

## MEMORANDUM

**To:** NorthPoint Development

**From:** Tina Yuan, Michael Baker International

**Date:** January 21, 2025

**Subject:** SPR 24-010 – Energy Assessment Memorandum

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### PURPOSE

The purpose of this technical memorandum is to evaluate potential short-term construction and long-term operational energy consumption impacts that would result from the construction and operation of the proposed SPR 24-010 (project), located in the City of Lancaster (City), California.

### PROJECT LOCATION

The City is in the Antelope Valley in northern Los Angeles County (County), approximately 70 miles north of downtown Los Angeles; refer to Exhibit 1, *Regional Vicinity*. The project site is located within the northern portion of the City and consists of two noncontiguous parcels (Assessor's Parcel Numbers [APNs] 3114-010-041 and 3114-010-054). Generally, the project site is bound by West Avenue F 8 to the north, 25<sup>th</sup> Street West to the east, and 30<sup>th</sup> Street West to the west; refer to Exhibit 2, *Site Vicinity*. Regional access to the site is available via State Route 14 (SR-14) at the Avenue G exit, approximately 0.4-mile east of the project site. Local access to the site is provided via Avenue G and 30<sup>th</sup> Street West.

### EXISTING SITE CONDITIONS

The approximately 26.8-acre site comprises two separate parcels: one located near the intersection of West Avenue F-8 and 30<sup>th</sup> Street West (northern portion, APN 3114-010-041), and another along 25<sup>th</sup> Street West (eastern portion, APN 3114-010-054). The site is currently vacant, with no existing structures or paved roads present. To the west and south of the project site is a planned industrial development.

The project site is designated "Light Industry (LI)" with a "Specific Plan" overlay based on the *General Plan Land Use Map* in the *Lancaster General Plan 2030* (General Plan).<sup>1</sup> The project site is zoned "SP 95-02 Fox Field Industrial Corridor Specific Plan" based on the *City of Lancaster Zoning Map*.<sup>2</sup> Based on the *Fox Field Industrial Corridor Specific Plan*, the project site is located within focused area "Fox Field East" and designated "Light Industrial", "Manufacturing/Distribution (MFG)", and "Park".<sup>3</sup>

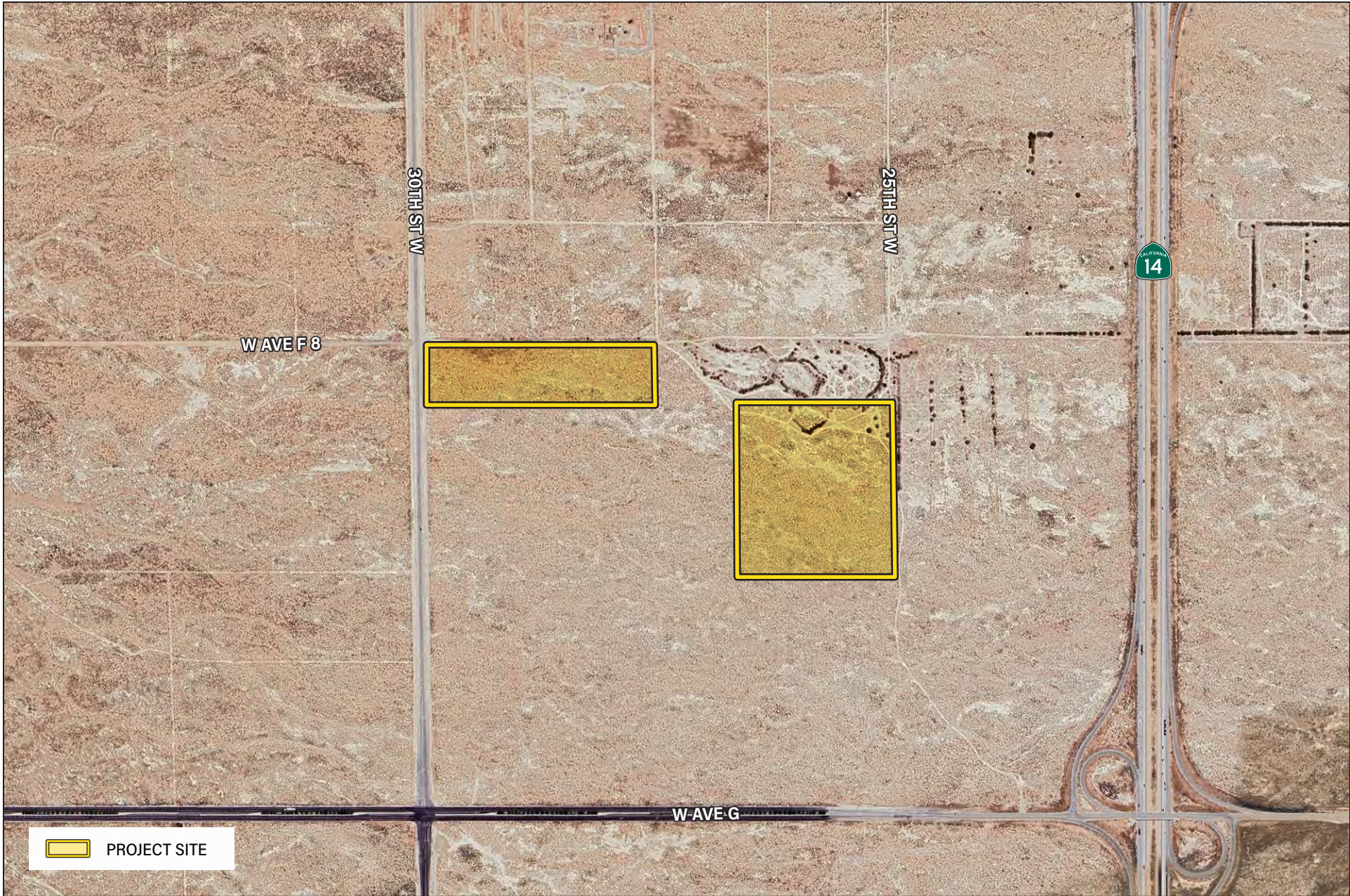
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<sup>1</sup> City of Lancaster, *Lancaster General Plan 2030, General Plan Land Use Map*, adopted July 14, 2009, updated September 1, 2015.

<sup>2</sup> City of Lancaster, *City of Lancaster Zoning Map*, adopted July 13, 2010, revised October 26, 2022.

<sup>3</sup> City of Lancaster, *Fox Field Industrial Corridor Specific Plan*, May 31, 1996.





Source: Google Earth Pro, December 2024

The project site is surrounded by vacant undeveloped land and the planned industrial development. Prominent land uses in the project vicinity include several single-family residences, temporary storage facilities, and associated unpaved roadways to the north; transportation use (SR-14) to the east; industrial/warehousing uses to the south; and the General William J. Fox Airfield and Apollo Community Regional Park west of the site.

## **PROJECT DESCRIPTION**

The project considers two development options for the vacant site: Warehouse Option and Trailer Parking Lot Option. The Warehouse Option would include an approximately 510,000-square-foot warehouse building in the eastern portion of the site and an approximately 8.55-acre detention basin in the western portion. The Trailer Parking Lot Option would include a 16.8-acre detention basin in the northern portion and a trailer parking lot in the eastern portion of the site serving the planned industrial development to the west of the project site. The Trailer Parking Lot Option would include approximately 866 trailer parking spaces.

Under the Warehouse Option, construction of the proposed building and detention basin would occur over 14 months, beginning in January 2026 and concluding by March 2027. Construction activities would primarily include grading, building construction, paving, and architectural coating. For proposed earthwork, approximately 442,000 cubic yards of cut and 446,000 cubic yards of fill are expected, resulting in 4,000 cubic yards of materials import during the grading phase.

Under the Trailer Parking Lot Option, construction of the proposed parking lot and detention basin would occur over three months, beginning in January 2026 and concluding by April 2026. Construction activities would primarily include grading, paving, and architectural coating for the parking lot. Construction under this development option does not expect any import or export of earthwork materials.

Construction activities for both development options would occur from 7:00 a.m. to 8:00 p.m., Monday through Saturday.

## EXISTING SETTING

### Electricity

Lancaster Energy (LE) provides electrical services to the City as a Community Choice Aggregation (CCA) program, while Southern California Edison (SCE) delivers the electricity, provides billing, customer service and power line maintenance and repair. Over the past 15 years, electricity generation in California has undergone a transition. Historically, California has relied heavily on oil- and gas-fired plants to generate electricity. Spurred by regulatory measures and tax incentives, California's electrical system has become more reliant on renewable energy sources, including cogeneration, wind energy, solar energy, geothermal energy, biomass conversion, transformation plants, and small hydroelectric plants. Unlike petroleum production, electricity generation is usually not tied to the location of the fuel source and can be delivered great distances via the electrical grid. The generating capacity of a unit of electricity is expressed in megawatts (MW). Net generation refers to the gross amount of energy produced by a unit, minus the amount of energy the unit consumes. Generation is typically measured in kilowatt-hours (kWh), megawatt-hours (MWh), or gigawatt-hours (GWh).

Electricity services are available to locations where land uses could be developed. The City's ongoing development review process includes an opportunity for publicly- and privately-owned utility providers to review and comment 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. The ability of utility providers to provide services concurrently for each project is evaluated during the development review process. Utility providers are bound by contract to update energy systems to meet any additional demand.

### Natural Gas

Southern California Gas (SoCalGas) provides natural gas service to the City. SoCalGas provides natural gas to approximately 21.8 million customers across a 24,000-square-mile territory, including parts of the following counties: Riverside, Orange, San Bernardino, Los Angeles, Ventura, Santa Barbara, Kern, Inyo, Tulare, and Mono. Natural gas generation is expressed in therms, where one therm is equivalent to 100,000 British Thermal Unit (BTU).

### Energy Usage

Energy usage is typically quantified using the British Thermal Unit (BTU). Total energy usage in California was 6,882 trillion BTU in 2022, which equates to an approximately 176.5 million BTU per capita.<sup>4</sup> Of California's total energy usage, the breakdown by End-Use sector is 42.6 percent transportation, 22.5 percent industrial, 17.4 percent commercial, and 17.6 percent residential.<sup>5</sup> Electricity 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. In 2023, taxable gasoline sales (including aviation gasoline) in California accounted for 13,564,578,025 gallons of gasoline.<sup>6</sup>

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<sup>4</sup> U.S. Energy Information Administration, *California State Energy Profile, last Updated May 16, 2024*, <https://www.eia.gov/state/print.php?sid=CA>, accessed October 31, 2024.

<sup>5</sup> Ibid.

<sup>6</sup> California Department of Tax and Fee Administration, *Net Taxable Gasoline Gallons*, available at: <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm>, accessed October 31, 2024.

The electricity consumption attributable to County of Los Angeles (County) from 2013 to 2022 is shown in Table 1, *Electricity Consumption in Los Angeles County 2013-2022*. The year 2022 is the most recent year for which data is available.

**Table 1**  
**Electricity Consumption in Los Angeles County 2013-2022**

Year	Electricity Consumption (in millions of kilowatt hours)
2013	68,280
2014	69,860
2015	69,461
2016	69,365
2017	68,591
2018	67,834
2019	66,742
2020	65,566
2021	66,003
2022	68,485

Source: California Energy Commission, *Electricity Consumption by County*, <http://www.ecdms.energy.ca.gov/>, accessed October 31, 2024.

The natural gas consumption attributable to the County from 2013 to 2022 is shown in Table 2, *Natural Gas Consumption in Los Angeles County 2013-2022*. The year 2022 is the most recent year for which data is available.

**Table 2**  
**Natural Gas Consumption in Los Angeles County 2013-2022**

Year	Natural Gas Consumption (in millions of Therms)
2013	3,065.43
2014	2,793.87
2015	2,761.05
2016	2,877.86
2017	2,956.04
2018	2,921.51
2019	3,048.32
2020	2,936.69
2021	2,882.77
2022	2,820.29

Source: California Energy Commission, *Natural Gas Consumption by County*, <http://www.ecdms.energy.ca.gov/>, accessed October 31, 2024.

Automotive fuel consumption in Los Angeles County from 2013 to 2024 is shown in Table 3, *Automotive Fuel Consumption in Los Angeles County 2013-2024* (projections for the year 2024 are also shown).

**Table 3**  
**Automotive Fuel Consumption in Los Angeles County 2013-2024**

Year	On-Road Automotive Fuel Consumption (gallons)	Heavy-Duty Vehicle/Diesel Fuel Consumption (Construction Equipment) (gallons)
2013	4,455,240,524	30,386,041
2014	4,494,942,120	31,412,517
2015	4,616,506,876	32,380,286
2016	4,781,612,229	33,324,823
2017	4,772,073,148	34,221,807
2018	4,708,284,033	35,091,687
2019	4,632,404,345	35,918,628
2020	4,142,328,606	36,717,728
2021	4,618,636,990	30,373,898
2022	4,585,194,048	30,359,249
2023	4,530,411,359	30,353,204
2024 (projected)	4,448,480,145	30,352,640

Source: California Air Resources Board, EMFAC2021 v1.0.2., <https://arb.ca.gov/emfac/emissions-inventory/>, accessed October 31, 2024.

**REGULATORY SETTING**

**State**

***Senate Bill 100***

Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; 60 percent by December 31, 2030; and 100 percent by December 31, 2045. SB 100 requires the California Public Utilities Commission (CPUC), California Energy Commission (CEC), State board, and all other State agencies incorporate this policy into all relevant planning. In addition, SB 100 requires the CPUC, CEC, and State board to utilize programs authorized under existing statutes to achieve such renewable energy goals.

***California Building Energy Efficiency Standards (Title 24)***

The 2022 California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as “Title 24,” became effective on January 1, 2023. In general, Title 24 requires 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 2022 Title 24 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Title 24 standards.

### ***California Green Building Standards (CALGreen)***

The 2022 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as CALGreen, went into effect on January 1, 2023. The California Green Building Standards (CALGreen) is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed the green building standards in an effort to meet the goals of California's landmark initiative Assembly Bill (AB) 32, which established a comprehensive program of cost-effective reductions of greenhouse gases (GHGs) to 1990 levels by 2020. CALGreen was developed to (1) reduce GHGs from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. CALGreen requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.<sup>7</sup>

### ***California Public Utilities Commission Energy Efficiency Strategic Plan***

The CPUC prepared an *Energy Efficiency Strategic Plan* (Strategic Plan) in September 2008 with the goal of promoting energy efficiency and GHG reductions. In January 2011, a lighting chapter was adopted and added to the Strategic Plan. The Strategic Plan is California's single roadmap to achieving maximum energy savings in the State from 2009 to 2020 and beyond. The Strategic Plan contains the practical strategies and actions to attain significant Statewide energy savings, because of a year-long collaboration by energy experts, utilities, businesses, consumer groups, and governmental organizations in California, throughout the West, nationally and internationally. The plan includes the following four strategies:

1. All new residential construction in California will be zero net energy by 2020;
2. All new commercial construction in California will be zero net energy by 2030;
3. HVAC will be transformed to ensure that its energy performance is optimal for California's climate; and
4. All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

### ***California Public Utilities Commission Community Choice Aggregation***

Community Choice Aggregation (CCA) was enacted by Assembly Bill 117 (AB 117) in 2002. Under AB 117, "all electrical corporations must cooperate fully with community choice aggregators investigating, pursuing, or implementing community choice aggregator programs."

The investor-owned utility (IOU) continues to provide transmission and distribution, metering, billing, collection, and customer service to retail customers participating in CCAs. AB 117 also provided guidance on how communities may create a CCA program. AB 117 requires that the city or county pass an ordinance to implement a CCA program within its jurisdiction. Two or more cities or counties may participate in a CCA program as a group through a Joint Powers agency. Potential customers within a community's service

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<sup>7</sup> U.S. Green Building Council, *Green Building Costs and Savings*, <https://www.usgbc.org/articles/green-building-costs-and-savings>, accessed October 31, 2024.

area are automatically enrolled in a CCA program unless they opt out, provided that they are notified in writing of their right to opt out. In the event that a customer opts out of CCA service, the IOU will continue to serve them as bundled customers.

CCAs are responsible to meet regulatory compliance requirements established in Resource Adequacy (RA), Integrated Resource Planning (IRP), and Renewable Portfolio Standards (RPS). CCAs are responsible for tracking and compliance with CPUC regulations.

### ***California Energy Commission Integrated Energy Policy Report***

In 2002, the California State legislature adopted Senate Bill (SB) 1389, which requires the CEC to develop an Integrated Energy Policy Report (IEPR) every two years. SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety. As part of the IEPR process, the CEC develops and adopts 10-year forecasts of end-user electricity demand every two years, in odd-numbered years, and provides an update to the IEPR forecast in even-numbered years.

The CEC adopted the 2023 Integrated Energy Policy Report (2023 IEPR) on February 14, 2024. The 2023 IEPR provides the results of the CEC's assessments of a variety of energy issues facing California, many of which will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs. The 2023 IEPR discusses speeding connection of clean resources to the electricity grid, the potential use of clean and renewable hydrogen, and the California Energy Demand Forecast to 2040.

### ***Executive Order N-79-20***

Executive Order N-79-20, issued September 23, 2020, directs the State to require all new cars and passenger trucks sold in the State to be zero-emission vehicles by 2035. Executive Order N-79-20 further states that all medium- and heavy-duty vehicles sold in the State will be zero-emission by 2045.

## **Local**

### ***City of Lancaster Climate Action Plan***

The City of Lancaster adopted the *City of Lancaster Climate Action Plan (CAP)* in March 2017. The CAP documents the City's GHG emissions inventories and the progress the City has made through its alternative energy and sustainability programs. The CAP also identifies projects that would enhance the City's ability to further reduce GHG emissions. A focused working group made up of City staff worked to develop projects which would enhance the community, improve government operations, and ultimately reduce GHG emissions. A total of 61 projects across eight sectors were identified: traffic, energy, municipal operations, water, waste, built environment, community, and land use. Based on project descriptions, action items and indicators, potential reductions were quantified for each of the measures for each of the forecast years.

The CAP including the following measures that may be applicable to the project:

## Energy Measures

- 4.2.2c: Lancaster Choice Energy Programs. Develop energy efficiency programs that will provide opportunities for residential and commercial buildings to become more energy efficient, reduce usage, and save money.

## Land Use Measures

- 4.8.1c: Commercial Better Built Building. Develop a better built building program to incentivize the construction or rehabilitation of buildings to be “green”.

## ***Lancaster General Plan 2030***

The *Lancaster General Plan 2030* (General Plan) was adopted on July 14, 2009, and the horizon year for the adopted General Plan is 2030. The General Plan contains the vision, goals, objectives, policies, and specific actions for the City. The General Plan includes the following elements or plans: natural environment, public health and safety, active living, physical mobility, municipal services and facilities, economic development and vitality and physical development. The following objective and policies related to energy resources in the Plan for the Natural Environment Chapter of the General Plan would be applicable to the project:

## Plan for the Natural Environment

- Objective 3.3: Preserve acceptable air quality by striving to attain and maintain national, State and local air quality standards.
- Policy 3.3.1: Minimize the amount of vehicular miles traveled.
- Policy 3.3.2: Facilitate the development and use of public transportation and travel modes such as bicycle riding and walking.
- Objective 3.6: Encourage efficient use of energy resources through the promotion of efficient land use patterns and the incorporation of energy conservation practices into new and existing development, and appropriate use of alternative energy.
- Policy 3.6.1: Reduce energy consumption by establishing land use patterns which would decrease automobile travel and increase the use of energy efficient modes of transportation.
- Policy 3.6.2: Encourage innovative building, site design, and orientation techniques which minimize energy use.
- Policy 3.6.3: Encourage the incorporation of energy conservation measures in existing and new structures.
- Policy 3.6.4: Support State and Federal legislation that would eliminate wasteful energy consumption in an appropriate manner.
- Policy 3.6.6: Consider and promote the use of alternative energy such as wind energy and solar energy.

## **Lancaster Energy**

Lancaster Energy (LE) is the City's utility provider, originally called Lancaster Choice Energy. With a lofty goal of becoming the nation's first net-zero city, the City of Lancaster created Lancaster Energy, an all-new, locally run, not-for-profit Community Choice Aggregation (CCA) program. Lancaster Energy offers an opportunity for those who work and live in the City to choose their electric provider and the source of their electricity. The utility provider gets its electricity from suppliers that have gone through a qualification and selection process. These suppliers, much like Southern California Edison (SCE), get their electricity from a variety of generation sources. At a minimum, 35 percent of the Clear Choice option comes from renewable sources such as wind. The Smart Choice option provides electricity from 100 percent renewable sources. To verify the amount of renewable energy procured, Lancaster Energy is required to report to the CPUC and CEC on an annual basis like other California utilities, such as SCE, for verification purposes. This program is available exclusively to those who work and live within Lancaster unless they opt out. Lancaster Energy was formed in 2014 and launched on May 1<sup>st</sup>, 2015 for all municipal accounts. Following this initial phase, Lancaster Energy rolled out to all energy customers citywide on October 1st, 2015. SCE provides the billing and distribution services for Lancaster Energy.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT THRESHOLDS**

In accordance with the *California Environmental Quality Act Guidelines* (CEQA Guidelines), project impacts are evaluated to determine whether significant adverse environmental impacts would occur. This analysis will focus on the project's potential impacts and provide mitigation measures, if required, to reduce or avoid any potentially significant impacts that are identified. According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to energy if it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation (refer to Impact Statement EN-1); and/or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency (refer to Impact Statement EN-2).

## **Appendix F of the CEQA Guidelines**

Appendix F of the CEQA Guidelines is an advisory document that assists environmental document preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis in Impact Statement EN-1 relies upon Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- **Criterion 1:** The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- **Criterion 2:** The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- **Criterion 3:** The effects of the project on peak and base period demands for electricity and other forms of energy.
- **Criterion 4:** The degree to which the project complies with existing energy standards.

- **Criterion 5:** The effects of the project on energy resources.
- **Criterion 6:** The project’s projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the project’s energy usage is presented and addresses **Criterion 1**. The discussion on construction-related energy use focuses on **Criteria 2, 4, and 5**. The discussion on operational energy use is divided into transportation energy demand and building energy demand. The transportation energy demand analysis discusses **Criteria 2, 4, and 6**, and the building energy demand analysis discusses **Criteria 2, 3, 4, and 5**.

## IMPACT ANALYSIS

### EN-1 **WOULD THE PROJECT RESULT IN POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES, DURING PROJECT CONSTRUCTION OR OPERATION?**

**Level of Significance:** Less Than Significant Impact.

The impact 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 project operations as well as the fuel necessary for project construction. The California Emissions Estimator Model (CalEEMod) version 2022.1 was utilized to calculate the project’s construction and operational energy consumption. The project’s estimated electricity and natural gas consumption is based primarily on CalEEMod’s default settings for Los Angeles County, and consumption factors provided by Lancaster Energy, the electricity provider for the project site. The amount of operational fuel use was estimated using the California Air Resources Board (CARB) Emissions Factor 2021 (EMFAC2021) computer program, which provides projections for typical daily fuel (i.e., diesel and gasoline) usage in the County, and the project’s trip generation. The estimated construction fuel consumption is based on the project’s construction equipment list timing/phasing, and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips. The results of the CalEEMod modeling and EMFAC2021 modeling for construction and operation fuel estimates are included in [Appendix A, Energy Data](#).

### Warehouse Option

The Warehouse Option would be constructed in a single phase in an approximately 14-month construction schedule and is anticipated to begin January 2026 and conclude by March 2027. The Warehouse Option’s estimated energy consumption is summarized in [Table 4, Project and Countywide Energy Consumption – Warehouse Option](#). As shown in [Table 4](#), the Warehouse Option’s energy usage would constitute an approximate 0.0035 percent increase over County’s typical annual electricity and natural gas consumption. The Warehouse Option’s off-road construction equipment diesel fuel consumption, on-road construction fuel consumption, and operational vehicle fuel consumption would increase Los Angeles County’s consumption by 0.1057 percent, 0.0057 percent, and 0.0109 percent, respectively (**Criterion 1**).

**Table 4  
Project and Countywide Energy Consumption – Warehouse Option**

Energy Type	Project Annual Energy Consumption <sup>1</sup>	Los Angeles County Annual Energy Consumption <sup>2</sup>	Percentage Increase Countywide
Electricity Consumption <sup>3</sup>	2,387 MWh	68,484,956 MWh	0.0035%
Natural Gas Consumption <sup>3</sup>	98,308 Therms	2,820,285,935 Therms	0.0035%
<b>Fuel Consumption</b>			
Construction Off-Road Fuel Consumption	31,978 gallons	30,265,281 gallons	0.1057%
Construction On-Road Fuel Consumption	243,393 gallons	4,259,958,457 gallons	0.0057%
Operational Automotive Fuel Consumption	456,461 gallons	4,180,034,714 gallons	0.0109%
Notes:			
1. Project electricity consumptions as modeled in California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model. Project fuel consumption calculated based on CalEEMod results. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB EMFAC2021.			
2. The project's increase in electricity consumption is compared to the total consumption in Los Angeles County in 2022. The project increases in construction off-road and on-road fuel consumption are compared with the projected Los Angeles Countywide off-road fuel consumption and Los Angeles Countywide on-road fuel consumption in 2026, respectively. The project increases in operational automotive fuel consumption is compared with the projected Countywide on-road fuel consumption in 2027.			
3. Los Angeles County electricity consumption data source: California Energy Commission, <i>Electricity Consumption by County</i> , <a href="http://www.ecdms.energy.ca.gov/elecbycounty.aspx">http://www.ecdms.energy.ca.gov/elecbycounty.aspx</a> , accessed October 31, 2024. Los Angeles County natural gas consumption data source: California Energy Commission, <i>Natural Gas Consumption by County</i> , <a href="http://www.ecdms.energy.ca.gov/elecbycounty.aspx">http://www.ecdms.energy.ca.gov/elecbycounty.aspx</a> , accessed October 31, 2024.			
Source: Refer to Appendix A, <i>Energy Data</i> for CalEEMod outputs and assumptions used in this analysis.			

**Construction Energy Consumption**

During construction, the Warehouse Option would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels for construction vehicles and other energy-consuming equipment would be used during grading, building construction, paving, and architectural coating. As indicated in Table 4, the Warehouse Option's off-road fuel consumption and on-road fuel consumption from construction would be approximately 31,978 gallons and 243,393 gallons, respectively. Consequently, the Warehouse Option's off-road construction equipment diesel fuel consumption and on-road construction fuel consumption would increase Los Angeles County's consumption by 0.1057 percent and 0.0057 percent, respectively. As such, construction of Warehouse Option would have a minimal effect on the local and regional energy supplies and would not require additional capacity (**Criterion 2**).

Some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off (i.e., Title 13, California Code of Regulations Section 2485). Project construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency (EPA) and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. In addition, because the cost of fuel and transportation is a significant aspect of construction budgets, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**Criterion 4**).

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than nonrecycled materials.<sup>8</sup> The integration of green building materials can help reduce environmental impacts associated with the extraction, transport, processing, fabrication, installation, reuse, recycling, and disposal of these building industry source material. The project-related incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. Further, it is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment, or building materials, or methods that would be less energy efficient than at comparable construction sites in the region or State. Therefore, fuel energy and construction materials consumed during construction would not represent a significant demand on energy resources (**Criterion 5**) and a less than significant impact would occur in this regard.

### ***Operational Energy Consumption***

#### Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. According to the *Lancaster Fox Field Commerce Center East Project Local Traffic Analysis Scoping Assessment* (Traffic Analysis Scoping Assessment), prepared by Fehr & Peers, dated October 25, 2024, the proposed warehouse would generate approximately 714 total daily trips. The operational analysis utilizes the total daily trips, which does not account for pass-by trips, to provide a worst-case scenario. In addition, since the Warehouse Option would include warehouse uses, it is expected to attract heavy-duty vehicle traffic, mainly in the form of large multi-axle trucks. The fleet mix for the proposed warehouse is based on the CalEEMod default and the Traffic Analysis Scoping Assessment. As indicated in Table 4, operational fuel consumption is estimated to be approximately 456,461 gallons per year, which would increase Countywide automotive fuel consumption by 0.0109 percent. As such, the Warehouse Option does not propose any unusual features that would result in excessive long-term operational fuel consumption (**Criterion 2**).

The key drivers of transportation-related fuel consumption for the Warehouse Option are heavy-duty trucks traveling to and from the project site. Additionally, passenger vehicle and light- and medium-duty trucks trips also account for a portion of the transportation-related fuel consumption. At the time of this analysis, it has not been determined if the ultimate tenant would operate its own fleet and most warehouse operators have no control over the trucks entering and exiting their facilities. Consequently, it is infeasible to require trucks with particular emission profiles (e.g., zero-emission [ZE], near-zero-emission [NZE], or 2010 or beyond model year trucks) to visit the project site.

The Warehouse Option would also consume fuel in the form of employees driving to and from the project site during operation. However, employee commuting factors are outside the scope of the design. Notwithstanding, the Warehouse Option would include approximately 47 electric vehicle (EV) charging

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<sup>8</sup> California Department of Resources Recycling and Recovery, *Construction and Demolition Debris Recycling*, <https://calrecycle.ca.gov/condemo/>, accessed November 3, 2024.

stations, and 16 bicycle parking spaces, all of which would comply with CALGreen standards. These requirements would encourage and support alternative modes of travel and thus reduce petroleum fuel consumption (**Criterion 4** and **Criterion 6**). Therefore, fuel consumption associated with vehicle trips generated by the Warehouse Option would not be considered inefficient, wasteful, or unnecessary compared to other similar developments in the region. A less than significant impact would occur in this regard.

### Building Energy Demand

The CEC developed 2024 to 2040 forecasts for energy consumption and peak demand in support of the 2023 IEPR for each of the major electricity and natural gas planning areas and the State based on the economic and demographic growth projections. CEC forecasted baseline electricity consumption to grow at a rate of about 1.7 percent annually through 2040.<sup>9</sup> Natural gas consumption will grow at a rate of about 0.2 percent annually through 2035.<sup>10</sup> As shown in Table 3, operational electricity and natural gas consumption of the Warehouse Option would represent approximately 0.0035 percent increase over the current Countywide electricity and natural gas consumption, which would be significantly below CEC's forecasts. Therefore, the Warehouse Option would be consistent with the CEC's energy consumption forecasts and would not require additional energy capacity or supplies (**Criterion 2**). Additionally, the Warehouse Option would consume energy during the same time periods as other commercial and light industrial developments and would consume energy evenly throughout the day. As a result, the Warehouse Option would not result in unique or more intensive peak or base period electricity demand (**Criterion 3**).

The building associated with the Warehouse Option would need to comply with the most current Title 24 standards. These standards provide minimum efficiency requirements for various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Specifically, the proposed building would install high-efficiency lighting, energy-efficient appliances, utilize water-efficient irrigation, and incorporate drought-tolerant landscaping. However, these features were not included in CalEEMod as a conservative analysis. Implementation of the most current Title 24 standards significantly reduces energy usage (**Criterion 4**).

The electricity provider for the City, Lancaster Energy, is subject to California's Renewables Portfolio Standard (RPS) reflected in SB 100. The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 44 percent by the end of 2024, 52 percent by the end of 2027, 60 percent of total procurement by 2030, and 100 percent of total procurement by 2045. 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 proposed warehouse would generate on-site renewable energy through solar panels. The increase in reliance of such energy resources further ensures that new development projects will not result in the waste of the finite energy resources (**Criterion 5**).

The Warehouse Option would not cause wasteful, inefficient, and unnecessary consumption of building energy during operation, or preempt future energy development or future energy conservation. A less than significant impact would occur.

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<sup>9</sup> California Energy Commission, *2023 Integrated Energy Policy Report*, page 130, July 14, 2024.

<sup>10</sup> Based on the 2023 Integrated Energy Policy Report, the gas forecast is updated every two years, in odd years. As such, the natural gas consumption shown here is based on the California Energy Commission, Final 2022 Integrated Energy Policy Report Update, page 140, May 10, 2023.

**Trailer Parking Lot Option**

The Trailer Parking Lot Option would be constructed in a single phase in an approximately three-month construction schedule and is anticipated to begin January 2026 and conclude by April 2026. The Trailer Parking Lot Option’s estimated energy consumption is summarized in Table 5, Project and Countywide Energy Consumption – Trailer Parking Lot Option.

**Table 5  
Project and Countywide Energy Consumption – Trailer Parking Lot Option**

Energy Type	Project Annual Energy Consumption <sup>1</sup>	Los Angeles County Annual Energy Consumption <sup>2</sup>	Percentage Increase Countywide
Electricity Consumption <sup>3</sup>	1,073 MWh	68,484,956 MWh	0.0016%
<b>Fuel Consumption</b>			
Construction Off-Road Fuel Consumption	10,721 gallons	30,265,281 gallons	0.0354%
Construction On-Road Fuel Consumption	1,761 gallons	4,259,958,457 gallons	<0.0001%
Notes:			
1. Project electricity consumptions as modeled in California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model. Project fuel consumption calculated based on CalEEMod results. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB EMFAC2021.			
2. The project’s increase in electricity consumption is compared to the total consumption in Los Angeles County in 2022. The project increases in construction off-road and on-road fuel consumption are compared with the projected Los Angeles Countywide off-road fuel consumption and Los Angeles Countywide on-road fuel consumption in 2026, respectively.			
3. Los Angeles County electricity consumption data source: California Energy Commission, <i>Electricity Consumption by County</i> , <a href="http://www.ecdms.energy.ca.gov/elecbycounty.aspx">http://www.ecdms.energy.ca.gov/elecbycounty.aspx</a> , accessed October 31, 2024.			
Source: Refer to Appendix A, <i>Energy Data</i> for CalEEMod outputs and assumptions used in this analysis.			

It is important to note that as a trailer parking lot serving the planned industrial development to the west of the project site, the Trailer Parking Lot Option would not propose any buildings, generate daily trips, or consume natural gas during operation. As such, there is no impacts regarding operational fuel consumption and building natural gas demand (**Criterion 2, 3, 4, and 6**). However, as a parking lot, electricity would be used for lighting. As shown in Table 5, the Trailer Parking Lot Option’s energy usage would constitute an approximate 0.0016 percent increase over County’s typical annual electricity consumption. Another major source of energy consumption for this option is construction fuel consumption. The Trailer Parking Lot Option’s off-road construction equipment diesel fuel consumption, and on-road construction fuel consumption would increase Los Angeles County’s consumption by 0.0354 percent and less than 0.0001 percent, respectively, refer to Table 5. The energy consumption would be nominal (**Criterion 1, and 5**). Therefore, the Trailer Parking lot Option would not cause wasteful, inefficient, and unnecessary consumption of building energy during operation, or preempt future energy development or future energy conservation. A less than significant impact would occur.

**Mitigation Measures:** No mitigation is required.

**EN-2      WOULD THE PROJECT CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY?**

**Level of Significance:** Less Than Significant Impact.

This analysis would be focused on project consistency with applicable objectives, policies, and measures

within the City’s General Plan and CAP.

## Warehouse Option

### Consistency With the City’s General Plan

The Warehouse Option would comply with all applicable goals and policies identified in the City’s General Plan, as listed in Table 6, Consistency with the Lancaster General Plan 2030 – Warehouse Option.

**Table 6  
Consistency with the Lancaster General Plan 2030 – Warehouse Option**

General Objectives and Policies	Project Consistency
<b>Objective 3.3: Preserve acceptable air quality by striving to attain and maintain national, State and local air quality standards.</b>	
<u>Policy 3.3.1:</u> Minimize the amount of vehicular miles traveled.	<b>Consistent.</b> The Warehouse Option would provide bicycle parking spaces and EV charging stations, which would promote alternative mode of transportation to reduce VMT.
<u>Policy 3.3.2:</u> Facilitate the development and use of public transportation and travel modes such as bicycle riding and walking.	<b>Consistent.</b> The Warehouse Option would provide bicycle parking.
<b>Objective 3.6: Encourage efficient use of energy resources through the promotion of efficient land use patterns and the incorporation of energy conservation practices into new and existing development, and appropriate use of alternative energy.</b>	
<u>Policy 3.6.1:</u> Reduce energy consumption by establishing land use patterns which would decrease automobile travel and increase the use of energy efficient modes of transportation.	<b>Consistent.</b> The Warehouse Option would provide bicycle parking spaces and EV charging stations, which would promote alternative mode of transportation to reduce VMT.
<u>Policy 3.6.2:</u> Encourage innovative building, site design, and orientation techniques which minimize energy use.	<b>Consistent.</b> The proposed building in the Warehouse Option would be required to comply with the most current Title 24, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Specifically, the proposed warehouse would install high-efficient lighting and energy-efficient appliances. Further, the option would also comply with CalGreen Code which promote sustainability through enhanced design and construction of buildings.
<u>Policy 3.6.3:</u> Encourage the incorporation of energy conservation measures in existing and new structures.	<b>Consistent.</b> The Warehouse Option would be required to comply with CalGreen Code which promote sustainability through enhanced design and construction of buildings.
<u>Policy 3.6.4:</u> Support State and Federal legislation that would eliminate wasteful energy consumption in an appropriate manner.	<b>Consistent.</b> The proposed building in the Warehouse Option would be required to comply with the most current Title 24 and CalGreen Code. Specifically, the proposed warehouse would install high-efficient lighting and energy-efficient appliances.
<u>Policy 3.6.6:</u> Consider and promote the use of alternative energy such as wind energy and solar energy.	<b>Consistent.</b> The Warehouse Option would install generate renewable energy onsite through solar panels on the roof.
Source: City of Lancaster, <i>Lancaster General Plan 2030</i> , July 14, 2009.	

### Consistency With the City’s CAP

The Warehouse Option’s consistency with the applicable CAP measures is analyzed in Table 7, Consistency with the Climate Action Plan – Warehouse Option. As depicted in Table 7, the Warehouse Option would be consistent with the City’s CAP.

**Table 7**  
**Consistency with the Climate Action Plan – Warehouse Option**

Measure Code	Measure	Project Consistency Analysis
<b>Energy Measure</b>		
4.2.2c	<u>Lancaster Choice Energy Programs</u> . Develop energy efficiency programs that will provide opportunities for residential and commercial buildings to become more energy efficient, reduce usage, and save money.	<b>Consistent.</b> The proposed building in the Warehouse Option would be required to comply with the most current Title 24, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Specifically, the Warehouse Option would install high-efficient lighting and energy-efficient appliances.
<b>Land Use Measures</b>		
4.8.1c	<u>Commercial Better Built Building</u> . Develop a better built building program to incentivize the construction or rehabilitation of buildings to be “green”.	<b>Consistent.</b> The proposed building under the Warehouse Option would be required to comply with the most current Title 24, which provides minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Specifically, the project would install energy-efficient appliances. Emphasizing green building practices, the Warehouse Option aligns with this measure that promotes sustainability and reduce environmental impact.
Source: City of Lancaster, <i>City of Lancaster Climate Action Plan</i> , March 2017.		

**Conclusion**

As discussed above, the operational energy consumption of the Warehouse Option would represent approximately 0.0035 percent and 0.0035 percent increase in electricity and natural gas consumption over the current Countywide usage, which would be significantly below CEC’s forecasts in the 2023 IEPR; refer to [Table 4](#). Therefore, the Warehouse Option would be consistent with the CEC’s 2023 IEPR. Further, the building proposed under the Warehouse Option would be required to comply with the most current Title 24, which provides minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. the Warehouse Option would also comply with the CALGreen standards, which require that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting, HVAC, and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicle charging infrastructure. Specifically, the Warehouse Option would install energy-efficient appliances. Implementation of the most current Title 24 standards significantly reduces energy usage. Additionally, per the RPS, the Warehouse Option would utilize electricity that would achieve 60 percent of total procurement by 2030, and 100 percent renewable energy by 2045. The proposed building would generate renewable energy on-site through solar panels installed on the roof. As such, the Warehouse Option would comply with State energy plans, including the 2023 IEPR, the most current Title 24, as well as CalGreen standards.

In conclusion, the Warehouse Option would comply with all applicable City objectives, policies, and measures within the City’s General Plan and CAP for reducing energy usage and implementing energy efficiency. Therefore, the Warehouse Option would not conflict with or obstruct a State or local plan for

renewable energy or energy efficiency, and its impacts would be less than significant.

### **Trailer Parking Lot Option**

As discussed, the operational energy consumption of the Trailer Parking Lot Option would represent approximately a 0.0016 percent increase in electricity consumption over the current Countywide usage, significantly below the CEC's forecasts in the 2023 IEPR (refer to [Table 5](#)). Therefore, the Trailer Parking Lot Option would be consistent with the CEC's 2023 IEPR.

Furthermore, the Trailer Parking Lot Option does not propose buildings and would not generate additional vehicle trips. Therefore, the Trailer Parking Lot Option would not conflict with any applicable City objectives, policies, or measures within the City's General Plan and CAP aimed at reducing energy usage and implementing energy efficiency. Therefore, the Trailer Parking Lot Option would not conflict with or obstruct any State or local plans for renewable energy or energy efficiency, resulting in less than significant impacts.

**Mitigation Measures:** No mitigation is required.

## REFERENCES

### Documents

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### **Programs**

1. Google Earth, 2024.
2. California Air Pollution Control Officers Association, *California Emissions Estimator Model* (CalEEMod), version 2022.1.

**Appendix A**  
Energy Data