Other CEQA Considerations







Chapter 5 | OTHER CEQA CONSIDERATIONS

5.1 LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

This Environmental Assessment (EA) substantially conforms to the content for a Supplemental EIR pursuant to State CEQA Guidelines § 15163, Supplement to an EIR. Pursuant to State CEQA Guidelines § 15126.2, this Section analyzes short-term uses of the environment and the maintenance and enhancement of long-term productivity. If future residential development accommodated through Project implementation is approved and constructed, a variety of short- and long-term impacts would occur locally. During site-specific Project grading and construction, portions of surrounding land uses may be temporarily impacted by dust and noise, and short-term impacts related to soil erosion could occur. Grading and construction activities could also temporarily increase vehicle pollutant emissions. However, these disruptions/impacts would be temporary and could be avoided/lessened to a large degree through compliance with the established regulatory framework (i.e., relevant laws, ordinances, regulations, and standards, and the recommended mitigation; refer to Sections 4.1 through 4.14.

Future development would create long-term environmental consequences associated with a transition in land use. Future development and the subsequent long-term effects could impact the physical and human environments. Long-term physical consequences of development include increased traffic volumes, increased noise from individual project-related mobile (traffic) and stationary (mechanical and landscaping) sources, incremental increased demands for public services, recreational facilities, and utilities, and increased energy and natural resource consumption. Incremental degradation of local and regional air quality would also occur from mobile source emissions generated by individual project-related traffic, as well as stationary source emissions generated from the consumption of natural gas and electricity.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WOULD BE INVOLVED IN THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

According to State CEQA Guidelines §§ 15126(c) and 15126.2(c), an EIR is required to address any significant irreversible environmental changes that would occur should the Project be implemented. As stated in State CEQA Guidelines § 15126.2(c):

"....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 likely, 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."

Future development would consume limited, slowly renewable and non-renewable resources. This consumption would occur during each individual project's construction phase and would continue throughout its operational lifetime. Future development would require a commitment of resources that



would include: (1) building materials; (2) fuel and operational materials/resources; and (3) the transportation of goods and persons to/from individual development sites. Construction would require the consumption of the following resources (e.g., construction supplies), which are non-renewable or which may renew so slowly as to be considered non-renewable: lumber and other forest products; aggregate materials used in concrete and asphalt; metals; and water. Fossil fuels such as gasoline and oil would also be consumed to power construction vehicles and equipment.

The resources that would be committed during future development operations would be like those currently consumed within the City. These would include energy resources such as electricity and natural gas, petroleum-based fuels (e.g., gasoline and diesel for vehicle trips), fossil fuels (i.e., oil and natural gas), and water. Fossil fuels would represent the primary energy source associated with both short-term construction and long-term operations, and the existing, finite supplies of these natural resources would be incrementally reduced. Future development operations would occur in accordance with California Code of Regulations (CCR) Title 24, Part 6, which sets forth conservation practices that would limit energy consumption. However, energy requirements would, nonetheless, represent a long-term commitment of essentially non-renewable resources.

Individual future developments could use/store limited amounts of potentially hazardous materials typical of residential uses. However, these materials would be used in small quantities and would be used, handled, stored, and disposed of in accordance with the manufacturer's instructions and established regulatory framework. Compliance with these regulations and standards would protect against significant and irreversible environmental changes resulting from the accidental release of hazardous materials.

Approximately 61.4 acres (55 percent) of the candidate sites are developed to varying degrees, and thus would require demolition activities to accommodate future development. All potential future demolition activities must comply with the established regulatory framework to ensure that asbestos and lead-based paints are not released into the environment. Compliance with the established regulatory framework, Encinitas General Plan (EGP) policies, and recommended mitigation would protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

In summary, future development construction and operations would result in the irretrievable commitment of limited, slowly renewable, and non-renewable resources, which would limit the availability of these resource quantities for future generations or for other uses during the life of the individual developments. However, continued use of such resources would be on a relatively small scale in a regional context. Although Project implementation would result in irreversible environmental changes, such changes would not be considered significant.

5.3 ENERGY CONSERVATION

Public Resources Code (PRC) § 21100(b)(3) and State CEQA Guidelines § 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. AB 1575 also amended PRC § 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 State CEQA Guidelines Appendix F.

State CEQA Guidelines Appendix F is an advisory document that assists EIR preparers in determining whether a project would result in the inefficient, wasteful, and unnecessary consumption of energy. The



discussion below analyzes the revised Project's effect on energy consumption impacts on energy resources.

5.3.1 ENVIRONMENTAL SETTING

This EA analyzes energy consumption due to the potential direct and indirect environmental impacts associated with future development accommodated through Project implementation. Such impacts include non-renewable resource (e.g., oil, natural gas, coal, etc.) depletion and air pollutant emissions during short-term construction and long-term operations.

ELECTRICITY/NATURAL GAS SERVICES

San Diego Gas & Electric (SDG&E) provides electrical and natural gas services to the Project area. SDG&E is a regulated public utility that provides energy service to 3.6 million people through 1.4 million electric meters and 873,000 natural gas meters in San Diego County and southern Orange County (SDG&E 2016).

ENERGY USAGE

Energy usage is typically quantified using the British Thermal Unit (Btu). Total energy usage in California was 7,676 trillion Btu's in 2015 (the most recent year for which this specific data is available), which equates to an average of 197 million per capita. Of California's total energy usage, the breakdown by sector is 39 percent transportation, 24 percent industrial, 19 percent commercial, and 18 percent residential. In California, electricity and natural gas consumption is generally by stationary users such as residences and commercial and industrial facilities, whereas petroleum consumption is generally by transportation-related energy use (EIA, 2018).

In 2016, net taxable gasoline sales (including aviation gasoline) in California accounted for 15,297,030,909 gallons of gasoline (California Department of Tax and Fee Administration [CDTFA] 2017).

The electricity consumption attributable to San Diego County's residential and nonresidential land uses from 2008 through 2016 is shown in Table 5-1, *Residential and Nonresidential Electricity Consumption in San Diego County*. As indicated in Table 5-1, residential and nonresidential demand have both remained relatively constant between 2008 and 2016, with no substantial increase, despite population growth.

The natural gas consumption attributable to residential and nonresidential land uses in San Diego County from 2008 through 2016 is shown in Table 5-2, *Residential and Nonresidential Natural Gas Consumption in San Diego County*. As shown in Table 5-2, residential and nonresidential demand have remained relatively constant between 2008 and 2016, despite population growth.



TABLE 5-1: RESIDENTIAL AND NONRESIDENTIAL ELECTRICITY CONSUMPTION IN SAN DIEGO COUNTY **Nonresidential Electricity Residential Electricity Consumption** Year Consumption (million kilowatt-hours) (million kilowatt-hours) 2016 12,879.16 6,825.30 2015 12,863.83 6,917.35 2014 13,039.60 6,864.20 2013 12,623.47 6,802.31 2012 12,654.79 6,907.24 2011 12,333.06 6,689.53 2010 12,379.46 6,598.79 2009 12,747.27 6,768.03 2008 13,096.64 6,898.18 Source: California Energy Consumption Data Management System, 2018

Year	Nonresidential Natural Gas Consumption (million therms)	Residential Natural Gas Consumption (million therms)
2016	203.80	268.99
2015	208.87	255.63
2014	205.03	256.58
2013	219.50	318.31
2012	203.50	311.18
2011	201.91	326.95
2010	222.87	337.91
2009	206.14	308.75
2008	216.67	324.69

GASOLINE/DIESEL FUELS

Daily automotive fuel consumption in San Diego County from 2008 to 2017 is shown in Table 5-3, *Daily Automotive Fuel Consumption in San Diego County*. As shown in Table 5-3, automotive fuel consumption in the County has declined since 2008.



TABLE 5-3: DAILY AUTOMOTIVE FUEL CONSUMPTION IN SAN DIEGO COUNTY		
Year	Gas Consumption (gallons)	Diesel Fuel Consumption (gallons)
2017	1,286,253,712	209,551,622
2016	1,299,839,080	206,428,711
2015	1,304,398,958	200,988,107
2014	1,308,161,648	194,319,043
2013	1,304,467,267	190,139,701
2012	1,325,466,647	187,217,459
2011	1,348,527,180	186,720,529
2010	1,371,659,695	188,505,714
2009	1,363,315,367	192,305,012
2008	1,382,152,264	210,350,786
Source: California Air Resources Board	, EMFAC2014.	

5.3.2 REGULATORY SETTING

State and local environmental laws and policies relevant to the CEQA review process are described below.

STATE OF CALIFORNIA FRAMEWORK

The California Energy Commission (CEC) established California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) in 1978. Title 24 was established in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and establish energy efficiency standards for residential and nonresidential buildings. As indicated in Table 5-1, total electricity demand in San Diego County from 2008 through 2015 remained relatively stable, despite population growth. The 2016 Title 24 standards, which are expected to improve energy efficiency by approximately 20 percent compared to the 2013 standards, took effect on January 1, 2017.

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 concerning the following five green building topics: 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 could adopt which encourage or require additional measures in the five green building topics. The most recent CALGreen Code update was adopted in 2016 and took effect January 1, 2017.

CITY OF ENCINITAS CLIMATE ACTION PLAN

The City adopted its Climate Action Plan (CAP) in January 2018. The CAP contains GHG emissions inventory, projections, goals, reductions measures, and actions to reduce Citywide GHG emissions and achieve the City's 2020 and 2035 reduction targets. The CAP sets ambitious targets to reduce emissions



13 percent below 2012 levels by 2020 and 41 percent below 2012 levels by 2030. Refer to Section 4.6, *Greenhouse Gas Emissions*, for a discussion of the Project's consistency with the CAP.

5.3.3 SIGNIFICANCE DETERMINATION THRESHOLDS

The following is a description of State and local environmental laws and policies relevant to the CEQA review process.

In accordance with State CEQA Guidelines, a project's effects are evaluated to determine whether they would result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary depending on the nature of the project. According to State CEQA Guidelines Appendix F, the Project would have a significant impact related to energy, if it would:

 Develop land uses and patterns that cause wasteful, inefficient, and unnecessary consumption of energy or construct new or retrofitted buildings that would have excessive energy requirements for daily operation.

5.3.4 ENERGY CONSUMPTION

SHORT-TERM CONSTRUCTION

2016 PEIR

Impacts associated with energy usage are discussed in 2016 PEIR Section 5.3 (page 5-3). The 2016 PEIR concluded that the project would not result in a wasteful or inefficient use of energy resources during construction of future development due to construction practice requirements, which would increase fuel-energy conservation above typical standards. Adherence to the City's Construction & Demolition Debris (C&D) Ordinance would further increase energy conservation through recycling efforts and reduction of unnecessary consumption of energy associated with solid waste disposal during construction. The 2016 PEIR concluded a less than significant impact concerning construction energy consumption.

The additions/changes necessary to make the 2016 PEIR applicable to the revised Project are presented below.

REVISED PROJECT

The 2016 PEIR conclusions concerning energy consumption during construction apply to the revised Project. The revised Project would not result in wasteful, inefficient, or unnecessary energy consumption during construction of future development. Project construction equipment would be required to comply with the latest US Environmental Protection Agency (EPA) and CARB engine emissions standards, which require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Further, construction fuel use would be temporary and would cease upon completion of construction. No unusual Project characteristics are involved that would necessitate the use of construction equipment that would be less energy-efficient, as compared to construction sites in the region or State. Therefore, the future developments' construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects. Further, the Project would adhere to the C&D Ordinance, which increases energy conservation through recycling efforts.



Adherence to the established regulatory framework would future developments' construction activities would not cause wasteful, inefficient, or unnecessary energy consumption. Impacts would be less than significant in this regard.

LONG-TERM OPERATIONS

2016 PEIR

Long-term operational energy use associated with the Project includes vehicle fuel consumption and electricity and natural gas consumption, and energy consumption related to obtaining water. However, the analysis noted that these resources would be used daily regardless of Project implementation. The 2016 PEIR concluded, although long-term operational energy use would result from future development, such usage would not be considered significant in comparison to energy usage by other cities in the region. The Project would not involve any unusual characteristics that would result in excessive long-term operational building energy demand. Further, adherence to California Building Code (Title 24) and associated updates, as well as EGP policies would reduce excessive and inefficient energy use. At the time of 2016 PEIR preparation, the City's CAP was not adopted yet. 2016 PEIR Mitigation Measure GHG-2 required that the City adopt a CAP, which would include GHG reduction measures to meet future GHG targets. The 2016 PEIR concluded impacts concerning long-term operations energy consumption would be less than significant with mitigation.

REVISED PROJECT

Future developments' long-term operational energy consumption would include vehicle fuel consumption, electricity and natural gas consumption, and energy consumption related to obtaining water. However, energy sources including fuel, electricity, and natural gas would continue to be consumed daily regardless of Project implementation. Future development would be subject to compliance with the established Federal and State regulatory framework, including 2016 Title 24 Building Energy Efficiency Standards, which establish minimum efficiency standards related to various building features (e.g., including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting). Future development would also be subject to compliance with EGP policies intended to reduce excessive/inefficient energy consumption and CAP measures intended to reduce GHG emissions. Adherence to the established regulatory framework would reduce long-term operations energy consumption. The Project would not involve any unusual characteristics that would result in excessive long-term operational building energy demand. Overall, the Project does not involve development of land uses or patterns that would cause wasteful, inefficient, or unnecessary operational energy consumption, or construction of new/retrofitted buildings with excessive operational energy requirements. Impacts would be less than significant in this regard.

TRANSPORTATION

2016 PEIR

As discussed in the 2016 PEIR, transportation and vehicle miles traveled (VMT) are relevant considerations in the analysis of the HEU's energy impacts under State CEQA Guidelines Appendix F. 2016 PEIR Section 4.9, Land Use, includes an analysis of the VMT relative to each housing strategy is provided in. All three housing strategies showed a VMT/trip reduction, as compared to the adopted EGP Land Use Plan. The EGP Circulation Element includes policies to improve transit service and the City's overall mobility, resulting in a decrease in auto dependency and VMT. The analysis noted that future mixed-use



development would help connect existing neighborhoods to support more efficient transit service and pedestrian opportunities and therefore reduce consumption of transportation energy. The 2016 PEIR concluded that overall, fuel consumption associated with vehicle trips generated by future development would not be considered inefficient, wasteful, or unnecessary in comparison to other cities in the region. Impacts were concluded to be less than significant.

REVISED PROJECT

Table 4.13-1 identifies the average daily trip (ADT) generation for the Future 2035 Adopted General Plan scenario, without and with the Project. As indicated in Table 4.13-1, the Project would generate 14,965 ADT, or 711,109 ADT under the Future 2035 Adopted General Plan With Project scenario. The California Emissions Estimator Model (CalEEMod)¹ was used to calculate the Project's annual vehicle miles travelled (VMT). Revised Project buildout (all 2,494 DUs) would result in approximately at 46,979,089 VMT. Future development would be subject to compliance with EGP Policy 1.15 and Policies 3.1 through 3.11, which encourage improving bicycle, pedestrian, and rail services and cooperation with SANDAG for an integrated multi-modal regional transit system. The HEU does not involve any unusual characteristics that would result in excessive long-term operational fuel consumption. Adherence to the City's CAP would also improve transit service and overall mobility within the City, resulting in a decrease in auto dependency and VMT. Further, the HEU would not grant immediate development rights to new housing projects. Overall, the Project does not involve development of land uses or patterns that would cause wasteful, inefficient, or unnecessary operational fuel consumption. Impacts would be less than significant in this regard.

5.3.5 SOURCES CITED

- BREEZE Software, A Division of Trinity Consultants, California Emissions Estimator Model Appendix A, Calculation Details for CalEEMod, October 2017 CalEEMod2016.3.2.
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¹ BREEZE Software, A Division of Trinity Consultants, *California Emissions Estimator Model Appendix A, Calculation Details for CalEEMod*, October 2017 CalEEMod2016.3.2.