
5.0 OTHER CEQA ANALYSIS

This section discusses additional topics statutorily required by CEQA, including growth-inducing impacts and significant and unavoidable environmental effects. In addition, this section analyzes the proposed project's energy consumption and conservation, consistent with CEQA Guidelines Appendix F.

5.1 GROWTH-INDUCING IMPACTS

INTRODUCTION

CEQA Guidelines Section 15126.2(d) requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by CEQA Guidelines as:

...the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...It must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if, for example, a project involves construction of new housing. A project would have indirect growth inducement potential if, for example, it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, a project would indirectly induce growth if, for example, it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project facilitating an increased water supply in an area where water service historically limited growth could be considered growth inducing.

The CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans include land use development patterns and growth policies that allow the orderly expansion of development supported by adequate public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

COMPONENTS OF GROWTH

As required by Government Code Section 65300, the City of Hayward General Plan is intended to serve as the overall plan for the physical development of the city. While the General Plan does not specifically propose any development projects, it does regulate the location and type of future development and thus controls future city population and economic growth that would result in indirect growth-inducing effects.

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The project site is designated Central City-Retail and Office Commercial (CC-ROC) in the Hayward General Plan. The CC-ROC designation generally applies to the core and periphery of downtown Hayward. The General Plan notes that typical building types include storefront commercial buildings, professional offices and mixed-use buildings that contain commercial or office uses on the ground floor and residential units or office space on upper floors. The existing zoning for the site is Central City-Commercial (CC-C). The purpose of the CC-C district is to establish a mix of business and other activities to enhance the economic vitality of the downtown area. The proposed development would be consistent with the existing General Plan land use designation and zoning for the project site.

GROWTH EFFECTS OF THE PROPOSED PROJECT

Changes in population and employment are not in and of themselves environmental impacts. However, they may result in the need for the construction of new housing, businesses, infrastructure, and services that accommodate increases in population and employment. Following is a discussion of the proposed project's potential to generate growth in the area and the anticipated effects of such growth. The reader is also referred to Section 3.0, Impact POP-1, for a discussion of the project's potential impacts related to population growth.

Direct Growth Effects

The project proposes to develop 476 new residential units on the site, which would provide housing for an estimated 1,542 people. While the project would result in direct growth in the city, the proposed development would be consistent with the General Plan and would be within the housing and population projections in the 2040 General Plan EIR (Hayward 2014b, p. 3-21). Therefore, the project would not result in any direct growth effects beyond those previously considered and disclosed in the General Plan EIR.

Indirect Growth Effects

The project also proposes to develop 80,500 square feet of commercial space that would generate an estimated 137 new jobs in the city, assuming 1 employee for every 588 square feet of retail space. The creation of new jobs could indirectly result in growth if new residents move into the city to fill the positions. However, as described previously, the proposed development would be consistent with the General Plan and would be within the employment and population projections in the 2040 General Plan EIR. Furthermore, the project also includes housing that could be occupied by some of the employees on the project site. Lastly, given the developed nature of the site and the surrounding area, the project would not extend infrastructure to areas outside the project boundaries that are not already served, nor would the project provide additional capacity or otherwise result in indirect growth effects beyond those previously considered in the General Plan EIR.

Other Economic-Related Growth

The proposed project would increase economic activity through the short-term creation of jobs during construction. However, current residents of the city and other nearby areas who are employed in the construction industry would be sufficient to meet the demand for construction workers that would be generated by the project. As such, substantial population growth or increases in housing demand in the region as a result of these temporary construction-related jobs would not be anticipated.

The proposed project would also increase demand for public services and utilities. However, as discussed previously, the project would not result in growth beyond that previously considered in the City's 2040 General Plan and associated EIR. Furthermore, as discussed in Section 3.0, Impacts Found Not Significant (Impacts PUB-1, REC-1 and REC-2, and UTL-1 to UTL-4), the project could be served by existed public facilities, infrastructure, and resources and would have less than significant impacts in these environmental issue areas.

ENVIRONMENTAL EFFECTS OF GROWTH

As described previously, the project would not result in direct or indirect growth or related environmental effects beyond those considered in the 2040 General Plan EIR.

5.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. In addition, CEQA Guidelines Section 15093(a) allows the decision-making agency to determine whether the benefits of a proposed project outweigh the unavoidable adverse environmental impacts of implementing the project. The City of Hayward can approve a project with unavoidable adverse impacts if it prepares a Statement of Overriding Considerations setting forth the specific reasons for making such a judgment.

The following project impacts have been recognized as significant and unavoidable in the project context in Section 3.1, Transportation and Traffic, of this Draft EIR. All other impacts have been identified either as less than significant or as less than significant with mitigation.

Traffic Operational Impacts – Background plus Phase I Conditions (Standards of Significance a and b)

Impact 3.1.2 Implementation of Phase I of the proposed project would generate vehicle trips that could contribute to significant traffic operational impacts at intersections as compared to background conditions.

Traffic Operational Impacts – Background plus Phases I and II Conditions (Standards of Significance a and b)

Impact 3.1.3 Implementation of the Phase I and II of the proposed project would generate vehicle trips that could contribute to significant traffic operational impacts at intersections as compared to background conditions.

Traffic Operational Impacts (Standards of Significance a and b)

Impact 3.1.8 Implementation of the proposed project, in combination with other approved, planned, and reasonably foreseeable development in the project area, would generate vehicle trips that could contribute to significant traffic operational impacts to intersections as compared to cumulative conditions.

5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines Section 15126.2(c) describes irreversible environmental changes in the following manner:

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Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Renewable, nonrenewable, and limited resources that would likely be consumed as part of the project would include, but are not limited to, oil, gasoline, lumber, sand and gravel, asphalt, water, steel, and similar materials.

5.4 ENERGY CONSUMPTION AND CONSERVATION

INTRODUCTION

Public Resources Code Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, largely in response to the oil crisis of the 1970s, the California legislature adopted Assembly Bill (AB) 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct state responses to energy emergencies, and—perhaps most importantly—promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F of the CEQA Guidelines.

CEQA Guidelines Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. For the reasons set forth below, this EIR concludes that the proposed project would not result in this type of energy consumption and therefore would not create a significant impact on energy resources.

APPLICABLE REGULATIONS

State

California Building Energy Efficiency Standards

In general, the California Building Energy Efficiency Standards require the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The California Energy Commission adopted changes to the 2013 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code) and associated administrative regulations in Part 1 (collectively referred to here as the standards). The amended standards took effect in the summer of 2014. The 2013 Building Energy Efficiency Standards are 25 percent more efficient than previous standards for residential construction and 30 percent more efficient for nonresidential construction. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. Energy-efficient buildings require less electricity; increased energy efficiency reduces fossil fuel consumption.

California Green Building Standards

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2013 and went into effect July 1, 2014.

California Environmental Quality Act Guidelines

CEQA Guidelines Appendix F, Energy Conservation, requires consideration of project impacts on energy and focuses particularly on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (Public Resources Code Section 21100[b][3]). The potentially significant energy implications of a project must be considered in an EIR to the extent relevant and applicable to the project.

Local

Climate Action Plan

On July 28, 2009, the City of Hayward adopted a Climate Action Plan (CAP), which identifies greenhouse gas emissions reduction targets that are consistent with those adopted by the State of California, as well as the actions that are needed to achieve the targets. The City of Hayward was awarded \$1.36 million from the Department of Energy's Energy Efficiency and Conservation Block Grant (EECBG) funds for energy-related programs.

City of Hayward General Plan

The City of Hayward General Plan Housing Element includes the following policy related to sustainability and energy conservation:

Policy H-3.3: **Sustainable Housing Development.** The City shall improve affordability by promoting sustainable housing practices that incorporate a "whole system" approach to siting, designing, and constructing housing that is integrated into the building site, consumes less water and improves water quality, reduces the use of energy use, and other resources, and minimizes its impact on the surrounding environment.

ENVIRONMENTAL SETTING

Electricity/Natural Gas Services

The Pacific Gas and Electric Company (PG&E) provides electrical and natural gas services to Hayward through State-regulated public utility contracts. Electricity and natural gas service infrastructure exists on the project site.

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The City's ongoing development review process includes a review and comment opportunity for privately owned utility companies, including PG&E, to allow informed input from each utility company on all development proposals. The input facilitates a detailed review of all projects by service purveyors to assess the potential demands for utility services on a project-by-project basis.

PG&E's ability to provide its services concurrently with each project is evaluated during the development review process. The utility company is bound by contract to update its systems to meet any additional demand. PG&E's Electric and Gas Rules 15 and 16 provide guidelines for the extension of distribution lines necessary to furnish permanent services to customers. PG&E also outlines responsibilities for installation and extension allowances, as well as financial contributions by project applicants.

Energy Consumption Setting

Total energy usage in California was 7,641 trillion British thermal units (BTUs) in 2012, which equates to an average of 201 million BTUs per capita. Of California's total energy usage, the breakdown by sector is 38.5 percent transportation, 22.8 percent industrial, 19.3 percent commercial, and 19.2 percent residential. Electricity and natural gas in California are generally consumed by stationary users such as residences and commercial and industrial facilities, whereas petroleum consumption is generally accounted for by transportation-related energy use (EIA 2016). In 2014, taxable gasoline sales (including aviation gasoline) in California accounted for 14,921,441,859 gallons of gasoline (BOE 2016).

The electricity and natural gas consumption attributable to residential and nonresidential land uses in Alameda County from 2007 to 2014 is shown in **Table 5.0-1**. As indicated, electricity consumption has decreased slightly year to year, even with an increase in population. As shown in the table, natural gas consumption remained relatively constant through the period with the exception of 2009 and 2014. In 2009, the data shows a substantial reduction in nonresidential consumption, while in 2014, the data shows a substantial reduction in residential consumption. No explanation is provided for these reductions, which may be errors in the data.

TABLE 5.0-1
RESIDENTIAL AND NONRESIDENTIAL ELECTRICITY CONSUMPTION IN ALAMEDA COUNTY 2007–2014

Year	Residential & Nonresidential Electricity Consumption (in millions of kilowatt-hours)	Residential & Nonresidential Natural Gas Consumption (in millions of therms)
2007	11,730	443
2008	11,170	437
2009	10,356	254
2010	10,718	423
2011	10,975	421
2012	10,589	408
2013	10,616	423
2014	10,299	361

Source: ECDMS 2016

Automotive and construction-related (off-road) fuel consumption in Alameda County from 2007 to 2015 is shown in **Table 5.0-2** (projections for the year 2016 are also shown). As shown, automotive and construction-related fuel consumption has declined in the county since 2007.

**TABLE 5.0-2
AUTOMOTIVE FUEL CONSUMPTION IN ALAMEDA COUNTY 2007–2016**

Year	Automotive Fuel Consumption (gallons)	Construction Fuel Consumption (gallons)
2007	715,498,915	52,050,095
2008	689,822,625	50,238,965
2009	688,553,885	42,757,195
2010	682,782,505	38,615,540
2011	667,802,905	43,105,770
2012	657,094,170	44,678,555
2013	660,166,740	43,560,195
2014	661,708,135	42,431,250
2015	659,988,620	43,542,110
2016 (projected)	657,616,850	42,000,185

Source: CARB 2014

ENERGY CONSUMPTION

Proposed Project

A project may create a significant environmental effect if it results in the inefficient, wasteful, and unnecessary consumption of energy. The analysis focuses on the three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel for vehicle trips associated with new development, as well as the fuel necessary for project construction.

The analysis of electricity and natural gas usage is based on California Emissions Estimator Model (CalEEMod) air quality and greenhouse gas emissions modeling conducted by Urban Crossroads (2016), which quantifies energy use for occupancy. The results of the CalEEMod modeling are included in **Appendix AQ** of this EIR. Modeling was based primarily on the default settings in the computer program for Alameda County. The amount of operational fuel use was estimated using the California Air Resources Board's EMFAC2014 computer program, which provides projections for typical daily fuel usage in Alameda County. The amount of construction-related fuel use was estimated using ratios provided in the Climate Registry (2015) General Reporting Protocol for the Voluntary Reporting Program, Version 2.1. The results of EMFAC2014 modeling and construction fuel estimates are included in **Appendix ENG** of this EIR.

Energy consumption associated with the proposed project is summarized in **Table 5.0-3**.

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**TABLE 5.0-3
LINCOLN LANDING ENERGY CONSUMPTION**

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Electricity Consumption ¹	4,198,607 kilowatt-hours	0.04%
Natural Gas Consumption ¹	45,894 therms	0.01%
Automotive Fuel Consumption ²		
<i>Project Construction</i>	278,621 gallons	0.64%
<i>Project Operations</i>	591,300 gallons	0.89%

Sources: ¹Urban Crossroads 2016; ²EMFAC2014 (CARB 2014)

Notes: The increases in electricity and natural gas consumption associated with the proposed project are compared with all of the residential and nonresidential buildings in Alameda County in 2014. The increases in automotive fuel consumption and construction-related fuel consumption associated with the proposed project are compared with the countywide fuel consumption in 2015.

As shown in **Table 5.0-3**, the increase in electricity usage as a result of the project would constitute an approximate 0.04 percent increase in the typical annual electricity consumption and an approximate 0.01 percent increase in the typical annual natural gas consumption attributable to all residential and nonresidential buildings in Alameda County. The increase in automotive fuel would increase use in the county by approximately 0.6 percent, and the increase in construction-related fuel would increase use in the county by approximately 0.9 percent.

The proposed project would be required to comply with Title 24 Building Energy Efficiency Standards, which establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage. Furthermore, the electricity provider in Alameda County, PG&E, is subject to California's Renewables Portfolio Standard (RPS). The RPS 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 and to 50 percent of total procurement by 2030. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures projects will not result in the waste of finite energy resources.

PG&E currently provides electrical services and natural gas to Alameda County. PG&E will continue to provide these services and is required by the California Public Utilities Commission to update existing systems to meet any additional demand.

In terms of automotive fuel consumption, the project would develop a commercial retail shopping center close to residential development, which would minimize vehicle travel distances and thus fuel consumption. The project would also offer goods and services at a local site, thereby reducing the number of vehicle trips currently being made to shop for the same goods and services in neighboring areas. Further, the project would develop a mixed-use transit-oriented development close to BART and AC Transit stops and incorporate transportation demand management strategies, such as transit passes for employees and residents, car sharing programs, bicycle parking and maintenance areas and unbundling parking costs from housing costs (see also Appendix TRA) that would reduce mobile source emissions and automotive fuel consumption.

As shown in **Table 5.0-3**, the increase in electricity, natural gas, automotive fuel consumption, and construction-related fuel consumption over existing conditions is minimal (less than 1 percent). For the reasons described above, the proposed project would not place a substantial demand on regional energy supply or require significant additional capacity; significantly increase peak and base period electricity demand; cause wasteful, inefficient, and unnecessary consumption of energy during project construction, operation, and/or maintenance; or preempt future energy development or future energy conservation.

Cumulative Effects

The cumulative context considered in this Draft EIR generally encompasses the cumulative setting conditions considered in the City of Hayward 2040 General Plan (adopted July 1, 2014). As discussed in Chapter 2.0, Project Description, the proposed project is consistent with the General Plan, so the project has already been considered in the context of General Plan buildout. Cumulative development in Alameda County may require the extension of existing power and gas lines, and new transmission facilities and substations would be needed. While the proposed project would increase the demand on electricity and natural gas services, the demand would not be substantial in relation to the total amount of energy available, and service is readily available on the site and at adjacent locations that are already developed with urban uses.

The proposed project would not substantially contribute to the need for increasing the capacity of or constructing new off-site facilities to serve the project, in combination with other development in the city. Impacts would be less than cumulatively considerable.

Energy in the city is obtained from a variety of sources owned and operated by other entities, including combustion (natural gas), hydroelectric facilities, and geothermal projects. Future development in the region would increase residential and commercial needs for electricity and natural gas. Given the regional, and in some cases national, nature of the electrical and natural gas transmission systems, and the variety of sources of energy, it would be speculative to address the likely future sources of energy and the impacts of increasing demand for any particular source of energy (e.g., hydroelectric, coal) or changes in the types of energy sources available. Utility providers have the ability to comment on and review all development proposals to ensure adequate service can be provided prior to development approval.

The project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the city, would not result in the inefficient, wasteful, or unnecessary consumption of energy.

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