locate new noise-sensitive receptors (project residents) at the project site. Motor vehicle traffic noise would account for the majority of noise levels experienced at the project site. A 24-hour ambient noise measurement was conducted on April 24th, 2014 at the project site, which indicated that the ambient noise level at the project site is about 55.9 dBA Ldn (J.C. Brennan & Associates 2014). This is consistent with and within 0.5 dBA Ldn of the noise level calculated based on traffic volumes in the project areas; the modeled noise level is shown in **Table 4.6-11** and is estimated to be 55 dBA Ldn.

Table 4.6-11 also presents the increase in ambient noise levels at the project site under cumulative conditions. As the table shows, both the existing ambient noise level and the projected ambient noise level at the project site under cumulative conditions are below the maximum allowable noise exposure from transportation sources (60 dBA Ldn) for residential land use under the County General Plan (see **Table 4.6-3** above).

Although there are no airports within 2 miles of the project site, there are several airports in the greater area which have the potential to generate air traffic noise. As discussed above and in the Initial Study, the Cameron Airpark Airport is located approximately 4.6 miles northeast of the project site. The project site is not within the Airport Influence Area of the Cameron Park Airport established in the Land Use Compatibility Plan. The project site is approximately 4.4 miles southwest from the 55-60 dBA CNEL noise contour for Cameron Park Airport (El Dorado County ALUC 2012). Additionally, the project site is approximately 14 miles northeast of Mather Airport. According to the Mather Airport Comprehensive Land Use Plan, the proposed project is well outside of the 60 dBA CNEL noise contour, which extends approximately 5 miles to the northeast of the airport (Sacramento County Department of Airports 2013). The project site is not within the 60 dBA CNEL of any of the area airports, and the project receptors would not be exposed to excessive aircraft noise.

There are no stationary sources of noise near the project site that would contribute additional noise to the noise resulting from transportation sources described above. As a result, the project is considered to be located in a compatible noise environment and would not expose project site receptors to excessive noise. This impact would be considered less than significant.

Mitigation Measures: No mitigation measures are required.

4.6.4.5 Cumulative Impacts and Mitigation Measures

Cumulative Impact C-NOI-1: The proposed project along with other future development in El Dorado County would generate increased traffic, but the increase in traffic would not cause a substantial permanent increase in noise levels at off-site locations. (*Less than Significant*)

Table 4.6-11, Cumulative Mobile Source Noise Levels, shows cumulative plus project noise level increases from increased traffic on roadways that would be affected by project traffic and compares the estimated noise levels to a cumulative without project scenario. As shown in **Table 4.6-11**, the largest ambient noise level increase as a result of project traffic would be 0.4 dBA, occurring on Town Center

Boulevard, east of Post Street. This increase in ambient noise would not exceed the General Plan threshold of 5.0 dBA where traffic noise is less than 60 dBA. This increase in ambient noise would also be below the threshold of audibility and would not cause ambient noise levels measured at the property lines of affected land uses to increase by an audible 3 dBA. Along all other roadway segments, project-related mobile noise increases would have an even lesser impact. As a result, the project's off-site vehicular traffic would not contribute considerably to a significant cumulative noise impact. The impact would be less than significant.

Table 4.6-11
Cumulative Mobile Source Noise Levels

Roadway Segment	Estimated dBA, Ldn at Adjacent Sensitive Receptors			
	Future No Project	Future Plus Project	Project Change	Significant Impact?
Town Center Boulevard East of Post Street	55.0	55.4	0.4	No
Latrobe Road South of White Rock Road	69.1	69.2	0.1	No
White Rock Road from Post Street to Valley View Parkway	68.9	69.0	0.1	No
Valley View Parkway South of White Rock Road	63.2	63.3	0.1	No
Silva Valley Parkway North of U.S.50	67.0	67.0	0.0	No

Source: Impact Sciences, 2017.

Mitigation Measures: No mitigation measures are required.

Cumulative Impact C-NOI-2: Construction activities associated with the proposed project along with other construction projects in El Dorado County would not result in a substantial temporary or periodic cumulative increase in ambient noise levels. *(No Impact)*

With respect to cumulative construction noise impacts, those would occur only if other development projects in El Dorado Hills were to be under construction at the same time as the proposed project and if these concurrent projects would be in close proximity of the same sensitive receptors adjacent to the project site and would expose those receptors to their construction noise. There are no proposed projects that would be located near the proposed project that would result in a cumulative construction noise impact on the nearby receptors. As such, there would not be a cumulative construction noise impact.

Mitigation Measures: No mitigation measures are required.

4.6.5 REFERENCES

- De Novo Planning Group. 2017. Air Quality and Greenhouse Gas Analysis for the El Dorado Hills Apartments Project. May.
- California Department of Transportation (Caltrans). 2013. *Transportation and Construction Vibration Guidance Manual*. September.
- California Office of Planning and Research (OPR). 2003. *General Plan Guidelines, Noise Element Guidelines (Appendix C)*.
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- Federal Transit Administration (FTA). 2006. *Transit Noise and Vibration Impact Assessment*. May.
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- Sacramento County Department of Airports. 2013. *2013 Draft Mather Airport Master Plan*. May.

4.7 PUBLIC SERVICES AND RECREATION

4.7.1 INTRODUCTION

This section describes the existing public services and recreational facilities that serve the project site and its vicinity and potential impacts to these services and facilities from the construction and occupancy of the proposed El Dorado Hills Apartments project (“proposed project”). The public services addressed in this section include fire protection, law enforcement, schools, libraries, and parks and recreational facilities. Regulations and policies affecting these public services are also described. Information in this section is based on consultation with individual service providers and County staff.

4.7.2 ENVIRONMENTAL SETTING

4.7.2.1 Fire Protection

The project site is located within the service area of the El Dorado Hills Fire Department (EDHFD). The EDHFD operates four fire stations and covers approximately 30 square miles of territory in western El Dorado County. The EDHFD employs 68 paid staff. In 2016, the EDHFD responded to 3,595 calls for service, a 17 percent increase from 2015 (EDHFD 2016).

Fire Station 85, located at 1050 Wilson Boulevard, is the primary station that serves the project site. Equipment at this station includes a Type 1 fire engine with basic life support capability (emergency medical technicians). The current staff at Fire Station 85 includes one medic unit¹ with two personnel and four personnel affiliated with the fire engine. In 2016, Station 85 responded to 692 calls for service. Fire Station 87, located at 4680 Golden Foothill Parkway, may also be responsible for responding to the project site. Fire Station 87 is staffed with 3 personnel and houses one Type 1 fire engine. In 2016, Station 87 responded to 678 calls of service. The EDHFD’s target response time is 6 minutes 90 percent of the time. As of May 2017, the overall average response time for all calls within Station 85 and 87 response areas was four minutes and 30 seconds, respectively (Cox 2017).

4.7.2.2 Police Services

Police services for the proposed project would be provided by the El Dorado County Sheriff’s Office. The County Sheriff’s Office has a force of 371, including 164 sworn officers, and provides service to approximately 1,700 square miles of unincorporated land within El Dorado County. Currently, there is a substation in the El Dorado Hills Town Center, which serves as a satellite office for temporary deputy use

¹ A fire medic unit includes medical kits and Emergency Medical Technicians (EMTs).

and is occasionally staffed by STARS (Sheriff's Team of Active Retirees) members during limited hours. The County's target service ratio is 1.0 officer per 1,000 residents. With a service population of 183,957 in unincorporated El Dorado County and 164 sworn officers, the current service ratio is 0.90 (or 1 officer for every 1,112 residents), which does not meet the County's standard.

Policy 5.1.2.2 of the County General Plan identifies that the minimum level of service for sheriff responses should be an 8-minute response to 80 percent of the population. In 2016, the sheriff's department responded to 124,987 calls for service (EDCS 2016)..

4.7.2.3 Schools

The proposed project is located within the boundaries of the Buckeye Union Elementary School District (ESD) and the El Dorado Union High School District (HSD). The Buckeye Union ESD provides kindergarten through 8th grade services for students living within its boundaries, and the El Dorado Union HSD provides 9th through 12th grade services for students living within its boundaries. Student enrollment in the 2016-17 school year was 5,216 for the Buckeye Union ESD and 6,649 for the El Dorado Union HSD (CDE 2017).

The Buckeye Union ESD operates six elementary schools and two middle schools, and the El Dorado Union HSD operates four high schools and five continuation high schools. The project site is located within the area served by Oak Meadow Elementary School, Rolling Hills Middle School, and Oak Ridge High School.

Oak Meadow Elementary School is located less than 1 mile north of the project site at 7701 Silva Valley Parkway and has a current enrollment of 862 students. Rolling Hills Middle School is located approximately 2 miles north of the project site at 7141 Silva Valley Parkway and has a current enrollment of 1,024 students. District staff has indicated that these schools have capacity to accept new students (Boike 2017).

Oak Ridge High School is located approximately 2 miles north of the project site at 1120 Harvard Way. The High School currently has an enrollment of approximately 2,400 students and is operating at capacity (Torres 2017). In order to accommodate additional students in the future, the school would secure financing to create more classes and possibly on-site portable classrooms to be constructed adjacent to the existing facilities, if necessary.

4.7.2.4 Parks and Recreation

Parks and recreational facilities, including trails, in the vicinity of the proposed project are provided by the El Dorado Hills Community Service District (CSD) and El Dorado County. A discussion of each park system is provided below.

El Dorado Hills Community Service District Facilities

The El Dorado Hills CSD owns and manages 294 acres of land, including 191 acres of parks and 127 acres of open space, and serves a population of about 38,000 (EDHCSD 2014). The parks closest to the project site are Creekside Greens Park, approximately 0.3 miles south, Peter Bertelson Park, approximately 0.8 miles northwest, and Allan Lindsey Park, approximately 0.9 miles northeast of the project site. The El Dorado Hills CSD strives to provide 5 acres of parks per 1,000 residents. As of 2016, the CSD provided approximately 7.7 acres of parkland per 1,000 residents (EDHCSD 2017).

El Dorado County Recreational Facilities

El Dorado County owns and manages approximately 274 acres of land for parks and recreation purposes, which includes six existing public recreational facilities (about 139 acres) and land to be developed into four future parks (about 134 acres). Existing park facilities include one neighborhood park, three community parks, and two regional parks. The closest County park to the project site is Bradford Park, a neighborhood park located 7.5 miles to the east in Shingle Springs. El Dorado County strives to provide 1.5 acres per 1,000 residents for regional and community parks, and 2 acres per 1,000 residents for neighborhood parks. Based on a current population of approximately 185,600 residents, the County currently provides approximately 0.7 acres of regional and community parks per 1,000 residents and 0.01 acres of neighborhood parks per 1,000 residents.

4.7.2.5 Libraries

El Dorado County Library system operates six branch libraries and a bookmobile service and serves a population of approximately 92,000 cardholders. The branch closest to the proposed project is the El Dorado Hills Library located at 7455 Silva Valley Parkway, approximately 2.2 miles from the project site. The 16,000 square foot library opened in February 2006 and serves a population of 28,490. It features an adult reading room with fireplace, a separate storytime room, a young adult area, and automated circulation system. The library has a capacity of 60,000 volumes (Robbins 2017). While the County library system does not currently have a planning standard, the American Library Association provides a standard of 0.5 square feet of library space and two volumes per capita. With approximately 0.56 square

feet of library space and 2.1 volumes per capita, the El Dorado Hills Branch Library currently meets this standard.

4.7.3 REGULATORY CONSIDERATIONS

4.7.3.1 State Laws and Regulations

Senate Bill 50

The Leroy F. Greene School Facilities Act of 1998, or Senate Bill 50 (SB 50), restricts the ability of a local agency to deny project approvals on the basis that public school facilities (classrooms, auditoriums, etc.) are inadequate. School impact fees are collected at the time building permits are issued. These fees are used by the local schools to accommodate the new students added by the project, reducing potential impacts on schools to a less than significant impact. Payment of school fees is required by SB 50 for all new residential development projects and is considered full and complete mitigation for school impacts of new development.

Quimby Act

The 1975 Quimby Act (California Government Code Section 66477) requires developers to set aside land, donate conservation easements, or pay park fees to help mitigate the impacts of their projects. The extent of the mitigation is established by the residential density of the area, with the amount of land dedicated or fees paid increasing in areas of higher occupancy. The standards for parkland acquisition or payment of fees in lieu thereof is implemented by the County through §120.12.090 of the County Code. It is also referred to in Policy 9.1.1.5 of the General Plan, which states:

Parkland dedicated under the Quimby Act must be suitable for active recreation uses and:

- Shall have a maximum average slope of 10 percent;
- Shall have sufficient access for a community or neighborhood park; and
- Shall not contain significant constraints that would render the site unsuitable for development.

California Fire Code

The California Fire Code (Title 24 CCR, Part 9) establishes minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of CCR contains requirements for fire safety during construction and demolition.

4.7.3.2 Local Plans and Policies

County of El Dorado General Plan

The following presents guiding and implementing policies from the current County of El Dorado General Plan (2004) relevant to public services and contained within the Public Services and Utility Element.

GOAL 5.1: PROVISION OF PUBLIC SERVICES: Provide and maintain a system of safe, adequate, and cost-effective public utilities and services; maintain an adequate level of service to existing development while allowing for additional growth in an efficient manner; and, ensure a safe and adequate water supply, wastewater disposal, and appropriate public services for rural areas.

OBJECTIVE 5.1.2: CONCURRENCY: Ensure through consultation with responsible service and utility purveyors that adequate public services and utilities, including water supply, wastewater treatment and disposal, solid waste disposal capacity, storm drainage, fire protection, police protection, and ambulance service are provided concurrent with discretionary development or through other mitigation measures provided, and ensure that adequate school facilities are provided concurrent with discretionary development to the maximum extent permitted by State law. It shall be the policy of the County to cooperate with responsible service and utility purveyors in ensuring the adequate provision of service. Absent evidence beyond a reasonable doubt, the County will rely on the information received from such purveyors and shall not substitute its judgment for that of the responsible purveyors on questions of capacity or levels of service.

Policy 5.1.2.1 Prior to the approval of any discretionary development, the approving authority shall make a determination of the adequacy of the public services and utilities to be impacted by that development. Where, according to the purveyor responsible for the service or utility as provided in Table 5-1 (presented as **Table 4.7-1** in this Draft EIR), demand is determined to exceed capacity, the approval of the development shall be conditioned to require expansion of the impacted facility or service to be available concurrent with the demand, mitigated, or a finding made that a CIP project is funded and authorized which will increase service capacity.

Policy 5.1.2.2 Provision of public services to new discretionary development shall not result in a reduction of service below minimum established standards to current users, pursuant to Table 5-1 (presented as **Table 4.7-1** in this Draft EIR).

**Table 4.7-1
Minimum Levels of Service**

	Community Region	Rural Center and Rural Region
Public water source	As determined by purveyor	As determined by purveyor, when applicable
Private wells	Environmental Management	Environmental Management
Public water treatment capacity	As determined by purveyor	As determined by purveyor
Public sewer treatment capacity	As determined by purveyor	As determined by purveyor
On-site sewage disposal	Environmental Management	Environmental Management
Storm drainage	Department of Transportation	Department of Transportation
Solid waste	Environmental Management	Environmental Management
County and State road circulation system	E	D
Schools	As determined appropriate by the school districts	As determined appropriate by the school districts
Parks	Specific plan for new communities or Quimby Fee/dedication program for tentative maps	Quimby Fee/dedication program for tentative maps
Fire district response	8-minute response to 80% of the population	15 to 45-minute response
Sheriff	8-minute response to 80% of the population	No standard
Ambulance	10-minute response to 80% of the population	20-minute response in Rural Regions and "as quickly as possible" in wilderness areas*

Source: County of El Dorado General Plan, Public Services and Utility Element, 2004

GOAL 5.7: EMERGENCY SERVICES: Provide adequate and comprehensive emergency services, including fire protection, law enforcement, and emergency medical services.

OBJECTIVE 5.7.1: FIRE PROTECTION (COMMUNITY REGIONS): Ensure sufficient emergency water supply, storage, and conveyance facilities are available, and that adequate access is provided for, concurrent with development.

Policy 5.7.1.1 Prior to approval of new development, the applicant will be required to demonstrate that adequate emergency water supply, storage, conveyance facilities, and access for fire protection either are or will be provided concurrent with development.

OBJECTIVE 5.7.3: LAW ENFORCEMENT: An adequate, comprehensive, coordinated law enforcement system consistent with the needs of the community.

Policy 5.7.3.1 Prior to approval of new development, the Sheriff's Department shall be requested to review all applications to determine the ability of the department to

provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.

GOAL 5.8: SCHOOL SERVICES: Provide an adequate, high-quality school system consistent with the needs of current and future residents.

OBJECTIVE 5.8.1: SCHOOL CAPACITY: Require that adequate school capacity exists and/or appropriate mitigation consistent with State law to serve new residents concurrent with development.

Policy 5.8.1.1 School districts affected by a proposed development shall be relied on to evaluate the development's adverse impacts on school facilities or the demand therefor. No development that will result in such impacts shall be approved unless:

1. To the extent allowed by State law, the applicant and the appropriate school district(s) have entered into a written agreement regarding the mitigation of impacts to school facilities; or
2. The impacts to school facilities resulting from the development are mitigated, through conditions of approval, to the greatest extent allowed by State law.

GOAL 5.9: LIBRARIES AND CULTURAL FACILITIES: Addresses providing a quality County library system and other cultural facilities consistent with the needs of current and future residents.

OBJECTIVE 5.9.1: LIBRARY FACILITIES: Maintain existing library facilities and locate new libraries to serve existing and new communities throughout the County.

Policy 5.9.1.1 Allow flexibility in the placement of libraries.

Policy 5.9.1.2 New libraries shall be funded through Community Services Districts, assessment districts, zones of benefits, or other sources.

El Dorado County Subdivision Ordinance (Section 120.12.090)

Section 120.12.090 of the El Dorado Code of Ordinances mandates that when a subdivision proposes to or creates residential lots, the Board of Supervisors has the authority to require the dedication of land, the payment of fees in lieu thereof, or a combination of both for park and recreational purposes. The payment shall be conveyed to the local public agency which provides park and recreational services in the area; in

this case, the El Dorado Hills CSD. The amount of fees and/or land dedicated is directly related to the population density of the project. Within the boundaries of the El Dorado Hills CSD, it is estimated that each dwelling unit has a density of 3-3/10 persons. For multiple family dwelling units, the density is approximated at 2-1/10 persons per unit. The goal of public interest convenience, health, and safety is perpetuated by this section, as the County aims to provide three acres of park area per 1,000 residents within a subdivision.

4.7.4 IMPACTS AND MITIGATION MEASURES

4.7.4.1 Significance Criteria

In accordance with Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, the impact of the proposed project related to public services, recreation, and utilities and service systems would be considered significant if the project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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
 - Other public facilities
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Require the construction or expansion of offsite recreational facilities that might have an adverse physical effect on the environment.

4.7.4.2 Issues adequately addressed in the Initial Study

As noted in the Initial Study the proposed project would generate a demand for an additional 97 K-5 seats in the elementary school district, as well as an additional 38 seats in the high school district.² The proposed project would be required to pay school development fees, as dictated by state law, prior to the issuance of building permits. According to Government Code Section 65996, payment of fees constitutes full mitigation of any school impacts under CEQA. Following the payment of the SB 50 fees, impacts would be less than significant and no further analysis is required in the EIR.

4.7.4.3 Methodology

Public service providers serving the project site were contacted to determine existing operational service levels and whether there are any existing service deficiencies. The estimated population expected to be added to the area by the proposed development was presented to the service provider. Other details of the proposed project were also provided. The service provider then determined whether there would be a need to construct new or physically altered public facilities in order to maintain acceptable service ratios and serve the proposed project.

4.7.4.4 Project Impacts and Mitigation Measures

Impact PS-1: The proposed project would not require the construction of new or physically altered fire facilities. (*Less than Significant*)

Implementation of the proposed project would add approximately 492 residents to the population of El Dorado Hills. As such, there would be an increased demand for fire suppression services in the service area of Fire Stations 85 and 87. The EDHFD has indicated that it currently has the capacity to handle any increase in demand generated from project buildout. In addition, the EDHFD estimates that Stations 85 and 87 would have a response time between 4 and 5 minutes to the project site, which is well below the Department's target response time of 6 minutes 90 percent of the time. To ensure fire safety to the fullest degree, the EDHFD would increase training and equipment for Hose Above Ground and Standpipe operations that directly relate to the proposed project. The proposed project would pay a public safety fee as part of the County's development fee program, which would cover costs associated with expanded training and equipment (Cox 2017). As the EDHFD has indicated that it has capacity to serve the proposed project and that response times are adequate, the proposed project would not require the construction of new or physically altered EDHFD facilities, and there would be no potential for

² The Student Generation Rate used by the Buckeye and Latrobe districts is 0.451 student/dwelling unit. The Student Generation Rate used by the El Dorado Union High School District is 0.177 student/dwelling unit.

significant environmental impacts from the construction of new or expanded facilities. The impact of the proposed project related to the provision of fire protection services would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact PS-2: The proposed project would not require the construction of new or physically altered police facilities. (*Less than Significant*)

Implementation of the proposed project would add approximately 492 residents to the population of El Dorado Hills, thereby increasing demand for police services. The El Dorado County Sheriff's Department has indicated the proposed project could increase calls for service to the Town Center area due to compatibility issues with neighboring business. Several businesses in the vicinity of the project (i.e., a night club and movie theater) operate late hours, and the Sheriff's Department predicts that the operation of these businesses will result in complaints from future project residents. The County has a target service ratio of 1.0 officer per 1,000 residents, and therefore, the proposed project would generate the need for approximately 0.5 officers. However, the Sheriff's Department anticipates that it will need two additional officers to handle the anticipated requests for service in the Town Center area due to the project (Byers 2016). The proposed project would pay a public safety fee as part of the County's development fee program, which would provide funding for these additional officers. The addition of two officers would not be substantial enough to require the construction of new or physically altered facilities, and there would be no potential for significant environmental impact from the construction of new or expanded facilities. The impact of the proposed project related to the provision of police protection services in El Dorado Hills would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact PS-3: The proposed project would not require the construction of new or physically altered library facilities. (*Less than Significant*)

As noted above, the proposed project would increase the population of El Dorado Hills by approximately 492 persons, thereby increasing demand on library facilities. Based on a planning standard of 0.5 square feet of library space and two volumes per capita recommended by the American Library Association, the proposed project would generate the need for approximately 250 square feet of additional library space and about 1,000 additional volumes. The El Dorado Hill branch currently provides 0.56 square feet of

library space and 2.1 volumes per capita. The addition of the proposed project would lower these metrics to approximately 0.55 square feet of library space and about 2.0 volumes per capita, which is still above the recommended planning standard. In addition, the El Dorado Hills branch has indicated that the increased demand would not be substantial enough to necessitate the construction of new or expanded facilities. As a result, the El Dorado Hills Library has sufficient ability to accommodate the anticipated demand increase (Robbins 2017). Additionally, the project applicant would be required to pay development impact fees, if applicable, which would further reduce the project's impact related to library services. The impact associated with library services would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact PS-4: **Development of the proposed project would increase the use of existing neighborhood parks or other recreational facilities but not result in substantial physical deterioration of the facilities. In addition, the demand created by the proposed project would not require the construction of new or physically altered parks and recreation facilities. (*Less than Significant*)**

As noted above, the proposed project would increase the population of El Dorado Hills by approximately 492 persons, thereby increasing demand for parks owned and maintained by the El Dorado CSD and the County. The El Dorado Hills CSD strives to provide 5 acres of parks per 1,000 residents, and therefore, the proposed project would generate the need for approximately 2.5 acres of park land. The CSD currently provides approximately 7.7 acres of parkland to every 1,000 residents. The addition of the proposed project would lower the ratio to approximately 7.6 acres to every 1,000 residents, which is still well above the District's standard of 5 acres per 1,000 residents. As a result, the increase in demand for park facilities owned and maintained by the El Dorado Hills CSD would not be substantial, and the proposed project would not result in substantial physical deterioration of El Dorado Hills CSD park facilities or require the construction of new park facilities.

The County strives to provide 1.5 acres per 1,000 residents for regional and community parks, and two acres per 1,000 residents for neighborhood parks, and therefore, the proposed project would generate the need for approximately 0.7 acres of regional and community parks and about one acre of neighborhood parks. The County currently provides approximately 0.7 acres of regional and community parks per 1,000 residents and 0.01 acres of neighborhood parks per 1,000 residents, which is well below the County's standards. However, the increase in demand for County park facilities due to the project would not be substantial. Project residents would not likely use county park facilities to a significant extent, as the

closest county park is located 7.5 miles to the east, while several parks owned and maintained by the El Dorado Hills CSD are located close by within the El Dorado Hills community. Therefore, the proposed project would not result in substantial physical deterioration of County park facilities or require the construction of new County park facilities. The project would also include private recreational facilities and 0.51-acres of informal space, thus decreasing the need for project residents to use public parks. Finally, the project applicant would pay park impact fees as part of the County's development fee program. As such, development of the proposed project would not result in substantial physical deterioration of the facilities nor require the construction of new or physically altered parks and recreation facilities. Impacts associated with parks and other recreational facilities would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.7.4.5 Cumulative Impacts and Mitigation Measures

Cumulative Impact C-PS-1: **The proposed project, in conjunction with other closely related past, present and reasonably foreseeable future development, would not result in a significant cumulative impact on public services. (*Less than Significant*)**

The following analysis evaluates the significance of potential cumulative public service and recreation impacts of the proposed project in conjunction with the projects included in **Table 4.0-1**, which lists reasonably foreseeable projects in the County.

Fire Service

As discussed above under **Impact PS-1**, implementation of the proposed project would contribute to an increase in demand for fire protection services. However, this increase in demand would not result in the need for new or physically altered fire facilities, the construction of which could cause significant environmental impacts. The other approved and reasonably foreseeable development projects in the County, as listed in **Table 4.0-1**, would also result in an incremental demand for fire services. Each cumulative project has been or will be subject to environmental review and, if significant impacts are identified, mitigation measures would be implemented to avoid or reduce the impacts. In addition, in accordance with General Plan Policy 5.7.1.1, all new development must obtain review and approval of development plans by the fire department to ensure adequate levels of service and access. Regardless of future growth in the County, the fire department would have sufficient resources to accommodate an

increase in demand for fire protection services, even if an expansion of facilities is necessary. The cumulative impact on fire services and facilities would be less than significant.

Police

The proposed project, in conjunction with other approved and reasonably foreseeable projects in the County, would generate an increased demand for police services. As discussed above under **Impact PS-2**, implementation of the proposed project would contribute to an increase in demand for police services. However, this increase in demand would not result in the need for new or physically altered police facilities, the construction of which could cause significant environmental impacts. Other approved and reasonably foreseeable development projects in the County listed in **Table 4.0-1** would result in an incremental demand for police services. Each cumulative project has been or will be subject to environmental review and, if significant impacts are identified, mitigation measures would be implemented to avoid or reduce the impacts. In addition, in accordance with General Plan Policy 5.7.3.1, all new development must obtain review and approval of development plans by the Sheriff's Department to ensure adequate levels of service and access. Regardless of future growth in the County, the sheriff's department would have sufficient resources to accommodate an increase in demand for police services, even if an expansion of facilities is necessary. The cumulative impact on police services and facilities would be less than significant.

Library Services

The proposed project, in conjunction with other approved and reasonably foreseeable projects in the County, would generate an increased demand for library services. As discussed above under **Impact PS-3**, implementation of the proposed project would contribute to an increase in demand for library services. However, this increase in demand would not result in the need for new or physically altered library facilities, the construction of which could cause significant environmental impacts. **Table 4.0-1** lists all approved and reasonably foreseeable projects in El Dorado Hills. Each cumulative project has been or will be subject to environmental review and, if significant impacts are identified, mitigation measures would be implemented to avoid or reduce the impacts. Potential impacts associated with the construction of new library facilities are expected to be less than significant or if potentially significant, capable of being mitigated to a less than significant level with mitigation. Therefore, the cumulative impact from the construction or expansion of library facilities would be less than significant.

Parks

The proposed project, in conjunction with other approved and reasonably foreseeable projects in the County, would increase the use of existing parks and recreational facilities. As discussed above under

Impact PS-4, implementation of the proposed project would contribute to an increase in demand for parkland and the utilization of existing facilities, despite the private recreational facilities included in the proposed project. However, this increase in demand would not result in the need for new or physically altered parks and recreation facilities, the construction of which could cause significant environmental impacts. **Table 4.0-1** lists all approved and reasonably foreseeable projects in El Dorado Hills. Each cumulative project has been or will be subject to environmental review and, if significant impacts are identified, mitigation measures would be implemented to avoid or reduce the impacts. Potential impacts associated with the construction of new parks and recreational facilities are expected to be less than significant or if potentially significant, capable of being mitigated to a less than significant level with mitigation. Therefore, the cumulative impact from the construction or expansion of parks and recreation facilities would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.7.5 REFERENCES

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4.8 TRANSPORTATION AND TRAFFIC

4.8.1 INTRODUCTION

This section describes the existing transportation setting and analyzes the potential impacts of the proposed El Dorado Hills Apartments project (“proposed project”) on transportation and traffic under CEQA as well as El Dorado County Initiative Measure E. The analysis focuses on potential impacts of the proposed project on intersections and roadway segments, pedestrian and bicycle facilities, and transit service. Regulations and policies applicable to traffic and transportation are also described in this section. The section is based on a *Transportation Impact Analysis* prepared by Fehr & Peers, dated June 2017. The report is included in **Appendix 4.8** of this Draft EIR.

4.8.2 ENVIRONMENTAL SETTING

This subsection describes the existing condition of the transportation system that serves the project site, including roadway facilities, pedestrian and bicycle facilities, transit service, traffic volumes, and intersection operations.

4.8.2.1 Existing Transportation Network

Regional and Local Roadways

The location of the project site and the surrounding roadway network are shown in **Figure 4.8-1, Project Location and Study Area**. Regional access to the project site is provided via U.S. Route 50 (U.S. 50), El Dorado Hills Boulevard/Latrobe Road, and Silva Valley Parkway/White Rock Road. Local access to the project site is provided by Town Center Boulevard, Post Street, and Vine Street. The characteristics of the roadway system near the project site are described below.

U.S. 50 is an east-west freeway located south of the project site. Generally, U.S. 50 serves the majority of El Dorado County’s major population centers and provides regional connections to the west (i.e., Sacramento) and to the east (i.e., State of Nevada). Primary access to the project site from U.S. 50 is provided via the U.S. 50/El Dorado Hills Boulevard/Latrobe Road and U.S. 50/Silva Valley Parkway/White Rock Road interchanges. Near the project site, westbound U.S. 50 has a high-occupancy vehicle (HOV) lane and two general purpose travel lanes, and eastbound U.S. 50 has an HOV lane and three general purpose travel lanes. The General Plan identifies U.S. 50 as an eight lane freeway under future conditions.



SOURCE: Fehr and Peers, 2017

FIGURE 4.8-1

Construction of Phase 1 of the new U.S. 50/Silva Valley Parkway/White Rock Road interchange was completed in 2016. Phase 1 constructed a new connection to U.S. 50 with new signalized slip on- and off ramps westbound and a slip off-ramp and loop on-ramp eastbound. The mainline has an overcrossing for Silva Valley Parkway and was improved to include eastbound and westbound auxiliary lanes between the U.S. 50/El Dorado Hills Boulevard/Latrobe Road interchange and the new U.S. 50/Silva Valley interchange. Phase 2 will construct a westbound loop on-ramp and eastbound slip on-ramp (CIP Project No: 71345). The westbound loop on-ramp will begin the addition of an auxiliary lane that will continue westbound through the El Dorado Hills Boulevard interchange and terminate at the planned U.S. 50/Empire Ranch interchange (CIP Project No: 53115).

The planned reconstruction of the U.S. 50/Bass Lake Road interchange (CIP Project No: 71330 and GP148) will add a westbound auxiliary lane between the Bass Lake Road and Silva Valley Parkway interchanges.

El Dorado Hills Boulevard is a north-south roadway that continues as Salmon Falls Road on the north end at Green Valley Road, and Latrobe Road to the south of U.S. 50. The roadway is four lanes with a center median between Park Drive and Governor Drive. Between U.S. 50 and Park Drive, the roadway section widens to six lanes to accommodate vehicle demand near the U.S. 50/El Dorado Hills Boulevard/Latrobe Road interchange. The County's General Plan identifies El Dorado Hills Boulevard as a four lane divided road except near U.S. 50 where the designation changes to a six lane divided road.

Latrobe Road is a north-south roadway and is the continuation of El Dorado Hills Boulevard south of U.S. 50. Latrobe Road is six lanes near the U.S. 50 interchange, narrows to four lanes south of White Rock Road, and eventually narrows to two lanes as it continues south to connect with State Route 16 in Amador County. The General Plan identifies Latrobe Road as a six lane divided roadway near the U.S. 50 interchange transitioning to a four lane divided road, then a two lane major road, and eventually a two lane regional road serving the southwest portion of the County.

Park Drive is a two lane local roadway serving the Raley's shopping center located in the northeast quadrant of the U.S. 50/El Dorado Hills Boulevard interchange. Park Drive intersects El Dorado Hills Boulevard at two locations, opposite the new U.S. 50 westbound loop off-ramp, and Saratoga Way.

Post Street is a two-lane private roadway in the Town Center. Post Street intersects Town Center Boulevard (also a private roadway) at an all-way stop-controlled intersection about 400 feet east of Latrobe Road. The project will have an access point on Post Street.

Saratoga Way is currently two lanes and extends west of El Dorado Hills Boulevard to Finders Way. Saratoga Way is planned as a four-lane divided arterial that will connect to Iron Point Road in the City of Folsom.

Silva Valley Parkway is a north-south roadway that generally runs parallel to El Dorado Hills Boulevard north of U.S. 50. Silva Valley Parkway ranges from two lanes to four lanes with a center median within the study area. The General Plan identifies Silva Valley Parkway as a four lane divided road from U.S. 50 to Harvard Way, and as a major two-lane road from Harvard Way to Green Valley Road. A new U.S. 50 interchange at Silva Valley/White Rock Road was recently completed and is included in the existing and cumulative conditions transportation analysis. The interchange project provided a realigned Silva Valley Parkway that connects to the old four-lane Silva Valley Parkway to the north and the existing two-lane White Rock Road on the south. A new signalized intersection was installed where the new Silva Valley Parkway intersects old White Rock Road on the south.

Town Center Boulevard is a private east-west roadway that serves as a primary access for the Town Center. Town Center Boulevard is four lanes between Latrobe Road and Post Street and two lanes between Post Street and Vine Street with angled parking. Town Center Boulevard has a traffic signal controlled intersection with Latrobe Road and all-way stop control at the Post Street and Vine Street intersections.

Vine Street is a two-lane private roadway in the Town Center. Vine Street intersects Town Center Boulevard at an all-way stop-controlled intersection. The project will have an access point on Vine Street.

White Rock Road enters into El Dorado County from Sacramento County, crosses Latrobe Road approximately 0.45 mile south of U.S. 50, and continues east connecting to Silva Valley Parkway south of U.S. 50. White Rock Road is a two-lane roadway from Sacramento County to Manchester Drive, widening to a four-lane divided roadway from Manchester Drive to Monte Verde Drive. It continues east as a three-lane roadway to the Vine Street/Valley View Parkway intersection, narrowing back to two lanes until its connection to Silva Valley Parkway. . The General Plan identifies White Rock Road as a four-lane divided road. White Rock Road is identified as a portion of the Capital SouthEast Connector Expressway, a regional transportation improvement project being pursued by a Joint Powers Authority (JPA) including El Dorado County, Sacramento County, and the Cities of Elk Grove, and Folsom. The U.S. 50/Silva Valley Parkway/White Rock Road interchange modified the roadway alignment and introduced a new signalized intersection at the intersection of White Rock Road/Old Silva Valley Parkway/New Silva Valley Parkway.

Public Transit

El Dorado County Transit Authority (El Dorado Transit) provides public transit service within the study area. El Dorado Hills is currently served by El Dorado Transit Dial-A-Ride services, the Sacramento Commuter Service, and the 50 Express service. Both the Sacramento Commuter Service and the 50

Express serve the El Dorado Hills Park-and-Ride Lot, but do not circulate within the community. The Sacramento Commuter route also serves the Vine Street and Mercedes Lane Park-and-Ride lot.

In May 2013, The EDCTC completed the *El Dorado Hills Community Transit Needs Assessment and U.S. 50 Corridor Operations Plan* (Plan), which explores how the recent growth and projected development impact the need for transit services, and identifies the most appropriate type and level of service needed given the demand. All three services are addressed in the Plan and are described briefly below.

- **Dial-A-Ride** service is a demand response service designed for seniors and disabled passengers, with limited access available for the general public. The service is available on a first-come, first-serve basis Monday through Friday between the hours of 7:30 AM and 5:00 PM, and between 8:00 AM and 5:00 PM on Saturdays and Sundays. El Dorado Hills is one of twelve geographic zone service areas.
- **Sacramento Commuter Service** is offered Monday through Friday between El Dorado County and downtown Sacramento. The Sacramento Commuter provides 11 trips in the morning, 11 return trips in the afternoon, and two reverse commuter trips twice per day. Morning departures from the Town Center Park-and-Ride lots are scheduled from 5:43 AM to 8:30 AM, and afternoon eastbound arrivals occur from 3:46 PM to 7:03 PM. The Vine Street and Mercedes Lane Park-and-Ride lot, located in Town Center is the nearest stop location for the project. According to the Plan, nearly half of commute passengers boarded in Town Center at the Town Center Park-and-Ride lots. The Sacramento Commuter Service has about 138,000 annual boardings, based on the El Dorado Transit Fiscal Year 2015/2016 Administrative Operations Report (November 3, 2016).
- **50 Express** provides direct service from El Dorado County to Folsom with connections to Sacramento Regional Transit light rail on weekdays. This route operates every hour from 6:00 AM until 7:00 PM. The El Dorado Hills Park-and-Ride located in Town Center at the White Rock Road/Post Street intersection is the nearest stop location for the project. The 50 Express has about 32,000 annual boardings, based on the El Dorado Transit Fiscal Year 2015/2016 Administrative Operations Report (November 3, 2016).

The El Dorado Hills Park-and-Ride Lot provides 120 parking spaces. The Plan reports that parking demand exceeds supply. Specifically, Table 19 of the Plan reports 108 percent parking utilization in 2005 based on Sacramento Area Council of Governments and Caltrans data.

Bicycle Facilities

Existing and planned bicycle facilities within the study area are shown in **Figure 4.8-2, Existing and Planned Bicycle Facilities**. Bicycle facilities are classified into four categories:

- Class I Bicycle Path – Off-street bike paths within exclusive right-of-way; usually shared with pedestrians
- Class II Bicycle Lane – Striped on-road bike lanes adjacent to the outside travel lane on preferred corridors for biking
- Class III Bicycle Route – Shared on-road facility, usually delineated by signage and pavement markings
- Class IV Bikeways – Separated bikeways or cycle tracks on an already built out environment.

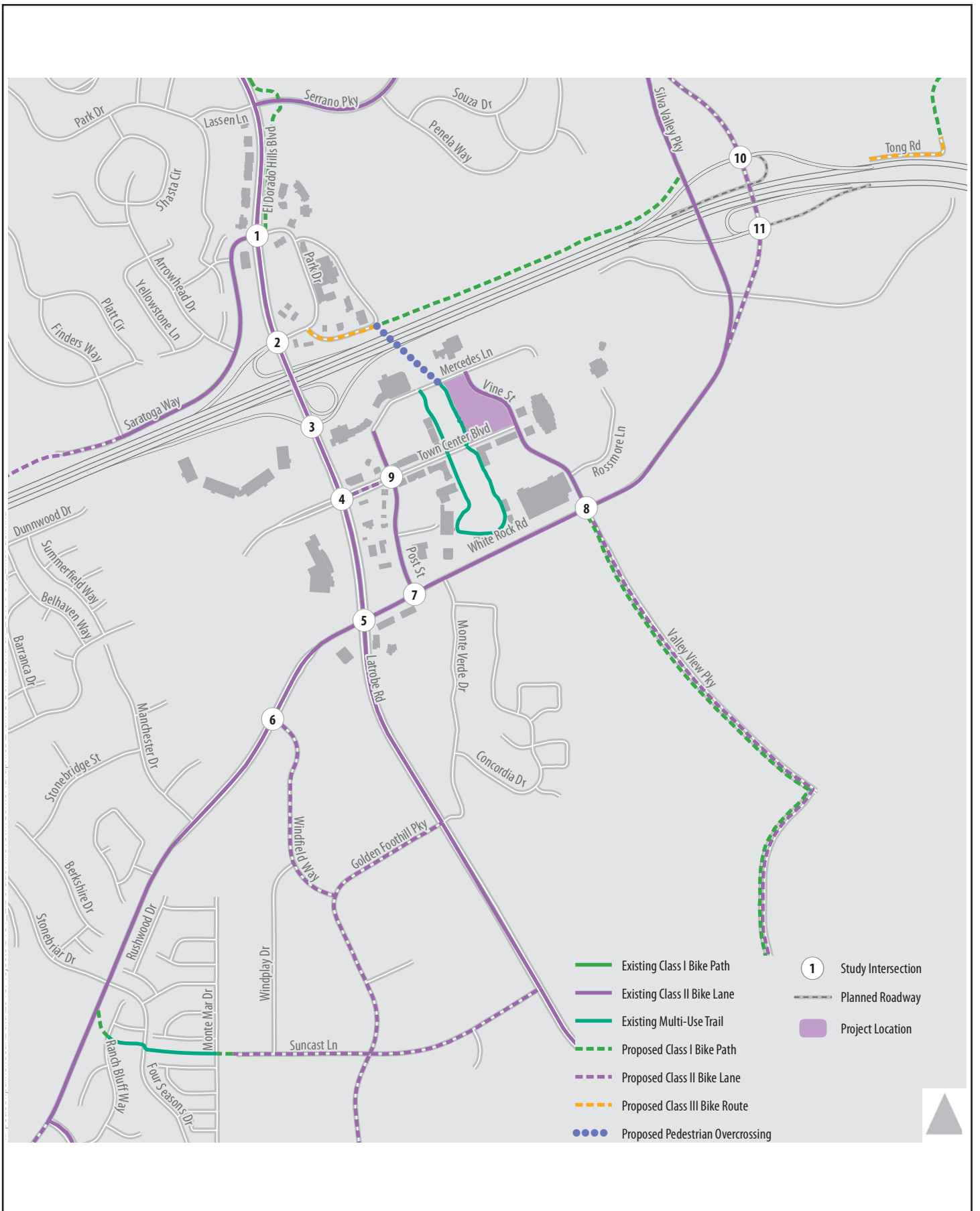
According to the *El Dorado Bicycle Transportation Plan, 2010 Update (El Dorado County Transportation Commission)*, mapping information provided by the County, and field observations, the following major bikeway facilities are present within the study area:

- Class II bicycle lanes on Latrobe Road, White Rock Road, El Dorado Hills Boulevard, and portions of Silva Valley Parkway
- Class I bicycle path, New York Creek Nature Trail, which is adjacent to El Dorado Hills Boulevard on the east side between Serrano Parkway and St Andrews Drive

Figure 4.8-2 also identifies planned bikeways presented in the *El Dorado Bicycle Transportation Plan, 2010 Update* and the *Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for 2035*.

Pedestrian Facilities

Pedestrian facilities in Town Center include attached sidewalks on Town Center Boulevard, Post Street, Vine Street, and Mercedes Lane, and an off-street path around the Town Center Lake. Sidewalks on Town Center Boulevard connect to Latrobe Road, which has sidewalks north of Town Center Boulevard on the east side of Latrobe Road. Continuous sidewalks are not provided on the west side of Latrobe Road or on the east side of Latrobe Road between Town Center Boulevard and White Rock Road. On White Rock Road, sidewalks are generally provided on improved frontages. All study intersections provide controlled pedestrian crossings with marked crosswalks.



SOURCE: Fehr and Peers, 2017

FIGURE 4.8-2

Existing and Planned Bicycle Facilities

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4.8.2.2 **Traffic Operations Analysis**

Intersection operations during typical weekday AM and PM peak hours were evaluated under Existing conditions at the following 11 intersections.

- El Dorado Hills Boulevard/Saratoga Way/Park Drive
- El Dorado Hills Boulevard/U.S. 50 WB Ramps
- Latrobe Road/U.S. 50 EB Ramps
- Latrobe Road/Town Center Boulevard
- Latrobe Road/White Rock Road
- White Rock Road/Winfield Way
- White Rock Road/Post Street
- White Rock Road/Vine Street/Valley View Parkway
- Town Center Boulevard/Post Street (Private Road Intersection)
- Silva Valley Parkway/U.S. 50 WB Ramps
- Silva Valley Parkway/U.S. 50 EB Ramps

U.S. 50 freeway operations during AM and PM peak hours were evaluated under Existing conditions in both the westbound and eastbound directions between Silva Valley Parkway and the County Line.

Intersection Operation Analysis Method

Evaluation of traffic conditions on local streets involves analysis of intersection operations, as intersections represent the locations where the roadway capacity is most constrained. Transportation engineers and planners commonly use the concept of Level of Service (LOS) to measure and describe the operation of a local roadway network. LOS qualitatively characterizes traffic conditions associated with varying levels of traffic.

LOS varies from LOS A, which represents free flow traffic conditions with little or no delay, to LOS F, which represents long delays and a facility that is operating at or near its functional capacity. For basic freeway segments (such as U.S. 50 west of El Dorado Hills Boulevard), LOS A represents a vehicle density of up to 11 passenger cars per mile per lane and vehicle speeds (a secondary performance

measure) at or above 65 miles per hour, and LOS F represents a vehicle density of greater than 45 passenger cars per mile per lane and vehicle speeds less than 52 miles per hour.

Intersection traffic operations and LOS for signalized intersections were determined using the procedures and methodology described in the *Highway Capacity Manual (HCM)* (Transportation Research Board 2000, 2010). This methodology uses intersection characteristics (such as traffic volumes, lane geometry, and signal phasing) to determine the LOS for traffic signal controlled and all-way stop controlled intersections based on the average control delay experienced for the entire intersection, measured in seconds per vehicle. Control delay includes delay resulting from initial deceleration, queue move-up time, time actually stopped, and final acceleration. **Table 4.8-1, Signalized Intersection Level of Service Definitions**, summarizes the LOS criteria for signalized intersections.

Table 4.8-1
Signalized Intersection Level of Service Definitions

LOS	Description	Average Control Delay Per Vehicle (Seconds)
A	Very low delay. At signalized intersections, most vehicles do not stop.	≤ 10
B	Generally good progression of vehicles. Slight delays.	> 10 – 20
C	Fair progression. At signalized intersections, increased number of stopped vehicles.	> 20 – 35
D	Noticeable congestion. At signalized intersections, large portion of vehicles stopped.	> 35 – 55
E	Poor progression. High delays and frequent cycle failure.	> 55 – 80
F	Oversaturation. Forced flow. Extensive queuing.	> 80

Source: Highway Capacity Manual, Transportation Research Board, 2010, 6th Edition.

Intersection traffic operations and LOS for unsignalized intersections (all-way stop-controlled and side street stop-controlled) were determined using the methodology described in the *HCM*. Similar to signalized intersections, LOS for all way stop controlled intersections is based on the average control delay experienced at the intersection, measured in seconds per vehicle. At two-way or side street stop-controlled intersections, the control delay is evaluated separately for each movement, not for the intersection as a whole. The LOS for the intersection is reported based on the single controlled movement with the highest average control delay. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. The correlation between the average control delay and LOS for unsignalized intersections is summarized in **Table 4.8-2, Unsignalized Intersection Level of Service Definitions**.

Table 4.8-2
Unsignalized Intersection Level of Service Definitions

LOS	Description	Average Control Delay Per Vehicle (Seconds)
A	No delay for stop-controlled approaches.	≤ 10
B	Operations with minor delay.	> 10 – 15
C	Operations with moderate delays.	> 15 – 25
D	Operations with some delays.	> 25 – 35
E	Operations with high delays, and long queues.	> 35 – 50
F	Operation with extreme congestion, with very high delays and long queues unacceptable to most drivers.	> 50

Source: Highway Capacity Manual, Transportation Research Board, 2000, 2010, 6th Edition.

General Plan Circulation Policy TC-Xd establishes that the minimum acceptable operating level for intersections is LOS E in a Community Region or LOS D in the Rural Centers and Rural Regions. The proposed project and the study area are located within a Community Region subject to the LOS E standard.

Existing Intersection Volumes and Lane Configurations

Peak traffic conditions generally occur on weekday mornings while school is in session from 7:00 AM to 9:00 AM and during evenings from 4:00 PM to 6:00 PM, based on turning movement counts that were collected in December 2016 and February 2017. **Figure 4.8-3, Existing Conditions Peak Hour Intersection Turning Movement Volumes**, presents the existing AM and PM peak hour turning movement volumes, existing intersection lane configurations, and traffic control devices for the study intersections. Detailed traffic count data are provided in **Appendix 4.8** of this EIR.

Field Observations

Field observations conducted during the AM and PM peak periods identified extensive vehicle queuing near the U.S. 50/El Dorado Hills Boulevard interchange, with the longest queues southbound during the AM peak hour and northbound during the PM peak hour. However, all queued vehicles were served during the peak hour, so the traffic counts are representative of peak hour travel demand.

Freeway Operations Analysis Method

The Highway Capacity Manual (HCM) includes three different tiers of analysis for freeway facilities, which include planning, design, and operations analysis. The different tiers are intended to provide flexibility to the user in selecting the appropriate analysis level given available resources (time and availability of analysis inputs) and the desired breadth of analysis coverage (more locations with less detail vs. fewer locations with more detail). For example, a planning level analysis requires relatively generalized analysis inputs and is regularly used when the breadth of coverage is more important than analysis detail. The project level analysis in this report is based on operations analysis methods and analyzes each freeway facility separately, focusing on analysis detail instead of breadth of coverage. The operations analysis method is consistent with General Plan Policy TC-Xd and Caltrans traffic impact study guidelines.

Freeway operations were analyzed using the procedures and methodologies contained in the HCM. **Table 4.8-3, Freeway Facility Level of Service Criteria**, describes the HCM LOS criteria for freeway mainline, freeway ramp junctions, and freeway weaving segments. For weaving segments, Caltrans District 3 prefers analysis based on the Leisch Method, which is described in the *Highway Design Manual* (Caltrans, last updated July 1, 2008). For consistency with both the El Dorado County General Plan and Caltrans preference, analysis of freeway weaving segments was conducted using both the HCM and Leisch methods.

**Table 4.8-3
Freeway Facility Level of Service Criteria**

LOS	Density (vehicle/mile/lane)	
	Mainline	Ramp Junction/Weaving
A	≤ 11	≤ 10
B	11-18	10-20
C	18-26	20-28
D	26-35	28-35
E	35-45	>35
F	>45	Demand Exceeds Capacity

Source: Transportation Research Board, 2010, 6th Edition.

4.8.2.3 Existing Intersection Operations

Table 4.8-4, Existing Conditions – Study Intersection LOS Summary, summarizes the existing weekday AM and PM peak hour intersection LOS. Detailed calculation work sheets are provided in **Appendix 4.8**

of this Draft EIR. As shown in this table, all of the study intersections currently operate at LOS E or better during both peak hours.

**Table 4.8-4
Existing Conditions – Study Intersection LOS Summary**

Intersection	Intersection Control	Peak Hour	Avg Delay ²	LOS
1. El Dorado Hills Boulevard/Park Drive/Saratoga Way	Signal	AM PM	19 20	B C
2. El Dorado Hills Boulevard/U.S. 50 WB Ramps	Signal	AM PM	31 33	C C
3. Latrobe Road/U.S. 50 EB Ramps	Signal	AM PM	33 20	C C
4. Latrobe Road/Town Center Boulevard	Signal	AM PM	16 50	B D
5. Latrobe Road/White Rock Road	Signal	AM PM	31 27	C C
6. White Rock Road/Winfield Way	Signal	AM PM	20 22	C C
7. White Rock Road/Post Street	Signal	AM PM	18 27	B C
8. White Rock Road/Vine Street/Valley View Drive	Signal	AM PM	24 46	C D
9. Town Center Boulevard/Post Street ¹	AWSC	AM PM	13 48	B E
10. Silva Valley Parkway/U.S. 50 WB Ramps	Signal	AM PM	11 10	B A
11. Silva Valley Parkway/U.S. 50 EB Ramps	Signal	AM PM	10 13	B B

Source: Fehr & Peers, 2017.

Notes: AWSC = all-way stop control

¹The Town Center Boulevard/ Post Street intersection is private (i.e., not a County facility).

²The average delay is measured in seconds per vehicle. For signalized and AWSC intersections, the delay shown is the average control delay for the overall intersection. For side-street stop controlled intersections, the LOS and control delay for the worst movement is shown. Intersection LOS and delay is calculated based on the procedures and methodology contained in the HCM 2010 (TRB, 2010). Intersections 6-11 were analyzed in Synchro 9. Intersections 1-5 were analyzed in SimTraffic.

4.8.2.4 Existing Freeway Operations

Freeway facilities in the County are under the jurisdiction of Caltrans. In recent years, U.S. 50 and interchanges proximate to the project site have undergone or are undergoing various improvements to enhance traffic operations. These improvements include: High Occupancy Vehicle (HOV) lanes east to

Cameron Park Drive, modifications to the U.S. 50/El Dorado Hills Boulevard-Latrobe Road interchange westbound ramps, construction of the U.S. 50/Silva Parkway/White Rock Road interchange, and construction of auxiliary lanes between the U.S. 50/Silva Valley Parkway/White Rock Road and U.S. 50/El Dorado Hills Boulevard/Latrobe Road interchanges. **Table 4.8-5, Existing Conditions – Study Freeway Segments and Ramps LOS Summary**, summarizes the existing weekday AM and PM peak hour U.S. 50 freeway segment LOS. As shown in this table, all eastbound and westbound U.S. 50 study segments currently operate at LOS D or better during both peak hours.

**Table 4.8-5
Existing Conditions – Study Freeway Segments and Ramps LOS Summary**

Segment	Facility Type	Peak Hour ¹	Density ¹	LOS
<i>Eastbound</i>				
A. Latrobe Road off-ramp	Diverge	AM PM	22 30	C D
B. El Dorado Hills Boulevard off-ramp	Diverge	AM PM	14 26	B C
C. El Dorado Hills Boulevard on-ramp to Silva Valley Parkway off-ramp	Weave	AM PM	10 23	A C
D. Silva Valley Parkway on-ramp (loop)	Merge	AM PM	11 21	B C
E. Silva Valley Parkway to Bass Lake Road	Basic	AM PM	11 20	A C
<i>Westbound</i>				
A. Bass Lake Road to lane addition	Basic	AM PM	29 17	D B
B. Lane addition to Silva Valley Parkway	Basic	AM PM	19 12	C B
C. Silva Valley Parkway off-ramp	Diverge	AM PM	13 5	B A
D. Silva Valley Parkway on-ramp to El Dorado Hills Boulevard off-ramp	Weave	AM PM	34 18	D B
E. El Dorado Hills Boulevard on-ramp	Merge	AM PM	34 24	D C

Source: Fehr & Peers, 2017.

Notes:

¹Density reported as passenger cars per mile per lane. Density is not reported for LOS F operations.

4.8.3 REGULATORY CONSIDERATIONS

Existing transportation policies, laws, and regulations that would apply to the proposed project are summarized below. This information provides a context for the impact discussion related to the project's consistency with applicable regulatory requirements.

4.8.3.1 State Laws and Regulations

California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for operating and maintaining the State highway system. In the project vicinity, U.S. 50 falls under Caltrans jurisdiction. Caltrans provides administrative support for transportation programming decisions made by the California Transportation Commission (CTC) for state funding programs. The State Transportation Improvement Program (STIP) is a multi-year capital improvement program that sets priorities and funds transportation projects envisioned in long-range transportation plans.

In June 2014, Caltrans approved a *Transportation Concept Report (TCR) for Highway 50*. Caltrans prepares a TCR, which is a long-range (20-year) planning document, for each state highway. The purpose of each TCR is to identify existing route conditions and future needs and includes a concept LOS standard. The cover of the TCR states that the *U.S. 50 Corridor System Management Plan* (Caltrans 2009), referred to as the CSMP, now serves as the TCR for Highway 50 from I-80 in West Sacramento to the Cedar Grove exit, which is east of the study area. Caltrans has established LOS E as the 'concept LOS' consistent with a four lane freeway with HOV lanes, auxiliary lanes, and intelligent transportation systems (ITS). Since LOS E is identified as the concept LOS, no further degradation of service from existing "E" is acceptable. The concept LOS is a generalized LOS for large study segments used by Caltrans that reflects the minimum level of service or quality of operations acceptable for the route segment.

According to the *Guide for the Preparation of Traffic Impact Studies* (Caltrans 2002), the existing LOS should be maintained if a freeway facility is currently operating at an unacceptable LOS (e.g., LOS F). A project impact is said to occur if the project degrades LOS from an acceptable to unacceptable level. A project impact may also occur when the addition of project trips exacerbates existing LOS F conditions and leads to a perceptible increase in density on freeway mainline segments or ramp junctions, or a perceptible increase in service volumes in a weaving area. In addition, a project impact is said to occur when the addition of project trips causes a queue on the off-ramp approach to a ramp terminal intersection to extend beyond its storage area and onto the freeway mainline.

4.8.3.2 Local Plans and Policies

Sacramento Area Council of Governments

The Sacramento Area Council of Governments (SACOG) is an association of local governments in the six-county Sacramento Region. Its members include the counties of Sacramento, El Dorado, Placer, Sutter, Yolo, and Yuba, as well as 22 cities. SACOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues. In addition to preparing the region's long-range transportation plan, SACOG assists in planning for transit, bicycle networks, clean air, and airport land uses.

The *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for 2036* (SACOG 2016) is a federally mandated long-range fiscally constrained transportation plan for the six-county area. Most of this area is designated a federal non-attainment area for ozone, indicating that the transportation system is required to meet stringent air quality emissions budgets to reduce pollutant levels that contribute to ozone formation. To receive federal funding, transportation projects nominated by cities, counties, and agencies must be consistent with the MTP/SCS.

The *2017-20 Metropolitan Transportation Improvement Program (MTIP)* is a list of transportation projects and programs to be funded and implemented over the next 3 years. SACOG submits this document to Caltrans and amends the program on a quarterly cycle. Only projects listed in the MTP/SCS may be included in the MTIP.

El Dorado County Transportation Commission (EDCTC)

The EDCTC is the Regional Transportation Planning Agency (RTPA) for El Dorado County, except for the portion of the County within the Tahoe Basin, which is under the jurisdiction of the Tahoe Regional Planning Agency (TRPA).

One of the fundamental responsibilities which results from RTPA designation is the preparation of the County's Regional Transportation Plan. The *El Dorado County Regional Transportation Plan 2015 – 2035 (RTP)* is designed to be a blueprint for the systematic development of a balanced, comprehensive, multi-modal transportation system. The EDCTC submits the RTP to SACOG for inclusion in the MTP/SCS process.

The *El Dorado County Bicycle Transportation Plan - 2010 Update* provides a blueprint for the development of a bicycle transportation system on the western slope of El Dorado County. The plan updates the El Dorado County Bicycle Master Plan, which was adopted by the EDCTC in January 2005.

In May 2013, the EDCTC completed the *El Dorado Hills Community Transit Needs Assessment and U.S. 50 Corridor Operations Plan* (Plan), which explores how the recent growth and projected development impact the need for transit services, and identifies the most appropriate type and level of service needed given the demand. The Plan represents a recommendation from the Western El Dorado County 2008 Short-Range Transit Plan to study and consider improved transit service in the El Dorado Hills area.

In April 2015, the EDCTC adopted the Coordinated Public Transit – Human Services Transportation Plan, which is intended to improve mobility of individuals who are disabled, elderly, or of low-income status. The plan focuses on identifying needs specific to those population groups and identifying strategies to meet their needs.

County of El Dorado General Plan

The following presents relevant guiding and implementing policies from the current County of El Dorado General Plan (2004) contained within the Transportation and Circulation Element (additional policies are listed under the following subsection **El Dorado County Initiative Measure E**).

GOAL TC-X: To coordinate planning and implementation of roadway improvements with new development to maintain adequate levels of service on County roads.

Policy TC-Xd Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume to capacity ratio of the roadway segments listed in Table TC-2 shall not exceed the ratio specified in that table. Level of Service will be as defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council) and calculated using the methodologies contained in that manual. Analysis periods shall be based on the professional judgment of the Department of Transportation which shall consider periods including, but not limited to, Weekday Average Daily Traffic (ADT), AM Peak Hour, and PM Peak hour traffic volumes.

Policy TC-Xe For the purposes of this Transportation and Circulation Element, “worsen” is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

- A. A 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or

- B. The addition of 100 or more daily trips, or
- C. The addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

GOAL TC-2: To promote a safe and efficient transit system that provides service to all residents, including senior citizens, youths, the disabled, and those without access to automobiles that also helps to reduce congestion, and improves the environment.

GOAL TC-3: To reduce travel demand on the County's road system and maximize the operating efficiency of transportation facilities, thereby reducing the quantity of motor vehicle emissions and the amount of investment required in new or expanded facilities.

Policy TC-3c The County shall encourage new development within Community Regions and Rural Centers to provide appropriate on-site facilities that encourage employees to use alternative transportation modes. The type of facilities may include bicycle parking, shower and locker facilities, and convenient access to transit, depending on the development size and location.

GOAL TC-4: To provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of the viable alternative transportation modes.

GOAL TC-5: To provide safe, continuous, and accessible sidewalks and pedestrian facilities as a viable alternative transportation mode.

Policy TC-5b In commercial and research and development subdivisions, curbs and sidewalks shall be required on all roads. Sidewalks in industrial subdivisions may be required as appropriate.

The El Dorado County Community Development Agency's¹ (CDA) *Transportation Impact Study Guidelines* (El Dorado County 2014) set forth the protocols and procedures for conducting transportation analysis in the County, including the identification of the study area (TIS Guidelines). All of the study intersections for the proposed project are within the County's jurisdiction. This traffic analysis is consistent with the TIS Guidelines.

¹ As of May 18, 2017 the El Dorado County Community Development Agency (CDA) has been re-organized into separate departments within Community Development Service. These departments are Environmental Management Department, Planning and Building Department, and the Transportation Department.

El Dorado County Initiative Measure E

General Plan Policy TC-X was revised through the approval of Measure E by County voters in June 2016. The key updated policies state:

Policy TC-Xa1 Traffic from residential development projects of five or more units or parcels of land shall not result in, or worsen, Level of Service F (gridlock, stop-and-go) traffic congestion during weekday, peak-hour periods on any highway, road, interchange or intersection in the unincorporated areas of the county.

Policy TC-Xa3 All necessary road capacity improvements shall be fully completed to prevent cumulative traffic impacts from new development from reaching Level of Service F during peak hours upon any highways, arterial roads and their intersections during weekday, peak-hour periods in unincorporated areas of the county before any form of discretionary approval can be given to a project.

Policy TC-Xa7 Before approval of any kind to a residential development project of five or more units or parcels of land, the County shall make a finding that the project complies with the policies above. If this finding cannot be made, then the County shall not approve the project in order to protect the public's health and safety as provided by state law to assure that safe and adequate roads and highways are in place as such development occurs.

Policy TC-Xf At the time of approval of a tentative map for a single family residential subdivision of five or more parcels that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element based on existing traffic plus traffic generated from the development plus forecasted traffic growth at 10-years from project submittal.

For all other discretionary projects that worsen (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element.

El Dorado County Transit Authority

El Dorado County Transit Authority (EDCTA) operates El Dorado Transit, which provides public transit service within the project area. El Dorado Hills is currently served by El Dorado Transit Dial-A-Ride services, the Sacramento Commuter Service, and the 50 Express service. Both the Sacramento Commuter Service and the 50 Express serve the El Dorado Hills Park-and-Ride Lot, but do not circulate within the community. The Sacramento Commuter route also serves the Vine Street and Mercedes Lane Park-and-Ride lot.

The El Dorado Park-and-Ride Facilities Master Plan, November 2007 calls for constructing nine new facilities over 20 years. The Plan calls for EDCTA to assume primary responsibility for existing Park-and-Ride facilities in the county and sets forth an annual program to fund the upkeep and operation. The Plan reiterates that demand exceeds supply at the Park-and-Ride lot, referred to as the El Dorado Hills Multi-modal Facility, located in the northeast corner of the White Rock Road/Latrobe Road intersection.

4.8.4 IMPACTS AND MITIGATION MEASURES

4.8.4.1 Significance Criteria

In accordance with Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, the impact of the proposed project related to transportation and traffic would be considered significant if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the 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;
- 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;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Transportation/Circulation System Effectiveness (Level of Service) Impact Criteria

General Plan Circulation Policy TC-Xd provides Level of Service (LOS) thresholds for County-maintained roads and state highways as follows² (these LOS thresholds do not apply to private roadway facilities):

- Level of Service for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume to capacity ratio of the roadway segments listed in Table TC-2 as applicable shall not exceed the ratio specified in that table. *(Note: None of the study roadways are presented in Table TC-2; the study area is located within a Community Region)*
- If a project causes the peak hour level of service or volume/capacity ratio on a county road or state highway that would otherwise meet the County standards (without the project) to exceed County LOS thresholds, then the impact shall be considered significant.
- If any county road or state highway fails to meet the above listed county standards for peak hour LOS or volume/capacity ratios without the proposed project, and the project will worsen conditions on the road or highway, then the impact shall be considered significant. The term worsen is defined for the purpose of this paragraph according to General Plan Policy TC-Xe as follows:
 - A. A two (2) percent increase in traffic during the AM peak hour, PM peak hour or daily, OR
 - B. The addition of 100 or more daily trips, OR
 - C. The addition of 10 or more trips during the AM peak hour or the PM peak hour.

Caltrans considers the following to be significant impacts:

- Project traffic added to off-ramps results in vehicle queues that extend into the ramp's deceleration area or onto the freeway (i.e., exceed the available storage capacity);
- Project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service.
- Any additional traffic generated by the project is added to a facility already operating at LOS E.³

4.8.4.2 Issues adequately addressed in the Initial Study

As noted in the Initial Study, the County has no congestion management plan that is applicable to the project site or vicinity. As such, there would be no impact.

As discussed in the Initial Study, the project would not result in a change in established air traffic patterns for publicly or privately operated airports or landing fields in the project vicinity. There are no

² El Dorado County Community Development Agency's Transportation Impact Study Guidelines

³ The U.S. 50 Transportation Concept Report and Corridor System Management Plan identifies LOS E as the "Concept LOS" for U.S. 50 from the Sacramento/El Dorado County line to Bass Lake Road.

public or private airports within 2 miles of the project site, and it is not within an airport land use plan boundary. As such, there would be no impact.

As noted in the Initial Study, the existing roadway network that provides access to the project site would not be modified, and no new roadways would be constructed. The proposed project would provide a new driveway along Vine Street, and a motor court and driveway would be located along Town Center Boulevard. However, the design of the proposed project would not cause a permanent alteration to the local vehicular circulation routes and patterns, or impede public access or travel on any public rights-of-way and no design hazards would be created. Further, the final design of the proposed project, including curb cuts, ingress, egress, and other streetscape changes, would be subject to review by the El Dorado County Transportation Department and would be required to comply with all requirements of the Department. As a result, impacts would be less than significant.

As discussed in the Initial Study, the El Dorado Hills Fire Department has reviewed the proposed project and will require all access roadways and fire hydrant systems be installed and in service prior to any combustible materials being brought onto the site. An emergency access connection would be provided between Town Center Boulevard and Mercedes Lane. Project conditions of approval will require that the project landscaping plan exclude the planting of any trees adjacent to the Fire Apparatus Access road on the west side of the project site that could impede fire apparatus access when fully grown. As a result, the impact related to emergency access would be less than significant.

4.8.4.3 Methodology

The impacts of the proposed project to the surrounding transportation system were evaluated using the County of El Dorado guidelines. The operation of 10 study intersections, one private intersection, and 10 freeway segments and ramps were evaluated with LOS calculations for the weekday morning (AM) and evening (PM) peak periods for the four scenarios listed below:

- Scenario 1: Existing Conditions**
- Scenario 2: Existing Plus Project Conditions**
- Scenario 3: Near-Term Plus Project Conditions**
- Scenario 4: Long-Term Cumulative Plus Project Conditions**

A description of the methods used to estimate the amount of traffic generated by the proposed project is provided below. Project-specific impacts are described under **Section 4.8.4.3, Project Impacts and Mitigation Measures**.

Scenario 1: Existing Conditions

Existing conditions are represented by existing traffic volumes on the existing roadway network. Existing traffic volumes were obtained from counts conducted during typical weekday AM and PM peak periods in December 2016 and February 2017. Existing levels of service are presented in **Table 4.8-4**.

Scenario 2: Existing Plus Project Conditions

Existing Plus Project conditions are represented by the addition of proposed project traffic to existing traffic volumes on the existing roadway network. Existing Plus Project conditions were compared to Existing conditions to determine potential immediate project impacts.

Project Traffic Estimates

The amount of traffic added to the roadway system by the proposed project was estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. The first step estimates the amount of traffic that would be generated once the proposed project is built and fully occupied. The second step estimates the direction of travel to and from the project site. The third step assigns the proposed project trips to specific street segments and intersection turning movements. The results are described below.

Project Trip Generation

The amount of traffic added to the surrounding roadway system by the proposed project was estimated using peak hour trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (9th Edition), with adjustments to account for internal vehicle trips and walking trips given that the project would be located in the Town Center.

The traffic study completed for the proposed project determined that the combined effects of the project's land use, location, and development scale would contribute to a reduction in off-site average weekday vehicle "trips" (one vehicle trip is generated when a person drives from their home to shopping, school, or their job. Their return drive home is another trip). This reduction is due largely to the project's proximity to commercial and retail services and connections between the project and these services. That is, most of the reduction in total off-site vehicle trips generated by the project is attributable to those trips either (1) beginning on the project site, traveling to adjacent services, and ending on the project site without using off-site roadways or (2) being replaced by walking.

Traditionally, traffic engineers and transportation planners have estimated internalization of project trips using one of two methods. First, they would estimate it based on their professional judgment.

Alternatively, professionals relied on the Institute of Transportation Engineers' (ITE) internalization methodology presented in the ITE Trip Generation Handbook. Although this has been applied in thousands of studies in California, the methodology was limited as it was based on only six surveys in Florida. Additionally, the ITE internalization methodology only accounts for the land use types on the mixed-use site. Given the limited input information (land use amount and type) and the limited range of data (six surveys), the accuracy of the internalization estimates has recently been found to generally under-estimate internalization of trips from mixed-use projects.

Recognizing the limitations of the simplified methodology applied in the ITE handbook, the United States Environmental Protection Agency (U.S. EPA) commissioned a study to develop a more substantial, statistically superior methodology. This methodology, identified as MXD (or mixed-use development trip generation), begins with ITE rates and develops trip internalization estimates based on a series of factors tied to numerous site attributes. It should also be noted that the MXD model has been developed in cooperation with the U.S. EPA and ITE, and that ITE is currently reviewing the model for potential inclusion in their updated recommended practice for evaluating mixed-use development projects. MXD trip internalization methodology is detailed in **Appendix 4.8**.

MXD Model Inputs and Trip Generation Estimates

To determine the amount of trips that would be internal to the project site, an MXD trip generation estimate was prepared. The MXD analysis first begins with gross trip rates identified in the ITE's Trip Generation (9th Edition, 2012). It then incorporates the MXD methodology for "matching" trips to estimate the amount of internalization within the project area. **Table 4.8-6, Project Trip Generation Rates and Estimates**, summarizes project land use, assumed trip rates, calculated trip generation totals, and adjustments to account for trips occurring between the project and other parts of the Town Center.

**Table 4.8-6
Project Trip Generation Rates and Estimates**

Land Use	Trip Rate		Trips					
			AM Peak Hour			PM Peak Hour		
	AM	PM	In	Out	Total	In	Out	Total
Multifamily Housing (Dwelling Units)	0.51	0.62	22	87	109	87	46	133
Town Center Trips						18	10	28
Vehicle Trips External to Town Center			22	87	109	69	36	105

Source: Institute of Transportation Engineers' Trip Generation (9th Edition, 2012)

According to the MXD analysis, the project is projected to generate 109 AM peak hour vehicle trips and 133 PM peak hour vehicle trips. About 28 trips in the PM peak hour are expected to remain within the Town Center.

Project Trip Distribution

The distribution was developed using the following sources and analytical techniques:

- Existing travel patterns based on traffic counts
- Traffic assignment using the validated base year El Dorado County travel demand forecasting model
- Project access

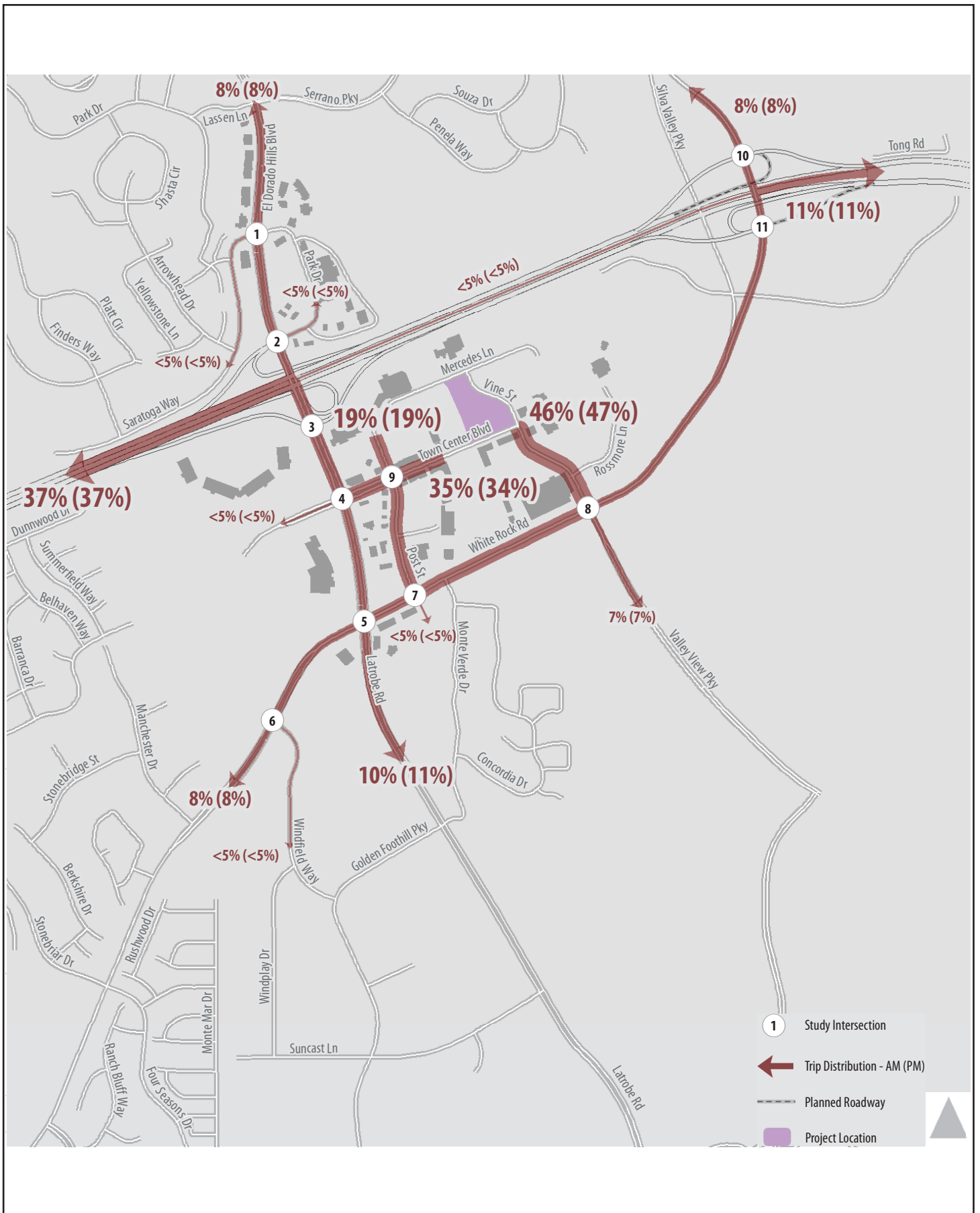
As shown on **Figure 4.8-4, Project Trip Distribution**, the largest share of project trips (37 percent) would use U.S. 50 to/from the west in the morning and evening with 11 percent traveling on U.S. 50 to/from the east. Travel to/from the north on El Dorado Hills Boulevard represents about eight percent of project travel. Travel to/from the east and west on White Rock Road is fairly balanced at eight percent. About 20 percent of project travel will have an origin/destination south of White Rock Road.

Project Trip Assignment

The proposed project trips were assigned to the roadway system based on the directions of approach and departure discussed above. The locations of complimentary land uses and local knowledge of the study area helped determine specific trip routes. **Figure 4.8-5, Project Trip Assignment**, shows the expected increases in peak hour intersection turning movements due to the proposed project. The new project trips (as shown on **Figure 4.8-5**) were added to existing traffic volumes to establish intersection volumes for Existing Plus Project conditions, shown on **Figure 4.8-6, Existing Plus Project Conditions Peak Hour Intersection Turning Movement Volumes**.

Scenario 3: Near-Term Plus Project Conditions

The near-term analysis is used by El Dorado County to determine compliance with General Plan Policy TC-Xa(3), which was created by the approval of Measure E by County voters in June 2016. The near-term cumulative analysis, which is not required by CEQA and does not constitute an analysis of transportation impacts for CEQA purposes, represents conditions 10 years beyond the existing baseline (i.e., 2027 conditions).



SOURCE: Fehr and Peers, 2017

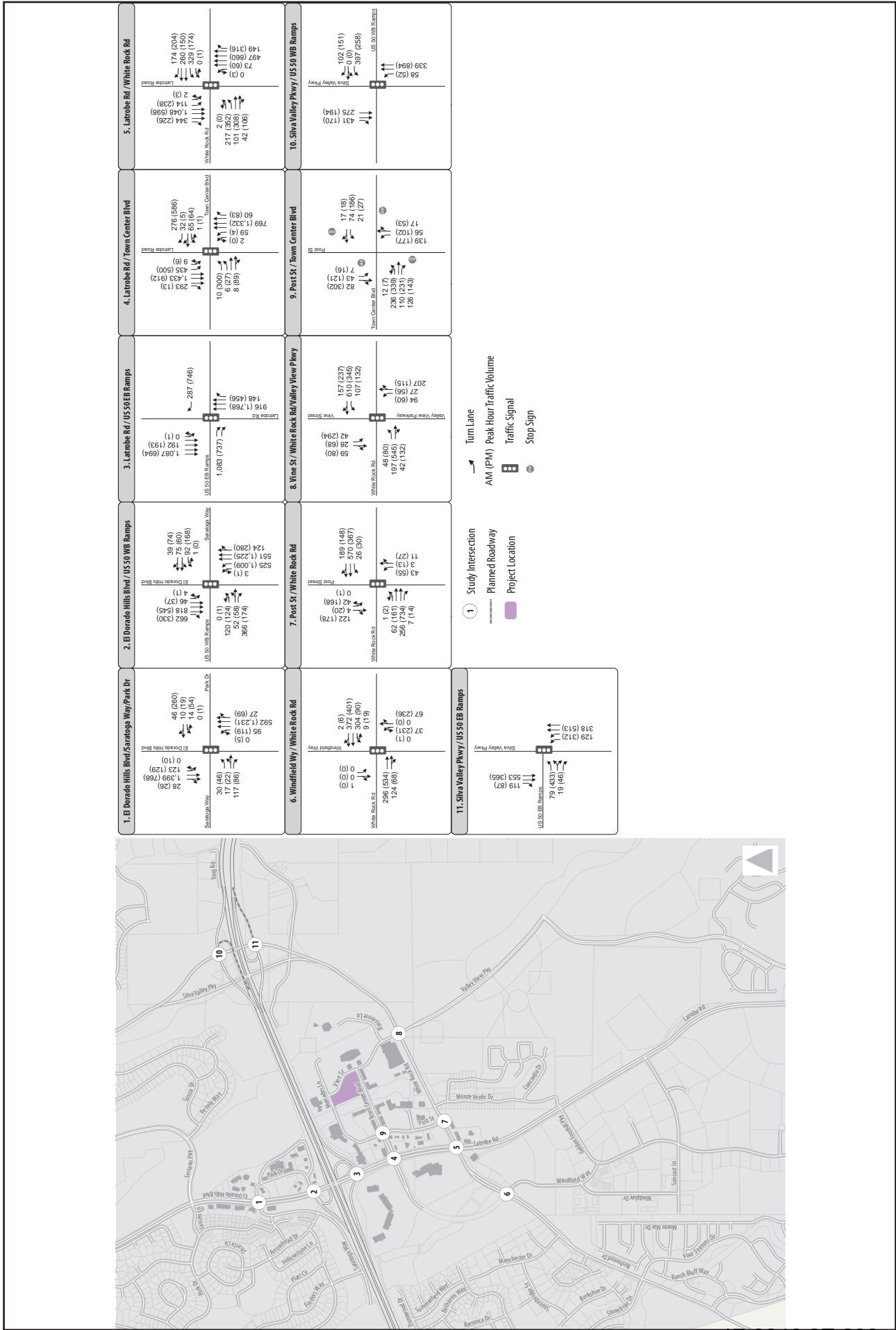
FIGURE 4.8-4



SOURCE: Fehr and Peers, 2017

FIGURE 4.8-5
 Project Trip Assignment





SOURCE: Fehr and Peers, 2017

FIGURE 4.8-6

Existing Plus Project Conditions Peak Hour Intersections Turning Movement Volumes



Near-Term Conditions Forecast Development

The El Dorado County travel demand forecasting model was used to develop traffic volume forecasts for near-term cumulative conditions. The following steps, based on coordination with El Dorado County Community Development Agency staff, were taken to develop the land use and roadway network inputs for the Near-Term (2027) analysis scenario forecasting model:

1. Land Use Growth – Used linear interpolation between the base year and future year models to develop 10-year land use growth projections.
2. 10-Year Land Use Forecasts – Added land use growth from Step 1 to the base year model land use inputs.
3. Capital Improvement Program Projects – Identified roadway improvement projects from the adopted 2016 Capital Improvement Program with construction planned by 2027. **Table 4.8-7, Capacity-Enhancing Roadway Improvements (Construction within 10 years)**, below summarizes roadway improvement projects identified in the El Dorado County 2016 Capital Improvement Program that are planned to be under construction by 2027.
4. Near-Term Transportation Network – Added roadway improvement projects from Step 3 to the base year model transportation network.
5. Near-Term No Project Forecasts – Developed AM and PM peak hour traffic volume forecasts for study intersections and freeway facilities using the inputs from Steps 1 through 4.
6. Near-Term Plus Project Forecasts – Added project trips to the Near-Term No Project Forecasts from Step 5 to developed AM and PM peak hour traffic volume forecasts for study intersections and freeway facilities with the proposed project.

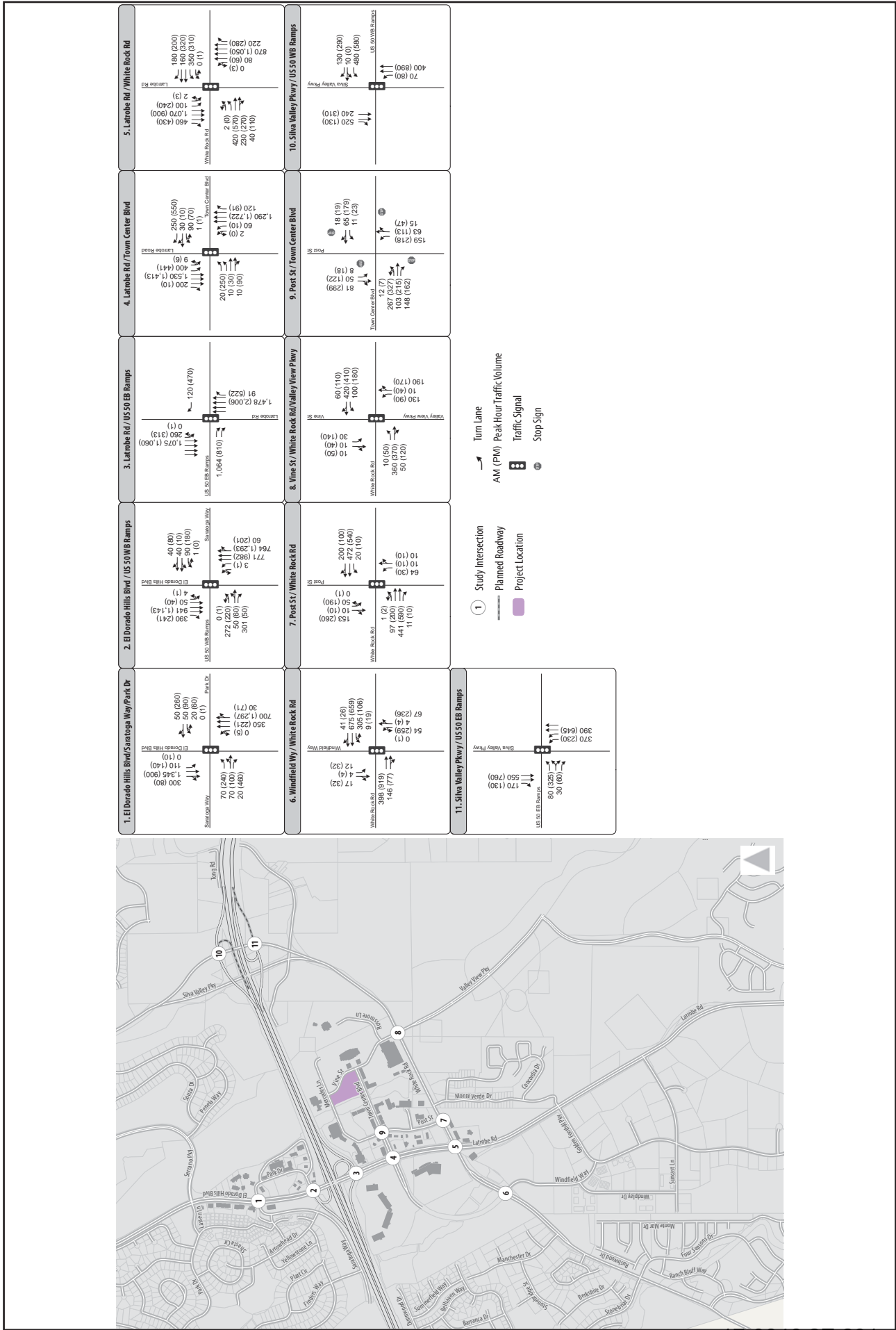
**Table 4.8-7
Capacity-Enhancing Roadway Improvements (Construction within 10 years)**

Project Name	Project Description	Begin Construction
Country Club Drive – Silva Valley Parkway to Tong Road	Construct new 2-lane road Country Club Drive from Silva Valley Parkway to Tong Road. Work includes curb, gutter, and sidewalk on both sides of the roadway. CIP#71362	By 2026
Country Club Drive Extension – Tong Road to Bass Lake Road	Construct 2-lane extension of Country Club Drive from Tong Road to Bass Lake Road, with 8-foot paved shoulder, curb and gutter, and new intersection at Bass Lake Road. CIP#71361	By 2026
Country Club Drive Realignment -Bass	Realign Country Club Drive from Bass Lake Road/Old Bass Lake Road to Tierra de Dios Drive. Work includes constructing a 2-lane road with 8-	By 2018

Project Name	Project Description	Begin Construction
Lake Road to Tierra De Dios Drive	foot paved shoulders, sidewalk, curb and gutter. CIP#71360	
Green Valley Road Widening – County Line to Sophia Parkway	Widen Green Valley Rd from County line to Sophia Parkway from two to four lanes. CIP#72376	By 2017
Saratoga Way Ext - Phase 1	Construct new 24-lane arterial to extend Saratoga Way from Wilson Boulevard to Sacramento County line and a 2-lane arterial from Wilson Boulevard to the current terminus near Finders Way to Sacramento County Line; includes median, 6-ft shoulders, right two-way left-turn pocket onto from Finders Way to Arrowhead, asphalt path, drainage system, environmental clearance and secure ROW for future 4-lane road from County Line to El Dorado Hills Boulevard CIP#71324 (Phase 2 CIP#GP147 - See ELD19234 in MTP.)	By 2018
Silver Springs Parkway to Bass Lake Road (South Segment)	Realign Bass Lake Road south of Green Valley Road through the proposed Silver Springs subdivision, which is west of the existing Bass Lake Road. The new road is named Silver Springs Parkway. That development is responsible for building Silver Springs Parkway through their development. Silver Springs Parkway will be a 2-lane standard divided roadway with shoulders. CIP#76108	By 2018
U.S. 50 Auxiliary Lane Westbound – Bass Lake Road to Silva Valley Parkway	Widen U.S. 50 to add an auxiliary lane to westbound US 50 connecting the Bass Lake Road Interchange and Silva Valley Parkway Interchange. Timing of construction to be concurrent with or after the Bass Lake Road Interchange improvement. CIP#53117	By 2026
U.S. 50 / El Dorado Hills Blvd Interchange Improvements – (Phase 2B)	Reconstruct eastbound diagonal on-ramp and eastbound loop off-ramp for the ultimate configuration; add a lane to northbound El Dorado Hills Blvd under the overpass (eliminates merge lane and improves traffic flow from the eastbound loop off-ramp); eastbound diagonal on-ramp will be metered and have an HOV bypass. Project split from ELD15630 (CIP#71323).	By 2026
White Rock Rd Widening -Manchester to Sacramento County Line (Connector Segment)	Widen White Rock Rd from 2 to 4 lanes, divided, from Manchester Dr west to Sacramento County Line. CIP#GP137	By 2026

Source: El Dorado County's Adopted 2016 Capital Improvement Program, December 6, 2016. (Section 4.1 – West Slope Road/Bridge Individual Project Summaries)

Figures 4.8-7 and 4.8-8 show AM and PM peak hour traffic volume forecasts used for the analysis of Near-Term No Project Conditions and Near-Term Plus Project Conditions.

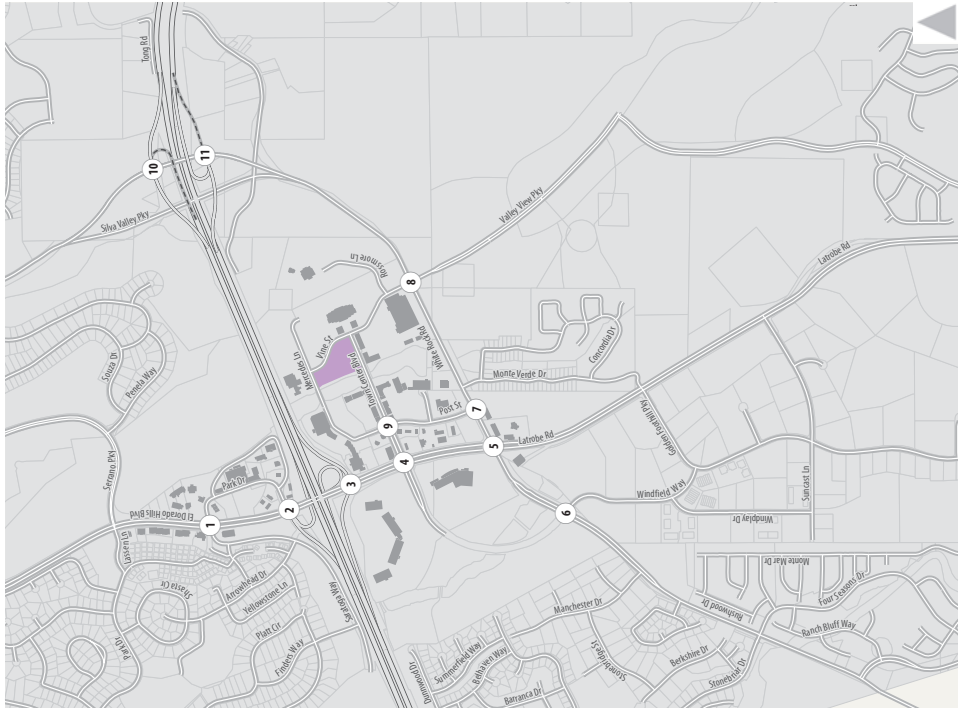


SOURCE: Fehr and Peers, 2017

FIGURE 4.8-7

Peak Hour Traffic Volumes and Lane Configurations – Near-Term No Project





Location	AM (PM) Peak Hour Traffic Volume	Traffic Signal	Stop Sign	
1. El Dorado Hills Blvd / Saratoga Way / Park Dr	110 (140) 110 (140) 1347 (907) 300 (80)	12 (10) 70 (240) 12 (10) 194 (110)	0 (1) 0 (1) 0 (1) 0 (1)	0 (1) 0 (1) 0 (1) 0 (1)
2. El Dorado Hills Blvd / US 50 WB Ramps	40 (80) 50 (90) 91 (181) 181 (362)	272 (220) 50 (60) 11 (10) 944 (1,151) 390 (241)	0 (1) 0 (1) 0 (1) 0 (1)	0 (1) 0 (1) 0 (1) 0 (1)
3. Larabee Rd / US 50 EB Ramps	1,074 (842)	1,528 (2,027) 93 (523)	120 (470)	0 (1) 0 (1) 0 (1)
4. Larabee Rd / Town Center Blvd	20 (250) 11 (33) 10 (10)	1,310 (1,731) 80 (120) 94 (172) 122 (95)	2 (0) 2 (0) 2 (0)	2 (0) 2 (0) 2 (0)
5. Larabee Rd / White Rock Rd	200 (200) 168 (324) 358 (314)	462 (431) 105 (90) 145 (255) 2 (9)	0 (1) 0 (1) 0 (1) 0 (1)	0 (1) 0 (1) 0 (1) 0 (1)
6. Windfield Wy / White Rock Rd	12 (32) 17 (32) 4 (4) 4 (4)	400 (300) 148 (77) 492 (93) 12 (32) 17 (32)	0 (1) 0 (1) 0 (1) 0 (1)	0 (1) 0 (1) 0 (1) 0 (1)
7. Post St / White Rock Rd	166 (266) 11 (10) 11 (10) 11 (10)	201 (102) 485 (550) 48 (191) 20 (10)	0 (1) 0 (1) 0 (1) 0 (1)	0 (1) 0 (1) 0 (1) 0 (1)
8. Vine St / White Rock Rd / Valley View Pkwy	130 (90) 190 (170) 12 (7)	65 (123) 100 (88) 17 (72) 362 (871) 50 (120)	46 (47) 33 (60) 17 (43)	0 (1) 0 (1) 0 (1)
9. Post St / Town Center Blvd	159 (218) 64 (115) 10 (55)	18 (18) 20 (28) 12 (7) 274 (298) 110 (298) 148 (182)	0 (1) 0 (1) 0 (1)	0 (1) 0 (1) 0 (1)
10. Silva Valley Pkwy / US 50 WB Ramps	70 (80) 408 (694)	520 (130) 243 (177) 232 (277)	0 (1) 0 (1) 0 (1)	0 (1) 0 (1) 0 (1)
11. Silva Valley Pkwy / US 50 EB Ramps	380 (234) 398 (649)	80 (325) 566 (775)	0 (1) 0 (1)	0 (1) 0 (1)

- Study Intersection
- Planned Roadway
- Project Location
- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign

SOURCE: Fehr and Peers, 2017

FIGURE 4.8-8

Peak Hour Traffic Volumes and Lane Configurations – Near-Term Plus Project



4.8.4.4 Project Impacts and Mitigation Measures

Impact TRANS-1: Development of the proposed project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the traffic circulation system under Existing plus Project Conditions. (*Less than Significant*)

The traffic impact analysis below examines transportation conditions in the study area under existing conditions and identifies the project's impacts under this scenario. An assessment of the proposed project's contribution to near-term and long-term cumulative impacts is included in **Section 4.8.4.4 Cumulative Impacts and Mitigation Measures**.

Impacts under Existing Plus Project Intersection Conditions

As shown in **Table 4.8-6**, the proposed project would result in the addition of 109 AM peak hour vehicle trips and 105 PM peak hour vehicle trips on the study area road network. The effects of these additional vehicle trips on intersection levels of service were calculated for the Existing Plus Project condition, and the resulting levels of service are presented in **Table 4.8-8, Existing and Existing Plus Project Intersection LOS Summary**.

**Table 4.8-8
Existing and Existing Plus Project Intersection LOS Summary**

Intersection	Intersection Control	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
			Avg Delay ²	LOS	Avg Delay ²	LOS
1. El Dorado Hills Boulevard/Park Drive/Saratoga Way	Signal	AM	19	B	20	B
		PM	20	C	20	C
2. El Dorado Hills Boulevard/U.S. 50 WB Ramps	Signal	AM	31	C	32	C
		PM	33	C	35	C
3. Latrobe Road/U.S. 50 EB Ramps	Signal	AM	33	C	29	C
		PM	20	C	21	C
4. Latrobe Road/Town Center Boulevard	Signal	AM	16	B	16	B
		PM	50	D	53	D
5. Latrobe Road/White Rock Road	Signal	AM	31	C	31	C
		PM	27	C	27	C
6. White Rock Road/Winfield Way	Signal	AM	20	C	20	C
		PM	22	C	22	C
7. White Rock Road/Post Street	Signal	AM	18	B	19	B
		PM	27	C	27	C

Intersection	Intersection Control	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
			Avg Delay ²	LOS	Avg Delay ²	LOS
			8. White Rock Road/Vine Street/Valley View Drive	Signal	AM PM	24 46
9. Town Center Boulevard/Post Street ¹	AWSC	AM PM	13 48	B E	14 49	B E
10. Silva Valley Parkway/U.S. 50 WB Ramps	Signal	AM PM	11 10	B A	11 10	B A
11. Silva Valley Parkway/U.S. 50 EB Ramps	Signal	AM PM	10 13	B B	11 13	B B

Source: Fehr & Peers, 2017.

Notes: AWSC = all-way stop control

¹The Town Center Boulevard/ Post Street intersection is private (i.e., not a County facility).

²The average delay is measured in seconds per vehicle. For signalized and AWSC intersections, the delay shown is the average control delay for the overall intersection. For side-street stop controlled intersections, the LOS and control delay for the worst movement is shown. Intersection LOS and delay is calculated based on the procedures and methodology contained in the HCM 2010 (TRB, 2010). Intersections 6-11 were analyzed in Synchro 9. Intersections 1-5 were analyzed in SimTraffic.

Table 4.8-8 indicates that with the addition of project traffic, all County-owned study intersections would continue to operate at LOS E or better during both the AM and PM peak hours. Therefore, traffic generated by the project would not result in significant impacts at the study intersections, given that all study intersections would operate acceptably under Existing Plus Project conditions.

Impacts on Freeway Segments and Ramps under Existing Conditions

The proposed project's contribution to freeway traffic density would be small. As shown in Table 4.8-9, Existing and Existing Plus Project Freeway Segments and Ramps LOS Summary, adding the proposed project freeway traffic to existing densities would not worsen operations on any of the study freeway segments or ramps from LOS D or better. Therefore, the proposed project would have a less than significant impact on freeway operation under Existing Plus Project conditions.

Table 4.8-9
Existing and Existing Plus Project Conditions – Study Freeway Segment LOS Summary

Segment	Facility Type	Peak Hour ¹	Existing Conditions		Existing Plus Project Conditions	
			Density ¹	LOS	Density ¹	LOS
<i>Eastbound</i>						
A. Latrobe Road off-ramp	Diverge	AM PM	22 30	C D	22 30	C D

Segment	Facility Type	Peak Hour ¹	Existing Conditions		Existing Plus Project Conditions	
			Density ¹	LOS	Density ¹	LOS
B. El Dorado Hills Boulevard off-ramp	Diverge	AM	14	B	14	B
		PM	26	C	26	C
C. El Dorado Hills Boulevard on-ramp to Silva Valley Parkway off-ramp	Weave (HCM) ²	AM	10	A	10	A
		PM	23	C	23	C
	Basic	AM	7	A	7	A
		PM	15	B	15	B
D. Silva Valley Parkway on-ramp (loop)	Merge	AM	11	B	12	B
		PM	21	C	21	C
E. Silva Valley Parkway to Bass Lake Road	Basic	AM	11	A	11	A
		PM	20	C	20	C
Westbound						
B. Bass Lake Road to lane addition	Basic	AM	29	D	29	D
		PM	17	B	18	B
C. Lane addition to Silva Valley Parkway	Basic	AM	19	C	19	C
		PM	12	B	12	B
D. Silva Valley Parkway off-ramp	Diverge	AM	13	B	13	B
		PM	5	A	5	A
E. Silva Valley Parkway on-ramp to El Dorado Hills Boulevard off-ramp	Weave (HCM) ²	AM	34	D	34	D
		PM	18	B	18	B
	Basic	AM	19	C	19	C
		PM	11	A	11	A
F. El Dorado Hills Boulevard on-ramp	Merge	AM	34	D	34	D
		PM	24	C	24	C

Source: Fehr & Peers, 2017.

Notes:

¹ Density reported as passenger cars per mile per lane. Density is not reported for LOS F operations.

² This weave section lies outside the realm of weaving using the Leisch Method. As a result, it is analyzed as a basic segment.

Mitigation Measures: No mitigation measures are required.

Impact TRANS-2: Development of the proposed project would not conflict with policies, programs or plans for alternate transportation. (*Less than Significant*)

The proposed project would have a significant impact to alternate transportation programs for pedestrian, bicycle, and transit facilities and services if an element of the proposed project would conflict with existing or planned pedestrian, bicycle, and transit services or if the proposed project would create hazardous conditions for pedestrians or bicyclists that currently do not exist.

Pedestrians and Bicycle Facilities

Pedestrian facilities in the Town Center include attached sidewalks on Town Center Boulevard, Post Street, Vine Street, and Mercedes Lane and an off-street path around the Town Center Lake. The project would connect to existing bicycle and pedestrian facilities in the Town Center. Project implementation would not alter, impede, or degrade existing bicycle and pedestrian facilities and a less than significant impact would occur.

Public Transit Service

Based on ridership data presented in the *El Dorado Hills Community Transit Needs Assessment and U.S. 50 Corridor Transit Operations Plan Final Report*, approximately 41,760 annual commute trips are made by El Dorado Hills residents using El Dorado Transit Commuter Service. Residents of El Dorado Hills account for about 72 percent of boardings at the El Dorado Hills Park-n-Ride Lot (located in the Town Center), which includes riders that park in the lot and riders that use other means to access the service (walk, bike, and drop-off).

Based on this information, about one annual commute trip is generated per El Dorado Hills resident, assuming a population of 42,100 (2010 Census) in El Dorado Hills. Therefore, the project's 214 dwelling units could result in demand of about 560 annual commute trips assuming a household population of 2.6 persons (Sacramento Area Council of Governments, SACSIM regional travel demand simulation model), or about 3 commute trips per weekday. The proposed project would not alter existing nearby bus stops or conflict with adopted plans or policies related to transit in the General Plan. The existing transit service is expected to accommodate the increased demand from the proposed project. Transit services would continue to be provided only during peak periods, and peak periods are the most likely times for residents of the proposed project to use transit. Therefore, the proposed project would have a less than significant impact on transit facilities and access.

Mitigation Measures: No mitigation measures are required.

4.8.4.5 Cumulative Impacts and Mitigation Measures

This section presents an evaluation of the proposed project's cumulative traffic impacts under near-term cumulative conditions (2027). As noted above, the near-term analysis is used by El Dorado County to determine compliance with General Plan Policy TC-Xa(3), which was created by the approval of Measure E by County voters in June 2016. The near-term cumulative analysis, which is not required by CEQA and

does not constitute an analysis of transportation impacts for CEQA purposes, represents conditions 10 years beyond the existing baseline. The near-term cumulative impact analysis is referred to as “Measure E analysis” in the TIA, presented in **Appendix 4.8** of this Draft EIR.

This section also presents traffic impacts under long-term cumulative conditions (2035) as required by CEQA. The long-term cumulative impact analysis is referred to as “Cumulative Impact analysis” in the TIA.

Cumulative Impact C-TRANS-1: **Development of the proposed project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the traffic circulation system under Near-Term Cumulative (2027) plus Project Conditions. (Significant; Less than Significant with Mitigation)**

The following summarizes traffic operations for study intersections and freeway facilities under near-term cumulative conditions without and with the addition of trips from the El Dorado Hills Town Center Apartments project.⁴

Near-Term No Project Operations

Intersections

Table 4.8-10, Intersection LOS and Delay – Near-Term Conditions, compares existing AM and PM peak hour intersection operations to near-term cumulative conditions.

**Table 4.8-10
Intersection LOS and Delay—Near-Term Conditions**

Intersection	Control	Existing (LOS/Delay)		Near-Term (LOS/Delay)	
		AM	PM	AM	PM
1. El Dorado Hills Boulevard/Saratoga Way/Park Drive	Signal	B / 19	C / 20	F / 108	D / 47
2. El Dorado Hills Boulevard/US 50 WB Ramps	Signal	C / 31	C / 33	D / 44	D / 37
3. Latrobe Road/US 50 EB Ramps	Signal	C / 33	C / 20	C / 20	B / 18
4. Latrobe Road/Town Center Boulevard	Signal	B / 16	D / 50	C / 20	D / 47

⁴ Although this section includes analysis of the private Town Center Boulevard/Post Street intersection for informational purposes, Policy TC-Xa(3) only applies to “highways, arterial roads and their intersections” and does not apply to private roads and their intersections. For this reason, the Town Center Boulevard/Post Street intersection is not subject to the requirements of this Measure E analysis.

Intersection	Control	Existing (LOS/Delay)		Near-Term (LOS/Delay)	
		AM	PM	AM	PM
5. Latrobe Road/White Rock Road	Signal	C / 31	C / 27	C / 35	C / 33
6. White Rock Road/Winfield Way	Signal	C / 20	C / 22	B / 18	C / 25
7. White Rock Road/Post Street	Signal	B / 18	C / 27	C / 23	C / 30
8. White Rock Road/Vine Street /Valley View Parkway	Signal	C / 24	D / 46	B / 18	C / 27
9. Town Center Boulevard/Post Street ¹	AWSC	B / 13	E / 48	B / 15	F / 50
10. Silva Valley Parkway/US 50 WB Ramps	Signal	B / 11	A / 10	B / 11	B / 12
11. Silva Valley Parkway/US 50 EB Ramps	Signal	B / 10	B / 13	B / 12	B / 13

Source: Fehr & Peers, 2017

Notes: AWSC = all-way stop control

¹The Town Center Boulevard/ Post Street intersection is private (i.e., not a County facility).

The average delay is measured in seconds per vehicle. For signalized and AWSC intersections, the delay shown is the average control delay for the overall intersection. For TWSC intersections, the LOS and control delay for the worst movement is shown. Intersection LOS and delay is calculated based on the procedures and methodology contained in the HCM 2010 (TRB, 2010). Intersections 6-11, were analyzed in Synchro 9. Intersections 1-5 were analyzed in SimTraffic.

As shown in **Table 4.8-10**, all relevant study intersections would continue to operate at LOS E or better, with the addition of 10 years of land use growth and the capital projects planned to begin construction in 10 years, except for the El Dorado Hills Boulevard/Saratoga Way/Park Drive intersection, which will operate unacceptably at LOS F during the AM peak hour.

The private Town Center Boulevard/Post Street intersection would operate at LOS F under near-term cumulative without project conditions. However, Policy TC-Xa(3) only applies to “highways, arterial roads and their intersections” and does not apply to private roads and their intersections.

Freeways

Table 4.8-11, Freeway Facility Peak Hour Level of Service – Near-Term Conditions, compares existing AM and PM peak hour freeway operations to near-term cumulative conditions.

Table 4.8-11
Freeway Facility Peak Hour Level of Service – Near-Term Conditions

Freeway	Segment	Facility Type	Existing Density ¹ / LOS		Near-Term Density ¹ / LOS	
			AM	PM	AM	PM
US 50 EB	Latrobe Road off-ramp	Diverge	22 / C	30 / D	22 / C	27 / C

Freeway	Segment	Facility Type	Existing Density ¹ / LOS		Near-Term Density ¹ / LOS	
			AM	PM	AM	PM
US 50 WB	El Dorado Hills Boulevard off-ramp	Diverge	14 / B	26 / C	13 / B	23 / C
	El Dorado Hills Boulevard on-ramp to Silva Valley Parkway off-ramp	Weave (HCM) ²	10 / A	23 / C	11 / B	23 / C
		Basic	7 / A	15 / B	7 / A	14 / B
	Silva Valley Parkway on-ramp (loop)	Merge	11 / B	21 / C	15 / B	20 / C
	Silva Valley Parkway on-ramp to Bass Lake Road off-ramp	Basic	11 / A	20 / C	14 / B	19 / C
	Bass Lake Road off-ramp	Diverge	15 / B	25 / C	18 / B	25 / C
	Bass Lake Road on-ramp	Merge	32 / D	21 / C	33 / D	27 / C
	Bass Lake Road on-ramp to lane addition	Basic	29 / D	17 / B	30 / D	24 / C
	Lane addition to Silva Valley Parkway off-ramp	Basic	19 / C	12 / B	19 / C	16 / B
	Silva Valley Parkway off-ramp	Diverge	13 / B	5 / A	14 / B	11 / B
	Silva Valley Parkway on-ramp to El Dorado Hills Boulevard off-ramp	Weave (HCM) ²	34 / D	18 / B	36 / E	21 / C
Basic		19 / C	11 / A	19 / C	13 / B	
El Dorado Hills Boulevard on-ramp	Merge	34 / D	24 / C	34 / D	24 / C	

Source: Fehr & Peers, 2017

Notes:

¹Density reported as passenger cars per mile per lane. Density is not reported for LOS F operations.

²This weave section lies outside the realm of weaving using the Leisch Method. As a result, it is analyzed as a basic segment.

As shown in **Table 4.8-11**, all freeway facilities would continue to operate at LOS E or better, with the addition of 10 years of land use growth and the capital projects planned to begin construction in 10 years.

Near Term Plus Project Operations

The following summarizes intersection and freeway operations under near-term cumulative conditions with the addition of project traffic, and demonstrates compliance with General Plan Policy TC-Xa(3) at all relevant intersections and freeway facilities.

Intersections

Table 4.8-12, Intersection LOS and Delay—Near-Term Plus Project Conditions, compares AM and PM peak hour intersection operations under near-term cumulative conditions without and with the proposed project.

Table 4.8-12
Intersection LOS and Delay—Near-Term Plus Project Conditions

Intersection	Control	Near-Term (LOS/Delay)		Near-Term Plus Project (LOS/Delay)	
		AM	PM	AM	PM
1. El Dorado Hills Boulevard/Saratoga Way/Park Drive	Signal	F / 108	D / 47	F / 125	D / 43
2. El Dorado Hills Boulevard/US 50 WB Ramps	Signal	D / 44	D / 37	D / 48	D / 40
3. Latrobe Road/US 50 EB Ramps	Signal	B / 20	B / 18	C / 20	B / 15
4. Latrobe Road/Town Center Boulevard	Signal	C / 20	D / 47	C / 21	D / 51
5. Latrobe Road/White Rock Road	Signal	C / 35	C / 33	D / 36	C / 33
6. White Rock Road/Winfield Way	Signal	B / 18	C / 25	B / 18	C / 25
7. White Rock Road/Post Street	Signal	C / 23	C / 30	C / 23	C / 30
8. White Rock Road/Vine Street /Valley View Parkway	Signal	B / 18	C / 27	B / 20	C / 29
9. Town Center Boulevard/Post Street ¹	AWSC	B / 15	F / 50	C / 17	F / 52
10. Silva Valley Parkway/US 50 WB Ramps	Signal	B / 11	B / 12	B / 11	B / 12
11. Silva Valley Parkway/US 50 EB Ramps	Signal	B / 12	B / 13	B / 12	B / 13

Source: Fehr & Peers, 2017

Notes: AWSC = all-way stop control

¹The Town Center Boulevard/ Post Street intersection is private (i.e., not a County facility).

The average delay is measured in seconds per vehicle. For signalized and AWSC intersections, the delay shown is the average control delay for the overall intersection. For TWSC intersections, the LOS and control delay for the worst movement is shown. Intersection LOS and delay is calculated based on the procedures and methodology contained in the HCM 2010 (TRB, 2010). Intersections 6-11, were analyzed in Synchro 9. Intersections 1-5 were analyzed in SimTraffic.

As shown in **Table 4.8-12**, with the exception of one County-owned intersection and one private intersection outside of County jurisdiction, all study intersections would continue to operate at LOS E or better, with the addition of project trips under near-term cumulative conditions.

El Dorado Hills Boulevard/Saratoga Way/Park Drive Intersection

The intersection of El Dorado Hills Boulevard/Saratoga Way/Park Drive would operate at LOS F prior to the addition of project traffic. Project traffic would worsen intersection operations (by adding more than 10 peak hour trips), resulting in a potentially significant impact at this location.

The operations at this intersection can be improved to meet the County LOS standards by adding a southbound right turn lane. This intersection improvement is included in the Saratoga Way Extension Phase 2 project (CIP # GP147), which is a project that is included in the County's CIP. Additionally, the County's annual Intersection Needs Prioritization Process will identify if the intersection triggers a LOS impact prior to 2035. Should the LOS become unacceptable, the potential intersection improvements can be added, by the Board of Supervisors, to the CIP as funding becomes available.

As the proposed project is not a single-family residential subdivision, the second paragraph under Policy TC-Xf is the guiding policy for mitigation of this project's impact. Therefore, payment of Traffic Impact Mitigation (TIM) fees will satisfy the project's fair share portion of the improvement project. **Mitigation Measure C-TRANS-1** is set forth below to ensure that the project will pay TIM fees to mitigate its impact at this intersection.

Town Center Boulevard/Post Street Intersection

The private Town Center Boulevard/Post Street intersection would operate at LOS F without or with the proposed project during the PM peak hour. However, as noted above, Measure E analysis applies to County "highways, arterial roads and their intersections" and does not apply to private roads and their intersections. For this reason, the LOS conditions at this intersection with and without the proposed project are reported in this Draft EIR for information only. The County is not required to draw a conclusion with respect to the significance of the impact at this location.

Freeways

Table 4.8-13, Freeway Facility Peak Hour Level of Service—Near-term Conditions, compares AM and PM peak hour freeway operations under near-term cumulative conditions without and with the proposed project.

Table 4.8-13
Freeway Facility Peak Hour Level of Service—Near-term Conditions

Freeway	Segment/Ramp	Facility Type	Existing Density ¹ / LOS		Near-Term Density ¹ / LOS	
			AM	PM	AM	PM
U.S. 50 EB	Latrobe Road off-ramp	Diverge	22 / C	27 / C	22 / C	27 / C
	El Dorado Hills Boulevard off-ramp	Diverge	13 / B	23 / C	13 / B	23 / C
	El Dorado Hills Boulevard on-ramp to Silva Valley Parkway off-ramp	Weave (HCM) ²	11 / B	23 / C	11 / B	23 / C
	Silva Valley Parkway on-ramp (loop)	Merge	15 / B	20 / C	15 / B	20 / B
	Silva Valley Parkway on-ramp to Bass Lake Road off-ramp	Basic	14 / B	19 / C	14 / B	19 / C
	Bass Lake Road off-ramp	Diverge	18 / B	25 / C	18 / B	25 / C
	Bass Lake Road on-ramp	Merge	33 / D	27 / C	33 / D	27 / C
	Bass Lake Road on-ramp to lane addition	Basic	30 / D	24 / C	30 / D	24 / C
U.S. 50 WB	Lane addition to Silva Valley Parkway off-ramp	Basic	19 / C	16 / B	19 / C	16 / B
	Silva Valley Parkway off-ramp	Diverge	14 / B	11 / B	14 / B	11 / B
	Silva Valley Parkway on-ramp to El Dorado Hills Boulevard off-ramp	Weave (HCM) ²	36 / E	21 / C	36 / E	21 / C
	El Dorado Hills Boulevard on-ramp	Merge	34 / D	24 / C	34 / D	24 / C

Source: Fehr & Peers, 2017

Notes:

¹ Density reported as passenger cars per mile per lane. Density is not reported for LOS F operations.

² This weave section lies outside the realm of weaving using the Leisch Method. As a result, it is analyzed as a basic segment.

As shown in **Table 4.8-13**, all freeway facilities would continue to operate at LOS E or better, with the addition of project trips and a less than significant impact would occur.

Mitigation Measures:

C-TRANS-1 The project applicant will pay TIM fees to the County prior to issuance of building permit(s).

Significance after Mitigation: Payment of TIM fees will satisfy the project's fair share portion of the improvement project identified for the affected intersection. The impact would be reduced to a less than significant level.

Cumulative Impact C-TRANS-2: **Development of the proposed project would not conflict with applicable policies establishing measures of effectiveness for the performance of the local roadway system and regional freeway system under Long-Term Cumulative (2035) plus Project Conditions. (*Less than Significant*)**

Future year 2035 cumulative traffic volumes were developed in order to assess the cumulative traffic impacts of the proposed project. The long-term cumulative no project scenario corresponds to a 2035 cumulative horizon that accounts for reasonably foreseeable development projects, transportation improvements, and land use growth consistent with the 2004 General Plan.

Foreseeable Development Projects

The following development projects were included in projecting the traffic levels that would exist in the study area under 2035 conditions.

- Bass Lake Hills Specific Plan
- Carson Creek Specific Plan
- Central El Dorado Hills Specific Plan
- Dixon Ranch
- Promontory
- Lime Rock Valley Specific Plan
- Marble Valley Master Plan
- Saratoga Estates (Rancho Dorado)
- Ridgeview
- Serrano
- Tilden Park
- Valley View Specific Plan
- Mill Creek (San Stino) Residential Project

Capacity-Enhancing Roadway Improvements

The roadway improvements listed in **Table 4.8-14, Capacity-Enhancing Roadway Improvements (Anticipated Completion by 2035)**, below were assumed to be completed and in place by 2035.

**Table 4.8-14
Capacity-Enhancing Roadway Improvements (Anticipated Completion by 2035)**

Project Name	Project Description	Estimated Completion
Country Club Drive – El Dorado Hills Boulevard to Silva Valley Parkway	Construct new 2-lane road Country Club Drive from El Dorado Hills Boulevard to Silva Valley Pkwy. Work includes curb, gutter, and sidewalk on both sides of the roadway. CIP#72377	By 2035
Country Club Drive – Silva Valley Parkway to Tong Road	Construct new 2-lane road Country Club Drive from Silva Valley Parkway to Tong Road. Work includes curb, gutter, and sidewalk on both sides of the roadway. CIP#71362	By 2027
Country Club Drive Extension – Tong Road to Bass Lake Road	Construct 2-lane extension of Country Club Drive from Tong Road to Bass Lake Road, with 8-foot paved shoulder, curb and gutter, and new intersection at Bass Lake Road. CIP#71361	By 2027
Country Club Drive Realignment -Bass Lake Road to Tierra De Dios Drive	Realign Country Club Drive from Bass Lake Road/Old Bass Lake Road to Tierra de Dios Drive. Work includes constructing a 2-lane road with 8-foot paved shoulders, sidewalk, curb and gutter. CIP#71360	By 2019
Green Valley Road Widening - Francisco to Silva Valley Parkway	Widen Green Valley Road from Francisco Dr to Silva Valley Parkway to 4-lanes with curb, gutter, and sidewalk. CIP#GP178	By 2035
Green Valley Road Widening - County Line to Sophia Parkway	Widen Green Valley Road from County line to Sophia Parkway from 2 to 4 lanes. CIP#72376	By 2018
Latrobe Connection	The project consists of intersection improvements at Golden Foothill Pkwy (south) and Carson Crossing Dr. CIP#66116	By 2027
Saratoga Way Ext - Phase 1	Construct new 4-lane arterial to extend Saratoga Way from Wilson Boulevard to Sacramento County line and a 2-lane arterial from Wilson Boulevard to the current terminus near Finders Way; includes median, 6-ft shoulders, two-way left-turn pocket from Finders Way to Arrowhead, asphalt path, drainage system, environmental clearance and secure ROW for future 4-lane road from County Line to El Dorado Hills Boulevard. CIP#71324 (Phase 2 CIP#GP147 - See ELD19234 in MTP)	By 2019
Saratoga Way (Phase 2)	Widen 4 lanes from the Wilson Boulevard to El Dorado Hills Boulevard Includes: full curb, gutter, and sidewalk on the north side. (See ELD16010 for Phase 1) CIP#GP147	By 2035
Silva Valley Parkway/Serrano Parkway Traffic Circulation Improvement	Project includes traffic signal modification and lane re-striping at the Silva Valley Parkway/Serrano Parkway intersection, installation of an all-way stop at Serrano Parkway/Village Green intersection, and installation of left-turn prohibition signs at Silva Valley Parkway/Entrada intersection and Oak Meadow School driveway at Silva Valley Parkway. This project will be coordinated with the U.S. 50/Silva Valley Parkway Freeway Interchange (CIP#71328). CIP#72141	Completed

Project Name	Project Description	Estimated Completion
Silver Springs Parkway to Bass Lake Road (South Segment)	Realign Bass Lake Road south of Green Valley Road through the proposed Silver Springs subdivision, which is west of the existing Bass Lake Road. The new road is named Silver Springs Parkway. That development is responsible for building Silver Springs Parkway through their development. Silver Springs Parkway will be a 2-lane standard divided roadway with shoulders. CIP#76108	By 2020
U.S. 50 Aux Lane WB - El Dorado Hills Boulevard to Sacramento County Line	Widen U.S. 50 and add auxiliary lane to westbound U.S. 50 from the El Dorado Hills Blvd/Latrobe Road Interchange to the County Line. CIP#53115	By 2035
U.S. 50 Auxiliary Lane Westbound - Ponderosa Road to Cameron Park Drive	Widen U.S. 50 and add an auxiliary lane to westbound U.S. 50, connecting Cameron Park Drive Interchange to Ponderosa Road Interchange. CIP#53128	By 2035
U.S. 50 Auxiliary Lane Westbound – Bass Lake Road to Silva Valley Parkway	Widen U.S. 50 to add an auxiliary lane to westbound U.S. 50 connecting the Bass Lake Road Interchange and Silva Valley Parkway Interchange. Timing of construction to be concurrent with or after the Bass Lake Road Interchange improvement. CIP#53117	By 2027
U.S. 50 Auxiliary Lane Westbound – Cambridge Road to Bass Lake Road	Widen U.S. 50 to add an auxiliary lane to westbound U.S. 50 connecting the Cambridge Road Interchange to Bass Lake Road Interchange. Timing of construction to be concurrent with or after the Bass Lake Road Interchange improvement. CIP GP149	By 2035
U.S. 50 Auxiliary Lane Eastbound – Bass Lake Road to Cambridge Road	Widen U.S. 50 and add eastbound auxiliary lane between Bass Lake Road Interchange and Cambridge Road Interchange. Timing of construction to be concurrent with or after the Bass Lake Road Interchange improvements. CIP #GP148	By 2035
U.S. 50 Auxiliary Lane Eastbound – Cambridge Road to Cameron Park Drive	Widen U.S. 50 and add eastbound auxiliary lane between Cambridge Road Interchange and Cameron Park Drive Interchange. Timing of construction to be concurrent with or after the Cambridge Road Interchange improvements. CIP #53126	By 2035
U.S. 50 Auxiliary Lane Eastbound – Cameron Park Drive to Ponderosa Road	Widen U.S. 50 and add eastbound continuous auxiliary lane from Cameron Park Drive Interchange to Ponderosa Road Interchange as determined necessary in the U.S. 50/Cameron Park Drive PSR/PDS dated October 2008. CIP# 53127	By 2035
U.S. 50 Auxiliary Lane Eastbound – Sacramento County Line to El Dorado Hills Boulevard/Latrobe Road Interchange	Widen U.S. 50 and add eastbound auxiliary lane from the County Line to U.S. 50 El Dorado Hills Boulevard/Latrobe Road Interchange. Timing of construction to be concurrent with El Dorado Hills Boulevard Interchange or Empire Ranch Interchange. CIP #53125	By 2035
U.S. 50 / Bass Lake Road Interchange Improvements	Phase 1 of a larger project for the complete reconstruction of the Bass Lake Road interchange. Phase 1 of the project includes a detailed study to determine the complete improvements needed. Phase 1 is assumed to	By 2035

Project Name	Project Description	Estimated Completion
	include ramp widenings, road widening, signals, and bridge replacement. CIP#71330	
U.S. 50 / Cambridge Road Interchange Improvements	Phase 1 improvements to Cambridge Road interchange consists of widening the existing EB and WB off-ramps; addition of new WB on-ramp from SB Cambridge Road; reconstruction of the local intersections to provide for additional capacity, both turning and through lanes; and the installation of traffic signals at the EB ramp-terminal intersection. Also preliminary engineering for Phase 2 improvements to the Cambridge Interchange. CIP#71332	By 2035
U.S. 50 / Cameron Park Dr. Interchange Improvements	This project includes detailed study to identify capacity improvement alternatives and selection of preferred alternative; assumes reconstruction of U.S. 50 bridges to widen Cameron Park Dr to 8 lanes under the overcrossing; road and ramp widening. CIP#72361	By 2035
U.S. 50 / El Dorado Hills Boulevard Interchange Improvements – (Phase 2B)	Reconstruct eastbound diagonal on-ramp and eastbound loop off-ramp for the ultimate configuration; add a lane to northbound El Dorado Hills Blvd under the overpass (eliminates merge lane and improves traffic flow from the eastbound loop off-ramp); eastbound diagonal on-ramp will be metered and have an HOV bypass. Project split from ELD15630 (CIP#71323).	By 2028
U.S. 50 / Silva Valley Pkwy Interchange - Phase 1	New Interchange: Phase 1 includes U.S. 50 on-/off-ramps, overcrossing, and U.S. 50 aux lanes. (See ELD19291/CIP#71345 for Phase 2). CIP#71328	Completed
U.S. 50 / Silva Valley Pkwy Interchange - Phase 2 – On-Ramps and Auxiliary Lanes on U.S. 50 (Connector Segment)	Final phase of new interchange: construction of eastbound diagonal and westbound loop on-ramps to U.S. 50. CIP#71345	By 2035
White Rock Road Widening -Manchester to Sacramento County Line (Connector Segment)	Widen White Rock Road from 2 to 4 lanes, divided, from Manchester Dr west to Sacramento County Line. CIP#GP137	By 2027
White Rock Road Widening – Monte Verde to U.S. 50 / Silva Valley Parkway Interchange (Connector Segment)	Widen White Rock Road from 2 lanes undivided to 4 lanes divided, from Monte Verde Dr east to new future U.S. 50/Silva Valley Pkwy Interchange (ELD15610/CIP71328); includes curb, gutter, sidewalk, and Class II bike lanes. CIP#72374	By 2035

Source: El Dorado County's Adopted 2016 Capital Improvement Program, December 6, 2016.

Bicycle and Pedestrian Facility Improvement Projects

The following bicycle and pedestrian improvement projects were included in the evaluation of conditions that would exist in the study area by 2035.

- El Dorado Hills Class I bike path - SMUD Corridor: Design and construct a Class I bike path between El Dorado Hills Boulevard and Silva Valley Parkway within the powerline easement operated by the Sacramento Municipal Utility District (SMUD). A portion of this project has been constructed between Silva Valley and New York Creek.
- Latrobe Road Class II bike lanes from Investment Boulevard to Deer Creek/SPTC
- Old Bass Lake Road – El Dorado Hills Boulevard to Bass Lake Road Connection, Phase 1: Use existing roadway as Class I path from Tong Road to Old Bass Lake Road
- Saratoga Way Extension Class II bike lanes included in extension of Saratoga Way from Finders Way to County Line. Bass Lake Road Class II bike lanes from Green Valley Road to U.S. 50
- Bike path parallel to U.S. 50 on the north side – El Dorado Hills Boulevard to Bass Lake Road
- Connection, Phase 2: Connect Silva Valley Road to El Dorado Hills Village Center Shopping Center
- El Dorado Hills Boulevard bike lanes, Phase 1: Saratoga Way to Governor Drive/Street Andrews
- El Dorado Hills Boulevard bike path, Phase 2: Utilizing an existing golf cart undercrossing of Serrano
- El Dorado Hills Boulevard Class I Bike Path: Governor Drive to Brittany Place
- Parkway, extend the bike path from the current terminus at Serrano Parkway to Raley’s Center
- El Dorado Hills Boulevard to Bass Lake Connection, Phase 1; Class III bike route on Tong Road, Class III bike route on Old Bass Lake Road
- Green Valley Road Class II bike lanes from Francisco Drive to Pleasant Grove Middle School
- Harvard Way bike path from Clermont Road to El Dorado Hills Boulevard
- Silva Valley Parkway bike lanes from the new connection with the old Silva Valley Parkway to Green Valley Road
- SPTC/El Dorado Trail Class I bike path from Latrobe Road to County Line

Impacts at Study Intersections

Intersection levels of service under long-term cumulative no project and cumulative plus project conditions were calculated and are shown in **Table 4.8-15, Long-Term Cumulative Conditions – Study Intersection LOS Summary**.

Table 4.8-15
Long-Term Cumulative Conditions – Study Intersection LOS Summary

Intersection	Intersection Control	Peak Hour	Cumulative No Project Conditions		Cumulative Plus Project Conditions	
			Avg Delay ²	LOS ⁴	Avg Delay ²	LOS ⁴
1. El Dorado Hills Boulevard/Park Drive/Saratoga Way	Signal	AM	37	D	37	D
		PM	48	D	50	D
2. El Dorado Hills Boulevard/U.S. 50 WB Ramps	Signal	AM	34	C	47	D
		PM	48	D	49	D
3. Latrobe Road/U.S. 50 EB Ramps	Signal	AM	34	C	54	D
		PM	22	C	18	B
4. Latrobe Road/Town Center Boulevard	Signal	AM	36	D	42	D
		PM	66	E	76	E
5. Latrobe Road/White Rock Road	Signal	AM	60	E	67	E
		PM	51	D	80	E
6. White Rock Road/Winfield Way	Signal	AM	12	B	12	B
		PM	35	D	36	D
7. White Rock Road/Post Street	Signal	AM	15	B	15	B
		PM	17	B	18	B
8. White Rock Road/Vine Street/Valley View Drive	Signal	AM	20	B	19	B
		PM	29	C	31	C
9. Town Center Boulevard/Post Street ¹	AWSC	AM	13	B	14	B
		PM	73	F	82	F
10. Silva Valley Parkway/U.S. 50 WB Ramps	Signal	AM	10	A	10	A
		PM	20	C	20	C
11. Silva Valley Parkway/U.S. 50 EB Ramps	Signal	AM	3	A	3	A
		PM	11	B	11	B

Source: Fehr & Peers, 2017.

Notes: AWSC = all-way stop control

¹The Town Center Boulevard/ Post Street intersection is private (i.e., not a County facility).

²The average delay is measured in seconds per vehicle. For signalized and AWSC intersections, the delay shown is the average control delay for the overall intersection. For side-street stop controlled intersections, the LOS and control delay for the worst movement is shown. Intersection LOS and delay is calculated based on the procedures and methodology contained in the HCM 2010 (TRB, 2010). Intersections 6-11 were analyzed in Synchro 9. Intersections 1-5 were analyzed in SimTraffic.

As shown in **Table 4.8-15**, all County-owned study intersections would operate at an acceptable level (LOS E or better) under long-term cumulative plus project conditions, and the impact of the project under long-term cumulative conditions would be less than significant.

Town Center Boulevard/Post Street Intersection

As the table above indicates, the intersection of Town Center Boulevard/Post Street (Intersection 9) would operate at LOS F during the PM peak hour both with and without the proposed project. The proposed project would add approximately 70 trips during the PM peak hour, and thereby contribute to the congestion at this location. As noted above, this is an internal (i.e., private) intersection in the Town Center (TC) development and, as a private facility, it is not subject to the County's thresholds of significance.⁵ In the absence of a threshold of significance, a determination of the significance of the project's impact at this location cannot be made by the County. Furthermore, any improvements that would be made at this location to relieve congestion are not under the County's jurisdiction.

The above notwithstanding, the project applicant and the owner of the right-of-way (ROW) of the Town Center Boulevard/Post Street intersection have voluntarily agreed to mitigate this impact below the County's threshold of significance applicable to County-owned facilities. The project applicant has confirmed that the installation of a traffic signal at this currently unsignalized intersection is feasible, which will improve LOS operations from LOS F to LOS E. Peak hour intersection analysis will be conducted every 2 years and a traffic signal will be installed at this location when the traffic signal reaches LOS F and applicable traffic signal warrants are satisfied. In addition, the new traffic signal would need to be interconnected with the County-owned traffic signal at Latrobe Road/Town Center Boulevard intersection. The installation of the interconnection would require an encroachment permit from the County, and the maintenance of the interconnection between the two traffic signals would be subject to an encroachment agreement with the County. **Mitigation Measure C-TRANS-2** below assures that these actions will be taken at the time mitigation is required.

Impacts on Freeway Segments and Ramps

The capacity-increasing projects from the County's Capital Improvement Program (CIP), which are documented in **Table 4.8-14** above, include many projects that would add capacity to U.S. 50, increase

⁵ Separately, increased traffic contained within a private development is generally not considered an adverse impact on the environment under CEQA. (See, e.g., *Walters v. City of Redondo Beach* (2016) 1 Cal.App.5th 809 ("The Guidelines and case law clarify that traffic impacts for CEQA purposes relate to the flow of vehicles in public spaces."); *Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 782 ["In general, CEQA does not regulate environmental changes that do not affect the public at large"].)

east/west parallel capacity, and add new interchange connections to U.S. 50. The following lists some of the more significant transportation improvements in the U.S. 50 corridor:

Interchange Projects

- U.S. 50/Silva Valley Parkway Interchange (new connection to U.S. 50)
- U.S. 50/Empire Ranch Road Interchange (new connection to U.S. 50)
- U.S. 50/Bass Lake Road Interchange Upgrade
- U.S. 50/Cambridge Road Interchange Upgrade

Mainline Projects

- Westbound U.S. 50 interchange-to-interchange auxiliary lane (Bass Lake Road to Silva Valley Parkway)
- Westbound U.S. 50 auxiliary lane (Silva Valley Parkway to Empire Ranch Road)
- Eastbound U.S. 50 auxiliary lane (Silva Valley Parkway to Empire Ranch Road)
- Westbound U.S. 50 interchange-to-interchange auxiliary lane (Silva Valley Parkway to El Dorado Hills Boulevard)
- Eastbound U.S. 50 interchange-to-interchange auxiliary lane (El Dorado Hills Boulevard to Silva Valley Parkway)
- Westbound U.S. 50 interchange-to-interchange auxiliary lane (Cambridge Drive to Bass Lake Road)
- Eastbound U.S. 50 interchange-to-interchange auxiliary lane (Bass Lake Road to Cambridge Drive)

Arterial Roadway Projects

- Country Club Drive Extension from Bass Lake Road to El Dorado Hills Boulevard
- Saratoga Way Extension from El Dorado Hills Boulevard to Iron Point Road
- Extension of Empire Ranch Road from U.S. 50 to White Rock Road
- Latrobe Road Connector (new roadway between Latrobe Road and White Rock Road)

Freeway segment levels of service under long-term cumulative plus project conditions were calculated and are presented in **Table 4.8-16, Long-Term Cumulative Conditions - Study Freeway Facilities LOS Summary**. A comparison of traffic operations on U.S. 50 between cumulative no project and cumulative

plus project conditions with respect to density and resulting LOS are provided to assess cumulative impacts.

**Table 4.8-16
Long-Term Cumulative Conditions – Study Freeway Facilities LOS Summary**

Segment/Ramp	Facility Type	Peak Hour ¹	Cumulative No Project Conditions		Cumulative Plus Project Conditions	
			Density ¹	LOS	Density ¹	LOS
<i>Eastbound</i>						
Latrobe Road off-ramp	Diverge	AM	28	D	28	D
		PM	33	D	34	D
El Dorado Hills Boulevard off-ramp	Diverge	AM	21	C	21	C
		PM	30	D	30	D
El Dorado Hills Boulevard on-ramp to Silva Valley Parkway off-ramp	Weave (HCM)	AM	20	B	20	B
		PM	29	D	29	D
	Weave (Leisch)	AM	-	-	-	-
		PM	-	-	-	-
	Basic	AM	13	B	13	B
		PM	19	C	19	C
Silva Valley Parkway on-ramp (loop)	Merge	AM	18	B	18	B
		PM	24	C	24	C
Silva Valley Parkway slip-on ramp	Merge	AM	22	C	23	C
		PM	30	D	30	D
Silva Valley Parkway on-ramp to Bass Lake Road off-ramp	Basic	AM	21	C	21	C
		PM	27	D	27	D
<i>Westbound</i>						
	Weave (HCM)	AM	27	D	27	D
		PM	24	C	24	C
Bass Lake Road on-ramp to Silva Valley Parkway off-ramp	Weave (Leisch)	AM	-	-	-	-
		PM	-	-	-	-
	Basic	AM	27	D	27	D
		PM	24	C	24	C
Silva Valley Parkway loop on-ramp	Merge	AM	15	B	15	B
		PM	13	B	13	B
Silva Valley Parkway slip-on ramp to El Dorado Hills Boulevard off-ramp	Weave (HCM)	AM	33	D	33	D
		PM	22	C	22	C
	Weave (Leisch)	AM	-	-	-	-
		PM	-	-	-	-
	Basic	AM	-	-	-	-
		PM	14	B	14	B

Segment/Ramp	Facility Type	Peak Hour ¹	Cumulative No Project Conditions		Cumulative Plus Project Conditions	
			Density ¹	LOS	Density ¹	LOS
El Dorado Hills Boulevard on-ramp to Empire Ranch Road off-ramp	Weave (HCM)	AM	41	E	41	E
		PM	33	D	33	D
	Weave (Leisch)	AM	-	D	-	D
		PM	-	C	-	C
	Basic	AM	-	-	-	-
		PM	-	-	-	-

Source: Fehr & Peers, 2017.

Notes:

¹ Density reported as passenger cars per mile per lane. Density is not reported for LOS F operations or weave segments. Weave segment's operations are based on the HCM 2010 and Leisch Method. If the weave segment is outside the realm of weaving it is analyzed as a basic segment.

As shown in **Table 4.8-16**, all study freeway facilities would operate acceptably at LOS E or better under cumulative no project conditions. Under cumulative plus project conditions, all freeway facilities during the AM and PM peak hours would continue to operate at acceptable levels of service LOS E or better. Therefore, the proposed project would not make a cumulatively considerable contribution to cumulative level of service impacts on study freeway segments and ramps.

Mitigation Measures:

C-TRANS-2 The project applicant shall be responsible for ensuring that a traffic signal is installed at the private intersection of Post Street and Town Center Boulevard, and that a funding mechanism is created for maintenance of that signal. Peak hour intersection signal warrant analysis will be performed, consistent with the methodologies presented in the County's Transportation Impact Study Guidelines, at 24-month intervals and provided to the County, and the signal will be installed when the intersection operations reach LOS F and applicable traffic signal warrants are satisfied. The new traffic signal will be interconnected or subordinate to the traffic signal at Latrobe Road/El Dorado Hills Boulevard, subject to an encroachment permit and agreement. Prior to issuance of a grading permit for project construction, the project applicant shall demonstrate to the County's satisfaction that it has obtained legally binding authority to assure implementation of this mitigation measure, via an agreement with the owner of the right-of-way encompassing the Post Street/Town Center Boulevard intersection or otherwise.

Significance after Mitigation: As this is a private intersection, the County's significance threshold does not apply and the potential impact is not subject to CEQA. However, implementation of this mitigation

measure will reduce the potential impact to an acceptable level within the County's significance threshold (LOS E) that would be applicable if this were a County intersection.

Cumulative Impact C-TRANS-3: **Development of the proposed project, in combination with reasonably foreseeable future developments, would not cause a substantial conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. (*Less than Significant*)**

The proposed project, in conjunction with other reasonably foreseeable future development in the project vicinity, would increase the demand for pedestrian and bicycle facilities. The project is located in the El Dorado Hills Town Center, which is a mixed-use development. Placing the project near jobs and service would encourage walking and bicycling for trips that would ordinarily be made by auto if the project were located in a more remote location further from jobs and services. Furthermore, the project would connect to existing bicycle and pedestrian facilities in the Town Center and would be located near the planned pedestrian overcrossing of U.S. 50 (just east of the El Dorado Hills Interchange). As the area is adequately served by pedestrian and bicycle facilities, a less than significant cumulative impact to pedestrian and bicycle facilities would occur.

Mitigation Measures: No mitigation measures are required.

Cumulative Impact C-TRANS-4: **Development of the proposed project, in combination with reasonably foreseeable future developments, would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of mass transit. (*Less than Significant*)**

Based on ridership data presented in the *El Dorado Hills Community Transit Needs Assessment* and *U.S. 50 Corridor Transit Operations Plan Final Report*, about 41,760 annual commute trips are made by El Dorado Hills residents using El Dorado Transit Commuter Service. Residents of El Dorado Hills account for about 72 percent of boardings at the El Dorado Hills Park-n-Ride Lot (located in Town Center), which includes riders that park in the lot and riders that use other means to access the service (walk, bike, and

drop-off). Based on this information, about one annual commute trip is generated per El Dorado Hills resident, assuming a population of 42,100 (2010 Census) in El Dorado Hills

Therefore, the project's 214 dwelling units could result in demand of about 560 annual commute trips assuming a household population of 2.6 persons (Sacramento Area Council of Governments, SACSIM regional travel demand simulation model), or about 3 commute trips per weekday. Implementation of the proposed project would increase transit demand. As mentioned above, the project could result in demand for about 560 annual commute trips or about 3 commute trips per weekday. This increase represents less than a two percent increase in El Dorado Transit Commuter Service, which is generally in line with historic population growth rates in El Dorado County. Consequently, the growth in these trips would not likely exceed the ability to serve this ridership growth through existing funding sources for transit that are tied to population growth. Project residents accessing the El Dorado Transit Commuter Service would likely walk to the El Dorado Hills Park-n-Ride Lot. Consequently, implementation of the proposed project would not likely increase demand for the El Dorado Hills Park-n-Ride Lot, which operates at capacity. Thus, cumulative impacts to transit would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.8.5 REFERENCES

- Caltrans. 2002. *Guide for the Preparation of Traffic Impact Studies*. December.
- Caltrans. 2014. *Transportation Concept Report and Corridor System Management Plan: United States Route 50 District 3*. June.
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- El Dorado County. 2014. *Transportation Impact Study Guidelines*. November.
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- El Dorado County Transportation Commission. 2015. *Coordinated Public Transit Human Services Transportation Plan*. April.
- El Dorado County Transportation Commission. *El Dorado Hills Community Transit Needs Assessment and US 50 Corridor Operations Plan*. May.

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Sacramento Area Council of Governments (SACOG). 2016. *Metropolitan Transportation Plan / Sustainable Community Strategy for 2036: Building a Sustainable System*. February.

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4.9 UTILITIES AND SERVICE SYSTEMS

4.9.1 INTRODUCTION

This section describes existing utilities including water supply and the water distribution system, and wastewater collection, conveyance, and treatment systems that serve the project site and its vicinity and analyzes the potential for the proposed El Dorado Hills Apartments project to affect these utilities. Information on utilities and service systems was obtained from the El Dorado Irrigation District (EID), the EID's 2015 Urban Water Management Plan (UWMP), and an evaluation of water supply prepared by West Yost Associates. The water supply evaluation is presented in **Appendix 4.9** of this Draft EIR.

4.9.2 ENVIRONMENTAL SETTING

4.9.2.1 Water

EID would provide both potable and recycled water service to the project site. EID's service area encompasses approximately 220 square miles on the western slope of the Sierra Nevada Mountains and serves a population of approximately 110,000 people in El Dorado County. EID's service area is primarily located in two major watersheds, the South Fork American River in the north and the North Fork of the Cosumnes River in the south, and is hydrologically split by the Placerville Ridge and Highway 50, which is generally located between these two drainage watersheds.

For planning purposes, EID has divided its contiguous water service area into three regions based on service areas:

- El Dorado Hills/ Cameron Park Region: El Dorado Hills, Bass Lake, and Cameron Park
- Western Region: Shingle Springs, Logtown, and Diamond Springs
- Eastern Region: Pleasant Valley, Sly Park, Pollock Pines, Camino, Placerville, and Lotus/Coloma

The El Dorado Hills/Cameron Park Region is divided into Zones 1, 2, and 4. The project site is located in Service Zone 2 (El Dorado Hills).

Existing and Projected Water Supply

Surface water constitutes a majority of EID's water supply with the remaining supply provided by recycled water. A description of EID's potable and recycled water supply systems is provided below.

Potable Water

EID maintains two primary interconnected potable water systems in its contiguous service area - the El Dorado Hills system and the Western/Eastern system.

The El Dorado Hills system obtains its primary supplies under rights and entitlements from Folsom Reservoir while the Western/Eastern system derives its supplies from sources under rights and entitlements emanating from further up the South Fork American River watershed (Forebay Reservoir) and the Cosumnes River watershed (Jenkinson Lake) (EID 2016a).

EID derives the remainder of its water supply from a number of sources. These include pre-1914 appropriative water rights, licensed and permitted appropriative water rights, United States Bureau of Reclamation Central Valley Project water service contracts, and Warren Act Contracts. In addition, the EID has identified two future water supply sources - water under the El Dorado-Sacramento Municipal Utility District (SMUD) Cooperation Agreement and a water entitlement derived from El Dorado County Water Agency Fazio water supply (EID 2016a). A summary of EID's existing and planned future potable water supplies during normal, single-dry and multiple dry years is provided in **Table 4.9-1, EID Projected Supply**.

**Table 4.9-1
EID Projected Supply**

Wholesale Sources	Projected Volume, AFY				
	2020	2025	2030	2035	2040
Normal Year Water Supplies, AFY					
Jenkinson Lake	23,000	23,000	23,000	23,000	23,000
El Dorado Forebay	15,080	15,080	15,080	15,080	15,080
Folsom Reservoir- USBR Contract	7,550	7,550	7,550	7,550	7,550
Folsom Reservoir- Warren Act Contract	4,560	4,560	4,560	4,560	4,560
Folsom Reservoir- Permit 21112	17,000	17,000	17,000	17,000	17,000
CVP supply (Public Law 101-514)	7,500	7,500	7,500	7,500	7,500
UARP supply (El Dorado-SMUD Agreement)	-	30,000	30,000	30,000	30,000
Total	74,690	104,690	104,690	104,690	104,690
Single Dry Year Water Supplies, AFY					
Jenkinson Lake	20,920	20,920	20,920	20,920	20,920
El Dorado Forebay	15,080	15,080	15,080	15,080	15,080
Folsom Reservoir- USBR Contract	3,775	3,775	3,775	3,775	3,775
Folsom Reservoir- Warren Act Contract	3,000	3,000	3,000	3,000	3,000
Folsom Reservoir- Permit 21112	17,000	17,000	17,000	17,000	17,000
CVP supply (Public Law 101-514)	3,750	3,750	3,750	3,750	3,750
UARP supply (El Dorado-SMUD Agreement)	-	5,000	5,000	5,000	5,000

Wholesale Sources	Projected Volume, AFY				
	2020	2025	2030	2035	2040
Total	63,525	68,525	68,525	68,525	68,525
Multi-Dry Year Water Supplies, First Year, AFY					
Jenkinson Lake	20,920	20,920	20,920	20,920	20,920
El Dorado Forebay	15,080	15,080	15,080	15,080	15,080
Folsom Reservoir- USBR Contract	3,775	3,775	3,775	3,775	3,775
Folsom Reservoir- Warren Act Contract	3,000	3,000	3,000	3,000	3,000
Folsom Reservoir- Permit 21112	17,000	17,000	17,000	17,000	17,000
CVP supply (Public Law 101-514)	3,750	3,750	3,750	3,750	3,750
UARP supply (El Dorado-SMUD Agreement)	-	5,000	5,000	5,000	5,000
Total	63,525	68,525	68,525	68,525	68,525
Multi-Dry Year Water Supplies, Second Year, AFY					
Jenkinson Lake	17,000	17,000	17,000	17,000	17,000
El Dorado Forebay	15,080	15,080	15,080	15,080	15,080
Folsom Reservoir- USBR Contract	3,775	3,775	3,775	3,775	3,775
Folsom Reservoir- Warren Act Contract	3,000	3,000	3,000	3,000	3,000
Folsom Reservoir- Permit 21112	17,000	17,000	17,000	17,000	17,000
CVP supply (Public Law 101-514)	3,750	3,750	3,750	3,750	3,750
UARP supply (El Dorado-SMUD Agreement)	-	5,000	5,000	5,000	5,000
Total	59,605	64,605	64,605	64,605	64,605
Multi-Dry Year Water Supplies, Third Year, AFY					
Jenkinson Lake	15,500	15,500	15,500	15,500	15,500
El Dorado Forebay	15,080	15,080	15,080	15,080	15,080
Folsom Reservoir- USBR Contract	1,888	1,888	1,888	1,888	1,888
Folsom Reservoir- Warren Act Contract	3,000	3,000	3,000	3,000	3,000
Folsom Reservoir- Permit 21112	17,000	17,000	17,000	17,000	17,000
CVP supply (Public Law 101-514)	1,875	1,875	1,875	1,875	1,875
UARP supply (El Dorado-SMUD Agreement)	-	5,000	5,000	5,000	5,000
Total	54,343	59,343	59,343	59,343	59,343

Source: EID 2015 UWMP, approved by EID Board of Directors June 27, 2016. Table 3-1 and 3-3.

Recycled Water

EID produces recycled water at both the El Dorado Hills and Deer Creek wastewater treatment plants (WWTP) which is then used by EID customers for irrigation of residential landscape, commercial landscape, recreation turf and, in a few areas, fire suppression and dust control. The availability of recycled water is currently limited to the El Dorado Hills and Cameron Park areas. In 2015, users within these areas used approximately 2,350 AFY of recycled water (WYA 2017).

Recycled water supply is not subject to climatic limitations as much as surface water supplies and, therefore, is expected to be available in all hydrologic year types. Recycled water supplies during dry

years are assumed to be the same as normal year supplies. **Table 4.9-2, EID Recycled Water Supply Reliability, AFY**, shows the incremental recycled water assets that would be available over time for EID's non-potable water uses.

Table 4.9-2
EID Recycled Water Supply Reliability, AFY

Year	Normal Year	Single Dry Year	Multiple Dry Years		
			Year 1	Year 2	Year 3
2016 ¹	2,500	2,500	2,500	2,500	2,500
2020	2,800	2,800	2,800	2,800	2,800
2025	3,000	3,000	3,000	3,000	3,000
2030	3,100	3,100	3,100	3,100	3,100
2035	3,300	3,300	3,300	3,300	3,300
2040 ²	3,500	3,500	3,500	3,500	3,500

Source: EID 2015 UWMP

¹ EID's 2015 recycled water supply was 2,349 AFY (Source: EID 2016b Water Resources and Service Reliability Report) and its use is assumed to expand incrementally over time

² By 2040, EID anticipates a supply of 3,500 AFY (Source: EID 2015 UWMP)

Water Distribution and Treatment

EID's potable water distribution system is comprised of over 1,200 miles of pipeline, 27 miles of ditches, five treatment plants, 34 storage reservoirs with a combined capacity of over 100 million gallons, and 38 pumping stations (EID 2016a). Potable water in El Dorado Hills is treated at the El Dorado Hills water treatment plant (WTP), which has an authorized capacity of 26 million gallons per day (mgd) (EID 2017b) and treats approximately 16 mgd at the present time (Strahan 2017). Potable water would be delivered to the project site via an existing 12-inch potable water main in Town Center Boulevard and Vine Street.

EID's recycled water distribution system is composed of two treatment plants that generate over 900 million gallons of recycled water each year, 55 miles of pipeline, six pump stations, and four storage tanks (EID 2017c). Recycled water in El Dorado Hills is provided by the El Dorado Hills WWTP, which is described in more detail below. Recycled water would be delivered to the project site via an existing 6-inch non-potable water main in Vine Street.

4.9.2.2 Wastewater

Wastewater Treatment

Wastewater on the project site would be collected and treated by EID. EID has four permitted wastewater collection systems: El Dorado Hills, Deer Creek, Camino Heights, and Gold Ridge Forest. The two largest

collection systems are the El Dorado Hills and Deer Creek Collection Systems. These systems are served by a series of lift stations, force mains, and gravity mains that convey wastewater to the El Dorado Hills WWTP and the Deer Creek WWTP, respectively (EID 2013).

Wastewater generated on the project site would be treated at the El Dorado Hills WWTP, which is located at 1000 Blackstone Parkway, along the east side of Latrobe Road. The El Dorado Hills WWTP has a rated capacity of 4.0 mgd and currently treats approximately 2.65 mgd (EID 2013), and thus is operating at about 65 percent of its capacity. Treated effluent that is not recycled is discharged to Carson Creek (EID 2013).

Sewage Collection and Conveyance

EID also provides sanitary sewer collection services to the area within its jurisdiction. The system consists of 560 miles of wastewater collection pipelines as well as 64 lift stations (EID 2017b). Wastewater on the project site would be conveyed to the El Dorado Hills WWTP via an 8-inch sewer main located in Town Center Boulevard.

4.9.2.3 Stormwater

The project site is served by storm drainage facilities that are owned and maintained by the El Dorado Hills Community Services District (CSD). The project site would be served by a 12-inch storm drain located in Town Center Boulevard.

4.9.2.4 Solid Waste

The project site is located within the El Dorado Hills CSD boundary. El Dorado Hills CSD contracts with El Dorado Disposal Service for franchised solid waste collection, disposal, and recycling services. El Dorado Disposal Service transports municipal waste to the Western El Dorado Recovery Systems (WERS) Transfer Station and Material Recovery Facility, located at 4100 Throwita Way in Placerville. The WERS Transfer Station and Material Recovery Facility handles mixed municipal waste and has a maximum permitted throughput of 400 tons per day.

After undergoing processing, non-recyclable wastes from the WERS Transfer Station and Material Recovery Facility are delivered to the Potrero Hills Landfill, located at 3675 Potrero Hills Lane, in Suisun City. The landfill handles several different types of waste, including agricultural, ash, construction and demolition, industrial, mixed municipal, sludge, and tires. The Potrero Hills Landfill has a maximum permitted capacity of 83.1 million cubic yards. The landfill receives a maximum disposal of 4,330 tons per day. The estimated closure date for the facility is 2048.

Recyclable materials are distributed to a facility in Benicia, and green wastes are sent to a processing facility in Sacramento. County Ordinance No. 4319 requires that new development provide areas for adequate, accessible, and convenient storing, collecting and loading of solid waste and recyclables.

4.9.3 REGULATORY CONSIDERATIONS

4.9.3.1 State Laws and Regulations

Urban Water Management Planning Act

California State Assembly Bill 797 (California Water Code Section 10610, et seq.), adopted in 1983, requires every urban water supplier providing water for municipal purposes to more than 3,000 customers or more than 3,000 acre-feet of water on an annual basis to prepare an Urban Water Management Plan (UWMP). The intent of the UWMP is to assist water supply agencies in water resource planning given their existing and anticipated future demands. UWMPs must be updated every five years, in years ending in zero and five.

EID has complied with the Urban Water Management Planning Act through the adoption of the EID's 2015 UWMP in May 2016.

Senate Bills 610 and 221

In 2001, the California Legislature passed Senate Bill 610 (Water Code Section 10910 et seq.) and Senate Bill 221 (Water Code Section 66473.7) to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 were companion measures, which sought to promote more collaborative planning between local water suppliers and cities and counties.

SB 610 requires the preparation of a Water Supply Assessment (WSA) for certain large developments, including residential projects with more than 500 dwelling units. SB 221 prohibits approval of subdivisions consisting of more than 500 dwelling units unless there is verification of sufficient water supplies for the project from the applicable water supplier(s). Because the proposed project includes less than 500 dwelling units, neither preparation of a WSA pursuant to SB 610 nor a water supply verification pursuant to SB 221 is required.

Although the proposed project is not subject to either SB 610 or SB 221 because of its size, a water supply evaluation utilizing data published by the EID and consistent with WSA requirements was prepared to demonstrate the existence of sufficient water supplies for the project.

Water Conservation Act of 2009 (SBX7-7)

The Water Conservation Act of 2009 (also known as Senate Bill X7-7) established a statewide water conservation target of 20 percent reduction in water use by 2020 compared to the State's 2005 baseline use. The Act requires that retail water suppliers define in their 2010 urban water management plans the gallons per capita per day (gpcd) targets for 2020, with an interim 2015 target. The legislation also requires the California Department of Water Resources, in consultation with other state agencies, to develop a single standardized water use reporting form, which would be used by both urban and agricultural water agencies. EID's 2015 UWMP, adopted in May 2016, complied with these requirements.

4.9.3.2 Local Plans and Policies

El Dorado Irrigation District

Drought Preparedness Plan

In 2008, EID adopted a Drought Preparedness Plan, which is a comprehensive plan to help identify drought conditions and determine when El Dorado County would be considered to be entering drought conditions. An update to the plan was prepared in 2015. Drought stages in the plan range from 0 to 4. For normal water supply conditions, EID would continue to implement water conservation measures and prohibit water waste, while raising public awareness regarding water efficiency practices. If water supplies become slightly restricted, the plan calls for an introductory Stage 1 drought response, during which customers are informed of possible shortages and asked to voluntarily conserve up to 15 percent. At Stage 2 when water supplies become moderately restricted, both voluntary and mandatory measures are implemented to achieve a demand reduction goal of up to 30 percent. If water supplies subsequently become severely restricted, a Stage 3 drought can be called with the enforcement of mandatory measures to achieve a demand reduction goal of up to 50 percent. Lastly, if drought conditions persist and EID experiences extremely restricted water supplies, then Stage 4 measures can be implemented, which require water rationing for health and safety purposes, in addition to the restrictions previously placed on more dispensable uses, in order to achieve a greater than 50 percent reduction of demand (EID 2008; EID 2015). In February 2014, the EID declared a Stage 2 Water Shortage. In April of 2017, Governor Brown declared the drought state of emergency over in most of the state, including the area within EID's jurisdiction. In May 2017, EID removed mandatory watering restrictions and returned control to the local purveyors to manage their water supplies. Conservation efforts and water use efficiency will be continually encouraged (EID 2017a).

Drought Action Plan

In 2014, EID prepared a Drought Action Plan that serves as a detailed work plan for EID that includes specific actions for management of water supply and demand, addresses effects associated with drought, and facilitates the timely implementation of effective drought responses. The most recent plan was adopted in February 2014, with subsequent revisions in April 2014. The Drought Action Plan addresses four stages of drought: 1) water alert; 2) water warning; 3) water crisis; 4) water emergency. In addition, post-drought actions address the scenarios that caused the drought (e.g., low rainfall or snowpack), lessons learned, and the associated costs and revenue to EID.

El Dorado County General Plan

The following presents guiding and implementing policies from the current County of El Dorado General Plan (2004) relevant to water and wastewater, which are contained within the Public Services and Utility and Conservation and Open Space Elements.

Public Services and Utilities Element

GOAL 5.1: PROVISION OF PUBLIC SERVICES: Provide and maintain a system of safe, adequate, and cost-effective public utilities and services; maintain an adequate level of service to existing development while allowing for additional growth in an efficient manner; and, ensure a safe and adequate water supply, wastewater disposal, and appropriate public services for rural areas.

OBJECTIVE 5.1.2: CONCURRENCY: Ensure through consultation with responsible service and utility purveyors that adequate public services and utilities, including water supply, wastewater treatment and disposal, solid waste disposal capacity, storm drainage, fire protection, police protection, and ambulance service are provided concurrent with discretionary development or through other mitigation measures provided, and ensure that adequate school facilities are provided concurrent with discretionary development to the maximum extent permitted by State law. It shall be the policy of the County to cooperate with responsible service and utility purveyors in ensuring the adequate provision of service. Absent evidence beyond a reasonable doubt, the County will rely on the information received from such purveyors and shall not substitute its judgment for that of the responsible purveyors on questions of capacity or levels of service.

Policy 5.1.2.1

Prior to the approval of any discretionary development, the approving authority shall make a determination of the adequacy of the public services and utilities to be impacted by that development. Where, according to the purveyor responsible for the service or utility as provided in Table 5-1, demand is determined to

exceed capacity, the approval of the development shall be conditioned to require expansion of the impacted facility or service to be available concurrent with the demand, mitigated, or a finding made that a CIP project is funded and authorized which will increase service capacity.

Policy 5.1.2.2 Provision of public services to new discretionary development shall not result in a reduction of service below minimum established standards to current users, pursuant to Table 5-1 (presented as 4.9-3 in this Draft EIR; the table includes only those portions of General Plan Table 5-1 that are relevant to this section of the Draft EIR).

**Table 4.9-3
Minimum Levels of Service - Utilities**

	Community Region	Rural Center and Rural Region
Public water source	As determined by purveyor	As determined by purveyor, when applicable
Public water treatment capacity	As determined by purveyor	As determined by purveyor
Public sewer treatment capacity	As determined by purveyor	As determined by purveyor
Storm drainage	Department of Transportation	Department of Transportation
Solid waste	Environmental Management	Environmental Management

Source: County of El Dorado General Plan, Public Services and Utility Element, 2004

GOAL 5.2: WATER SUPPLY: The development or acquisition of an adequate water supply consistent with the geographical distribution or location of future land uses and planned developments.

OBJECTIVE 5.2.1: COUNTY-WIDE WATER RESOURCES PROGRAM: Establish a County-wide water resources development and management program to include the activities necessary to ensure adequate future water supplies consistent with the General Plan.

Policy 5.2.1.2 An adequate quantity and quality of water for all uses, including fire protection, shall be provided for with discretionary development.

Policy 5.2.1.3 All medium-density residential, high-density residential, multifamily residential, commercial, industrial and research and development projects may be required to connect to public water systems if reasonably available when located within Community Regions and to either a public water system or to an approved private water systems in Rural Centers.

Policy 5.2.1.4 Rezoning and subdivision approvals in Community Regions or other areas dependent on public water supply shall be subject to the availability of a permanent and reliable water supply.

Policy 5.2.1.6 Priority shall be given to discretionary developments that are infill or where there is an efficient expansion of the water supply delivery system.

Policy 5.2.1.9 In an area served by a public water purveyor or an approved private water system, the applicant for a tentative map or for a building permit on a parcel that has not previously complied with this requirement must provide a Water Supply Assessment that contains the information that would be required if a water supply assessment were prepared pursuant to Water Code section 10910. In order to approve the tentative map or building permit for which the assessment was prepared the County must (a) find that by the time the first grading or building permit is issued in connection with the approval, the water supply from existing water supply facilities will be adequate to meet the highest projected demand associated with the approval on the lands in question; and (b) require that before the first grading permit or building permit is issued in connection with the approval, the applicant will have received a sufficient water meters or a comparable supply guarantee to provide adequate water supply to meet the projected demand associated with the entire approval. A water supply is adequate if the total entitled water supplies available during normal, single, dry, and multiple dry years within a 20-year projection will meet the highest projected demand associated with the approval, in addition to existing and 20-year projected future uses within the area served by the water supplier, including but not limited to, fire protection, agricultural, and industrial uses, 95% of the time, with cutbacks calculated not to exceed 20% in the remaining 5% of the time.

Policy 5.2.1.11 The County shall direct new development to areas where public water service already exists. In Community Regions, all new development shall connect to a public water system. In Rural Centers, all new development shall connect either to a public water system or to an approved private water system.

GOAL 5.3: WASTEWATER COLLECTION AND TREATMENT: Provide an adequate and safe system of wastewater collection, treatment, and disposal to serve current and future County residents.

OBJECTIVE 5.3.1: WASTEWATER CAPACITY: Ensure the availability of wastewater collection and treatment facilities of adequate capacity to meet the needs of multifamily, high-, and medium-density residential areas, and commercial and industrial areas.

Policy 5.3.1.1 High-density and multifamily residential, commercial, and industrial projects may be required to connect to public wastewater collection facilities if reasonably available as a condition of approval. In the Rural Centers of Camino/Cedar Grove/Pollock Pines, the long term development of public sewer service shall be encouraged.

Policy 5.3.1.7 In Community Regions, all new development shall connect to public wastewater treatment facilities. In Community Regions where public wastewater collection facilities do not exist project applicants must demonstrate that the proposed wastewater disposal system can accommodate the highest possible demand of the project.

GOAL 5.4: STORM DRAINAGE: Manage and control storm water runoff to prevent flooding, protect soils from erosion, prevent contamination of surface waters, and minimize impacts to existing drainage infrastructure.

OBJECTIVE 5.4.1: DRAINAGE AND FLOOD MANAGEMENT PROGRAM: Initiate a County-wide drainage and flood management program to prevent flooding, protect soils from erosion, and minimize impacts on existing drainage facilities.

Policy 5.4.1.1 Require storm drainage systems for discretionary development that protect public health and safety, preserve natural resources, prevent erosion of adjacent and downstream lands, prevent the increase in potential for flood hazard or damage on either adjacent, upstream or downstream properties, minimize impacts to existing facilities, meet the National Pollution Discharge Elimination System (NPDES) requirements, and preserve natural resources such as wetlands and riparian areas.

Policy 5.4.1.2 Discretionary development shall protect natural drainage patterns, minimize erosion, and ensure existing facilities are not adversely impacted while retaining the aesthetic qualities of the drainage way.

Conservation and Open Space Element

GOAL 7.3: WATER QUALITY AND QUANTITY: Conserve, enhance, and manage water resources and protect their quality from degradation.

OBJECTIVE 7.3.5: WATER CONSERVATION: Conservation of water resources, encouragement of water conservation, and construction of wastewater disposal systems designed to reclaim and re-use treated wastewater on agricultural crops and for other irrigation and wildlife enhancement projects.

Policy 7.3.5.1 Drought-tolerant plant species, where feasible, shall be used for landscaping of commercial development. Where the use of drought-tolerant native plant species is feasible, they should be used instead of non-native plant species.

Policy 7.3.5.4 Require efficient water conveyance systems in new construction. Establish a program of ongoing conversion of open ditch systems shall be considered for conversion to closed conduits, reclaimed water supplies, or both, as circumstances permit.

Policy 7.3.5.5 Encourage water reuse programs to conserve raw or potable water supplies consistent with State Law.

4.9.4 IMPACTS AND MITIGATION MEASURES

4.9.4.1 Significance Criteria

In accordance with Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, the impact of the proposed project related to public services, recreation, and utilities and service systems would be considered significant if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Board.
- Require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

- 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.
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Comply with federal, state, and local statutes and regulations related to solid waste.

4.9.4.2 Issues adequately addressed in the Initial Study

As noted in the Initial Study, implementation of standard conditions would ensure storm drainage facilities are adequate to accept project flows. It is anticipated that storm drain improvements would be made on-site, with connections to existing points of connection in adjacent roadways. Impacts would be less than significant. No further analysis is required in the EIR.

As discussed in the Initial Study, the proposed project would generate approximately 856 pounds of solid waste per day (156.2 tons per year), which would not represent a substantial contribution to the waste stream at the County's Material Recovery Facility (MRF) or landfills where County-generated waste is disposed. Further, the project would be required to comply with AB 341 and AB 1826, and the County operates a comprehensive recycling program, which would reduce the amount of solid waste. Impacts would be less than significant. No further analysis is required in the EIR.

4.9.4.3 Methodology

Project impacts related to water and wastewater are evaluated according to the above standards of significance by utilizing information on existing water service and wastewater service systems infrastructure provided by EID. A water supply evaluation was prepared for the proposed project and is included in **Appendix 4.9** of this Draft EIR. The evaluation utilizes information from EID's 2015 UWMP (2016a), the Wastewater Facilities Master Plan (2013), and Water Resources and Service Reliability Report (2016b).

The project's effect on the wastewater conveyance and treatment systems was evaluated by using the information in EID's Annual Water Resources Report, which evaluated the existing and future capacity of the wastewater conveyance system using monitoring and a hydraulic model.

4.9.4.4 Project Impacts and Mitigation Measures

Impact UTL-1: Development of the proposed project would not result in the need for new or expanded water supply entitlements. (*Less than Significant*)

Project Water Demand

As shown in **Table 4.9-4, Projected Water Demand**, the proposed project would result in a demand for about 53.9 AFY of water. This projection includes a 13 percent factor for unaccounted-for water to match the system water loss reported in EID's 2013 Integrated Water Master Plan. However, because the project site will be served by existing water service connections, water system line losses should not significantly increase with development of the proposed project. Therefore, the applied water loss of 13 percent produces a highly conservative demand projection for the proposed project.

**Table 4.9-4
Projected Water Demand**

Component	Quantity	Water Factor	Units	Annual Water Demand, AFY
Multi-Family Residential Units	214 DU	0.20	AFY/DU	42.8
Parks	0.9 acres	2.77	AFY/acre	2.4
ROW Landscaping	0.5 acres	3.30	AFY/acre	1.7
Open Space ¹	1.6 acres	0	AFY/acre	0.0
Unaccounted-for-Water ²	-	-	-	7.0
Total Water Demand				53.9

Source: West Yost Associates, 2017

¹ Includes parking garage, other hardscape, and exterior open space.

² Based on 13 percent of total water production (El Dorado Irrigation District Integrated Water Resources Master Plan, March 2013).

As recycled water is available in the El Dorado Hills service area of EID, potable water estimate was reduced by the amount of recycled water that would be used on the project site. As shown in **Table 4.9-5, Projected Potable and Recycled Water Demand**, the proposed project's projected potable and recycled water demand is projected to be 49.2 AFY and 4.7 AFY, respectively.

**Table 4.9-5
Projected Potable and Recycled Water Demand**

Component	Quantity	Water Factor	Units	Annual Water Demand, AFY
Potable Water Component				
Multi-Family Residential Units	214 DU	0.2	AFY/DU	42.8
Unaccounted-for-Water ^(a)	-	-	-	6.4
Total Potable Water Demand				49.2
Recycled Water Component				
Parks	0.9 acres	2.77	AFY/acre	2.4
ROW Landscaping	0.5 acres	3.30	AFY/acre	1.7
Unaccounted-for-Water ¹	-	-	-	0.6
Total Recycled Water Demand				4.7

Source: West Yost Associates, 2017

(a)Based on 13 percent of total water production (El Dorado Irrigation District Integrated Water Resources Master Plan, March 2013).

Potable Water Supply Sufficiency

According to EID's 2016 Water Resources and Service Reliability Report (2016b), the total available water supply for the El Dorado Hills service area (23,775 AF) satisfies and exceeds the projected normal year potential water demand for 2016 (9,483 AF). Therefore, under current conditions, the El Dorado Hills service area has approximately 14,292 AF of unallocated water supply. The current unallocated water supply significantly exceeds the 53.9 AFY total water demand as well as the potable water demand of 49.2 AFY associated with the proposed project.

Table 4.9-6, Summary of Potable Water Demand versus Supply, provides a comparison of projected potable water demand and supplies during hydrologic normal, single-day, and multiple dry years for the entire EID system over a 20 year planning period. As shown, EID has enough potable water supply available to serve its projected demand, including the demand associated with the proposed project, during all hydrologic conditions through 2040.

**Table 4.9-6
Summary of Potable Water Demand versus Supply**

Hydrologic Condition	Supply and Demand Comparison				
	2020	2025	2030	2035	2040
Normal Year					
Available Surface Water Supply	74,690	104,690	104,690	104,690	104,690
Total Water Demand (with Project)	40,367	43,758	47,490	49,822	52,658
Potential Surplus (Deficit)	34,323	60,932	57,200	54,868	52,032
Single Dry Year					
Available Surface Water Supply	63,525	68,525	68,525	68,525	68,525
Total Water Demand (with Project)	42,385	45,946	49,865	52,313	55,291
Potential Surplus (Deficit)	21,140	22,579	18,660	16,212	13,234
Multiple Dry Years					
Multiple-Dry Year First Year Supply	Available Surface Water Supply	63,525	68,525	68,525	68,525
	Total Water Demand (with Project)	42,385	45,946	49,865	52,313
	Potential Surplus (Deficit)	21,140	22,579	18,660	16,212
Multiple-Dry Year Second Year Supply	Available Surface Water Supply	59,605	64,605	64,605	64,605
	Total Water Demand (with Project)	40,266	43,649	47,371	49,697
	Potential Surplus (Deficit)	19,339	20,956	17,234	14,908
Multiple-Dry Year Third Year Supply	Available Surface Water Supply	54,343	59,343	59,343	59,343
	Total Water Demand (with Project)	38,147	41,351	44,878	47,082
	Potential Surplus (Deficit)	16,196	17,992	14,465	12,261

Source: West Yost Associates, 2017

Normal year demands are from Table 5-2 and dry year demands are based off the demand assumptions stated in Section 5.2. Surface water supplies are from Table 6-3.

Recycled Water Supply Sufficiency

Table 4.9-7, Summary of Recycled Water Demand versus Supply (During Hydrologic Normal, Single Dry, and Multiple Dry Years for EID, AFY), provides a comparison of projected recycled water demand and supplies during hydrologic normal, single-day, and multiple dry years for the entire EID system over a 20 year planning period. As shown, EID does not have enough recycled water supply available to serve its projected demand, including the proposed project, during most hydrologic conditions through 2040.

Table 4.9-7
Summary of Recycled Water Demand versus Supply
(During Hydrologic Normal, Single Dry, and Multiple Dry Years for EID, AFY)

Hydrologic Condition	Supply and Demand Comparison					
	2020	2025	2030	2035	2040	
Normal Year						
Available Recycled Water Supply	2,800	3,000	3,100	3,300	3,500	
Total Water Demand (with Project)	3,165	3,130	3,261	3,359	3,464	
Potential Surplus (Deficit)	-365	-130	-161	-59	36	
Single Dry Year						
Available Recycled Water Supply	2,800	3,000	3,100	3,300	3,500	
Total Water Demand (with Project)	3,323	3,287	3,424	3,527	3,637	
Potential Surplus (Deficit)	-523	-287	-324	-227	-137	
Multiple Dry Years						
Multiple-Dry Year First Year Supply	Available Recycled Water Supply	2,800	3,000	3,100	3,300	3,500
	Total Water Demand (with Project)	3,323	3,287	3,424	3,527	3,637
	Potential Surplus (Deficit)	-523	-287	-324	-227	-137
Multiple-Dry Year Second Year Supply	Available Recycled Water Supply	2,800	3,000	3,100	3,300	3,500
	Total Water Demand (with Project)	3,157	3,122	3,253	3,351	3,455
	Potential Surplus (Deficit)	-357	-122	-153	-51	45
Multiple-Dry Year Third Year Supply	Available Recycled Water Supply	2,800	3,000	3,100	3,300	3,500
	Total Water Demand (with Project)	2,991	2,958	3,082	3,174	3,273
	Potential Surplus (Deficit)	-191	42	18	126	227

Source: West Yost Associates, 2017

Normal year demands are from Table 5-2 and dry year demands are based off the demand assumptions stated in Section 5.2. Recycled water supplies are from Table 6-4.

EID is unable to increase its recycled water supplies further until additional population growth occurs and treatment and storage facilities are expanded. Although EID's wastewater treatment plants treat about twice the amount of water that is recycled, EID is required to discharge a portion of its treated wastewater, thereby preventing EID from distributing a greater volume of recycled water at this time. To alleviate these potential recycled water deficits, EID has the capability to supply potable water to the recycled water users, as EID has several thousand AFY in surplus potable water supply in every scenario. EID could also implement minimal short term demand reductions (water conservation) to help reduce

the demand for recycled water (West Yost Associates 2017). EID would implement water conservation efforts in addition to providing supplemental water for recycled uses should the need arise.

As discussed above, in February 2014, EID declared a Stage 2 Water Shortage which sets a 30 percent water conservation target. EID's 2014 reduction target significantly exceeds the demand reductions needed to alleviate 2040 water supply deficiencies. Therefore, EID's total projected water supplies can easily satisfy the projected demands during normal, single-dry, and multiple dry water years over a 20 year projection (West Yost Associates 2017).

In summary, based on the analysis in the water supply evaluation prepared for the proposed project, water demand associated with the proposed project would be served by existing supplies under normal, single-dry, and multiple dry years, and the development of the proposed project would not result in the need for new or expanded water supply entitlements. The project's impact related to water supply would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact UTL-2: **Development of the proposed project would not require the construction of new or expanded water conveyance systems. (*Less than Significant*)**

Potable and recycled water service would be provided to the site by a proposed on-site water infrastructure system. The on-site water infrastructure improvements would connect to an existing 12-inch potable water main and an existing 6-inch non-potable water main located in Town Center Boulevard and would not require an upgrade or extension to the existing off-site water infrastructure system. Therefore, the proposed project would not require expansion of EID's water delivery system. This impact would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact UTL-3: **Development of the proposed project would not require the construction of new or expanded wastewater treatment facilities, nor would it result in a discharge that would cause the water treatment facility to exceed the wastewater treatment requirements of the Regional Water Quality Control Board. (*Less than Significant*)**

The proposed project would generate approximately 0.04 mgd of wastewater.¹ Wastewater generated by the proposed project would be conveyed to the El Dorado Hills WWTP. As discussed above, the treatment plant is currently operating at approximately 65 percent of its capacity and would be capable of handling increased flows anticipated with the proposed project. Therefore, development of the proposed project would not require the construction of new or expanded wastewater treatment facilities, nor would it result in a discharge that would cause the water treatment facility to exceed the wastewater treatment requirements of the Regional Water Quality Control Board. This impact would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact UTL-4: **Development of the proposed project would require the construction of new or expanded wastewater conveyance systems. (Potentially Significant; Less than Significant with Mitigation)**

Wastewater generated on site would be collected through an on-site collection system and discharged into the existing 12-inch sewer main in Town Center Boulevard, which discharges into the 18-inch El Dorado Hills Boulevard (EDHB) trunk gravity sewer line in the vicinity of White Rock Road and Post Street. While the existing sewer main adjacent to the site has adequate capacity to serve the proposed project, EID has indicated that multiple sections of the 18-inch EDHB trunk line may not have adequate capacity to handle project flows (El Dorado County 2014). As a result, development of the proposed project may require the construction of new or expanded wastewater conveyance systems. The upgrade to the EDHB trunk line would take place within the existing roadway, which has already been disturbed, and thus would not result in effects that cannot be mitigated to a less than significant level. For this reason, upgrades to the EDHB trunk line would not result in significant environmental effects. Furthermore, upgrades to the EDHB trunk line are included in the EID's 2014-2018 Capital Improvement Plan, and the proposed project would be required to pay fees towards the planned improvements. Nonetheless, conservatively, the impact is considered potentially significant, and **Mitigation Measure UTL-1** is set forth below to mitigate this impact.

Mitigation Measures:

UTL-4 The applicant shall pay fair-share fees towards the planned CIP improvement for the EDHB trunk sewer line improvement, and associated EID connection costs.

¹ Based on 90 percent of potable water demand ($[49.2 \text{ AFY} = 16 \text{ mgd}] / 365 \text{ days} = 0.04 \text{ mgd}$)

Significance after Mitigation: Less than significant

4.9.4.5 Cumulative Impacts and Mitigation Measures

Cumulative Impact C-UTL-1: The proposed project, in conjunction with other past, present and reasonably foreseeable future development, would not result in a significant cumulative impact on utilities. (*Less than Significant*)

The following analysis evaluates the significance of potential cumulative impacts of the proposed project on water and wastewater systems in conjunction with the projects included in **Table 4.0-1**.

Water Supply

The proposed project, combined with other past, present, and reasonably foreseeable development in the EID service area, would increase demand for potable and recycled water. As shown in **Table 4.9-6** above, the EID has enough potable water supply available to serve the projected demand, which includes existing and proposed development as well as the proposed project. Therefore, cumulative development would not result in the need for new or expanded water supply entitlements, and the cumulative impact would be less than significant.

Wastewater Conveyance and Treatment

The proposed project, combined with other past, present, and reasonably foreseeable development (listed in **Table 4.0-1**) within the service area of the El Dorado Hills WWTP, would increase the amount of wastewater that would require treatment. EID's wastewater master plan was prepared in 2013 utilizing conservative growth projections for each service area based on General Plan projections and over a 20 year planning period, from 2010 through 2030. The master plan further relied on the service area and infrastructure needs to serve the growth defined by the land uses specified in the County General Plan, including the El Dorado Hills Specific Plan. The General Plan and Specific Plan land uses for the project site included commercial land uses, which were accounted for in the 2013 wastewater master plan. As the proposed project would require General Plan and Specific Plan amendments which would allow for construction of housing instead of commercial uses at the project site, the wastewater flows associated with the proposed project are likely more than those accounted for in EID's estimated projections of wastewater flows to the WWTP and may be incremental to EID's estimates. Regardless, EID monitors and updates its planning efforts to provide expanded wastewater collection and treatment facilities to meet the demand associated with authorized development, including five-year capital improvement plans.

Based on its projections of wastewater flows to the El Dorado Hills WWTP prepared in 2013, EID estimated at that time that the El Dorado Hills WWTP will approach its permitted capacity in 2026. EID estimates that the El Dorado WWTP would require a capacity of 5.45 mgd to treat existing and future wastewater flows within its service area and plans to have an expanded facility operational by 2026 (EID 2013). The expansion of the El Dorado Hills WWTP would take place on a developed portion of the facility, and in 2007 the EID prepared an Initial Study/Mitigated Negative Declaration (IS/MND) to evaluate the potential environmental effects of the plant expansion on the environment. According to the IS/MND, the proposed expansion of the El Dorado Hills WWTP could result in temporary significant adverse effects to the environment with respect to air quality (diesel exhaust, fugitive dust emissions, and naturally occurring asbestos), cultural resource (unknown archaeological resources, including human remains), geology and soils (soil erosion), and noise (noise in excess of established standards) during construction. However, with proposed mitigation, such as compliance with the local air district's rules and regulation and the preparation of a storm water pollution prevention plan, these temporary effects would be reduced to a less than significant level. In addition, the expansion of the plant could result in permanent significant adverse effects to the environment with respect to aesthetics (visual character/light and glare) and geology and soils (exposure to people to seismic risks) after construction. However, with the implementation of mitigation measures requiring the preparation of a revised landscape plan, and conformance with County and State building codes, these permanent effects would also be reduced to a less than significant level (EID 2007).

As noted above, the El Dorado Hills WWTP is currently operating at 65 percent capacity, and the EID does not expect the capacity of the existing facility to be reached until 2026. Therefore, enough capacity would exist to treat wastewater generated by the proposed project when it is occupied in 2019. In addition, development on the project site was included in EID's wastewater projections, and while residential development on the project site would result in the generation of more wastewater than projected under the current commercial land use designation, this addition represents only a small fraction of anticipated wastewater treatment demand from future development. Finally, the expansion of the El Dorado WWTP would be funded through the EID's facility capacity charges for new development, which the proposed project would be required to pay. As the expansion of the El Dorado WWTP would not cause significant environmental effects and the amount of wastewater generated by the project site would be minimal relative anticipated future demand, the cumulative impact on wastewater treatment services is deemed less than significant.

Mitigation Measures: No mitigation measures are required.

4.9.5 REFERENCES

- County of El Dorado. 2004. *El Dorado County General Plan - Conservation and Open Space Element*. Adopted July 19. Last amended December 2015.
- County of El Dorado. 2004. *El Dorado County General Plan – Public Services and Utilities Element*. Adopted July 19. Last amended December 2015.
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4.10.1 INTRODUCTION

This section evaluates potential impacts associated with energy consumption and demand that would result from the implementation of the proposed El Dorado Hills Apartments project (“proposed project”). The section also provides a description of the regulatory framework governing the management of energy on a federal, state, regional, and local level. The analysis in this section is based on the *Air Quality and Greenhouse Gas Analysis* prepared for the proposed project by De Novo Planning Group, dated June 2017. The report is presented in **Appendix 4.1** of this Draft EIR.

4.10.2 ENVIRONMENTAL SETTING

Electric Supply

Electricity on the West Slope of El Dorado County is supplied by Pacific Gas and Electric Company (PG&E).¹ PG&E owns and operates electricity infrastructure in the county and throughout Northern California that includes power lines, powerhouses, and substations. Powerhouses are located at Chili Bar on the South Fork American River and at Forebay Reservoir in Pollock Pines. A total of nine electric substations are located throughout the county; an additional station is proposed at Pine Hill on a 10-acre site at the southeast corner of the intersection of Starbuck Road and Fremont’s Loop. PG&E no longer owns all of its facilities, having sold some recently as a result of legislative deregulation. PG&E produces some of its own power and purchases some of its electricity through the Independent System Operator, which in turn obtains electricity from a number of companies that operate power plants throughout the Western Grid. The Western Grid is a multistate grid that provides electricity from as far away as Washington State and Canada (El Dorado County 2003). The Sacramento Municipal Utility District (SMUD) also owns and maintains power lines in El Dorado County; however, it does not provide electricity services to users in the county (El Dorado County 2003). In 2015, the total electricity consumption by residential uses in El Dorado County was about 736 GWh (CEC 2016b).

Electricity generated within the State of California in 2015 was from natural gas (60 percent), nuclear (9 percent), large hydroelectric (6 percent), renewable resources (25 percent), and coal (<1 percent) (CEC 2016a). The rest of the electricity used in the state was generated within the United States either in the Southwest or Pacific Northwest. The State of California power mix, based on in-state generation and out-

¹ The Sacramento Area Council of Governments (SACOG) has distributed the unincorporated El Dorado County Regional Housing Needs Allocation (RHNA) by “East Slope” (Tahoe National Forest Area and Lake Tahoe Basin) and “West Slope” (the remainder of the county.)

of-state purchases in 2015 was comprised of natural gas (44 percent), renewable resources (22 percent), large hydroelectric (5 percent), coal (6 percent), nuclear (9 percent), and additional unspecified sources of power (14 percent) (CEC 2015a). In 2015, the total system power for California was 295,405 gigawatt-hours (GWh), which is down about 0.5 percent from 2014's total system electric generation of 297,062 GWh (CEC 2016a).

Natural Gas

PG&E supplies natural gas on the West Slope of El Dorado County. Currently, natural gas distribution lines extend from the west (Sacramento County) to the community of El Dorado Hills and the El Dorado Hills Business Park. The households in the remaining portions of the West Slope of the county use either all electric energy or use propane in place of natural gas (El Dorado County 2003). In 2015, the total natural gas consumption by residential uses in El Dorado County was about 2,028,300 MBTU/year.

In 2012, natural gas used within California was extracted in the State of California (9 percent), Canada (16 percent), the Rocky Mountain region of the United States (40 percent), and in the southwest United States (35 percent) (CPUC 2017). In 2012, natural gas was used in California to produce electricity (45.6 percent), in residential uses (21 percent), in industrial uses (25 percent), and in commercial uses (8.6 percent). The total natural gas usage in 2012 was 2,313,000 MBTU/year (CEC 2016a).

Petroleum Based Fuel

In 2015, 12 billion gallons of gasoline (non-diesel) and 1.6 billion gallons of diesel fuel were sold statewide (CEC 2016c). While projected gasoline sales for El Dorado County were expected to be approximately 81 million gallons in 2015, the number of gallons consumed in the County was 65 million gallons (CEC 2015b). Similar to the number of gasoline gallons consumed, the number of diesel gallons consumed was lower than the California Energy Commission's (CEC) projection. Countywide, seven million gallons of diesel fuel were consumed in 2015, while the CEC had projected that nine million gallons of diesel fuel would be consumed countywide (CEC 2015b).

4.10.3 REGULATORY CONSIDERATIONS

4.10.3.1 Federal Laws and Regulations

Energy Policy and Conservation Act

Enacted in 1975, this legislation established fuel economy standards for new light-duty vehicles sold in the U.S. The law placed responsibility on the National Highway Traffic and Safety Administration (a part of the U.S. Department of Transportation) for establishing and regularly updating vehicle standards. The

U.S. Environmental Protection Agency (US EPA) administers the Corporate Average Fuel Economy (CAFE) program, which determines vehicle manufacturers' compliance with existing fuel economy standards. Since the inception of the CAFE program, the average fuel economy for new light-duty vehicles (autos, pickups, vans, and SUVs) steadily increased from 13.1 miles per gallon (mpg) for the 1975 model year to 27.5 mpg for the 2012 model year and is proposed to increase to 54.5 by 2025.

Energy Star Program

In 1992, the U.S. EPA introduced Energy Star as a voluntary labeling program designed to identify and promote energy-efficient products to reduce greenhouse gas emissions. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, and heating and cooling systems. Under this program, appliances that meet specifications for maximum energy use established under the program are certified to display the Energy Star label. In 1996, US EPA joined with the Energy Department to expand the program, which now also includes qualifying commercial and industrial buildings, and homes.

4.10.3.2 State Laws and Regulations

Title 24

Title 24, Part 6, of the California Code of Regulations contains the CEC's Energy Efficiency Standards for Residential and Nonresidential Buildings. Title 24 was first established in 1978, in response to a legislative mandate to reduce California's energy consumption. Since that time, Title 24 has been updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

On April 23, 2008, the CEC adopted the 2008 standards, which applied to projects that submitted an application for a building permit on or after January 1, 2010. The CEC adopted the 2008 standards for a number of reasons: (1) to provide California with an adequate, reasonably priced, and environmentally sound supply of energy; (2) to respond to Assembly Bill 32 (AB 32; the Global Warming Solutions Act of 2006), which requires California to reduce its greenhouse gas emissions to 1990 levels by 2020; (3) to pursue the statewide policy that energy efficiency is the resource of choice for meeting California's energy needs; (4) to act on the findings of California's Integrated Energy Policy Report, which indicate that the 2008 Standards are the most cost-effective means to achieve energy efficiency, reduce the energy demand associated with water supply, and reduce greenhouse gas emissions; (5) to meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures in the update of all state building codes; and (6) to meet the Executive Order in the Green Building Initiative

to improve the energy efficiency of nonresidential buildings through aggressive standards.² In 2013, updates were made to the 2008 Title 24 standards (effective January 1, 2014). The updated 2013 Title 24 standards will be applicable to the project.

The California Green Building Standards Code, which is Part 11 of the Title 24 Building Standards Code, is commonly referred to as the CALGreen Code. The 2008 edition, the first edition of the CALGreen Code, contained only voluntary standards. The 2013 CALGreen Code is a code with mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools, and hospitals) throughout California beginning on January 1, 2014. The 2013 CALGreen Code contains requirements for construction site selection, stormwater control during construction, construction solid waste reduction, indoor water use reduction, building material selection, natural resource conservation, site irrigation conservation, and more. Additionally, this code encourages buildings to achieve exemplary performance in the area of energy efficiency. For the purposes of energy efficiency standards, the CEC believes a green building should achieve at least a 15 percent reduction in energy usage when compared to California's mandatory energy efficiency standards.

AB 32

In addition to Title 24, AB 32 is anticipated to result in the future regulation of energy resources in California. (See **Section 4.4, Greenhouse Gas Emissions**, for additional information on AB 32.) In order to achieve these emission reductions, it is generally accepted that California will need to improve its overall energy efficiency, which includes the use of more renewable energy resources. Pursuant to AB 32, the California Air Resources Board (CARB) will work with other state agencies (including the CEC), to implement feasible programs and regulations that reduce emissions and improve energy efficiency.³

Senate Bill 32

In the 2016 legislative session, the Legislature passed, and the Governor signed, Senate Bill 32 (SB 32). This bill requires CARB to adopt rules and regulations to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030.

Renewable Portfolio Standard

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2, California's Renewables Portfolio Standard (RPS) is one of the most ambitious renewable energy

² See <http://www.energy.ca.gov/title24/2008standards/index.html>, 2013.

³ See <http://www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm#electric>, September 13, 2013 (highlights targeted improvements for the energy sector).

standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Senate Bill 350

In the 2015 legislative session, the Legislature passed, and the Governor signed, Senate Bill 350 (SB 350). The legislation requires that, by 2030, 50 percent of all electricity provided by power plants in California must be from renewable sources. SB 350 further requires the California Energy Commission (CEC) to establish annual targets for statewide energy efficiency savings and demand reduction that would achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas by retail customers by 2030. The bill requires the Public Utilities Commission to establish efficiency targets for investor-owned electrical and gas corporations consistent with the 2030 goal, and the CEC to establish annual targets for energy efficiency savings and demand reductions for local publicly-owned electric utilities consistent with the 2030 goal. Each retailer of electricity must regularly file an integrated resource plan (IRP) for review and approval.

Other Energy Related Statutes and Executive Orders

Additional legislation and executive orders focused on energy efficiency in California are highlighted briefly below:

- Senate Bill 107: This legislation, which addresses California's Renewables Portfolio Standard (RPS), requires retail sellers of electricity to procure 20 percent of retail sales from renewable energy by 2010.
- Assembly Bill 1613: This legislation, also known as the Waste Heat and Carbon Emissions Reduction Act, was designed to encourage the development of new combined heat and power systems in California with a generating capacity of up to 20 MW.
- Senate Bill 1: This legislation enacted the Governor's Million Solar Roofs program and has an overall objective of installing 3,000 MW of solar photovoltaic systems.
- Senate Bill 1389: This legislation requires the California Energy Commission to prepare a biennial integrated energy policy report that contains an assessment of major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety.
- Executive Order S-14-08: This order established accelerated RPS targets—specifically 33 percent by 2020.
- Executive Order S-21-09: This order requires CARB to adopt regulations, by July 31, 2010, increasing California's RPS to 33 percent by 2020.

4.10.3.3 Local Plans and Policies

El Dorado County General Plan

The following presents guiding and implementing policies from the current County of El Dorado General Plan (2004) relevant to energy and contained within the Public Services and Utilities Element.

GOAL 5.6: GAS, ELECTRIC, AND OTHER UTILITY SERVICES: Sufficient utility service availability consistent with the needs of a growing community.

OBJECTIVE 5.6.1: PROVIDE UTILITY SERVICES: Community Regions shall be provided with adequate and reliable utility services such as gas, electricity, communication facilities, satellite and/or cable television, and water distribution facilities, while recognizing that levels of service will differ between Community Regions, Rural Centers, and Rural Regions.

Policy 5.6.1.1 Promote and coordinate efforts with utilities for the undergrounding of existing and new utility distribution lines in accordance with current rules and regulations of the California Public Utility Commission and existing overhead power lines within scenic areas and existing Community Regions and Rural Centers.

Policy 5.6.1.2 Reserve adequate rights-of-way to facilitate expansion of services in a timely manner.

OBJECTIVE 5.6.2: ENCOURAGE ENERGY-EFFICIENT DEVELOPMENT: Encourage development of energy-efficient buildings, subdivisions, development, and landscape designs.

Policy 5.6.2.1 Require energy conserving landscaping plans for all projects requiring design review or other discretionary approval.

Policy 5.6.2.2 All new subdivisions should include design components that take advantage of passive or natural summer cooling and/or winter solar access, or both, when possible.

4.10.4 IMPACTS AND MITIGATION MEASURES

4.10.4.1 Significance Criteria

Neither Appendix F of the *State CEQA Guidelines* nor PRC Section 21100(b)(3)) provides a threshold of significance that might be used to evaluate the potential significance of energy consumption of a

proposed project. Rather, the emphasis is on reducing “the wasteful, inefficient, and unnecessary consumption of energy.” Based on this focus of the guidelines, for purposes of this Draft EIR, the proposed project would have a significant impact related to energy consumption if it would:

- Involve the wasteful, inefficient, or unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, associated with project design, project location, the use of electricity and/or natural gas, and/or the use of fuel by vehicles anticipated to travel to and from the project; or
- Result in the excessive consumption of energy resources that could not be accommodated within the long-term electricity supply and distribution system or the long-term natural gas supply and distribution system of their respective supplier.

4.10.4.2 Methodology

Appendix F of the *State CEQA Guidelines* requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce “wasteful, inefficient and unnecessary” energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix F, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered “wasteful, inefficient, and unnecessary” if it were to (1) violate state and federal energy standards, (2) result in significant adverse impacts related to project energy requirements, energy inefficiencies, or energy intensiveness of materials, (3) cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, (4) fail to comply with existing energy standards, or (5) otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The methodology used to estimate the construction-phase energy use is described in **Impact EN-1** below. With respect to energy consumption during occupancy/operation, the increased electricity and natural gas demand estimates due to operation/occupancy of the proposed project were developed using the CalEEmod emissions model. In addition, as the proposed project would result in daily vehicle trips to and from the project site due to typical residential commutes, the increase in the consumption of petroleum-based fuel was calculated for the proposed project based on vehicle miles travelled (VMT). CalEEmod was used to estimate VMT for the proposed project. Energy consumption during occupancy/operation is presented in **Impact EN-1** and **Impact EN-2** below.

4.10.4.3 Project Impacts and Mitigation Measures

Impact EN-1: Construction and operation of the proposed project would increase the consumption of energy but would not result in wasteful, inefficient or unnecessary consumption of energy. (*Less than Significant*)

The proposed project is primarily a residential development, with 214 apartment units, composed of two apartment buildings, a parking structure, outdoor recreation areas, and an informal open space area. The apartment units would range in size from 576 square feet to 1,195 square feet, with a mix of 114 studio/1-bedroom units and 100 2-bedroom units. The proposed project uses would not have a high or wasteful demand for energy. The amount of energy used at the residential uses within the project site would directly correlate to the number and size of residential units, the energy consumption of associated unit appliances, garage usage, and outdoor lighting, landscape maintenance, and other energy uses associated with project site activities. Other proposed project energy uses include fuel used by vehicle trips generated by the project during its construction and operation, and fuel used by off-road construction vehicles during construction. The following analysis provides calculated levels of energy use expected for the proposed project, based on CalEEMod v.2016.3.1 and the California Air Resource Board's EMFAC2014.⁴

Operational Energy Use

The proposed project would use energy resources for the operation of project buildings (electricity and natural gas) and for on-road vehicle trips (gasoline and diesel fuel) generated by the proposed project. The proposed project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through Statewide and local measures.

Electricity and Natural Gas

Electricity and natural gas would be used primarily for residential housing end uses. Additionally, the electricity would be required to pump water and wastewater to and within the project site and is included in the electricity estimate. Total annual unmitigated and mitigated electricity (kWh) and natural gas (kBtu) usage associated with the operation of the proposed project are shown in **Table 4.10-1, Project Operational Natural Gas and Electricity Usage (Unmitigated Scenario)**, and **Table 4.10-2, Project Operational Natural Gas and Electricity Usage (Mitigated Scenario)**, below (as provided by

⁴ Many of the assumptions provided by CalEEMod are conservative relative to the proposed project. Therefore, this analysis provides conservative estimate of proposed project energy usage.

CalEEMod). The proposed project incorporates feasible mitigation to reduce the proposed project's operational electricity and natural gas consumption (see **Mitigation Measure AIR-2**).

Table 4.10-1
Project Operational Natural Gas and Electricity Usage (Unmitigated Scenario)

Energy ^(a)	Natural Gas (kBTU/year)	Electricity (kWh/year)
Apartments Mid Rise	1,049,350	1,069,570
Total	1,049,350	1,069,570

Source: De Novo, 2017

Note: (a) Numbers provided here may not add up exactly to total due to rounding.

Table 4.10-2
Project Operational Natural Gas and Electricity Usage (Mitigated Scenario)

Energy ^(a)	Natural Gas (kBTU/year)	Electricity (kWh/year)
Apartments Mid Rise	978,637	1,000,510
Total	978,637	1,000,510

Source: De Novo, 2017

Note: (a) Numbers provided here may not add up exactly to total due to rounding.

As shown in **Table 4.10-1** and **Table 4.10-2**, proposed project operational energy usage would be reduced with implementation of **Mitigation Measure AIR-2**. Measures that would increase project energy efficiency include disallowing wood-burning fireplaces/hearths and requiring the installation of energy efficient appliances. As a conservative estimate, the proposed project's electricity requirements would be reduced by approximately 6.5 percent and natural gas requirements would be reduced by approximately 6.7 percent with the incorporation of **Mitigation Measure AIR-2**, which would require the implementation of several of the project's sustainable development features that are listed in **Chapter 3.0**. With mitigation, this would represent less than 0.14 percent of the 2015 countywide annual electricity demand and less than 0.05 percent of the 2015 countywide annual natural gas consumption.

On-road Vehicles

The proposed project would generate vehicle trips during its operational phase. Based on the peak hour trip generation rates detailed in the project-specific Traffic Impact Analysis (TIA) found in **Appendix 4.8**, the proposed project would generate an estimated 1,403 gross daily vehicle trips. To calculate operational on-road vehicle energy usage and emissions, default trip lengths generated by CalEEMod were used,

which are based on the proposed project location and urbanization level parameters selected within CalEEMod (“El Dorado-Mounty County” County and “Urban” urbanization level). These values are provided by the individual districts or use a default average for the state, depending on the location of the proposed project. Based on default factors provided by CalEEMod, the weighted average distance per trip is assumed to be approximately 8.86 miles. Therefore, the proposed project would generate a total of approximately 12,436 average daily vehicle miles travelled (Average Daily VMT). Using fleet mix data provide by CalEEMod (v.2016.3.1), and Year 2020 gasoline and diesel mpg factors for individual vehicle classes as provided by EMFAC2014, a weighted mpg factor was derived (25.0 mpg for gasoline and 14.4 mpg for diesel). Based on these factors, the unmitigated proposed project would use a total of 462 gallons of gasoline and 62 gallons of diesel fuel per day, or 168,673 gallons of gasoline and 22,558 annual gallons of diesel fuel per year. This would represent approximately 0.26 percent of the countywide annual gasoline consumption and approximately 0.32 percent of the countywide annual diesel consumption.

The proposed project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. For example, PG&E is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g., solar and wind) within its energy portfolio. Based on this requirement, PG&E is expected to procure at least 33 percent of its electricity resources from renewable energy resources by 2020, and 50 percent by 2030. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. Furthermore, as described previously, the incorporation of **Mitigation Measure AIR-2** would further reduce project energy consumption. The proposed project would also be in compliance with the planning documents described above and would not result in an inefficient, wasteful, or unnecessary use of energy resources during project operation.

Construction Energy Use

The proposed project would use energy resources during construction from off road equipment and on-road vehicle trips generated by and associated with the proposed project (gasoline and diesel fuel).

On-road Vehicles

The proposed project would generate on-road vehicle trips during project construction from construction workers and vendors. Estimates of vehicle fuel consumed were derived based on the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by

CalEEMod, and Year 2020 gasoline mpg factors provided by EMFAC2014. It was assumed that all on-road worker vehicles generated by the construction phase of the project would use gasoline as a fuel source (as opposed to diesel fuel or alternative sources). Additionally, it was assumed that all on-road vendor trucks generated by the construction phase would use diesel fuel. **Table 4.10-3, On-road Mobile Fuel Generated by Project Construction Activities – By Phase**, below, describes gasoline and diesel fuel used by on-road mobile sources during each phase of the construction schedule. As shown, the majority of on-road mobile vehicle fuel used during the construction of the proposed project would occur during the building construction phase. See **Appendix 4.1** for detailed calculations of on-road mobile fuel generated during the project construction period.

Table 4.10-3
On-road Mobile Fuel Generated by Project Construction Activities – By Phase

Construction Phase	Number of Days	Total Daily Worker Trips	Total Daily Vendor Trips	Gallons of Gasoline Fuel	Gallons of Diesel Fuel
Site Preparation	5	18	-	39	-
Grading	8	15	-	52	-
Building Construction	273	154	23	18,157	6,713
Paving	22	20	-	190	-
Architectural Coating	18	31	-	241	-
Total	326	238	23	18,679	6,713

Source: De Novo, 2017

Off-road Vehicles

Off-road construction vehicles and equipment would use diesel fuel during the construction phase of the proposed Project. A non-exhaustive list of off-road constructive vehicles that could be used during the construction phase of the proposed project includes: cranes, forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO₂ emissions expected to be generated by the off-road mobile vehicles during the construction phase of the proposed project (as provided by the CalEEMod output), and a CO₂ to diesel fuel conversion factor provided by the U.S. Energy Information Administration, the proposed project would use a maximum total of approximately 35,968.28 gallons of diesel fuel for off-road construction vehicles. Detailed calculations are provided in **Appendix 4.1**.

The estimated amounts of energy resources reported for on-road and off-road construction vehicles and equipment would be consumed over a period of 15 months and would represent a small percentage of the total energy used in the county. More importantly, for reasons presented below, this consumption would not represent a wasteful and inefficient use of energy resources.

There is growing recognition among developers and retailers that sustainable construction is not any more expensive than “business as usual” construction methods, and further, that there are long-term significant cost-savings potential in utilizing green building practices and materials. In addition, the proposed project would feature a sustainable design to comply with CALGreen, which would also result in the use of sustainable materials and recycled content that would reduce energy consumption during project construction.

Further, the project has been designed to balance earthwork on the site between cut and fill. Only incidental excavated materials associated with the excavation of building footings and plumbing will need to be hauled off site. For this reason, only a limited number of haul trucks will be required to remove soil from the project site. Construction materials would include recycled materials and products originating from nearby sources to the extent feasible in order to comply with CALGreen and to reduce costs of transportation. Furthermore, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

For the reasons listed above, the proposed project would not involve the inefficient, wasteful, and unnecessary use of energy during construction and the construction-phase impact related to energy consumption would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact EN-2: **The proposed project would not result in the excessive consumption of energy resources that could not be accommodated within the long-term electricity supply and distribution system or the long-term natural gas supply and distribution system. (*Less than Significant*)**

Construction

Electricity and natural gas from the PG&E supply and distribution systems would not be used during project construction, and there would be no impact on the existing supply and distribution systems.

Operation

As stated above, the proposed project’s annual natural gas and electricity demand would represent very small percentages of the 2015 countywide annual natural gas and electricity consumption. Given the small fraction that the project’s demand would constitute of the total demand, the project’s demand by itself would not require the construction of new power generation facilities. The electrical loads and

natural gas demand associated with the proposed project are within the parameters of projected load growth in the County, and PG&E maintains sufficient capacity to serve the proposed project. The proposed project would comply with all existing energy standards, including those established by El Dorado County, and would not result in significant adverse impacts on energy resources. Thus, the proposed project would not be expected to cause an inefficient, wasteful, or unnecessary use of energy resources and the operation of the proposed project would not result in the consumption of energy resources that could not be accommodated within the long-term electricity and natural gas supply and distribution system of PG&E. The project's impact on supply and distribution systems would be less than significant.

Although the project demand for electricity by itself would not require the construction of new power generation facilities, the demand would, however, combine with the demand for electricity associated with past, present and reasonably foreseeable future projects in the region, and could contribute to the need for an expansion of an existing power plant or the construction of a new power plant. PG&E produces some of the electricity it sells and purchases the rest from other producers; the procured electricity could come from in-state or out of state generation facilities. It is, therefore, infeasible and speculative to predict where the new supply sources would be located or to evaluate the environmental consequences from the construction and operation of such facilities. Furthermore, if the new power generation facilities were to be located in California, they would be subject to environmental review and would be required to avoid or minimize their environmental impacts. Accordingly, the cumulative impact associated with energy use would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.10.5 ALTERNATIVES

Appendix F of the *State CEQA Guidelines* recommends that alternatives should be compared in terms of overall energy consumption and in terms of measures to reduce energy use. The energy use and impacts of alternatives to the proposed project are presented in **Section 5.0, Alternatives**, of this Draft EIR. The alternatives evaluated in **Section 5.0** include alternatives that would involve lower energy use than the proposed project.

4.10.6 UNAVOIDABLE ADVERSE EFFECTS

Appendix F recommends that the EIR report any unavoidable adverse impacts associated with the project's energy use. The analysis presented in **Impact EN-1** and **Impact EN-2** above shows that there would not be a significant unavoidable impact associated with the use of energy by the project.

4.10.7 IRREVERSIBLE COMMITMENT OF RESOURCES

Appendix F states that an irreversible commitment of resources could occur if the project preempts future energy development or future energy conservation. The proposed project is a residential development that would not preempt future energy development on the project site since there are no energy resources located on or near the site. The proposed project would also not preempt future energy conservation, because similar to other residential units in the County, the apartment buildings would be able to implement energy related improvements in the future, including solar panels and electric vehicle charging stations.

4.10.8 SHORT-TERM GAINS AND LONG-TERM IMPACTS

Appendix F suggests that the project's short-term gains and long-term impacts can be evaluated by calculating the project's energy cost over the project's lifetime. As noted above, the proposed project would not result in a wasteful use of energy. The project would provide housing that is needed to meet the County's housing needs. There would not be a reduction of long-term benefits for short-term gains as a result of the proposed project.

4.10.9 GROWTH INDUCING EFFECTS

Appendix F states that growth inducing effects may include the energy consumption of the growth induced by the project. As stated in **Section 6.0, Other CEQA Considerations**, other than the residents of the project site that would be added to the population of the County, the proposed project would not induce any population or employment growth beyond that anticipated in the General Plan, and therefore there would be no energy consumption related to growth induced by the proposed project.

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5.0 ALTERNATIVES

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an EIR evaluate a range of reasonable alternatives to the project or to the location of the project that could feasibly avoid or lessen significant environmental impacts while substantially attaining the basic objectives of the proposed El Dorado Hills Apartments project (“proposed project”). An EIR should also evaluate the comparative merits of the alternatives. This chapter sets forth potential alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the *State CEQA Guidelines*¹ pertaining to the alternatives analysis are summarized below:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.
- The range of alternatives required in an EIR is governed by a “rule of reason.” Therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- The No Project alternative shall be evaluated along with its impact. The No Project analysis shall discuss the existing conditions at the time the notice of preparation is published. Additionally, the analysis shall discuss what would be reasonably expected to occur at the project site in the foreseeable future based on current plans and consistent with available infrastructure and community services if the project were not approved.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

The range of potentially feasible alternatives is to be selected and discussed in a manner intended to foster meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives are environmental impacts, site

¹ California Code of Regulations, Title 14, Division 6, Chapter 3, *California Environmental Quality Act Guidelines*, Section 15126.6.

suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the applicant could reasonably acquire, control, or otherwise have access to an alternative site.²

5.2 PROJECT OBJECTIVES

The underlying purpose of the proposed project is to make an economically viable use of the subject property in a manner that meets the planning policies and regulatory standards of the County of El Dorado while meeting a market demand for housing.

The objectives of the project are to develop a well-designed, economically feasible residential community that consists of a variety of residential unit types and incorporates smart growth elements. The applicant's key objectives for the proposed project are to:

- Implement the County's General Plan by directing growth to areas that are already developed with existing access to services, schools and transportation systems in order to preserve agricultural land and open space;
- Implement goals and objectives of the El Dorado Hills Specific Plan;³
- Provide a residential population to support commercial development within the Town Center East Planned Development area;
- Assist in increasing the housing supply in El Dorado County to improve the job-housing imbalance, including housing that is more affordable;
- Implement smart growth principles by developing underutilized properties with higher density housing projects.
- Develop a sustainable community that incorporates smart-growth elements, places higher-density housing in close proximity to job centers, and complements adjacent commercial uses; and
- Create a residential development that maximizes density with accessibility to alternate transportation modes, and integrates pedestrian, bicycle, transit, open space and outdoor uses to encourage active centers.

² California Code of Regulations, Title 14, Division 6, Chapter 3, *California Environmental Quality Act Guidelines*, Section 15126.6(f)(1).

³ See http://www.edcgov.us/Government/Planning/Zoning_Ordinances_for_Specific_Plans.aspx#El%20Dorado%20Hills for the goals and objectives listed in the El Dorado Hills Specific Plan.

5.3 IMPACTS OF THE PROPOSED PROJECT

To develop project alternatives, the County, as Lead Agency, considered the project objectives and reviewed the significant impacts of the proposed project, identified those impacts that could be substantially avoided or reduced through an alternative, and determined the appropriate range of alternatives to be analyzed. The Initial Study prepared for the proposed project and published on April 7, 2017, evaluated the potential impacts of the proposed project related to all CEQA topics. The following resource topics were evaluated further in this Draft EIR in **Chapter 4.0, Environmental Impact Analysis**: air quality, biological resources, cultural resources, greenhouse gas (GHG) emissions, land use and planning, noise, public services, transportation and traffic, utilities and service systems, and energy. The analysis in **Chapter 4.0** concluded that implementation of the proposed project would result in significant and potentially significant impacts in five resource areas: air quality, biological resources, cultural resources, transportation and traffic, and utilities and service systems. However, all of the significant and potentially significant impacts of the proposed project would be reduced to a less-than-significant level with the incorporation of mitigation measures. A summary discussion of project impacts under each resource area analyzed in the Draft EIR is presented below. **Table 5.0-3, Summary Comparison of Project Alternatives**, presented at the end of this chapter, lists all potentially significant and significant impacts of the proposed project.

5.3.1 Air Quality

The analysis in **Section 4.1, Air Quality**, of the Draft EIR, identified a potentially significant impact associated with construction phase emissions of criteria pollutants such as ozone precursors (reactive organic compounds [ROG] and oxides of nitrogen [NO_x]) and fugitive dust (**Impact AIR-1**), emissions of criteria pollutants such as ozone precursors (ROG and NO_x) during operation (**Impact AIR-2**), and exposing sensitive receptors to substantial pollutant concentrations associated with naturally occurring asbestos during construction (**Impact AIR-5**). However, all of these impacts would be reduced to a less than significant level with mitigation. Impacts associated with emissions of other criteria pollutants such as carbon monoxide (CO), particulates (PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂), lead (Pb), sulfates (SO₄) and hydrogen sulfide (H₂S) would be less than significant. Finally, the analysis found that the proposed project would not conflict with an applicable air quality plan or create objectionable odors. No significant and unavoidable impacts related to air quality were identified.

5.3.2 Biological Resources

As analyzed in **Section 4.2, Biological Resources**, of the Draft EIR, the proposed project could have a potentially significant impact with respect to nesting birds (**Impact BIO-2**). However this impact would

be reduced to a less than significant level with mitigation. Impacts on candidate, sensitive, or special-status species or their habitat; riparian habitat; sensitive natural community; wetlands; and wildlife movement would be less than significant. No significant and unavoidable impacts associated with biological resources were identified.

5.3.3 Cultural Resources

The analysis found in **Section 4.3, Cultural Resources**, of the Draft EIR, identified potentially significant impacts associated with the disturbance of unknown archaeological resources (**Impact CUL-2**), disturbance of unknown human remains (**Impact CUL-4**), and disturbance of unknown tribal cultural resources (**Impact CUL-5**). However, these impacts would be reduced to a less-than-significant level with mitigation. Impacts associated with historical archaeological resources and paleontological resources were determined to be less than significant. No significant and unavoidable project-level impacts related to cultural resources were identified.

In addition, the analysis identified a potentially significant cumulative impact associated with cultural and tribal cultural resources (**Impact C-CUL-1**). However, with proposed mitigation, the project's contribution to this impact would be less than cumulatively considerable. No significant and unavoidable cumulative impacts related to cultural resources were identified.

5.3.4 Greenhouse Gas Emissions

As analyzed in **Section 4.4, Greenhouse Gas Emissions**, of the Draft EIR, the proposed project would not generate GHG emissions during construction and operation that would have a potentially significant impact on the environment. No significant and unavoidable impacts associated with GHG emissions were identified.

5.3.5 Land Use and Planning

The analysis in **Section 4.5, Land Use and Planning**, of the Draft EIR, found that the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. No significant and unavoidable impacts related to land use and planning were identified.

5.3.6 Noise

As analyzed in **Section 4.6, Noise**, of the Draft EIR, traffic and stationary noise sources associated with the proposed project would not cause a substantial permanent increase in noise levels at off-site receptors. In addition, although during construction, the proposed project would result in a substantial

temporary or periodic increase in ambient noise levels in the vicinity of the proposed project, the increase is not considered significant due to compliance with the County's noise ordinance. Finally, the proposed project would not expose on-site sensitive receptors to noise levels in excess of standards established in the County General Plan. No significant and unavoidable impacts associated with noise were identified.

5.3.7 Public Services

The analysis in **Section 4.7, Public Resources**, of the Draft EIR, found that the proposed project would not require the construction of new or physically altered fire, police, library, and parks and recreation facilities. No significant and unavoidable impacts related to public services were identified.

5.3.8 Transportation and Traffic

As analyzed in **Section 4.8, Transportation and Traffic**, of this Draft EIR, traffic generated by the proposed project would result in a significant impact at one intersection (El Dorado Hills Boulevard/Saratoga Way/Park Drive) under near-term cumulative plus project conditions (**Impact C-TRANS-1**). However, this impact would be reduced to a less-than-significant level with mitigation. In addition, the project's effect on the private intersection of Town Center Boulevard/Post Street under cumulative long-term plus project conditions, which is not required to be analyzed under CEQA, would be reduced with mitigation voluntarily proposed by the project applicant. No significant and unavoidable impacts associated with transportation and traffic were identified.

5.3.9 Utilities and Service Systems

The analysis in **Section 4.9, Utilities**, of this Draft EIR, identified a potentially significant impact associated with wastewater conveyance infrastructure (**Impact UTL-4**). However, this impact would be reduced to a less-than-significant level with mitigation. Impacts associated with water supply and infrastructure, and wastewater treatment capacity were identified as less than significant. No significant and unavoidable impacts related to utilities and service systems were identified.

5.3.10 Energy

The analysis in **Section 4.10, Energy**, of this Draft EIR, concluded that although the proposed project would result in an increase in energy demand, it would not result in a wasteful, inefficient or unnecessary consumption of energy resources, and the impact would be less than significant. No significant and unavoidable impacts associated with energy were identified.

5.4 ALTERNATIVES CONSIDERED BUT NOT EVALUATED IN DETAIL

Section 15126.6(c) of the *State CEQA Guidelines* states that an EIR should briefly describe the rationale for selecting the alternatives to be discussed and the reasons for eliminating alternatives from detailed consideration in an EIR. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR is failure to meet most of the basic project objectives, infeasibility, or inability to avoid or substantially reduce significant environmental impacts.

During project scoping, the County received a request to locate the proposed project on a site located east of Vine Street between Rossmore Lane and White Rock Road. The possibility of locating the proposed project on this alternative site within the El Dorado Hills community was determined by the County to be infeasible given that neither the project applicant nor the County owns or controls the property. Therefore, the ability of the applicant to purchase this site to develop the project is considered speculative. In addition, the development of an apartment building of the same size at this location would result in similar impacts with respect to construction and operational air quality, cultural resources, and wastewater conveyance. Thus, placing the proposed development at this alternative site would not avoid the significant impacts of the proposed project.

The County also received requests from the public during project scoping to analyze a mixed-use alternative that would include ground floor retail above residential. This alternative was not considered as the retail component would generate more vehicle trips than the residential component that it would replace, thus resulting in greater traffic impacts and an increase in air quality and GHG emissions.

5.5 ALTERNATIVES EVALUATED IN DETAIL

According to the *State CEQA Guidelines*, the discussion of alternatives should focus on alternatives to a project or its location that can avoid or substantially lessen the significant effects of the project, while feasibly attaining most of the basic project objectives. The *State CEQA Guidelines* indicate that the range of alternatives included in this discussion should be sufficient to allow decision-makers to make a reasoned choice. The alternative discussion should provide decision makers with an understanding of the merits and disadvantages of these alternatives.

Alternatives considered for detailed evaluation in this Draft EIR include potential alternate projects that meet most of the project's basic objectives while eliminating or reducing significant environmental impacts of the proposed project identified in **Section 4.0**. Alternatives considered in this Draft EIR for detailed evaluation include:

- No Project/No Development

- No Project/Existing Zoning
- Reduced Density

Table 5.0-3 provides a summary comparison of these alternatives in terms of their ability to reduce the significant and potentially significant impacts of the proposed project.

5.6 ALTERNATIVE IMPACT ANALYSIS

5.6.1 Alternative 1: No Project/No Development Alternative

Description and Analysis

Section 15126.6(e)(1) of the *State CEQA Guidelines*, states that, “the purpose of describing and analyzing a 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.” Under this alternative, no grading or new construction would occur on the project site and the site would remain vacant.

Description and Analysis

Air Quality

Under the No Project/No Development alternative, no construction activities would occur and the site would remain vacant. Therefore, the proposed project’s impacts that would result from construction at the project site, including the potentially significant impacts related to emissions of criteria pollutants, fugitive dust, and emissions of naturally occurring asbestos during construction, would be avoided. The less than significant impact from the emissions of criteria pollutants during operations would also be avoided.

Biological Resources

No construction or grading activities would occur on the project site. As a result, the proposed project’s impacts that would result from construction at the project site, including the potentially significant impacts related to nesting birds, would be avoided.

Cultural and Tribal Cultural Resources

No construction or grading activities would occur on the project site. Therefore, the proposed project’s impacts that would result from construction at the project site, including potentially significant impacts related to disturbance of unknown archaeological resources, human remains, and tribal cultural resources

would be avoided. In addition, the proposed project would not contribute to a potentially significant cumulative impact to cultural and tribal cultural resources for the same reason.

Greenhouse Gas Emissions

Under the No Project/No Development alternative, no construction activities would occur and the site would remain vacant. There would be no GHG emissions associated with construction and operation of proposed project. The proposed project's less than significant impacts associated with GHG emissions would be avoided under this alternative.

Land Use and Planning

Under the No Project/No Development alternative, no construction activities would occur at the project site and the site would remain vacant. Therefore, this alternative would not result in any land use impacts and the project's less-than-significant impacts related to land use would be avoided.

Noise

Under the No Project/No Development alternative, no construction activities would occur and the site would remain vacant. There would be no noise associated with the construction and operation of proposed project. The proposed project's less than significant impacts associated with noise would be avoided under this alternative.

Public Services and Recreation

Under the No Project/No Development alternative, no construction activities would occur at the project site and the site would remain vacant. Therefore, this alternative would not result in an increase in county population and no impacts to public services would occur. The project's less-than-significant impacts on public services and recreation would be avoided.

Transportation and Traffic

Under the No Project/No Development alternative, no construction activities would occur and the site would remain vacant. Therefore, the proposed project's impacts on traffic, including the proposed project's potentially significant impact at one intersection (El Dorado Hills Boulevard/Saratoga Way/Park Drive) under cumulative near-term plus project conditions, would be avoided. In addition, the project's effect on the private intersection of Town Center Boulevard/Post Street under cumulative long-term plus project conditions, which is not required to be analyzed under CEQA but for which a mitigation measure has been voluntarily proposed by the project applicant, would be also avoided.

Utilities and Service Systems

No construction or grading activities would occur on the project site. Therefore, the proposed project's impacts on utilities, including the potentially significant impact related to trunk sewer line capacity, would be avoided.

Energy

Under the No Project/No Development alternative, no construction activities would occur and the site would remain vacant. There would be no energy consumption associated with the construction and operation of the proposed project. The proposed project's less than significant impacts associated with energy use would be avoided under this alternative.

Conclusion and Relationship to Project Objectives

The No Project/No Development alternative would avoid all of the potentially significant impacts of the proposed project. However, none of the project objectives would be met under this alternative.

5.6.2 Alternative 2: No Project/Existing Zoning

Description and Analysis

The *State CEQA Guidelines* state that "the 'no project' analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistency with available infrastructure and community services." Should the proposed project not be approved by the County, it would be reasonable to expect that the project site would be developed by another entity consistent with the site's existing specific plan land use and zoning designations, and available infrastructure.

The project site is designated Commercial (C) in the El Dorado Hills Specific Plan (EDHSP) and zoned General Commercial-Planned Development (CG-PD). Based on a previous commercial land use proposal for the project site,⁴ this alternative would include seven buildings ranging in size from 2,750 square feet to 24,700 square feet. A total of 74,350 square feet of commercial building space, assumed to be retail, would be provided.⁵

⁴ CB Richard Ellis promotional materials

⁵ This amount of retail space is substantially lower than the amount of retail that could be entitled for this site under its current land use designation and zoning. However, this retail scenario is considered a realistic scenario as its development density is consistent with that of the adjoining commercial development in the TCE.

As shown in **Table 5.0-1 No Project/Existing Zoning Alternative Trip Generation**, the No Project/Existing Zoning alternative would generate 71 trips in the AM peak hour and 276 trips during the PM peak hour. Based on the County's zoning ordinance (one space per 300 square feet), a total of 478 parking spaces would be required.

**Table 5.0-1
No Project/Existing Zoning Alternative
Trip Generation**

Land Use	Trip Rates		Trips					
			AM Peak Hour			PM Peak Hour		
	AM	PM	In	Out	Total	In	Out	Total
Retail	0.96	3.71	44	27	71	132	143	276
Total								

Source: Source: Institute of Transportation Engineers' Trip Generation (9th Edition, 2012)

Air Quality

Under the No Project/Existing Zoning alternative, emissions of criteria pollutants during construction would be lower as the amount of building space (74,350 square feet) constructed under this alternative would be less than the proposed project (214,000 square feet). However, implementation of the same mitigation as recommended for the proposed project would be required to reduce exhaust emissions. The amount of fugitive dust, which could include naturally occurring asbestos, generated by this alternative would be the same, as the amount of area disturbed on the site would remain the same, and this alternative would implement the same mitigation measures. Impacts with respect to fugitive and naturally occurring asbestos under this alternative would also be reduced to a less than significant level with mitigation.

With respect to operational emissions, under the No Project/Existing Zoning alternative, emissions of ROG and NOX from area sources would decrease as the amount of space constructed (74,350 square feet) would decrease compared to the proposed project (214,000 square feet) while emissions of ROG and NOX from mobile sources would increase as the number of PM peak hour vehicle trips (276 PM trips) generated by the proposed retail under this alternative would be greater than the number of vehicle trips (105 PM trips) generated under the proposed project although the AM peak hour trips would be somewhat lower. As majority of the project's ROG emissions (97 percent) before mitigation are generated by area sources (wood burning hearths), emissions of criteria pollutants under this alternative would be substantially reduced as the amount of building space under this alternative would decrease by

approximately 65 percent. However, the reduction would not reduce ROG emissions below the significance threshold established by the County of El Dorado Air Quality Management District (EDCAQMD), and this alternative would implement the same mitigation measure as the proposed project to reduce impacts to a less than significant level. The project's NOx emissions are well below the EDCAQMD's significance threshold, and the increase in vehicle trips under this alternative would not be substantial enough to exceed the significance threshold, and thus the impact would remain less than significant.

The less than significant impacts of the proposed project associated with emissions of other criteria pollutants such as CO, particulates, SO₂, lead, sulfates, and H₂S would remain less than significant based on screening criteria established by the EDCAQMD. Finally, this alternative would not result in a conflict with an applicable air quality plan as emissions under this alternative would not exceed the EDCAQMD's threshold for criteria pollutants. This alternative would not create objectionable odors as the proposed retail use does not include any land uses that could subject existing receptors in the project vicinity to substantial odors.

Biological Resources

Similar to the proposed project, the No Project/Existing Zoning alternative would have the potential to result in a potentially significant impact to nesting birds. However, the mitigation measure identified for the proposed project would also apply to this alternative to reduce the impact to a less than significant level. This alternative would not adversely affect candidate, sensitive, or special-status species or their habitat as none of these species are located on the project site. In addition, this alternative would not indirectly affect any riparian habitat, sensitive natural community, or wetlands nor interfere with the movement of any wildlife species as these resources are not located on the project site. With respect to indirect impacts on the adjacent man-made lake, similar to the proposed project, development under this alternative would be required to adhere to National Pollutant Discharge Elimination System (NPDES) Permit regulations during construction, which would prevent pollutants from entering the water features. This impact would remain less than significant.

Cultural and Tribal Cultural Resources

Similar to the proposed project, the No Project/Existing Zoning alternative would disturb the project site and would have the potential to result in potentially significant impacts to unknown archaeological resources, human remains, and unknown tribal cultural resources. However, mitigation measures identified for the proposed project would also apply to this alternative to reduce the impacts to less than

significant levels. The less than significant impacts of the proposed project associated with historic architectural and paleontological resources would also occur under this alternative.

Similar to the proposed project, the No Project/Existing Zoning alternative could also result in potentially significant cumulative impacts to cultural and tribal cultural resources. However, mitigation measures identified for the proposed project that would also apply to this alternative would ensure that its contribution to this impact would be less than cumulatively considerable.

Greenhouse Gas Emissions

Under the No Project/Existing Zoning alternative, GHG emissions from area sources during operation would decrease as the amount of space constructed (74,350 square feet) would decrease compared to the proposed project (214,000 square feet) while GHG emissions from mobile sources would increase as the number of vehicle trips in the PM peak hour generated by the proposed retail under this alternative would be greater than the number of vehicle trips generated under the proposed project. While a majority of the project's GHG emissions (60 percent) are generated by mobile sources, the proposed project's per capita GHG emissions (2.98 MTCO₂e/capita) are substantially below the GHG efficiency threshold (4.5 MTCO₂e/capita), and even if the higher emissions from the increase in vehicle trips under this alternative were added in, the resulting per capita emissions for this alternative would not exceed the threshold. The GHG impacts of the alternative would remain less than significant.

Land Use and Planning

Similar to the proposed project, the No Project/Existing Zoning alternative would also not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect as it would be consistent with the specific plan and zoning land use designations for the project site. As with the proposed project, this impact would be less than significant.

Noise

Under the No Project/Existing Zoning alternative, noise generated by traffic would increase as the number of vehicle trips (71 AM trips and 276 PM trips) generated by the proposed retail under this alternative would be greater than the number of vehicle trips (109 AM trips and 105 PM trips) generated under the proposed project. With the exception of Town Center Boulevard, east of Post Street, the increase in traffic under this alternative would not be enough to result in an increase of 3 dBA or greater along surrounding roadways, which is the County's threshold of significance for project-related noise increases due to traffic. However, it is possible that the increase in traffic under this alternative would be

enough to result in an increase of 3 dBA or greater along Town Center Boulevard, compared to the increase in noise under the proposed project which is estimated to be 2.7 dBA. However, as there are no sensitive receptors along this segment, this impact would remain less than significant.

Noise generated by stationary sources such as HVAC systems and parking lots would be reduced under the No Project/Existing Zoning alternative as the amount of space constructed (74,350 square feet) would decrease compared to the proposed project (214,000 square feet), and thus the number of HVAC systems and parking spaces required would also be reduced. As with the proposed project, this impact would be less than significant.

Under the No Project/Existing Zoning alternative, noise generated during construction would be reduced in duration as the amount of space constructed would decrease compared to the proposed project. As with the proposed project, this impact would be less than significant.

No on-site sensitive receptors would be exposed to noise levels in excess of standards established in the County General Plan under the No Project/Existing Zoning alternative as retail employees and patrons are not considered sensitive receptors. No impact would occur under this alternative.

Public Services and Recreation

Similar to the proposed project, the No Project/Existing Zoning alternative would increase demand for fire and police services. However, as the amount of space constructed (74,350 square feet) would decrease compared to the proposed project (214,000 square feet), the demand for fire and police services under this alternative would be reduced. As with the proposed project, this impact would be less than significant.

Unlike the proposed project, the No Project/Existing Zoning alternative would not increase demand for libraries and parks and recreation facilities as this alternative does not include a residential component. No impact would occur with respect to these facilities.

Transportation and Traffic

Under the No Project/Existing Zoning alternative, the number of PM peak hour vehicle trips (276 PM trips) generated by the retail development would be greater than the number of vehicle trips (105 PM trips) generated under the proposed project. Similar to the proposed project, all study area intersections and freeway facilities would operate at an acceptable LOS under existing conditions with the addition of traffic from this alternative. As with the proposed project, traffic generated by this alternative would also significantly affect the intersection of El Dorado Hills Boulevard/Saratoga Way/Park Drive under near-term plus project conditions, and the same mitigation measure would apply. However, this alternative

would result in a new significant impact because with the addition of the traffic from this alternative, the intersection of Latrobe Road/White Rock Road would operate at an unacceptable LOS under long-term cumulative conditions, and an additional mitigation measure would be required. For this reason, the traffic impacts of this alternative would be greater than those of the proposed project. Similar to the proposed project, traffic generated under this alternative would also affect the private intersection of Town Center Boulevard/Post Street under cumulative long-term plus project conditions, and the same mitigation measure that has been voluntarily proposed by the project applicant but that is not required under CEQA, would need to be considered. Finally, the No Project/Existing Zoning Alternative would not conflict with policies, programs or plans for alternate transportation for the same reason.

Utilities and Service Systems

Similar to the proposed project, this alternative would result in a potentially significant impact associated with wastewater infrastructure. However, the extent of the impact would be reduced as the amount of space constructed (74,350 square feet) would decrease compared to the proposed project (214,000 square feet), and retail uses generate less wastewater than residential uses. The mitigation measure identified for the proposed project would still be required for this alternative to reduce the impact to a less-than-significant level. The less-than-significant impacts of the proposed project associated with water supply and infrastructure, and wastewater treatment capacity would be reduced for the same reasons, and would be less than significant.

Energy

Under the No Project/Existing Zoning alternative, the amount of energy demanded by the proposed structures would be lower as the amount of building space (74,350 square feet) constructed under this alternative would be less than the proposed project (214,000 square feet) while the amount of energy demanded by vehicles would increase as the total number of vehicle trips generated by the proposed retail under this alternative would be greater than the number of vehicle trips generated under the proposed project. However, the increase in energy use due to a greater number of trips under this alternative would not be substantial as vehicles traveling to and from the project site would be subject to statewide measures intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard), thus improving vehicle fuel economies, and thereby conserving gasoline and diesel fuel. As with the proposed project, this impact would be less than significant.

Conclusion and Relationship to Project Objectives

The No Project/Existing Zoning alternative would increase the project's impacts related to transportation and traffic while decreasing the proposed project's impacts related to air quality, GHG emissions, noise, public services, utilities and service systems, and energy. Impacts related to biological resources and cultural resources would be similar to those of the proposed project. This alternative would not achieve many of the project objectives because it would not provide a residential population to support commercial development within the Town Center East Planned Development area, assist in increasing the housing supply in El Dorado County to improve the job-housing imbalance, and implement smart growth principles by developing underutilized properties with higher density housing projects. In addition, this alternative would not: develop a sustainable community that incorporates smart-growth elements; place higher-density housing in close proximity to job centers; and would not complement adjacent commercial uses. Finally, this alternative would not create a residential development that maximizes density with accessibility to alternate transportation modes, and would not integrate pedestrian, bicycle, transit, open space and outdoor uses to encourage active centers.

5.6.3 Alternative 3: Reduced Density

Description and Analysis

The Reduced Density alternative would reduce the number of residential units on the project site by approximately 50 percent. Specifically, this alternative would develop a residential project on the project site at a density of 24 units per acre, which is the density allowed under the El Dorado County General Plan's Multifamily Residential land use designation (see General Plan Policy 2.2.1.2). Under this alternative a total of 108 residential units would be provided in two 2-story buildings on the project site as opposed to a total of 214 residential units provided in two 4-story buildings under the proposed project. The mix of apartment units under this alternative would consist of 58 studio/1-bedroom units and 50 2-bedroom units. In addition, a total of 209 vehicle parking spaces and 11 motorcycle parking spaces would be provided in a central 3-story garage compared to a total of 409 vehicle parking spaces and 22 motor cycle parking spaces located in a central 5-story garage under the proposed project. This alternative would also include an additional five vehicle spaces of surface parking elsewhere on the site similar to the proposed project.

As shown in **Table 5.0-2, Reduced Density Alternative Trip Generation**, the Reduced Density alternative would generate 55 trips during the AM peak hour and 53 trips during the PM peak hour.

**Table 5.0-2
Reduced Density Alternative
Trip Generation**

Land Use	Trip Rates		Trips					
			AM Peak Hour			PM Peak Hour		
	AM	PM	In	Out	Total	In	Out	Total
Multifamily Housing (Dwelling Units)	0.51	0.62	11	44	55	44	23	67
Town Center Trips						9	5	14
Vehicle Trips External to Town Center			11	44	55	35	18	53

Source: Institute of Transportation Engineers' Trip Generation (9th Edition, 2012)

Air Quality

Similar to the proposed project, the Reduced Density alternative would result in potentially significant impacts associated with construction phase emissions of criteria pollutants, fugitive dust, and exposure of existing sensitive receptors to construction emissions of naturally-occurring asbestos. However, compared to the proposed project, the magnitude of these impacts would be less under this alternative because a smaller structure would be constructed. Mitigation measures identified for the proposed project would still apply to this alternative to control emissions and reduce the impacts to a less than significant level.

Similar to the proposed project, this alternative would result in potentially significant impacts associated with emissions of criteria pollutants such as ozone precursors during operation. However, compared to the proposed project, the magnitude of these impacts would be less under this alternative because fewer apartment units would be constructed. Mitigation measures identified for the proposed project would be required to reduce the impact to a less than significant level.

The less than significant impacts of the proposed project associated with emissions of other criteria pollutants such as CO, particulates, SO₂, lead, sulfates, and H₂S would still remain less than significant based on screening criteria established by the EDCAQMD. Finally, this alternative would not conflict with an applicable air quality plan as emissions under this alternative would not exceed the EDCAQMD's threshold for criteria pollutants, and this alternative would not create objectionable odors as the proposed residential do not generate substantial odors.

Biological Resources

Similar to the proposed project, the Reduced Density alternative would have the potential to result in a potentially significant impact to nesting birds. However, the mitigation measure identified for the proposed project would also apply to this alternative to reduce the impact to a less than significant level. This alternative would not adversely affect candidate, sensitive, or special-status species or their habitat as none of these species are located on the project site. In addition, this alternative would not indirectly affect any riparian habitat, sensitive natural community, or wetlands nor interfere with the movement of any wildlife species as these resources are not located on the project site. With respect to indirect impacts to the adjacent man-made lake, development under this alternative would be required to adhere to NPDES Permit Program regulations during construction, which would prevent pollutants from entering the water features, similar to the proposed project. As with the proposed project, this impact would be less than significant.

Cultural Resources and Tribal Cultural Resources

The Reduced Density alternative would result in similar potentially significant impacts associated with the disturbance of unknown archaeological resources, human remains, and unknown tribal cultural resources. Mitigation measures identified for the proposed project would also be required for this alternative to reduce impacts to less than significant levels. Similarly, the less than significant impacts of the proposed project associated with historic architectural and paleontological resources would be the same under this alternative.

The Reduced Density alternative could also result in potentially significant cumulative impacts to cultural and tribal cultural resources. However, mitigation measures identified for the proposed project that would also apply to this alternative would ensure that its contribution to this impact would remain less than cumulatively considerable.

Greenhouse Gas Emissions

Under this alternative, GHG emissions during construction would be reduced as the amount of building space constructed would be less than that of the proposed project. Similarly, GHG emissions during operation would also be reduced as a result of fewer apartment units and fewer trips generated under this alternative. The GHG impacts would be less than significant.

Land Use and Planning

Similar to the proposed project, the Reduced Density alternative would require a general plan and a specific plan amendment as well as rezoning, although it would not require a change in the density of multi-family residential development. With these amendments, the alternative would also not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. As with the proposed project, this impact would be less than significant.

Noise

The less than significant impacts of the proposed project associated with traffic noise would be reduced under the Reduced Density alternative as there would be fewer residential units, and thus the alternative would generate a fewer number of vehicle trips to the project site. As with the proposed project, this impact would be less than significant.

Noise generated by stationary sources such as HVAC systems and parking lots would be reduced under the Reduced Density alternative as the proposed structure would have fewer residential units, and thus would require fewer HVAC systems and parking spaces. This impact would be less than significant and reduced compared to the proposed project.

Less construction noise would be generated under the Reduced Density alternative as less building space would be constructed compared to the proposed project. This impact would be less than significant and reduced compared to the proposed project.

Fewer on-site sensitive receptors would be exposed to noise levels in excess of standards established in the County General Plan under the Reduced Density alternative as fewer residential units would be constructed compared to the proposed project. This impact would be less than significant and reduced compared to the proposed project.

Public Services and Recreation

Similar to the proposed project, the Reduced Density alternative would also increase demand for fire and police services. However, as fewer residential units would be constructed under this alternative, demand for fire, police, and library services and parks and recreation facilities would be reduced. This impact would be less than significant and reduced compared to the proposed project.

Transportation and Traffic

Under the Reduced Density alternative, the number of vehicle trips (55 AM trips and 53 PM trips) that would be generated would be less than the number of vehicle trips (109 AM trips and 105 PM trips) generated under the proposed project. As with the proposed project, all study area intersections and freeway facilities would operate at an acceptable LOS under existing conditions with the addition of traffic from this alternative. In addition, traffic generated by this alternative would also impact the intersection of El Dorado Hills Boulevard/Saratoga Way/Park Drive under near-term cumulative conditions, and the same mitigation measure would apply. The addition of traffic from this alternative would also affect the private intersection of Town Center Boulevard/Post Street under cumulative long-term plus project conditions, and the same mitigation voluntarily proposed by the project applicant but that is not required under CEQA would apply. In addition, the Reduced Density alternative would not conflict with policies, programs or plans for alternate transportation for the same reason. These impacts would be less than significant and reduced compared to the proposed project.

Utilities and Service Systems

Similar to the proposed project, this alternative would result in a potentially significant impact associated with wastewater infrastructure. However, the impact would be reduced under this alternative as fewer residential units would be constructed and less wastewater would be generated. The mitigation measure identified for the proposed project would also be required for this alternative to reduce the impact to a less-than-significant level. Less than significant impacts to water supply and infrastructure, and wastewater treatment capacity, would also be reduced compared to the proposed project as fewer residential units would be constructed.

Energy

Under the Reduced Density alternative, the amount of energy demanded by the proposed structure would be reduced as fewer residential units would be built. In addition, energy demanded by vehicles would be reduced as fewer vehicle trips would be generated under this alternative than the proposed project. This impact would remain less than significant.

Conclusion and Relationship to Project Objectives

The Reduced Density alternative would decrease the project's impacts related to air quality, GHG emissions, noise, public services, utilities and service systems, transportation and traffic, and energy. Impacts related to biological resources and cultural resources would be similar to those of the proposed

project. While this alternative would achieve many of the project objectives, it would not create a residential development that maximizes density with accessibility to alternate transportation modes

5.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of the environmentally superior alternative among the alternatives to the proposed project. The environmentally superior alternative must be an alternative to the proposed project that reduces some of the environmental impacts of the proposed project, regardless of the financial costs associated with this alternative. Identification of the environmentally superior alternative is an informational procedure and the alternative identified as the environmentally superior alternative may not be that which best meets the goals or needs of the proposed project. Additionally, if the No Project Alternative is determined to reduce most impacts, CEQA requires that the EIR identify an environmentally superior alternative among the other alternatives (*State CEQA Guidelines* Section 15126.6).

Alternative 3, Reduced Density alternative is determined to be the environmentally superior alternative. As this alternative would provide as half as many units as the proposed project, it would reduce the project's significant and potentially significant impacts to the greatest extent. For this reason, Alternative 3 is the environmentally superior alternative.

**Table 5.0-3
Summary Comparison of Project Alternatives¹**

	Project Impact	Proposed Project (Before/After Mitigation)	Alternative 1: No Project/ No Development	Alternative 2: No Project/ Existing Zoning	Alternative 3: Reduced Development
AIR-1	Construction activities associated with the proposed project would result in a violation of an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable national or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)	S/LTS	Avoided	Reduced	Reduced
AIR-2	Operation of the proposed project would result in a violation of an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable national or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	S/LTS	Avoided	Reduced	Reduced
AIR-5	Project construction would expose sensitive receptors to substantial pollutant concentrations.	PS/LTS	Avoided	Similar	Reduced

	Project Impact	Proposed Project (Before/After Mitigation)	Alternative 1: No Project/ No Development	Alternative 2: No Project/ Existing Zoning	Alternative 3: Reduced Development
BIO-2	The proposed project would not directly or indirectly affect any riparian habitat, sensitive natural community, or wetlands nor interfere with the movement of any wildlife species, but project construction noise could affect nesting birds.	PS/LTS	Avoided	Similar	Similar
CUL-2	The proposed project could cause a substantial change in the significance of an archaeological resource pursuant to Section 15064.5.	PS/LTS	Avoided	Similar	Similar
CUL-4	The proposed project could disturb human remains, including those interred outside of formal cemeteries.	PS/LTS	Avoided	Similar	Similar
CUL-5	The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource.	PS/LTS	Avoided	Similar	Similar
C-CUL-1	Cumulative development could cause a substantial change in the significance of a historical resource or unique archaeological resource pursuant to Section 15064.5 or impact tribal cultural resources, but the proposed project would not contribute substantially to the cumulative impacts.	PS/LTS	Avoided	Similar	Similar
C-TRANS-1	Development of the proposed project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the traffic circulation system under Near-Term (2027) plus Project Conditions.	S/LTS	Avoided	Similar	Reduced
UTL-4	Development of the proposed project would require the construction of new or expanded wastewater conveyance systems.	PS/LTS	Avoided	Greater (S)	Reduced

Project Impact	Proposed Project (Before/After Mitigation)	Alternative 1: No Project/ No Development	Alternative 2: No Project/ Existing Zoning	Alternative 3: Reduced Development
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KEY

SU Significant and unavoidable

S Significant

PS Potentially significant impact

LTS Less than significant impact

Avoided Proposed project's impact avoided

Similar Impact similar to proposed project

Reduced Impact less than proposed project

Greater Impact greater than proposed project

1 This table lists only the significant or potentially significant environmental impacts of the proposed project.

6.0 OTHER CEQA CONSIDERATIONS

6.1 INTRODUCTION

Sections 15126 and 15128 of the *State CEQA Guidelines* state that an EIR must include a discussion of the following topics:

- Significant environmental effects which cannot be avoided if the proposed project is implemented
- Significant irreversible environmental changes
- Growth-inducing impacts of the proposed project
- A brief statement of the reasons why certain possible effects of a project have been determined not to be significant and, therefore, are not evaluated in the EIR
- A brief discussion of Mandatory Findings of Significance

The following sections address each of these topics based on the analyses included in **Section 4.0, Environmental Impact Analysis**.

6.2 SIGNIFICANT UNAVOIDABLE EFFECTS

As detailed in **Section 4.0**, implementation of the proposed El Dorado Hills Apartments project (“proposed project”) would result in no significant impacts that cannot be mitigated to a less than significant level.

6.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the *State CEQA Guidelines* states that an EIR must include a discussion of any significant irreversible environmental changes that would be caused by a proposed project. Generally, a project would result in significant irreversible environmental changes if:

- the primary and secondary impacts would generally commit future generations to similar uses;
- the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy);
- the project would involve a large commitment of nonrenewable resources; or
- the project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project.

6.3.1 Commit Future Generations to Similar Uses

Implementation of the proposed project would result in the construction of a 4-story, 214-unit apartment complex, composed of two apartment buildings, a parking structure, outdoor recreation areas, and an informal open space area. A 5-level parking structure would be located in the middle of the complex. The site is vacant and undeveloped, but indications of previous disturbance, including mass grading, are present.

The substantial investment required to construct the infrastructure and develop the project site as proposed would represent a long-term commitment of land to residential use. The commitment of currently vacant land to the proposed use is essentially an irreversible environmental change that would commit future generations to this use, although the use on the project site could be changed in the future.

6.3.2 Consumption of Nonrenewable Resources

The proposed project involves the development of a 214-unit apartment complex, composed of two apartment buildings, a parking structure, outdoor recreation areas, and an informal open space area. Construction and operation of the project would involve the consumption of renewable and non-renewable resources.

Resources such as lumber and other forest products are generally considered renewable resources. Such resources would be replenished over the lifetime of the proposed project. As such, the development of the proposed project would not result in the irreversible commitment of renewable resources. Non-renewable resources, such as natural gas, petroleum based products, asphalt, petrochemical construction materials, steel, copper and other metals, etc., are considered to be resources that are only available in finite supply. Therefore, the replacement of these materials would not likely occur over the lifetime of the proposed project.

The demand for renewable and non-renewable resources is expected to increase regardless of the development of the proposed project. If not consumed by the proposed project, these resources would likely be committed to other projects to meet the anticipated housing needs in the local area or elsewhere in the county or state. Furthermore, the investment of resources in this project would be typical of the level of investment normally required for residential developments of this size. For impacts related to energy resources, see **Section 4.10**.

6.3.3 Irreversible Damage from Environmental Accidents

CEQA requires a discussion of the potential for irreversible environmental damage caused by an accident associated with the project. As a multi-family residential project, the proposed project does not involve a land use that requires the transport, storage or on-site use of hazardous materials which, if inadvertently released, could result in irreversible damage to the environment. Therefore, the proposed project would not have the potential for irreversible damage from environmental accidents.

6.4 GROWTH-INDUCING IMPACTS

This section evaluates the potential for growth inducement as a result of implementation of the proposed project. Section 15126.2(d) of the *State CEQA Guidelines* requires that an EIR include a discussion of the potential for a proposed project to foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.

In general terms, a project may have growth-inducing impacts if it meets any one of the criteria that are identified below.

- The project removes an impediment to growth (e.g., the establishment of an essential public service, the provision of new access to an area, or a change in zoning or general plan designation).
- Economic expansion, population growth, or the construction of additional housing occurs in the surrounding environment in response to the project, either directly or indirectly (e.g., changes in revenue base, employment expansion, etc.).
- Development or encroachment in an isolated or adjacent area of open space (being distinct from an “infill” type of project).

An evaluation of the proposed project with regard to these criteria is provided below.

The *State CEQA Guidelines* require that consideration also be given to potential impacts on community service facilities resulting from increases in population. **Section 4.0** of this Draft EIR addresses potential impacts on community service facilities (e.g., police, fire, water, wastewater, etc.) resulting from increases in population on the project site.

6.4.1 Removal of an Impediment to Growth

Growth in an area may result from the removal of physical impediments or restrictions to growth, as well as the removal of planning impediments resulting from land use plans and policies. In this context, physical growth impediments may include nonexistent or inadequate access to an area or the lack of

essential public services (e.g., water service), and planning impediments may include restrictive zoning and/or general plan designations.

The project site is located within the TCE Development Plan area and is planned for future development. As discussed above, while vacant, the site has been previously disturbed. The project site is surrounded on three sides by existing development, including commercial and retail uses. Urban services, including water, sewer, and sheriff and fire protection are available at the site. No off-site upgrades to the water supply system would be required. Although an upgrade to the 18-inch El Dorado Hills Boulevard (EDHB) trunk gravity sewer line would be required, that upgrade to the EDHB trunk line is already planned and included in EID's 2014-2018 Capital Improvement Plan. Therefore, the proposed project would not remove an impediment to growth related to utility infrastructure.

The project site is proximate to existing major roadways (including U.S. 50). The project site is currently accessible from Mercedes Lane, Vine Street, and Town Center Boulevard. No off-site roadway extensions would be required to implement the proposed project. Consequently, the proposed project would not induce growth due to an extension of transportation infrastructure.

As noted above, development impediments, such as land use plans and policies, may also restrict or deter localized growth and can be considered an impediment to growth. The current General Plan land use designation for the project site is Adopted Plan (AP) EDHSP-Commercial (C). Implementation of the project would involve a General Plan Amendment to add a new policy under Objective 2.2.6 (Site Specific Policy Section) that would increase the maximum allowed density in the General Plan to 47 du/ac specifically for the project site and a Specific Plan change to incorporate multi-family residential use, density, and related standards for the project site. In addition, approval of the proposed project would require the rezoning of the project site from General Commercial-Planned Development (CG-PD) to Multi-Family Residential-Planned Development (RM-PD), revisions to the RM-zone district development standards applicable to the proposed 214-unit apartment project, and revisions to the approved TCE Development Plan to incorporate multi-family residential use.

The proposed General Plan policy would be specific to the project site and would not increase the maximum allowed residential density in other parts of the County. The proposed change in land use designation and rezoning for the proposed project would only apply to the project site, would not encompass other properties, and would not facilitate the development of other projects or induce growth.

6.4.2 Population and Economic Growth

The proposed project would result in a temporary increase in construction-related job opportunities in the local area. However, employment opportunities provided by construction would not likely result in

household relocation by construction workers to the vicinity of the project area. Construction workers would likely be drawn from the labor force already residing in the County of El Dorado and the surrounding communities in the broader Sacramento region. Employment opportunities provided during the relatively short construction period would not constitute a substantial growth in employment.

Based on 214 apartment units and a household size of 2.3 persons per household, the project would add approximately 492 new residents to the community of El Dorado Hills. The California Department of Finance (DOF) estimates that the population of El Dorado County was 185,062 in January of 2017 (DOF 2017). The project would increase the population of the county by about 0.25 percent. According to the U.S. Census Bureau *2011-2015 5-Year American Community Survey*, the estimated population of El Dorado Hills was 43,264 residents in 2015 (U.S. Census Bureau 2017). Although some of the future residents of the project may simply relocate from other existing housing in the area, if all 492 residents anticipated to live in the complex are considered new to the community, the project would result in a 1.1 percent increase in population in El Dorado Hills over the 2015 estimate.

As discussed above, the proposed project would not require new or expanded infrastructure that could, in turn, provide additional capacity or facilities for additional development in the TCE area. The site is one of the last remaining vacant properties in the TCE area and would, therefore, not result in increased pressure on land use intensification in the TCE area. While the proposed General Plan amendment would add a new policy that would increase the maximum residential density allowed in the General Plan from 24 du/ac to a maximum of 47 du/ac, the policy would apply only to the 4.56-acre project site. As such, the increase in population and economic growth associated with the proposed project would not induce growth.

6.4.3 Development of Open Space

The proposed project would be constructed on an infill site within the EDHSP area identified for commercial development. Although the site is vacant and undeveloped, it is highly disturbed and designated for development. It is not designated open space. Therefore, implementation of the proposed project would not involve the development of open space nor would it induce the development of any lands that are currently open space. The proposed project thus is not considered growth inducing based on this criterion.

6.5 EFFECTS NOT FOUND TO BE SIGNIFICANT

In accordance with Section 15128 of the *California Environmental Quality Act (CEQA) Guidelines*, an EIR must contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant. Based on the Initial Study prepared for the project, and included in **Appendix 1.0**, the County has determined that the proposed project would not have the potential to

cause significant adverse effects associated with the issues identified below. These topics have not been addressed in detail in this EIR for the reasons set forth in the Initial Study and for the additional reasons listed below.

6.5.1 Aesthetics

The project site is located in the TCE area in El Dorado Hills. The area surrounding the project site is fully developed and consists mainly of retail/commercial uses. An automobile dealership is to the north of the project site, across Mercedes Lane. Other retail/commercial uses are located to the east across Vine Street, which include restaurants and a movie theater (the Regal Cinemas El Dorado 14 and IMAX), and to the south, across Town Center Boulevard, which include a Target and other retail, restaurant and commercial businesses. Town Center Lake is immediately adjacent to the project site to the west. While the project site is visible from nearby public roadways, no scenic vistas have been officially designated in the County General Plan for the project site or vicinity, and the project site does not contain scenic resources, as designated in the General Plan (County of El Dorado 2004).

There are no officially designated state scenic corridors in the vicinity of the project site. The project site is a vacant, sparsely vegetated lot and does not contain any features that qualify as scenic resources. Therefore, the development of the site with the proposed buildings would not affect visual resources associated with any state-designated or local scenic highway. The proposed project would not degrade the visual character or quality of the site and would be visually compatible with the surrounding uses. Given the commercial/retail uses surrounding the project site, there are no nearby uses sensitive to nighttime light levels. A preliminary Photometric Plan has been prepared for the project, based on selected lighting fixtures, and included with the Planned Development Application. As shown on the Photometric Plan, the proposed lighting would be consistent with the County lighting ordinance, which includes shielding to avoid potential glare affecting day or nighttime views for those that live in or travel through the area. Therefore, no significant impacts are identified with respect to aesthetics.

6.5.2 Agriculture and Forestry Resources

The project site is an infill site located within a suburbanized area of the county and is currently surrounded by commercial/retail uses and the Town Center Lake. The project site is not designated or zoned for agricultural uses under the General Plan and Zoning Ordinance, mapped as Farmland under the Farmland Mapping and Monitoring Program of the California Resources Agency, or under a Williamson Act contract. No portion of the project site is designated as Timberland Preserve Zone (TPZ) or other forestland according to the General Plan and Zoning Ordinance. There are no forest lands or timberlands on or near the project site. Therefore, no significant impact is identified with respect to agriculture and forestry resources.

6.5.3 Air Quality

The proposed project would include the construction of a 4-story, 214-unit apartment complex, composed of two apartment buildings, a parking structure, outdoor recreation areas, and an informal open space area. No objectionable odors are anticipated and no impact is identified with respect to odors. Other air quality impacts are evaluated in **Section 4.1** of this Draft EIR.

6.5.4 Biological Resources

The project site is an infill site located in the TCE area. As shown on the County's Integrated Natural Resources Management Plan (INRMP) Initial Inventory Map (Exhibit 10), the project site is not within the boundaries of a Priority Conservation Area, any Important Biological Corridors, an adopted Habitat Conservation Plan (HCP), a Natural Community Conservation Plan (NCCP), or any other conservation plan, including those specifically listed in Exhibit 10. As such, the proposed project would not conflict with an adopted HCP or NCCP. No impact is identified for this issue. Other biological resource impacts are evaluated in **Section 4.2** of this Draft EIR.

6.5.5 Cultural and Tribal Cultural Resources

The project site is located in a suburbanized area of the County and has been subject to past subsurface disturbance. No formal cemetery exists on-site or in the vicinity of the proposed project. Although the project site has been subject to past subsurface disturbance associated with grading, it is possible that cultural and tribal cultural resources, including intact human remains, are present beneath the site. These issues are evaluated in **Section 4.3** of the Draft EIR.

6.5.6 Geology and Soils

The project site is not located within the boundaries of an Alquist-Priolo Earthquake Fault Zone. According to the California Geological Survey (CGS) maps, the nearest such faults are located in Emerald Bay and Echo Lake Quadrangles of the Lake Tahoe Basin (DOC 2017a). The mapped active fault nearest to the site is the Dunnigan Hills fault located about 68 kilometers to the west-northwest. Compliance with the Uniform Building Code and other applicable codes would minimize damage to the proposed residential structures. Based on the Seismic Hazards Mapping Program administered by the California Geological Survey, no portion of El Dorado County is located in a Seismic Hazard Zone or those areas prone to liquefaction and earthquake-induced landslides (DOC 2017b). All grading activities onsite would comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance (Grading Ordinance), including the implementation of pre- and post-construction Best Management Practices (BMPs). Projects disturbing areas of 1 acre or more during construction are required to comply with the

NPDES General Permit for Construction Activities. The project construction contractor would be required to file a notice of intent under the state's NPDES General Construction Permit. The El Dorado County Community Development Agency Transportation Division has reviewed the proposed design and will require the project applicant to implement the soil and grading standards listed in the Initial Study included in **Appendix 1.0**. Thus, there would be less than significant impacts related to soil erosion and/or loss of topsoil. Further, implementation of the proposed project would not use septic tanks or alternative wastewater disposal systems. Therefore, no impact is identified for this issue.

6.5.7 Hazards and Hazardous Materials

The proposed project would include the construction of a 4-story, 214-unit apartment complex, composed of two apartment buildings, a parking structure, outdoor recreation areas, and an informal open space area. As discussed in the Initial Study (refer to **Appendix 1.0**), all hazardous materials used during the construction period would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. Operation of the proposed project would involve the limited use and storage of common hazardous substances typical of those used at residential developments, including cleaning solvents, pesticides and herbicides for landscaping, and maintenance/painting supplies. The proposed project is on an infill site within the TCE area and would not interfere with an emergency response plan or an emergency evacuation plan. As verified in a Phase I Environmental Site Assessment completed for the project site in 2013, the project site is not included on a list of or near any hazardous materials sites pursuant to Government Code Section 65962.5. The project site is surrounded by developed, urban uses and is not immediately adjacent to areas that may be susceptible to wildland fire hazard. Further, the site would be graded, and appropriate building standards and setbacks would be maintained. The project site is not located within an airport land use plan or within the vicinity of a public airport or private airstrip. Therefore, no significant impacts are identified with respect to hazards and hazardous materials.

6.5.8 Hydrology/Water Quality

Regulatory compliance measures will ensure the proposed project would not violate any water quality standards or waste discharge requirements, substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site, or otherwise degrade water quality. As discussed in the Initial Study (refer to **Appendix 1.0**) there is no evidence that the project will substantially reduce or alter the quantity of groundwater in the vicinity, or materially interfere with groundwater recharge in the area of the proposed project. Further, no new wells are proposed as part of the proposed project. The project site is in an area of minimal flood risk (Zone X) and

is not located within a 100-year flood zone (FEMA 2008). Further, the existing drainage feature west of the project site, which has been incorporated as a natural landscape amenity within Town Center (Town Center Lake), has been designed to accommodate a potential 100-year flood within its channel. No dams are located in the vicinity of the project site which would result in the exposure of people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. Due to its inland location, the project site is not susceptible to tsunamis. Given the relatively flat topography and developed nature of the project area, there are no features adjacent to the project site capable of inundating the site by mudflow. Therefore, no significant impacts are identified with respect to hydrology and water quality.

6.5.9 Land Use and Planning

The project site is located within the TCE development plan area, which has a variety of shopping and entertainment venues. The TCE is bordered to the west and south by single-family residential development, and to the south by multi-family residential development (Sunset Mobile Home Park), and a master planned community (Valley View Specific Plan). Other existing single-family residential development (La Cresta Village, Serrano) is located north of Highway 50. Siting the project on a vacant parcel in the TCE would result in a residential development immediately surrounded by commercial uses. As such, the project would not divide a residential community. As discussed above in **Section 6.5.4, Biological Resources**, the proposed project would not conflict with an adopted HCP or NCCP. No impact is identified for this issue. Other land use and planning issues are evaluated in **Section 4.5** of this Draft EIR.

6.5.10 Mineral Resources

The El Dorado County General Plan Conservation Element, Figure CO-1, Important Mineral Resource Areas, does not map the project site as within either MRZ 2a or 2b mineral resource zones. Further, the project site is in an area mapped and classified by the State Geologist as MRZ-3a, and there are no mining operations in El Dorado Hills. No impacts are identified with respect to mineral resources.

6.5.11 Noise

Groundborne vibration or noise would primarily be generated during construction of the proposed project as a result of traffic associated with the transport of heavy materials and equipment to and from the construction site, as well as active construction operations. These temporary increases in groundborne vibration levels would be of short duration, and would occur primarily during daytime hours. Construction activities are limited by grading permit requirements to the hours of 7:00 AM to 7:00 PM, Monday through Friday, and 8:00 AM to 5:00 PM, on weekends and on federally recognized holidays. As

no vibration-sensitive land uses or older structures exist in the immediate vicinity of the project site, a temporary increase in groundborne vibration levels would not create any significant impacts.

The Cameron Airpark Airport is located approximately 4.6 miles northeast of the project site. The project site is not within the Airport Influence Area of the Cameron Park Airport established in the Land Use Compatibility Plan. Therefore, no impact is identified for this issue. Other noise impacts are evaluated in **Section 4.6** of this Draft EIR.

6.5.12 Population and Housing

Based on the population multiplier in the General Plan for a multi-family type of project,¹ a total of 492 persons would be anticipated to live in the complex, which would constitute a 1.1 percent increase in population in El Dorado Hills over the 2013 population, and would be well within the estimated average annual growth of 500 individuals. The proposed project would not require new or expanded infrastructure that could, in turn, provide additional capacity or facilities for additional development in the TCE area. The site is one of the last remaining vacant properties in the TCE area and would, therefore, not result in increased pressure on land use intensification in the TCE area. Therefore, the proposed project would not be growth-inducing. No housing exists on the project site; the site is currently vacant. The proposed project would not result in the displacement of existing housing or displace a substantial number of people, resulting in the construction of replacement housing elsewhere. The project will provide 214 new residential units. Therefore, no significant impacts are identified for population and housing.

6.5.13 Public Services

The proposed project is within the Buckeye Union Elementary School District and the El Dorado Union High School District. The proposed project would generate a demand for an additional 97 K-5 seats in the elementary school district, as well as an additional 38 seats in the high school district.² Education Code Section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities. Development fees are required to be paid pursuant to development conditions of approval. Pursuant to SB 50, the payment of these school fee amounts provided for in Government Code Sections 65995, 65995.5, and 65995.7 would

¹ Table 2-2, Land Use Densities and Residential Population Ranges in the Land Use Section of the General Plan sets Persons per Housing Unit for the Multi-Family Residential Land Use Designation at 2.3 persons per household.

² The Student Generation Rate used by the Buckeye and Latrobe districts is 0.451 student/dwelling unit. The Student Generation Rate used by the El Dorado Union High School District is 0.177 student/dwelling unit.

constitute full and complete mitigation for school facilities. Following the payment of SB 50 fees, no significant impact to schools is identified. Other public services impacts are evaluated in **Section 4.7** of this Draft EIR.

6.5.14 Recreation

The proposed project is anticipated to add 492 residents to El Dorado Hills, which would increase the demand on regional, community, and neighborhood park facilities. El Dorado County will require the project applicant to pay park impact fees as part of the County's development fee program. Following the payment of the fees, no significant impact is identified for this threshold. Other recreation impacts are evaluated in **Section 4.7** of this Draft EIR.

6.5.15 Transportation and Traffic

Under the proposed project, the existing roadway network that provides access to the project site would not be modified, and no new roadways would be constructed. The design of the proposed project would not cause a permanent alteration to the local vehicular circulation routes and patterns, or impede public access or travel on any public rights-of-way, and no design hazards would be created. The El Dorado Hills Fire Department has reviewed the proposed project and will require all access roadways and fire hydrant systems be installed and in service prior to any combustible materials being brought onto the site. An emergency vehicle access (EVA) connection would be provided between Town Center Boulevard and Mercedes Lane. Project conditions of approval will require that the project landscaping plan exclude the planting of any trees adjacent to the EVA on the west side of the project site that could impede fire apparatus access when fully grown. Therefore, no significant impacts are identified for these issues.

The County has no congestion management plan that is applicable to the project site or vicinity. There are no public or private airports within 2 miles of the project site, and it is not within an airport land use plan boundary. Therefore, no impacts are identified for these issues.

Other transportation and traffic impacts are evaluated in **Section 4.8** of this Draft EIR.

6.5.16 Utilities and Service Systems

Stormwater

The project would construct buildings, a central parking structure with driveway access, sidewalks, and other hardscaping. The project site is currently vacant and undeveloped. The project would increase the amount of impervious surface at the project site up to a maximum of 80 percent. The increase in impervious surface could change the rate and volume of stormwater runoff from the project site. A

preliminary drainage plan has been prepared for the project. In addition, the El Dorado County Community Development Agency Transportation Division has reviewed the proposed design and will require the project to demonstrate compliance with the Drainage Manual and Stormwater Management Plan (SWMP), NPDES Permit, and Stormwater Drainage BMPs. In addition, the construction of drainage easements to facilitate on-site drainage, as well as storm drain labeling, will be required. Therefore, no significant impact is identified for this issue.

Solid Waste

The proposed project would generate solid waste during construction and occupancy. County EMD has stated the project would be required to comply with CALGreen Section 5.408, which requires that a minimum of 50 percent of non-hazardous construction waste is recycled or salvaged for reuse, or meet the local construction and demolition (C&D) waste management ordinance, whichever is more stringent.³ The proposed project would generate approximately 856 pounds of solid waste per day (156.2 tons per year),⁴ which would not represent a substantial contribution to the waste stream at the County's Material Recovery Facility (MRF) or landfills where County-generated waste is disposed. Further, the County operates a comprehensive recycling program, which would reduce the amount of solid waste. Therefore, no significant impact is identified for this issue.

Other impacts on utilities and service systems are evaluated in **Section 4.9** of this Draft EIR.

6.6 MANDATORY FINDINGS OF SIGNIFICANCE

The lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur (Section 15065 of the *State CEQA Guidelines*):

- Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?

³ Effective 1/1/2017, CalGreen increased the mandated diversion rate from 50 percent to 65 percent.

⁴ Waste generation rate = 4 lbs/dwelling unit/day (CalRecycle 2017)

- Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?
- Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?

As discussed in **Section 4.2, Biological Resources** the project site and vicinity do not contain habitat for rare or endangered plant and wildlife species. However, construction of the proposed project could adversely affect nesting birds protected by the Migratory Bird Treaty Act. However, with implementation of mitigation, which outlines procedures to follow if birds are discovered nearby during a pre-construction survey, this impact would be reduced to a less than significant level. Therefore the project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal.

As analyzed in **Section 4.3, Cultural Resources**, the proposed project has the potential to disturb cultural and tribal cultural resources, including human remains. However, with implementation of mitigation measures, which outline procedures to follow if previously unidentified cultural and tribal resources are discovered, impacts would be reduced to a less than significant level. Therefore, the proposed project would not eliminate important examples of the major periods of California history or prehistory.

Cumulative impacts are evaluated in each resource topic in this Draft EIR. As the analysis demonstrates, the proposed project would not result in significant cumulative impacts related to any of the environmental factors analyzed in the Draft EIR.

As the analysis in this Draft EIR demonstrates, with mitigation, the proposed project would not result in substantial adverse direct or indirect impacts to human beings.

6.7 REFERENCES

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7.0 REPORT PREPARATION/AGENCIES CONSULTED

7.1 LEAD AGENCY

County of El Dorado
2850 Fairlane Court
Placerville, CA 95667

Roger Trout, Acting Director, Community Development Services
Rommel Pabalinas, Senior Planner
Natalie Porter, P.E., T.E., Traffic Engineer
Dave Spiegelberg, P.E., Senior Civil Engineer
Amy A. Phillips, CPSWQ, CPESC, QSD, Storm Water Coordinator - West Slope
Bryan Vyverberg, Supervising Environmental Health Specialist

7.2 EIR CONSULTANT

Impact Sciences, Inc.
505 14th Street, Suite 1230
Oakland, California 94612

Shabnam Barati, Ph.D., Principal
Lynn Kaufman, Associate Principal
Rima Ghannam, Associate Principal
Paul Stephenson, AICP, Senior Project Manager
Angela Pan, Project Planner
Sylvie Josel, Staff Analyst
Van Hoang, Publications

7.3 SUBCONSULTANTS

Salix Consulting, Inc. – Biological Resources
12240 Herdal Drive, Suite 14
Auburn, CA 95603

Jeff Glazner, Principal Biologist

Basin Research – Cultural Resources
1933 Davis Street, Suite 210
San Leandro, CA 94577

Colin Busby, Managing Principal

Fehr & Peers – Transportation and Traffic
2990 Lava Ridge Court, Suite 200
Roseville, CA 95661

David Robinson, Principal Traffic Engineer
Rebecca Schafer, Traffic Engineer

West Yost Associates – Water Supply Assessment
6800 Koll Center Parkway, Suite 150
Pleasanton, CA 94566

Gary S. Nakano, PE, Vice President

7.4 OTHER TECHNICAL CONSULTANTS

De Novo Planning Group – Air Quality and Greenhouse Gas Assessment
1020 Suncastr Lane, Suite 106
El Dorado Hills, CA 95762

Steve McMurtry, Principal

7.5 AGENCIES CONSULTED

Adam Baughman, Senior Planner, El Dorado County Air Quality Management District

Bret Sampson, Environmental Review Analyst, El Dorado Irrigation District