5 Other CEQA Required Discussions

This section discusses other issues for which CEQA requires analysis in addition to the specific issue areas discussed in Section 4, *Environmental Impact Analysis*. These additional issues include the Specific Plan's potential to induce growth and create significant and irreversible impacts on the environment.

5.1 Growth Inducement

CEQA Guidelines Section 15126(d) requires a discussion of a proposed Specific Plan's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed Specific Plan's growth inducing potential is therefore considered significant if Specific Plan-induced growth could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population and Economic Growth

As discussed in Section 4.11, *Population and Housing*, implementation of the proposed Specific Plan would introduce an estimated 2,540 housing units and would result in a net increase in 139,000 square feet of non-residential space. Based on the average of 2.85 persons per household in the City of San Leandro and standard employee generation rates, the proposed Specific Plan would add an estimated 7,239 residents and 725 jobs to San Leandro in 2035. Table 45 compares the anticipated growth under the proposed Specific Plan to 2035 General Plan and 2035 and 2040 ABAG projections.

Table 45 Specific Plan Growth Comparison

	2017 Existing	Specific Plan Growth	2035 With Specific Plan	2035 General Plan Projections[3]	2035 ABAG Projections[4]	2040 ABAG Projections[5]
Population	88,274[1]	7,239	95,513	101,250	103,300	N/A
Households	32,509[1]	2,540	35,049	36,685	37,080	37,300
Jobs	42,865[2]	725	43,590	54,995	51,120	59,600

[1] See Table 21 in Section 4.11, *Population and Housing*

[2] See Table 22 in Section 4.11, *Population and Housing*. 2017 jobs estimates for San Leandro not available so the 2015 estimate was used.

[3] See Table 22 in Section 4.11, *Population and Housing*

[4] Source: ABAG, Plan Bay Area, Projections 2013, City Table, Alameda County; City of San Leandro 2016i

[5] Source: ABAG, Plan Bay Area 2040. See Table 23 in Section 4.11, *Population and Housing. Plan Bay Area 2040* does not provide population estimates.

The 2035 General Plan assumed 1,100 new units in the Specific Plan Area. Therefore, the proposed Specific Plan would result in a net increase of 1,440 units compared to what was analyzed in the EIR for the 2035 General Plan. Although population, housing, and jobs associated with the proposed Specific Plan added to the existing population, housing, and jobs in San Leandro would be below

2035 General Plan and 2035 and 2040 ABAG projections, growth associated with the proposed Specific Plan in combination with overall growth in San Leandro under the 2035 General Plan may exceed 2035 General Plan projections and ABAG projections.

However, a goal of the City is to foster transit-oriented development. The City's downtown area and the Specific Plan Area are targeted for TOD growth. The City completed the Downtown TOD Strategy in 2007 prior to the adoption of the City's 2035 General Plan. The proposed Specific Plan aims to encourage transit-oriented development in the Specific Plan Area. Following adoption of the Specific Plan, growth in the City would be aimed at the two TOD areas in the City, the Downtown area and the Specific Plan Area. Therefore, growth assumed under the 2035 General Plan would occur in a greater amount in the Specific Plan Area than other areas of San Leandro. As a result, overall growth would be the same as was assumed under the 2035 General Plan but would shift from other areas of the City to the Specific Plan Area. Additionally, the Specific Plan Area is a potential Priority Development Area (PDA) that was targeted for transit-oriented development in the City's 2035 General Plan and by ABAG. In general, the proposed Specific Plan is consistent with the land use goals of the ABAG/MTC Regional Transportation Plan/Sustainable Communities Strategy (*Plan Bay Area 2040*) which encourages transit-oriented development (see Section 4.6, *Greenhouse Gas Emissions*). Further, as explained in Section 2, *Project Description*, buildout assumptions for the proposed Specific Plan are conservative. Growth that may actually occur as a result of the Specific Plan may be less than anticipated.

Finally, it is the purpose of the Specific Plan to guide growth and development near existing transit centers in an effort to reduce urban sprawl and VMT. Therefore, by its nature, the proposed Specific Plan is intended to reduce the potential for uncontrolled growth in San Leandro and in the region and the environmental impacts associated with uncontrolled growth.

5.1.2 Removal of Obstacles to Growth

The Specific Plan Area is located in a fully urbanized area that is served by existing infrastructure. As discussed in Section 4.14, *Utilities and Service Systems*, and Section 4.8, *Hydrology and Water Quality*, existing infrastructure in San Leandro would be adequate to serve development under the proposed Specific Plan. No additional utility infrastructure or facilities beyond those necessary to accommodate the project would be required. Furthermore, the proposed Specific Plan is intended to encourage transit-oriented development that utilizes existing public transportation infrastructure. No new roads would be required, other than those improving connectivity within the Specific Plan Area. Because the proposed Specific Plan constitutes redevelopment within an urbanized area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

5.2 Irreversible Environmental Effects

The *CEQA Guidelines* require that EIRs contain a discussion of significant irreversible environmental changes. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed project.

The proposed Specific Plan would involve future infill development on currently developed lands in the City of San Leandro. Construction activities associated with planned development that would be accommodated under the 2035 General Plan would involve the use of building materials and energy, some of which are non-renewable resources. Consumption of these resources would occur with any development in the region and is not unique to San Leandro or the proposed Specific Plan.

The addition of new residential and non-residential development in the Specific Plan Area would irreversibly increase local demand for non-renewable energy resources such as petroleum and natural gas. Increasing efficient building fixtures and automobile engines, as well as implementation of policies included in the 2035 General Plan, are expected to offset the demand to some degree. It is not anticipated that growth accommodated under the proposed Specific Plan would significantly affect local or regional energy supplies (see Section 5.3).

Growth facilitated by the proposed Specific Plan would require an irreversible commitment of law enforcement, fire protection, water supply, and wastewater treatment. As discussed in Sections 4.12, *Public Services, Schools, and Recreation*, and 4.14, *Utilities and Service* Systems, impacts to public services and utilities would be reduced to a less than significant level with implementation of policies included in the proposed Specific Plan and 2035 General Plan.

The additional vehicle trips associated with growth through 2035 would incrementally increase local traffic, noise levels, and regional air pollutant emissions. As discussed in Section 4.2, *Air Quality*, the proposed Specific Plan would be consistent with BAAQMD's 2017 Clean Air Plan and implementation of 2035 General Plan policies and regional air pollution programs would reduce the air pollutant emissions associated with individual future development projects to below significance thresholds. As discussed in Section 4.10, *Noise*, implementation of proposed policies and mitigation measures from the City's 2035 General Plan would reduce the noise impacts associated with future growth to a less than significant level. As discussed in Section 4.13, *Transportation and Traffic*, mitigation measures would reduce traffic intersection impacts at most intersections to a less than significant level. However, traffic queuing impacts at some intersections within the Specific Plan Area would remain significant and unavoidable.

5.3 Energy Effects

Public Resources Code Section 21100(b)(2) and Appendix F of the *CEQA Guidelines* require that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful or unnecessary consumption of energy.

California is one of the lowest per capita energy users in the United States, ranked 49th in the nation, due to its energy efficiency programs and mild climate (U.S. Energy Information Administration [EIA] 2015). California generated 290,567 gigawatt-hours (GWh) of electricity in 2016 (California Energy Commission [CEC] 2017) and 2,381,700 trillion British thermal units (Btu) of natural gas in 2015, of which 409,429 Btu were consumed by residential users (EIA 2017a). Additionally, in 2015, the most recent year of data provided by the EIA, California's transportation sector consumed 1,733.2 trillion Btu of motor gasoline in (EIA 2015). According to the EIA, one gallon of motor gasoline is equivalent to 120,476 Btu (EIA 2017b). Therefore, California's transportation sector consumed approximately 14,386,267,804.4 gallons of motor gasoline in 2015. The single largest end-use sector for energy consumption in California is transportation (38.7 percent), followed by industry (24.4 percent), commercial (18.6 percent), and residential (18.3 percent).

Electricity and natural gas service in the City of San Leandro is currently provided by Pacific Gas & Electric (PG&E). PG&E provides natural gas and electric service to approximately 16 million people throughout a 70,000-square mile service area in northern and central California (PG&E 2017a). In 2016, PG&E's power mix included 33 percent renewable energy sources (PG&E 2017b). Starting in October 2018, energy service in San Leandro will be sourced from the East Bay Community Energy (EBCE), a community-governed power supplier. EBCE is committed to providing electricity from a

high percentage of renewable sources such as solar, wind, and geothermal (EBCE 2017). Therefore, in the future, the electricity power mix may include more alternative energy sources.

Development facilitated by the proposed Specific Plan would involve the use of energy during associated construction and operation phases. Energy use during construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. Temporary grid power may also be provided to construction trailers or electric construction equipment. Long-term operation of development projects would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems. In addition, the increase in vehicle trips associated with potential development would increase fuel consumption.

Table 46 shows the estimated electricity and natural gas demand for buildout of the Specific Plan compared to statewide demand. Electricity and natural gas consumption were estimated using CalEEMod, as described in Section 4.2, *Air Quality*, and Section 4.6, *Greenhouse Gas Emissions*. Based on the modeling assumptions described in Sections 4.2 and 4.6, development facilitated by the proposed Specific Plan would utilize approximately 11.9 Gigawatt hours (GWh) of electricity and approximately 34,121 million Btu of natural gas per year during operation. As shown in Table 46, energy consumption for buildout under the proposed Specific Plan would represent less than 0.01 percent of statewide annual demand for electricity and less than 0.01 percent of statewide annual demand for natural gas.

Table 46 Plan Energy Use Relative to Statewide Energy Use

Form of Energy	Units	Annual Plan Related Energy Use	Annual Statewide Energy Use	Project Percent of Statewide Energy Use
Electricity	Gigawatt hours	11.9[1]	290,567[2]	<0.01%
Natural Gas	Million British thermal units	34,121[1]	2,381,700,000[3]	<0.01%

1 CalEEMod output (provided in Appendix B)

2 California Energy Commission (CEC). 2017. *Total System Electric Generation*. Available at: http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html. Accessed July 18, 2017.

3 U.S. Energy Information Administration (EIA). 2017. *Natural Gas Consumption by End Use*. Available at: https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm. Accessed July 18, 2017.

A large portion of the energy use associated with development facilitated by the proposed Specific Plan would result from fuel consumption from new vehicle trips. Table 47 shows the estimated annual operational fuel consumption due to vehicle travel from the proposed Specific Plan buildout. Fuel consumption was estimated using the default fleet vehicle mix and the total annual mitigated annual VMT from the CalEEMod trip generation estimates, and average fuel efficiencies for each vehicle category (refer to Tables 4.4 included in Appendix B, which shows the default fleet vehicle mix used by CalEEMod). Based on these assumptions, the Specific Plan would result in the consumption of approximately 1,622,000 gallons of vehicle fuel per year during full operation, which represents approximately 0.01 percent of annual statewide transportation fuel consumption.

Table 47 Project Operational Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips[1]	Annual Vehicle Miles Traveled[2]	Average Fuel Efficiency (miles/gallon)[3]	Total Annual Fuel Consumption (gallons)
Passenger Cars	56.61%	15,976,458	23.3	685,685
Light/Medium Trucks	32.61%	9,203,185	17.1	538,198
Heavy Trucks/Other	10.21%	2,881,463	7.3	394,721
Motorcycles	0.52%	146,754	43.4	3,381
Total	100%	28,221,971	–	1,621,985
State Motor Vehicle Fuels				14,386,267,804[4]
Plan Percent of Statewide Energy Use				<0.01%

[1] Percent of vehicle trips found in Table 4.4 "Fleet Mix" in CalEEMod outputs (see Appendix B)

[2] Mitigated annual VMT found in Table 4.2 "Trip Summary Information" in CalEEMod outputs (see Appendix B). Annual VMT per vehicle type = Mitigated annual VMT * Percent of vehicle trips per vehicle type.

[3] Source: US DOT, Bureau of Transportation Statistics. 2013. National Transportation Statistics 2013, Tables 4-12 and 4-13. Washington DC. Vehicle classes provided in CalEEMod do not correspond exactly to vehicle classes in USDOT fuel consumption data, except for motorcycles. Therefore, it was assumed that passenger cars correspond to the light-duty, short-base vehicle class, light/medium trucks correspond to the light-duty long-base vehicle class, and heavy trucks/ other correspond to the single unit, 2-axle 6-tire or more class.

[4] California Energy Commission 2014

Note: Total may not add up due to rounding.

In addition, construction activities would also result in short-term fuel consumption from worker trips, operation of diesel-powered equipment, and hauling trips.

Appendix F Requirements and Energy Conservation Standards

Appendix F of the *CEQA Guidelines* requires inclusion in an EIR of relevant information that addresses "potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy" (Public Resource code Section 21100[b][3]). Although the *CEQA Guidelines* do not include formal thresholds for evaluating the significance of potential energy-related impacts, the following discussion addresses direct energy impacts of the project as framed in Appendix F of the *CEQA Guidelines* by evaluating whether the project would result in the wasteful or inefficient consumption of energy

Threshold:	Would the Specific Plan result in the wasteful and inefficient use of non-renewable resources during construction and operation of projects facilitated by the Plan?

Long-term operation of development projects facilitated by the proposed Specific Plan would result in the annual consumption of approximately 11,900 megawatt hours of electricity, 34,121 million Btu of natural gas, and 1,621,985 gallons of vehicle fuel each year. Increasingly efficient building fixtures and automobile engines, as well as implementation of policies included in the City's 2035 General Plan, are expected to offset the energy demand facilitated by buildout under the proposed Specific Plan to some degree. The development facilitated by the proposed Specific Plan would be subject to energy conservation requirements in the California Energy Code (Title 24, Part 6, of the California Code of Regulations [CCR], California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards Code (CalGreen) (Title 24, Part

11, of the CCR). Adherence to Title 24 requirements would ensure that buildout of the proposed Specific Plan would not result in wasteful and inefficient use of non-renewable resources due to building operation.

The standards and guidelines shown in Table 48 are included in Chapter 5, *Development Standards and Guidelines*, of the proposed Specific Plan would reduce future energy use in the Specific Plan Area:

Table 48 Building Performance Standareds in the Proposed Specific Plan

Performance Standard #1	**CalGreen** New development shall achieve the mandatory elements of CalGreen as required by state law, but should seek opportunities to exceed, pursue, and achieve CalGreen Tier 1 or 2.
Performance Standard #2	**LEED for Neighborhood Development** LEED for Neighborhood Development (LEED-ND) certification is required for any new development over five acres in size, and LEED-ND is encouraged for any project involving two buildings or more. For projects less than five acres in size, encourage features consistent with LEED-ND criteria such as walkable streets, green infrastructure, energy- and water-efficient buildings, and access to diverse uses and public spaces.
Performance Standard #3	**Solar-Ready Buildings** All new buildings shall be built with solar-ready electrical systems/hardware and provide adequate roof surface area for these systems.
Performance Standard #5	**Sustainable Roofs** New construction, additions, and alterations shall follow the CalGreen guidance for solar-reflective roofs to reduce heat island effect. Vegetated roofs may also be used.
Performance Guideline #1	**Green Buildings** Green building certification such as LEED for Building Design and Construction (LEED-BD+C) or GreenPoint Rated is encouraged for new development.
Performance Guideline #4	**Vehicle Charging Stations** New development should include electric charging stations for electric automobiles for residents.
Private Open Space	
Guideline #5	**Planting and Landscape Character** Trees should be placed to maximize climate benefits and energy savings. Deciduous trees should be located to allow sunlight to reach buildings during winter months, and to provide shade during summer months.

The development facilitated by the proposed Specific Plan would be required to comply with applicable Title 24 building standards and numerous policies that would reduce construction and operational energy use by decreasing vehicle trips, increasing fuel efficiency, increasing building energy efficiency, and facilitating use of renewable energy. Therefore, the proposed Specific Plan would not result in wasteful and inefficient use of non-renewable resources during construction and operation.