AIR QUALITY & GREENHOUSE GAS TECHNICAL STUDY

FOR THE

PACIFIC BMW DEALERSHIP EXPANSION

901 – 919 South Brand Boulevard
(Also 112 – 118 West Garfield Avenue & 119 West Acacia Avenue)

PROJECT APPLICANT:

Khan Consulting, Inc.
c/o Rodney V. Khan
2233 Honolulu Avenue #209
Montrose, CA 91020

PREPARED BY:

Westlake Village Office
920 Hampshire Road, Suite A5
Westlake Village, CA 91361

Meridian Consultants

Los Angeles Office
706 S. Hill Street, 11th Floor
Los Angeles, CA 90014

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EXECUTIVE SUMMARY

This Air Quality and Greenhouse Gas Study (AQ/GHG Report) provides the City of Glendale (City) with an expanded evaluation of potential air quality and greenhouse gas impacts associated with the Pacific BMW Dealership Expansion Project from the analysis provided in Mitigated Negative Declaration (MND) prepared in August 2021.

The Applicant is proposing to construct a new 5-story, 171,140 square-foot above-ground parking structure with rooftop parking on an existing 81,148 square-foot Project site located in the CA-Commercial Auto Zone.

In accordance with requirements under the California Environmental Quality Act (CEQA), this AQ/GHG Report provides an estimate of emissions for the Project and the potential impacts from associated construction and operation activities. The report includes the categories and types of emission sources resulting from the Project, the calculation procedures used in the analysis, and any assumptions or limitations.

This report also summarizes the potential for the Project to conflict with an applicable air quality plan, violate an air quality standard or threshold, result in a cumulatively net increase of criteria pollutant emissions, expose sensitive receptors to substantial pollutant concentrations, or create objectionable odors affecting a substantial number of people.

The findings of the analyses are summarized at a high-level as follows, with additional discussion in the body of the analysis:

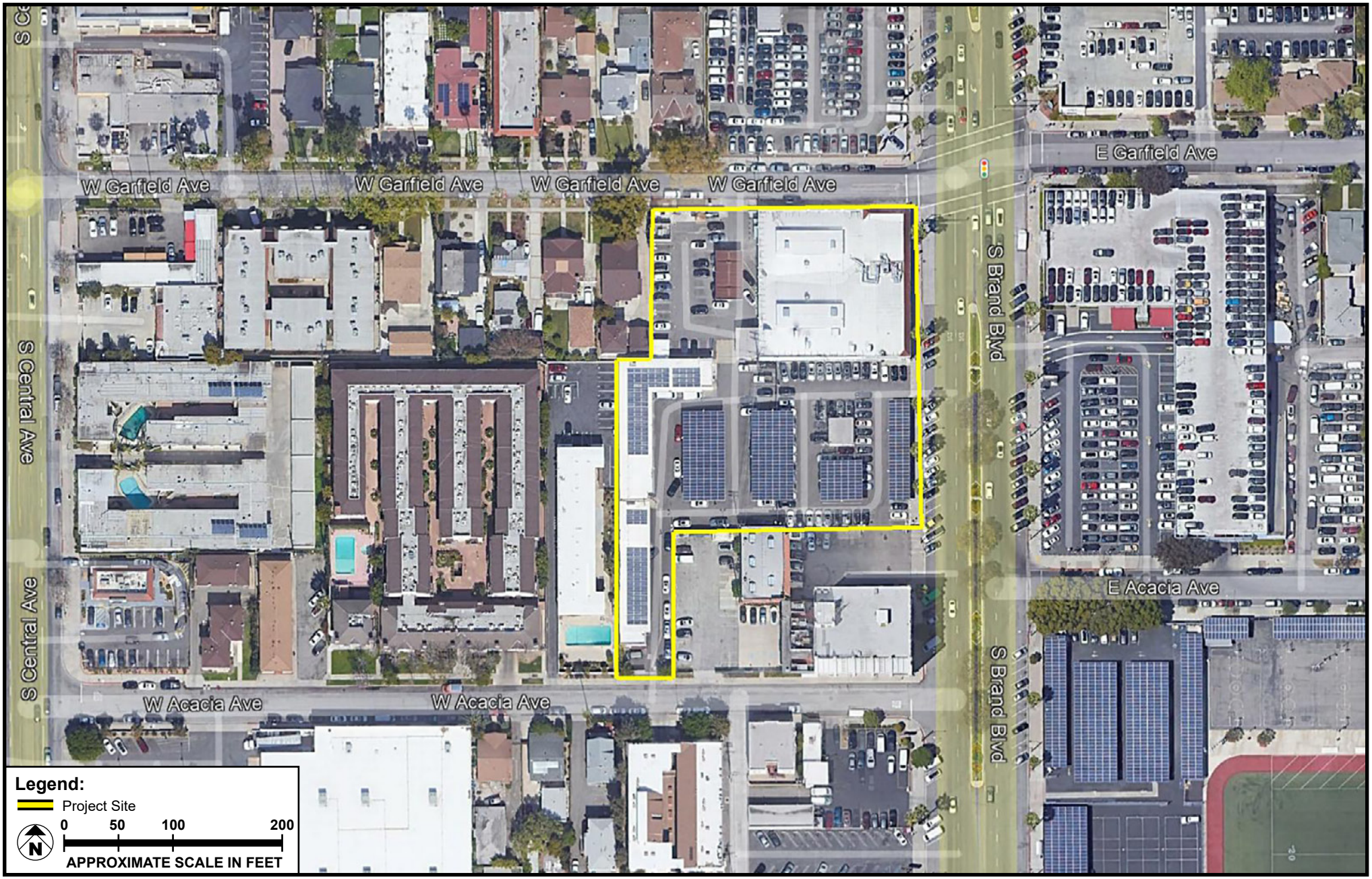
- **Construction**: The City's MND determined that the Project would result in less than significant impacts and would be consistent with local air quality plans and would not exceed regional concentration thresholds. This analysis assesses whether any new significant construction impacts would occur with up-to-date assumptions. The construction schedule would be shifted approximately 4 months however the duration and activities would be similar to that described in the City's MND. The Project would include demolition of an at-grade asphalt parking lot and the existing accessory building, totaling to removal of approximately 34,661 square feet of material. Additionally, excavation activities would include approximately 1,750 cubic yards of export. This analysis concludes construction of the new parking structure would not generate any significant environmental impacts associated with air quality compliance.
- **Operation**: The City's MND determined that the Project would result in less than significant impacts and would not exceed regional concentration thresholds. This analysis assesses whether any new significant operational impacts would occur with up-to-date assumptions. As stated in the City's MND, the City's Traffic Engineer determined no significant increase in traffic could occur as a result of the Project as the current car inventory and car sales/service floor area would remain unchanged. The area of parking garages is not considered for purposes of trip generation. Additionally, the existing solar panels would be removed and relocated to the rooftop of the new parking structure. However, for a conservative analysis, this study assumes the Project would generate approximately 652 weekday daily trips and does not take into account energy reductions from the solar panels. This analysis concludes operation of the new parking structure would not generate any significant environmental impacts associated with air quality compliance.

PROJECT DESCRIPTION

The Project site is located at 901 – 919 South Brand Boulevard (also 112-118 West Garfield Avenue & 119 West Acacia Avenue), consists of six lots, and is irregularly shaped with frontage on South Brand Boulevard, West Acacia Avenue, and West Garfield Avenue, as shown in **Figure 1: Local Vicinity Map**. There are currently three detached commercial buildings on the Project site: a one-story, 18,367 square-foot building originally constructed in 1924 (901 South Brand Boulevard), a one-story 9,192 square-foot building originally constructed in 1964 (915 South Brand Boulevard), and the one-story 561 square-foot accessory building that was relocated to the site in 1964 (919 South Brand Boulevard).

The Applicant is proposing to construct a new 5-story, 171,140 square-foot above-ground parking structure with rooftop parking on an existing 81,148 square-foot Project site located in the CA-Commercial Auto Zone, as shown in **Figure 2: Site Plan**. The proposed Project involves the demolition of the existing surface parking lot, an existing 561 square-foot accessory building (relocated to the site in 1964) and removal of existing solar panel structure that will be relocated to the rooftop of the new structure. The new parking structure will feature 450 parking spaces and is proposed for vehicle inventory for the Pacific BMW Car Dealership.

Surrounding land uses include a vehicle dealership (Nissan) and multi-family residential development to the north, storage facility, vehicle rental (Hertz) and multi-family residential development to the south, vehicle dealership (Chrysler/Dodge/Jeep/Ram) to the east and multi-family residential development to the west.



SOURCE: Google Earth - 2022

FIGURE **1**

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Local Vicinity Map

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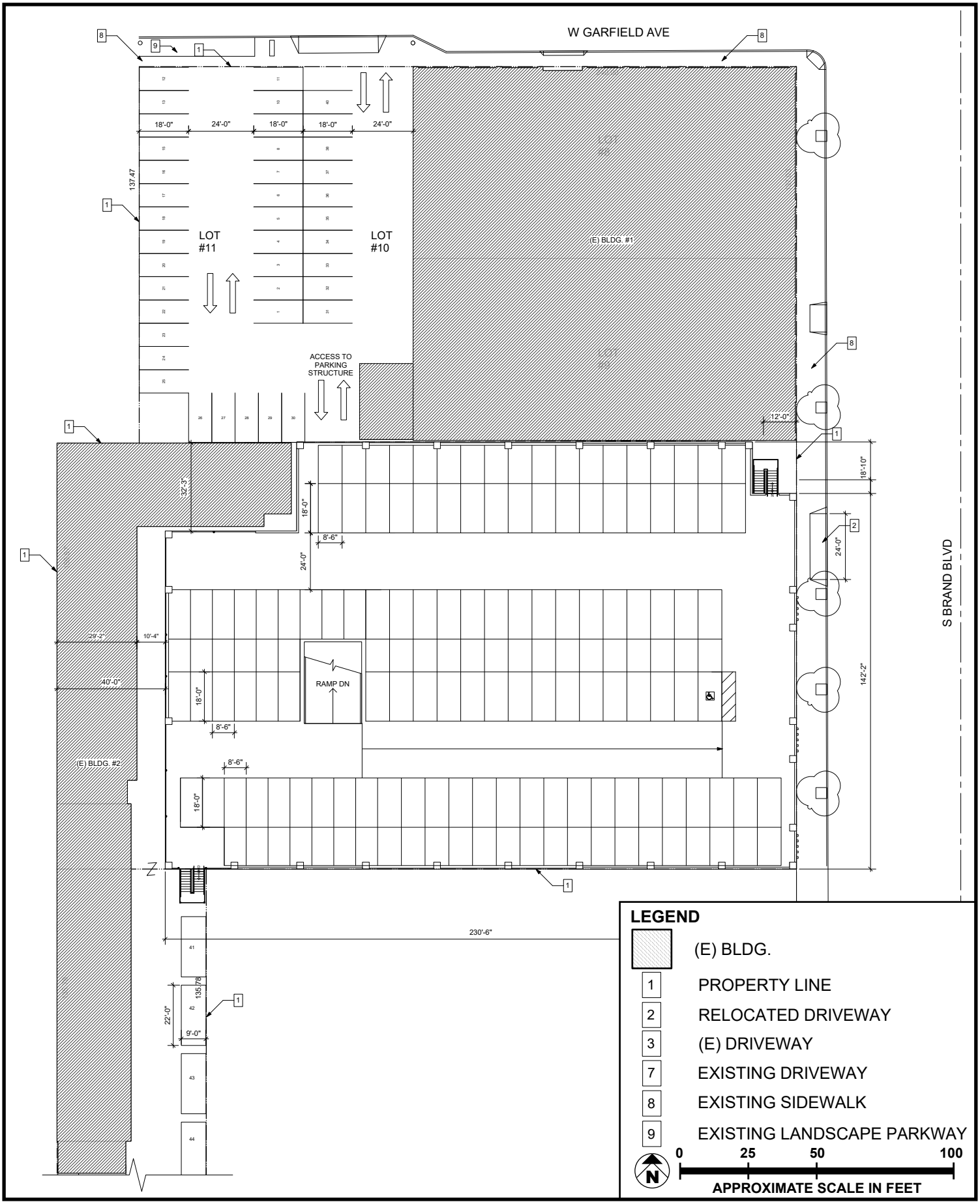

SOURCE: FLEX Design Group - 5-3-2021

FIGURE **2**

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Site Map

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REGULATORY SETTING

Ambient air quality emissions present complex environmental issues that require regulatory attention on both large and small scales. The cumulative nature of project-level and localized emissions contributing to greater regional conditions warrants those regulatory policies be instituted on national, State, and regional levels to address air quality concerns. The following sections outline the applicable regulatory framework that exists at the national, State, and regional levels for air quality.

Background

The United States Environmental Protection Agency (USEPA) is responsible for federal oversight and enforcement of air quality management policies under the 1970 Clean Air Act (CAA). Each individual state is tasked with preparing and adhering to State Implementation Plans[1] (SIPs) for achieving the goals set forth within the CAA. California has some of the most stringent air quality policies in the country and, through the California Air Resources Board (CARB) branch of the California Environmental Protection Agency (CalEPA), has developed its own ambient air quality standards (AAQS). The State is divided into air quality jurisdictions; each jurisdiction is governed by a regional air district that oversees policy implementation, permitting of air pollution emission sources, and enforcement of regulatory requirements. Six criteria air pollutants (CAPs) are monitored at the federal, State, and regional levels. These six CAPs—ozone, particulate matter PM10 and PM2.5, nitrogen dioxide, carbon monoxide, lead, and sulfur dioxide—were identified based on a consensus of decades of research that concluded inhalation of each of the chemicals results in adverse health effects in humans. The six pollutants are identified below in **Table 1: Sources and Health Effects of Criteria Air Pollutants**, along with their common sources and primary health effects from inhalation exposure.

1 A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain National Ambient Air Quality Standards.

TABLE 1
SOURCES AND HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS

Pollutants	Sources	Primary Effects
Ozone (O3)	Formed through chemical reactions between pollutants emitted from vehicles, factories and other industrial sources, fossil fuels, combustion, consumer products, evaporation of paints, and many other sources; VOCs and NOx react in the presence of sunlight	Respiratory symptoms; worsening of lung disease; lung tissue damage; ecosystem damage; damage to rubber and some plastics
Respirable particulate matter (PM10)	Emissions from combustion of gasoline, oil, diesel fuel or wood; dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, wind-blown dust from open lands, pollen, and fragments of bacteria; chemical reactions of gases and certain organic compounds	Premature death and hospitalization; worsening of respiratory disease; reduced visibility; surface soiling
Fine particulate matter (PM2.5)	Emissions from combustion of gasoline, oil, diesel fuel or wood; chemical reactions of gases and certain organic compounds	Premature death; hospitalization; asthma-related emergencies; increased asthma symptoms and inhaler use
Carbon monoxide (CO)	Incomplete combustion of CO-containing fuels such as natural gas, gasoline, or wood; emitted by a wide variety of combustion sources, including motor vehicles, power plants, wildfires, and incinerators	Chest pain in heart disease patients; headaches; light-headedness; reduced mental alertness
Nitrogen dioxide (NO2)	Emitted from combustion sources similar to CO; formed in the atmosphere through reactions between NO and other air pollutants that require the presence of sunlight (photochemical reactions).	Lung irritation; enhanced allergic responses
Lead (Pb)	Present in soils; ore and metals processing; waste incinerators, utilities, and lead-acid battery manufacturers	Impaired mental function; learning disabilities; brain and kidney damage
Sulfur dioxide (SO2)	Emitted when sulfur-containing fuel is burned; industrial processes, such as natural gas and petroleum extraction, oil refining, and metal processing; volcanic activity and from geothermal fields	Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits; acid rain

Source: California Air Resources Board, "Common Air Pollutants," https://ww2.arb.ca.gov/resources/common-air-pollutants (accessed June 2022).

Ozone

Ozone (O3) is a gas formed when volatile organic compounds (VOCs) and oxides of nitrogen (NOx), both byproducts of internal combustion engine exhaust and other sources, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months, when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

Volatile Organic Compounds

VOCs are compounds comprised primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Adverse effects on human health are not caused directly by VOCs, but rather by reactions of VOCs to form secondary air pollutants,

including ozone. VOCs themselves are not criteria pollutants; however, they contribute to the formation of ozone and are regulated under State policies.

Respirable Particulate Matter

Respirable particulate matter (PM10) consists of extremely small, suspended particles or droplets 10 micrometers (μm) or smaller in diameter. Some sources of PM10, like pollen and windstorms, are naturally occurring. However, in populated areas, most PM10 is caused by road dust, diesel soot, combustion products, the abrasion of tires and brakes, and construction activities.

Fine Particulate Matter

PM2.5 refers to fine particulate matter that is 2.5 μm or smaller in size. Sources of PM2.5 include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel-powered vehicles, such as buses and trucks. These fine particles are also formed in the atmosphere when gases, such as sulfur dioxide (SO2), NOx, and VOCs are transformed in the air by chemical reactions.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, and because motor vehicles operating at slow speeds are the primary source of CO in the South Coast Air Basin (Basin), the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

Nitrogen Dioxide

Nitrogen dioxide (NO2) is a reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO). NO2 is also a byproduct of fuel combustion. The principal form of NO2 produced by combustion is NO, but NO reacts quickly to form NO2, creating the mixture of NO and NO2 referred to as NOx. NO2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NOx is only potentially irritating. NO2 absorbs blue light, the result of which is a brownish-red cast to the atmosphere and reduced visibility.

Lead

Lead (Pb) occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so most such combustion emissions are associated with off-road vehicles, such as race cars, which use leaded gasoline. Other sources of Pb include the manufacturing and recycling of batteries; sanding or removal of lead-based paint; ink; ceramics; ammunition; and secondary lead smelters.

Sulfur Dioxide

SO2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of the burning of high-sulfur-content fuel oils and coal, as well as from chemical processes occurring at chemical plants and refineries. When SO2 oxidizes in the atmosphere, it forms sulfates (SO4).

Federal

The USEPA sets national vehicle and stationary source emission standards; oversees approval of all SIPs; provides research and guidance for air pollution programs; and sets National Ambient Air Quality Standards (NAAQS). The NAAQS for the six CAPs are shown in **Table 2: Ambient Air Quality Standards** and were identified from provisions of the 1970 CAA. The sections of the CAA that are most applicable to the Project include Title I: Nonattainment Provisions and Title II: Mobile Source Provisions.

TABLE 2
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O3)	1 hour	0.09 ppm (180 µg/m^3)	Ultraviolet photometry	—	Same as primary standard	Ultraviolet photometry
	8 hours	0.07 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable particulate matter (PM10)	24 hours	50 µg/m^3	Gravimetric or beta attenuation	150 µg/m^3	Same as primary standard	Inertial separation and gravimetric analysis
	Annual arithmetic mean	20 µg/m^3		—		
Fine particulate matter (PM2.5)	24 hours	No separate State standard		35 µg/m^3	Same as primary standard	Inertial separation and gravimetric analysis
	Annual arithmetic mean	12 µg/m^3	Gravimetric or beta attenuation	15 µg/m^3		
Carbon monoxide (CO)	8 hours	9.0 ppm (10 mg/m^3)	Nondispersive infrared photometry (NDIR)	9 ppm (10 mg/m^3)	None	NDIR
	1 hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
Nitrogen dioxide (NO2)	Annual arithmetic mean	0.03 ppm (57 µg/m^3)	Gas phase chemilumi-nescence	0.053 ppm (100 µg/m^3)	Same as primary standard	Gas phase chemilumi-nescence
	1 hour	0.18 ppm (339 µg/m^3)		0.100 ppm (188 µg/m^3)		

Source: California Air Resources Board website at: http://www.arb.ca.gov/research/aaqs/aaqs.htm (accessed June 2022).
Note: ppm = parts per million.

The CAA and the promulgated standards have evolved as a living document over time as research into the effects of air pollution has enhanced regulatory understanding of the associated issues. The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and

incorporation of additional sanctions for failure to attain or to meet interim milestones. On the national level, the USEPA designates regions as achieving "attainment" or suffering from "nonattainment" of the NAAQS based on air quality monitoring data. Regions that are designated as being in nonattainment are responsible for devising localized strategies for reducing emissions of CAPs and achieving regional attainment within a predetermined timeframe set by the USEPA.

The NAAQS were further amended in July 1997 to include an 8-hour standard for ozone and to adopt an NAAQS for PM2.5. The NAAQS were amended again in September 2006 to include an established methodology for calculating PM2.5, as well as to revoke the annual PM10 threshold. Additional revisions to the AAQS may be implemented in the future as the science of air quality progresses.

State

The California Clean Air Act, signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. CARB is responsible for the coordination and administration of both State and federal air pollution control programs within California. In this capacity, CARB conducts research, sets CAAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs.

CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions and the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the State. The CAAQS are provided in **Table 2**. It should be noted that the CAAQS are generally more stringent than the NAAQS, reflecting California's diligent efforts toward reducing air pollution and improving air quality.

Regional

In California, jurisdiction over air quality management, enforcement, and planning divided into 35 geographic regions. Within each region, a local air district is responsible for oversight of air quality monitoring, modeling, permitting, and enforcement to ensure that regulatory violations are avoided wherever possible.

The Project site is located within the 6,700-square-mile Basin and is under the SCAQMD's jurisdiction. The Basin includes the southern two-thirds of Los Angeles County, all of Orange County, and the western urbanized portions of Riverside and San Bernardino Counties.

South Coast Air Quality Management District

SCAQMD shares responsibility with CARB for ensuring that all State and federal AAQS are achieved and maintained over an area of approximately 10,743 square miles. This area includes the South Coast and Salton Sea Air Basins, all of Orange County, and the nondesert portions of Los Angeles, Riverside, and San

Bernardino Counties. It does not include the Antelope Valley or the nondesert portion of western San Bernardino County.

SCAQMD is responsible for controlling emissions, primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the air basins. SCAQMD, in coordination with the Southern California Association of Governments (SCAG), is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the air basins. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as being in nonattainment of the NAAQS or CAAQS. The term "nonattainment area" is used to refer to an air basin in which one or more AAQS are exceeded. SCAQMD also prepares the SIP for its jurisdiction and promulgates rules and regulations. The SIP includes strategies and tactics to be used to attain the federal ozone standards in the South Coast Air Basin. The SIP elements are taken from the most recent AQMP.

SCAQMD approved a Final 2016 AQMP on March 3, 2017.[2] The 2016 AQMP includes transportation control measures developed by SCAG from its 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy, as well as the integrated strategies and measures needed to meet the NAAQS. The 2016 AQMP demonstrates attainment of the 1-hour and 8-hour ozone NAAQS, as well as the latest 24-hour and annual PM2.5 standards. It should be noted that on September 3, 2020, SCAG adopted the 2020–2045 RTP/SCS,[3] which includes a SCS that addresses regional development and growth forecasts.

SCAQMD is responsible for limiting the number of emissions that can be generated throughout the air basins by various stationary, area, and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board that limit the emissions that can be generated by various uses/activities and identifying specific pollution-reduction measures that must be implemented in association with various uses and activities. These rules regulate not only the emissions of the federal and State criteria pollutants, but also toxic air contaminants (TACs) and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among the SCAQMD rules applicable to the Project are Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Rule 403 requires the use of stringent best available control measures (BACMs) to minimize PM10 emissions during grading and construction activities. Rule 1113 limits the VOC content of coatings, with a VOC content limit for flat coatings of 50 grams per liter (g/L).[4] Additional details regarding these rules and other potentially applicable rules are presented as follows.

2 SCAQMD, "Final 2016 Air Quality Management Plan" (2016), https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15, accessed June 2022.

3 Southern California Association of Governments (SCAG), Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Draft, "Chapter 1," https://www.connectsocal.org/Pages/Connect-SoCal-Draft-Plan.aspx, accessed June 2022.

4 SCAQMD, "Rule 1113 Architectural Coating" (amended September 6, 2013), http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf, accessed June 2022.

Rule 402 (Nuisance). This rule states that a "person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or to the public, or which cause, or have a natural tendency to cause, injury or damage to business or property."[5]

Rule 403 (Fugitive Dust). This rule requires fugitive dust sources to implement BACMs for all sources and prohibits all forms of visible particulate matter from crossing any property line. BACMs may include application of water or chemical stabilizers to disturbed soils covering haul vehicles; restricting vehicle speeds on unpaved roads to 15 miles per hour (mph); sweeping loose dirt from paved site-access roadways; cessation of construction activity when winds exceed 25 mph; and establishing a permanent ground cover on finished sites. SCAQMD Rule 403 is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust (see also Rule 1186).

Rule 1113 (Architectural Coatings). This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters). This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NOx emissions from natural-gas-fired water heaters, boilers, and process heaters as defined in this rule.

Rule 1186 (PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations). This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Stationary emissions sources subject to these rules are regulated through SCAQMD's permitting process. Through this permitting process, SCAQMD also monitors the number of stationary emissions being generated and uses this information in developing AQMPs.

South Glendale Community Plan EIR

According to the South Glendale Community Plan EIR,[6] Policy AQ-1 requires conditions of approval for construction projects near sensitive receptors and/or that would generate substantial levels of mass emissions to implement emissions reduction strategies. This includes but is not limited to, the use of

5 SCAQMD, "Rule 402—Nuisance," http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf, accessed June 2022.

6 City of Glendale, South Glendale Community Plan Environmental Impact Report, https://www.glendaleca.gov/government/departments/community-development/planning/community-plans/sgcp-eir, accessed June 2022.

electric-powered construction equipment, phasing construction activities, using alternative fuel such as high-performance renewable diesel for construction equipment and vehicles, and ensuring that construction equipment is maintained and tuned according to manufacturer specifications. Furthermore, Policies AQ-8 through AQ-10 would reduce AQ emissions by improving transit opportunities in the City and encouraging transit-oriented land uses to improve transit ridership and reduce automobile use and traffic congestion.

Greenhouse Gas

Greenhouse Gas Reduction Targets

Executive Order S-3-05, signed by Governor Arnold Schwarzenegger and issued in June 2005, proclaimed that California is vulnerable to the impacts of climate change.[7] It declared that increased temperatures could reduce the Sierra snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established the following total GHG emission targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Executive Order B-30-15, signed by Governor Edmund Gerald "Jerry" Brown and issued on April 29, 2015, established a new Statewide policy goal to reduce GHG emissions to 40 percent below their 1990 levels by 2030. Reducing GHG emissions by 40 percent below 1990 levels in 2030, and by 80 percent below 1990 levels by 2050 (consistent with Executive Order S-3-05), aligns with scientifically established levels needed to limit global warming to less than 2 degrees Celsius.[8]

AB 32, the Global Warming Solutions Act of 2006, requires a sharp reduction of GHG emissions to 1990 levels by 2020. To achieve these goals, which are consistent with the California Climate Action Team, which works to coordinate statewide efforts to implement global warming emission reduction programs and the state's Climate Adaptation Strategy after the passing of AB 32, AB 32 mandates that CARB establish a quantified emissions cap and institute a schedule to meet the cap; implement regulations to reduce Statewide GHG emissions from stationary sources consistent with the California Climate Action Team strategies; and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. To reach the reduction targets, AB 32 requires CARB to adopt—in an open, public process—rules and regulations that achieve the maximum technologically feasible and cost-effective GHG reductions.

7 National Resources Conservation Service, Emerging Issues Committee Members, https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_008701.pdf. Accessed June 2022.

8 Office of the Governor, Governor Brown Established Most Ambitious Greenhouse Gas Reduction Target in North America (April 29, 2015), https://www.ca.gov/archive/gov39/2015/04/29/news18938/index.html. Accessed June 2022.

Climate Change Scoping Plan

CARB approved a Climate Change Scoping Plan (Scoping Plan) on December 11, 2008, as required by AB 32. The Scoping Plan proposed a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health."[9] The Scoping Plan had a range of GHG reduction actions, including direct regulations; alternative compliance mechanisms; monetary and nonmonetary incentives; voluntary actions; market-based mechanisms, such as a cap-and-trade system; and an AB 32 implementation regulation to fund the program.

The Scoping Plan called for a "coordinated set of strategies" to address all major categories of GHG emissions.[10] Transportation emissions were to be addressed through a combination of higher standards for vehicle fuel economy, implementation of the Low Carbon Fuel Standard,[11] and greater consideration to reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations were encouraged and, sometimes, required to implement energy efficiency practices. Utility energy supplies will change to include more renewable energy sources through implementation of the Renewables Portfolio Standard. This will be complemented with emphasis on local generation, including rooftop photovoltaics and solar hot water installations. Additionally, the Scoping Plan emphasized opportunities for households and businesses to save energy and money through increasing energy efficiency. It indicated that substantial savings of electricity and natural gas would be accomplished through improving energy efficiency.

CARB updated the Scoping Plan in May 2014 (2014 Scoping Plan). The 2014 Scoping Plan[12] adjusted the 1990 GHG emissions levels to 431 million metric tons of carbon dioxide equivalents ($MMTCO_2e$); the updated 2020 GHG emissions forecast is 509 $MMTCO_2e$, which credited for certain GHG emission reduction measures already in place (e.g., the RPS). The 2014 Scoping Plan also recommended a 40 percent reduction in GHG emissions from 1990 levels by 2030, and a 60 percent reduction in GHG emissions from 1990 levels by 2040.

The 2017 Scoping Plan,[13] approved on December 14, 2017, builds on previous programs, and takes aim at the 2030 target established by the SB 32 (Pavley), which is further discussed below. The 2017 Scoping Plan outlines options to meet California's aggressive goals to reduce GHGs by 40 percent below 1990 levels by 2030. In addition, the plan incorporates the State's updated RPS requiring utilities to procure 50 percent of their electricity from renewable energy sources by 2030. It also raises the State's Low

9 CARB, Climate Change Scoping Plan: A Framework for Change, https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed June 2022.
10 CARB, Climate Change Scoping Plan, p. ES-7.
11 Office of the Governor, Executive Order S-01-07, (January 18, 2007), https://climateactionnetwork.ca/wp-content/uploads/2011/06/eos0107.pdf. Accessed June 2022.
12 CARB, First Update to the Climate Change Scoping Plan: Building on the Framework (May 2014).
13 CARB, California's 2017 Climate Change Scoping Plan, https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf. Accessed June 2022.

Carbon Fuel Standard.[14] and aims to reduce emissions of methane and hydrofluorocarbons by 40 percent from 2013 levels by 2030 and emissions of black carbon by 50 percent from 2013 levels.

The 2017 Scoping Plan[15] advises that absent conformity with a qualified GHG reduction plan, projects should incorporate all feasible GHG reduction measures and that achieving "no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development."

Transportation

Executive Order S-1-07, the Low Carbon Fuel Standard (issued on January 18, 2007), requires a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020.[16] Regulatory proceedings and implementation of the Low Carbon Fuel Standard have been directed to CARB. CARB has identified the Low Carbon Fuel Standard as a discrete early action item in the adopted Scoping Plan. CARB expects the Low Carbon Fuel Standard to achieve the minimum 10 percent reduction goal; however, many of the early action items outlined in the Scoping Plan work in tandem with one another. Other specific emission reduction measures included are the Million Solar Roofs Program[17] and Assembly Bill (AB) 1493 (Pavley I), Vehicle Emissions: Greenhouse Gases, which establishes motor vehicle GHG emissions standards.[18] To avoid the potential for double-counting emission reductions associated with AB 1493, the Scoping Plan has modified the aggregate reduction expected from the Low Carbon Fuel Standard to 9.1 percent. CARB released a draft version of the Low Carbon Fuel Standard in October 2008. The final regulation was approved by the Office of Administrative Law and filed with the Secretary of State on January 12, 2010; the Low Carbon Fuel Standard became effective on the same day.

Additionally, SCAG has prepared and adopted the 2020–2045 RTP/SCS,.[19] which includes a Sustainable Communities Strategy that addresses regional development and growth forecasts. The SCAG 2020–2045 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, with a specific goal of achieving an 8 percent reduction in

14 Office of the Governor, Executive Order S-01-07, (January 18, 2007), https://climateactionnetwork.ca/wp-content/uploads/2011/06/eos0107.pdf. Accessed June 2022.

15 California Air Resources Board, 2017. California's 2017 Climate Change Scoping Plan. pp. 100-101.Available: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf. Accessed June 2022.

16 Office of the Governor, Executive Order S-01-07 (January 18, 2007), https://www.arb.ca.gov/fuels/lcfs/eos0107.pdf. Accessed August 2021.

17 US Department of Energy, Laying the Foundation for Solar America: The Million Solar Roofs Initiative, https://www.nrel.gov/docs/fy07osti/40483.pdf. Accessed June 2022.

18 The standards enacted in Pavley I are the first GHG standards in the nation for passenger vehicles and took effect for model years starting in 2009 and going through 2016. Pavley I could potentially result in 27.7 million metric tons CO2e reduction in 2020. Pavley II will cover model years 2017 to 2025 and potentially result in an additional reduction of 4.1 million metric tons CO2e.

19 Southern California Association of Governments (SCAG), Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Draft, Chapter 1, https://www.connectsocal.org/Pages/Connect-SoCal-Draft-Plan.aspx. Accessed June 2022.

passenger vehicle GHG emissions on a per capita basis by 2020, 19 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level.

Energy

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

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." The CALGreen Code is mandatory for all new buildings constructed in the State and establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design and overall environmental quality. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2020.

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which expands the State's Renewables Portfolio Standard to 33 percent renewable power by 2020. Pursuant to Executive Order S-21-09, CARB was also preparing regulations to supplement the Renewables Portfolio Standard with a Renewable Energy Standard that will result in a total renewable energy requirement for utilities of 33 percent by 2020. But on April 12, 2011, Governor Jerry Brown signed SB X1-2 to increase California's Renewables Portfolio Standard to 33 percent by 2020. SB 350 (Chapter 547, Statues of 2015), signed into law on October 7, 2015, further increased the Renewables Portfolio Standard to 50 percent by 2030. The legislation also included interim targets of 40 percent by 2024 and 45 percent by 2027.

Greener Glendale Plan

In March 2012, the City completed the Greener Glendale Plan,[20] consisting of the Greener Glendale 2010 Report, the Greener Glendale Plan for Municipal Operations, and the Greener Glendale Plan for Community Activities. The Greener Glendale Plan analyzes City activities related to sustainability and GHG emissions to show how implementing sustainability measures will result in reduced GHG emissions. The list of quantifiable GHG reduction categories in the Greener Glendale Plan includes 2020 emissions reduction targets to be achieved through California vehicle and fuel standards, building energy efficiency audits and upgrades, smart grid applications, green building standards, Zero Waste Plans, EV charging station installation, and a plastic bag ban to name a few. The Greener Glendale Plan identified 2035 reduction targets through continued implementation of California vehicle and fuel standards, building energy and water efficiency audits and upgrades, Zero Waste Plan 90 percent diversion by 2030, tree planning programs, and turf reduction rebates.

The Greener Glendale Plan incorporates 12 measures in addition to the mandatory Green Building Standards for new construction projects. These measures went into effect on June 7, 2011. The 12 measures include:

1. Expand applicability of green building standards to residential buildings over 3-stories.
2. Exceed California Energy Code requirements by 15 percent.
3. Reduce baseline water usage by 20 percent.
4. A radian roof barrier shall be installed.
5. Gas fired tankless water heaters shall have an energy factor of at least 0.80.
6. Gas-fired storage-tank type water heaters shall have an energy factor of at 0.61.
7. Buildings shall be “solar ready.”
8. At least 20 percent of certain paved areas in residential projects shall be permeable.
9. Residential gas-fired heating equipment shall be high efficiency units.
10. Residential air conditioning equipment shall be high-efficiency units.
11. Natural light ventilation in residential habitable room shall be increased.
12. New single-family dwellings with floor area greater than 5,000 square feet shall be required to meet CALGreen Tier 1.

20 City of Glendale, Greener Glendale, https://www.glendaleca.gov/government/departments/management-services/office-of-sustainability/greener-glendale, accessed June 2022.

South Glendale Community Plan EIR

According to the South Glendale Community Plan EIR,[21] Policy GHG-1 requires the City to update the Greener Glendale Plan for community and municipal operations and establish GHG reduction goals that are consistent with California's established goals of 40 percent below baseline emissions by 2030 and 80 percent below baseline emissions by 2050. This update would be evaluated against potential environmental impacts with the objective of qualifying the Greener Glendale Plan as the City's Climate Action Plan. The updated plan would include quantifiable and feasible measures that the City can implement to achieve established GHG reduction targets. Furthermore, Policy GHG-3 requires the City to reduce GHG emissions from new development by discouraging auto-dependent sprawl and dependence on the private automobile; promoting water conservation and recycling; promoting development that is compact, mixed use, pedestrian friendly, and transit oriented; and promoting energy-efficient building design and site planning.

ENVIRONMENTAL SETTING

Air Quality

USEPA is the federal agency responsible for overseeing the country's air quality and setting the NAAQS for the CAPs. The NAAQS were devised based on extensive modeling and monitoring of air pollution across the country; they are designed to protect public health and prevent the formation of atmospheric ozone. Air quality of a region is considered to be in attainment of the NAAQS if the measured ambient air pollutant levels do not exceed the applicable concentration threshold. **Table 2** presents the federal and State AAQS.

As noted previously, CARB is the State agency responsible for setting the CAAQS. Air quality of a region is considered to be in attainment of the CAAQS if the measured ambient air pollutant levels for O3, CO, NO2, SO2, PM10, PM2.5, and Pb are not exceeded, and all other standards are not equaled or exceeded at any time in any consecutive 3-year period. The CAAQS are also presented in **Table 2**.

For evaluation purposes, the SCAQMD territory is divided into 38 source receptor areas (SRAs). These SRAs are designated to provide a general representation of the local meteorological, terrain, and air quality conditions within the particular geographical area.

The Project site is within SRA 8, West San Gabriel Valley.[22] The nearest air monitoring station SCAQMD operates is located at 1630 North Main Street.[23] This station monitors O3, NO2, PM10 and PM2.5.

21 City of Glendale, South Glendale Community Plan Environmental Impact Report, https://www.glendaleca.gov/government/departments/community-development/planning/community-plans/sgcp-eir, accessed June 2022.

22 SCAQMD, General Forecast Areas and Air Monitoring Areas, map, http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf, accessed June 2022.

23 South Coast Air Quality Management District, Site Survey Report for Los Angeles (Central)–North Main Street, AQS ID 060371103, http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-monitoring-network-plan/aaqmnp-losangeles.pdf?sfvrsn=16, accessed June 2022.

Table 3: Air Quality Monitoring Summary summarizes published monitoring data from 2018 through 2020, the most recent 3-year period available. The data shows that during the past few years, the region has exceeded the O3, and PM10, PM2.5 standards.

TABLE 3
AIR QUALITY MONITORING SUMMARY

Air Pollutant	Average Time (Units)	2018	2019	2020
Ozone (O3)	State Max 1 hour (ppm)	0.098	0.093	0.185
	Days > CAAQS threshold (0.09 ppm)	2	0	14
	National Max 8 hour (ppm)	0.073	0.080	0.118
	Days > NAAQS threshold (0.075 ppm)	4	2	22
	State Max 8 hour (ppm)	0.074	0.080	0.118
	Days > CAAQS threshold (0.07 ppm)	4	2	22
Carbon monoxide (CO)		—	—	—
Nitrogen dioxide (NO2)	National Max 1 hour (ppm)	0.070	0.070	0.062
	Days > NAAQS threshold (0.100 ppm)	0	0	0
	State Max 1 hour (ppm)	0.070	0.070	0.062
	Days > CAAQS threshold (0.18 ppm)	0	0	0
Respirable particulate matter (PM10)	National Max (µg/m3)	68.2	62.4	83.7
	National Annual Average (µg/m3)	30.2	23.0	33.1
	Days > NAAQS threshold (150 µg/m3)	0	0	0
	State Max (µg/m3)	81.2	93.9	185.2
	State Annual Average (µg/m3)	—	34.0	—
	Days > CAAQS threshold (50 µg/m3)	31	15	34
Fine particulate matter (PM2.5)	National Max (µg/m3)	61.4	43.5	175.0
	National Annual Average (µg/m3)	12.8	10.8	13.7
	Days > NAAQS threshold (35 µg/m3)	6	1	12
	State Max (µg/m3)	65.3	43.5	175.0
	State Annual Average (µg/m3)	12.8	10.8	13.7

Source: CARB, iADAM: Air Quality Data Statistics.
Note: (—) = Data not available.

USEPA and the CARB designate air basins where AAQS are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." Federal nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

The current attainment designations for the Basin are shown in **Table 4: South Coast Air Basin Attainment Status**. The Basin is currently designated as being in nonattainment at the federal level for O3 and PM2.5; and at the State level for O3, PM10, and PM2.5.

TABLE 4 SOUTH COAST AIR BASIN ATTAINMENT STATUS		
Pollutant	**State Status**	**National Status**
Ozone (O3)	Nonattainment	Nonattainment
Carbon monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen dioxide (NO2)	Attainment	Unclassified/Attainment
Sulfur dioxide (SO2)	Attainment	Unclassified/Attainment
Respirable particulate matter (PM10)	Nonattainment	Attainment
Fine particulate matter (PM2.5)	Nonattainment	Nonattainment

Source: California Air Resources Board (CARB) Area Designation Maps / State and National, https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations, accessed June 2022.

Greenhouse Gases

California is the second largest contributor of GHGs in the United States and the 16th largest in the world.[24] In 2019, California produced 418.2 million metric tons of carbon dioxide equivalents ($MMTCO_2e$), including imported electricity, and excluding combustion of international fuels and carbon sinks or storage. The major source of GHGs in California is transportation, contributing to 40 percent of the State's total GHG emissions. The Statewide inventory of GHGs by sector is shown in **Table 5: California GHG Inventory 2011-2019.**

24 California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, Staff Final Report, CEC-600-2006-013-SF (December 2006).

TABLE 5
CALIFORNIA GHG INVENTORY 2011-2019

Main Sector	Emissions ($MMTCO_2e$)								
	2011	2012	2013	2014	2015	2016	2017	2018	2019
Transportation[a]	161.8	161.4	161.3	162.6	166.2	169.8	171.2	169.6	166.1
Electric Power	89.2	98.2	91.4	88.9	84.8	68.6	62.1	63.1	58.8
Industrial[b]	89.4	88.9	91.7	92.5	90.3	89.0	88.8	89.2	88.2
Commercial and Residential	46.0	43.5	44.2	38.2	38.8	40.6	41.3	41.4	43.8
Agriculture	34.4	35.5	33.8	34.7	33.5	33.3	32.5	32.7	31.8
High GWP[c,d]	14.5	15.5	16.8	17.7	18.6	19.2	20.0	20.4	20.6
Recycled and waste	8.4	8.3	8.4	8.4	8.5	8.6	8.7	8.7	8.9
Total Emissions	**443.7**	**451.3**	**447.6**	**443.0**	**440.7**	**429.1**	**424.6**	**425.1**	**418.2**

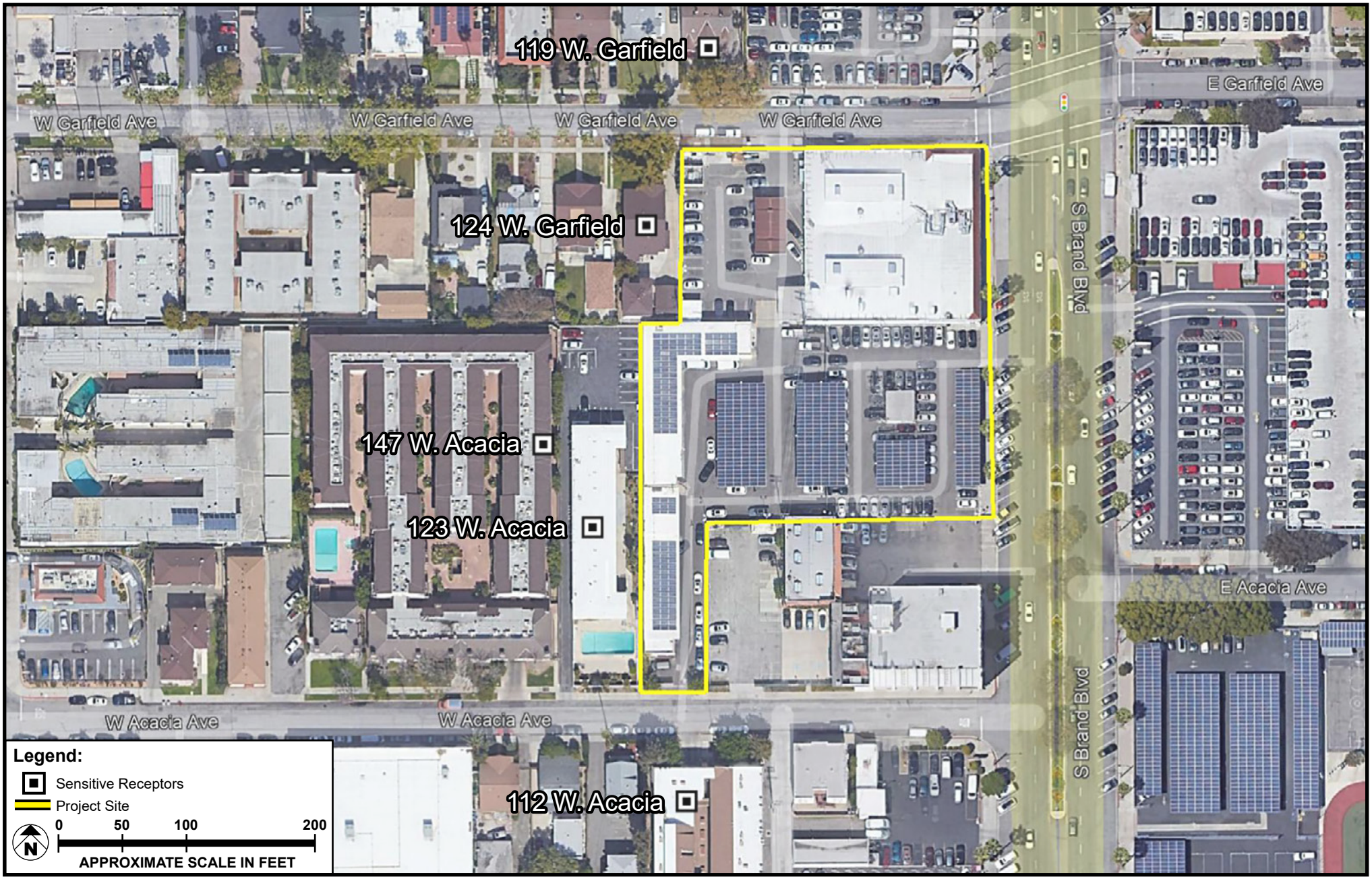
Source: CARB, GHG Current California Emission Inventory Data, https://ww2.arb.ca.gov/ghg-inventory-data, accessed June 2022.
[a] Includes equipment used in construction, mining, oil drilling, industrial and airport ground operations.
[b] Reflects emissions from combustion of natural gas, diesel, and lease fuel plus fugitive emissions.
[c] These categories are listed in the Industrial sector of CARB's GHG Emission Inventory sectors.
[d] This category is listed in the Electric Power sector of CARB's GHG Emission Inventory sectors.
Note: $MMTCO_2e$ - million metric tons of carbon dioxide equivalent emissions

EXISTING OPERATIONAL EMISSIONS

SCAQMD considers a sensitive receptor to be a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant. Sensitive receptors are identified near sources of air pollution to determine the potential for health hazards. Locations evaluated for exposure to air pollution include but are not limited to residences, schools, hospitals, and convalescent facilities.

As mentioned previously, surrounding land uses include a vehicle dealership (Nissan) and multi-family residential development to the north, storage facility, vehicle rental (Hertz) and multi-family residential development to the south, vehicle dealership (Chrysler/Dodge/Jeep/Ram) to the east and multi-family residential development to the west. **Figure 3: Sensitive Receptor Map** provides a detailed image of the proximal land uses and identifies the sensitive receptors closest to the Project site. These uses represent the nearest sensitive receptors who may be impacted by emissions of air pollutants due to the Project.

As discussed previously, there are currently three detached commercial buildings on the Project site. The Proposed Project involves construction of a new parking structure on the existing surface parking lot and involves demolition of the existing 561 square-foot accessory building that does not produce emissions. As such, this report does not take into account a net reduction of operational emissions due to removal of the accessory building.



SOURCE: Google Earth - 2022

FIGURE **3**

Meridian Consultants

Sensitive Receptor Map

102-002-22

METHODOLOGY

Air Quality

Construction

Construction of the Project's new parking structure has the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment, such as tractors and forklifts, and through vehicle trips generated from workers and haul trucks traveling to and from the Project site. Mobile-source emissions, primarily NOx, would result from the use of construction equipment, such as dozers and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The Project would be required comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located with SCAB. Therefore, the following condition—which would be required to reduce fugitive dust in compliance with SCAQMD Rule 403:

- **Control Efficiency of PM10**. During construction, methods and techniques should be applied to various operations or equipment when appropriate to reduce estimated emissions related to particulate matter. This includes replacing ground cover in disturbed areas as quick as possible, yielding to emission reduction efficiency of 15 – 49 percent.[25]

In addition, SCAQMD Staff recommends that the Lead Agency require the use of Tier 4 construction equipment of 50 horsepower or greater during construction. Alternative, applicable strategies include equipment outfitted with Best Available Control Technology (BACT) devices and CARB certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least an 85 percent reduction in particulate matter emissions.[26] Therefore, the following condition would be recommended by SCAQMD:

- **Construction Equipment Controls**. During construction, all off-road construction equipment greater than 50 horsepower shall meet USEPA Tier 3 emission standards with Level 3 DPF to minimize emissions of NOx associated with diesel construction equipment.

The emissions are estimated using the CalEEMod (Version 2020.4.0) software, an emissions inventory software program recommended by SCAQMD. CalEEMod is based on outputs from the CARB off-road emissions model (OFFROAD) and the CARB on-road vehicle emissions model (EMFAC), which are emissions

25 SCAQMD, CEQA Handbook, Tables 11-4, p. 11-15 and A11-9-A, page A11-77, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-sample-construction-scenario-report.pdf, accessed June 2022.

26 California Air Resources Board, Verification Procedure: Stationary, https://ww2.arb.ca.gov/our-work/programs/verification-procedure-warranty-and-use-compliance-requirements-use-strategies-4, accessed June 2022.

estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles. The input values used in this analysis are based on conservative assumptions in CalEEMod, with appropriate, Project-specific adjustments based on equipment types and expected construction activities. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Detailed construction equipment lists, construction scheduling, and emissions calculations are provided in **Appendix A**.

Operation

Operation of the Project has the potential to generate criteria pollutant emissions through vehicle trips traveling to and from the Project site. In addition, emissions would result from area sources on site, such as natural gas combustion, landscaping equipment, and use of consumer products.

Operational emissions were estimated using the CalEEMod software, which was used to forecast the daily regional emissions from area sources that would occur during long-term Project operations. In calculating mobile-source emissions, trip-length values were based on the distances provided in CalEEMod.

Area-source emissions are based on natural gas (building heating and water heaters), landscaping equipment, and consumer product (including paint) usage rates provided in CalEEMod. Natural gas usage factors in CalEEMod are based on the California Energy Commission's California Commercial End Use Survey data set, which provides energy demand by building type and climate zone.

Greenhouse Gases

The analysis of the Project's GHG emissions consists of a quantitative analysis of the GHG emissions generated by the construction and operation activities and a qualitative analysis of the proposed Project's consistency with adopted GHG-related legislation, plans, and policies. This approach is in accordance with CEQA Guidelines Section 15064.4(a), which affirms the discretion of a lead agency to determine, in the context of a particular project, whether to use quantitative and/or qualitative methodologies to determine the significance of a project's impacts.

Emissions Inventory Modeling

The total GHG emissions from the Project were quantified to determine the level of the Project's estimated annual GHG emissions. As with the Air Quality section calculations, construction emissions were estimated using CalEEMod by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile-source emissions factors. The modeling used the same input values as previously discussed under the methodology section for air quality. SCAQMD's *Draft Guidance Document—Interim CEQA Greenhouse Gas (GHG) Significance Threshold*[27] recognizes that construction-related GHG emissions from projects occur over a relatively

27 SCAQMD, Draft Guidance Document—Interim CEQA Greenhouse Gas (GHG) Significance Threshold (October 2008).

short-term period of time and contributes a relatively small portion of a project's overall lifetime GHG emissions. The guidance recommends that a project's construction-related GHG emissions be amortized over a 30-year project lifetime so that GHG reduction measures will address construction GHG emissions as part of the operation GHG reduction strategies. Detailed construction equipment lists, construction scheduling, and emissions calculations are provided in **Appendix A**.

CalEEMod was also used to estimate operational GHG emissions from electricity, natural gas, solid waste, water and wastewater, fireplaces, and landscaping equipment. CalEEMod calculates energy use from systems covered by Title 24 (e.g., heating, ventilation, and air conditioning [HVAC] system, water heating system, and lighting system); energy use from lighting; and energy use from office equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting. Mobile-source emissions were estimated based on the CARB EMFAC model. For mobile sources, CalEEMod was used to generate the vehicle miles traveled from the Project uses based on the default ITE trip generation rates.

With regard to energy demand, the consumption of fossil fuels to generate electricity and to provide heating and hot water generates GHG emissions. Energy demand rates were estimated based on square footage as well as predicted water supply needs for this use. Energy demand (off-site electricity generation and on-site natural gas consumption) for the Project was calculated within CalEEMod using the CEC's CEUS data set, which provides energy demand by building type and climate zone.

Emissions of GHGs from solid waste disposal were also calculated using CalEEMod software. The emissions are based on the waste disposal rate for the land uses, the waste diversion rate, and the GHG emission factors for solid waste decomposition. The GHG emission factors, particularly for methane, depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. The default values, as provided in CalEEMod, for landfill gas capture (e.g., no capture, flaring, energy recovery), which are Statewide averages, were used in this assessment.

Emissions of GHGs from water and wastewater result from the required energy to supply and distribute the water and treat the wastewater. Wastewater also results in emissions of GHGs from wastewater treatment systems. Emissions are calculated using CalEEMod and are based on the water usage rate for the restaurant use; the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment; the GHG emission factors for the electricity utility provider; and the emission factors for the wastewater treatment process.

SIGNIFICANCE THRESHOLDS

Air Quality

The determination of a project's significance on air quality shall be made considering the factors provided in the SCAQMD *CEQA Air Quality Handbook* (Handbook). The City has not adopted specific Citywide significance thresholds for air quality impacts; rather, the thresholds and methodologies contained in the SCAQMD Handbook for both construction and operational emissions are utilized for evaluating projects in the City. These thresholds are described below.

Construction and Operational Emission Thresholds

The Project will have a significant impact if it exceeds the construction thresholds listed in **Table 6: Construction Thresholds**.

TABLE 6
CONSTRUCTION THRESHOLDS

Pollutant	Construction Emissions (pounds/day)
Volatile organic compounds (VOCs)	75
Nitrogen dioxide (NO2)	100
Carbon monoxide (CO)	550
Sulfur dioxide (SO2)	150
Respirable particulate matter (PM10)	150
Fine particulate matter (PM2.5)	55

Based on the SCAQMD Handbook, thresholds for each criteria pollutant for the operations of the Project are provided in **Table 7: Operational Thresholds.**

TABLE 7 OPERATIONAL THRESHOLDS	
Pollutant	**Operational Emissions (pounds/day)**
Volatile organic compounds (VOCs)	55
Nitrogen dioxide (NO2)	55
Carbon monoxide (CO)	550
Sulfur dioxide (SO2)	150
Respirable particulate matter (PM10)	150
Fine particulate matter (PM2.5)	55

Construction and Operational Localized Significance Thresholds

The local significance thresholds are based on the SCAQMD's Final Localized Significance Threshold (LST) Methodology (LST Methodology)[28] guidance document for short-duration construction activities. The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project site because of construction activities. The SCAQMD provides voluntary guidance on the evaluation of localized air quality impacts to public agencies conducting environmental review of projects located within its jurisdiction. Localized air quality impacts are evaluated by examining the on-site generation of pollutants and their resulting downwind concentrations. For construction, pollutant concentrations are compared to significance thresholds for particulates (PM10 and PM2.5), CO, and NO2. The significance threshold for PM10 represents compliance with SCAQMD Rule 403 (Fugitive Dust). The threshold for PM2.5 is designed to limit emissions and to allow progress toward attainment of the AAQS. Thresholds for CO and NO2 represent the allowable increase in concentrations above background levels that would not cause or contribute to an exceedance of their respective AAQS.

The LST Methodology provides lookup tables of emissions that are based on construction projects of up to 5 acres in size. These LST lookup tables were developed to assist lead agencies with a simple tool for evaluating the impacts from small typical projects. Ambient conditions for West San Gabriel Valley, as recorded in SRA 8 by the SCAQMD, were used for ambient conditions in determining appropriate threshold levels. Thresholds for each criteria pollutant for construction activity and Project operation of the 1.46-acre Project site are listed in **Table 8: Localized Significance Thresholds**.

28 South Coast Air Quality Management District, Final Localized Significance Threshold (LST) Methodology, (June 2003, rev. July 2008).

TABLE 8 LOCALIZED SIGNIFICANCE THRESHOLDS		
	Construction	Operational
Pollutant	pounds/day	
Nitrogen dioxide (NO2)	94	94
Carbon monoxide (CO)	773	773
Respirable particulate matter (PM10)	5.72	1.86
Fine particulate matter (PM2.5)	3.86	1

Notes:

Based on a distance to sensitive receptors of 25 meters (164 feet). SCAQMD's Localized Significance Threshold (LST) Methodology for CEQA Evaluations *guidance document provides that projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.*

Toxic Air Contaminants

As set forth in the SCAQMD Handbook, the determination of significance of a project with respect TACs shall be made on a case-by-case basis, considering the following factors:

- Regulatory framework for toxic materials and process involved;
- Proximity of TACs to sensitive receptors;
- Quantity, volume, and toxicity of the contaminants expected to be emitted;
- Likelihood and potential level of exposure; and
- Degree to which project design will reduce risk of exposure.

Consistency with Applicable Air Quality Plans

Section 15125 of the State CEQA Guidelines requires an analysis of project consistency with applicable governmental plans and policies. In accordance with the SCAQMD Handbook, the following criteria were used to evaluate the Project's consistency with SCAQMD and local plans and policies, including the AQMP:

- Will the Project result in any of the following:
- Increase the frequency or severity of existing air quality violations?
- Cause or contribute to new air quality violations?
- Delay the timely attainment of the air quality standards or the interim emission reductions specified in the AQMP?
- Will the Project exceed the assumptions utilized in preparing the AQMP?
- Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based?
- Does the Project include air quality mitigation measures?
- To what extent is Project development consistent with the AQMP land use policies?

Cumulative Threshold

SCAQMD recommends that a project be considered to result in a cumulatively considerable impact to air quality if any construction-related emissions and operational emissions from individual development projects exceed the mass daily emissions thresholds for individual projects.[29]

The SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to be used to assess the impacts associated with these emissions.

A project is also considered to result in a cumulatively considerable contribution to significant impacts if the population and employment projections for the project exceed the rate of growth defined in SCAQMD's AQMP.

Greenhouse Gases

Pursuant to CEQA Guidelines Section 15064.4, the methods suitable for analysis of GHG emissions are:

1. Use a model or methodology to quantify greenhouse gas emissions resulting from a project. The Lead Agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The Lead Agency should explain the limitation of the particular model or methodology selected for use.
2. Rely on a qualitative analysis or performance-based standards.

The City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions. Nor have SCAQMD, OPR, CARB, CAPCOA, or any other state or regional agency adopted a numerical significance threshold for assessing GHG emissions that is applicable to the Project. Assessing the significance of a project's contribution to cumulative global climate change involves: (1) developing pertinent inventories of GHG emissions, and (2) considering project consistency with applicable emission reduction strategies and goals. This evaluation of consistency with such plans is the sole basis for determining the significance of the Project's GHG-related impacts on the environment.

IMPACT ANALYSIS

Air Quality

Emissions of air pollutants were estimated for construction and operation of the Project. In California, the California Air Pollution Control Officer's Association recommends the use CalEEMod to calculate and organize emissions data for new development projects. CalEEMod is a program that relies on project-specific information pertaining to geographic setting, utility service provision, construction scheduling and equipment inventory, and operational design features to generate estimates of air pollutant and GHG

29 SCAQMD, White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions, board meeting, Agenda No. 29 (September 5, 2003), Appendix D, p. D-3.

emissions. Information needed to parameterize the Project in CalEEMod was obtained from the construction engineer and the Project architect.

Table 9: Project Construction Schedule provides the dates and durations of each of the activities that will take place during construction of the new parking structure, as well as a brief description of the scope of work. Future dates represent approximations based on the general Project timeline and are subject to change pending unpredictable circumstances that may arise.

TABLE 9
PROJECT CONSTRUCTION SCHEDULE

Construction Activity	Approximate Start Date	Approximate End Date[a,b]	Duration (Days)	Description
Demolition	12/1/22	12/28/22	20	Removal of existing at-grade asphalt parking lot and 561 square foot building
Site Preparation	12/29/22	1/4/23	5	Site preparation prior to grading phase
Grading	1/5/23	1/12/23	6	Grading of site and export of 1,500 cubic yards of soil
Building Construction	1/13/23	10/19/23	200	Construction of new 5-story parking structure
Paving	10/20/23	11/2/23	10	Paving of asphalt surfaces
Architectural Coating[c]	11/3/23	11/16/23	10	Application of architectural coatings to building materials

*Note: Refer to **Appendix A.1 (Summer)** and **Appendix A.2 (Winter)**, Section 3.0: Construction Detail.*

Construction

An assessment of air pollutant emissions was prepared utilizing the construction schedule in **Table 9**. **Table 10: Project Construction Diesel Equipment Inventory** displays the construction equipment required for each activity described in **Table 9**. Under regulatory compliance measures in CalEEMod, construction would be required to adhere to SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings).

TABLE 10
PROJECT CONSTRUCTION DIESEL EQUIPMENT INVENTORY

Phase	Off-Road Equipment Type	Amount	Daily Hours	Horsepower [HP] (Load Factor)
Demolition	Concrete/Industrial Saws	1	8	81 (0.73)
	Rubber Tired Dozers	1	8	247 (0.40)
	Tractors/Loaders/Backhoes	3	8	97 (0.37)
Site Preparation	Graders	1	8	187 (0.41)
	Rubber Tired Dozers	1	7	247 (0.4)
	Tractors/Loaders/Backhoes	1	8	97 (0.37)
Grading	Graders	1	8	187 (0.41)

TABLE 10
PROJECT CONSTRUCTION DIESEL EQUIPMENT INVENTORY

Phase	Off-Road Equipment Type	Amount	Daily Hours	Horsepower [HP] (Load Factor)
Building Construction	Rubber Tired Dozers	1	8	247 (0.40)
	Tractors/Loaders/Backhoes	2	7	97 (0.37)
	Cranes	1	6	231 (0.29)
	Forklifts	1	6	89 (0.20)
	Generator Sets	1	8	84 (0.74)
	Tractors/Loaders/Backhoes	1	6	97 (0.37)
	Welders	3	8	46 (0.45)
Paving	Cement and Mortar Mixers	1	6	9 (0.56)
	Pavers	1	6	130 (0.42)
	Paving Equipment	1	8	132 (0.36)
	Rollers	2	7	80 (0.38)
	Tractors/Loaders/Backhoes	1	8	97 (0.37)
Architectural Coating	Air compressors	1	6	78 (0.48)

*Refer to **Appendix A.1 (Summer)** and **Appendix A.2 (Winter)**, Section 3.0: Construction Detail, for equipment inventory information.*

Maximum daily emissions of air pollutants during construction of the Project's new parking structure were calculated using CalEEMod. Construction activities involving grading and excavation would primarily generate PM2.5 and PM10 emissions. Approximately 1,500 cubic yards of soil would be exported. Mobile sources (such as diesel-fueled equipment on-site and vehicles traveling to and from the Project site) would primarily generate NOx emissions. The application of architectural coatings would primarily result in the release of VOC emissions. **Table 11: Maximum Construction Emissions** identifies daily emissions that are estimated for peak construction days for each construction year. It is important to note, emissions presented in **Table 11** do not include regulatory compliance measures such as construction equipment controls (Tier 3 emissions standards with Level 3 DPF per CARB requirements)[30] or control efficiency of PM10 (dust control measures per SCAQMD Rule 403) to provide a worst-case scenario analysis. Based on the modeling, construction of the Project's new parking structure would not exceed regional concentration thresholds. All criteria air pollutants would be below SCAQMD construction thresholds. Construction of the Project would not generate any significant environmental impacts associated with air quality compliance.

30 California Air Resources Board, Guide to Off-Road Vehicle & Equipment Regulations, website: https://ww3.arb.ca.gov/msprog/offroadzone/pdfs/offroad_booklet.pdf, accessed June 2022.

TABLE 11 MAXIMUM CONSTRUCTION EMISSIONS						
	VOC	NOx	CO	SOx	PM10	PM2.5
Source	pounds/day					
2022	2	18	15	<1	7	4
2023	31	19	16	<1	9	4
Maximum	31	19	16	<1	9	4
SCAQMD Mass Daily Threshold	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod.
Notes: CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; SOx = sulfur oxides; VOC = volatile organic compounds.
*Refer to **Appendix A.1 (Summer)** and **Appendix A.2 (Winter)**, Sections 3.2 through 3.7, for maximum on-site plus off-site emissions during both the summer and winter seasons.*

Operation

As mentioned previously, the proposed development includes construction of a new 5-story parking structure on the existing site. It is important to note, the City's Traffic Engineer determined no significant increase in traffic could occur as a result of the Project as the current car inventory and car sales/service floor area would remain unchanged. The area of parking garages is not considered for purposes of trip generation. However, for a worst-case assessment, the default ITE Trip Generation Rate for an Automobile Care Center (ITE 942) in CalEEMod was assumed, which generates approximately 652 weekday daily trips. The results presented in **Table 12: Maximum Operational Emissions** are compared to the SCAQMD-established operational significance thresholds. As shown in **Table 12**, assuming a worst-case assessment of 652 weekday daily trips, the operational emissions would not exceed the regional concentration thresholds. Operation of the Project would not generate any significant environmental impacts associated with air quality compliance.

TABLE 12 MAXIMUM OPERATIONAL EMISSIONS						
	VOC	NOx	CO	SOx	PM10	PM 2.5
Source	pounds/day					
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	1	1	10	<1	2	1
Total	2	1	10	<1	2	1
SCAQMD Mass Daily Threshold	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod.
Notes: Totals in table may not appear to add exactly due to rounding in the computer model calculations.
CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; SOx = sulfur oxides; VOC = volatile organic compounds.
*Refer to **Appendix A.1 (Summer)** and **Appendix A.2 (Winter)**, Section 2.2, for maximum operational emissions during both the summer and winter seasons.*

Localized Significance Thresholds

The result of the LST analysis are provided in **Table 13: Localized Construction and Operational Emissions**. These estimates assume the maximum area that would be disturbed during construction on any given day during Project buildout. Emissions presented in **Table 13** include regulatory compliance measures such as control efficiency of PM10 (dust control measures per SCAQMD Rule 403). As shown in **Table 13**, emissions would not exceed the localized significance construction and operational thresholds.

TABLE 13
LOCALIZED CONSTRUCTION AND OPERATIONAL EMISSIONS

Source	NOx	CO	PM10	PM2.5
	On-Site Emissions (pounds/day)			
Construction				
Total maximum emissions	17	14	3	2
LST threshold[a]	94	773	6	4
Threshold Exceeded?	**No**	**No**	**No**	**No**
Operational				
Project area/energy emissions	<1	<1	<0.1	<0.1
LST threshold[a]	94	773	2	1
Threshold Exceeded?	**No**	**No**	**No**	**No**

Notes:
Totals in table may not appear to add exactly due to rounding in the computer model calculations.
CO = carbon monoxide; NOx = nitrogen oxide; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns.
*Refer to **Appendix A.1 (Summer)** and **Appendix A.2 (Winter)**, Sections 3.2 through 3.7, for maximum on-site emissions during both the summer and winter seasons.*
[a] The Project site is approximately 1.86 acres. Consistent with SCAQMD's Localized Significance Threshold (LST) Methodology, the localized thresholds are based on a 1.86-acre site with a receptor distance of 25 meters (82 feet) in SCAQMD's SRA 8.

Toxic Air Contaminants

Project construction would result in short-term emissions of diesel particulate matter, which is a TAC. Off-road heavy-duty diesel equipment would emit diesel particulate matter over the course of the construction period. Localized diesel particulate emissions (strongly correlated with PM2.5 emissions) would be minimal and would be substantially below localized thresholds, as shown in **Table 13**. Project compliance with the CARB anti-idling measure, which limits idling to no more than 5 minutes at any location for diesel-fueled commercial vehicles, would further minimize diesel particulate matter emissions in the Project area.

Project operations would generate only minor amounts of diesel emissions from delivery trucks and incidental maintenance activities. Trucks would comply with the applicable provisions of the CARB Truck and Bus regulation to minimize and reduce emission from existing diesel trucks. In addition, Project operations would only result in minimal emissions of air toxics from maintenance or other ongoing activities, such as from the use of architectural coatings or household cleaning products. As a result, toxic or carcinogenic air pollutants are not expected to occur in any meaningful amounts in conjunction with operation of the proposed uses within the Project site. Based on the uses expected on the Project

site, potential long-term operational impacts associated with the release of TACs would be minimal and would not be expected to exceed the SCAQMD thresholds of significance.

Odors

As shown in **Table 13**, the construction of the Project would result in emissions below the localized significance thresholds. Mandatory compliance with SCAQMD Rule 1113 would limit the number of VOCs in architectural coatings and solvents. According to SCAQMD, while almost any source may emit objectionable odors, some land uses are more likely to produce odors because of their operation. Land uses more likely to produce odors include agriculture, chemical plants, composting operations, dairies, fiberglass molding manufacturing, landfills, refineries, rendering plants, rail yards, and wastewater treatment plants. The Project does not contain any active manufacturing activities and would not convert current agricultural land to residential land uses. Therefore, objectionable odors would not be emitted by the proposed uses.

Any unforeseen odors generated by the Project will be controlled in accordance with SCAQMD Rule 402. As previously noted, Rule 402 prohibits the discharge of air contaminants that harm, endanger, or annoy individuals or the public; endanger the comfort, health or safety of individuals or the public; or cause injury or damage to business or property. Failure to comply with Rule 402 could subject the offending facility to possible fines and/or operational limitations in an approved odor control or odor abatement plan.

Consistency with AQMP

The Basin is designated nonattainment at the federal level for O3 and PM2.5 and State level for O3, PM10, and PM2.5. SCAQMD developed regional emissions thresholds, as shown in **Table 6** and **Table 7**, to determine whether a project would contribute to air pollutant violations. If a project exceeds the regional air pollutant thresholds, then it would significantly contribute to air quality violations in the Basin.

As shown in **Table 11**, temporary emissions associated with construction of the Project would fall below SCAQMD thresholds for VOCs, NOx, CO, SOx, PM10, and PM2.5.

As shown in **Table 12**, long-term emissions associated with operation of the Project would not exceed SCAQMD thresholds for VOCs, NOx, CO, SOx, PM10, and PM2.5.

The Project's maximum potential NOx, CO, PM10, and PM2.5 daily emissions during construction and operation were analyzed to determine potential effects on localized concentrations and to determine if the potential exists for such emissions to cause or affect a violation of an applicable AAQS. As shown in **Table 13**, NOx, CO, PM10, and PM2.5 emissions would not exceed the SCAQMD localized significance thresholds.

Cumulative

Development of the Project in conjunction with any related projects near the Project would result in an increase in construction and operational emissions in an already urbanized area of the City. However, cumulative air quality impacts from construction, based on SCAQMD guidelines, are not analyzed in a manner similar to project-specific air quality impacts. Instead, SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts. According to SCAQMD, individual development projects that generate construction or operational emissions that exceed SCAQMD recommended daily regional or localized thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

With the implementation of regulatory compliance measures such as Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coating), the Project's construction and operational emissions are not expected to significantly contribute to cumulative emissions for CO, NOx, PM10, and PM2.5. As such, the Project's contribution to cumulative air quality emissions in combination with any related projects would not be cumulatively considerable.

As discussed previously, the Project would not jeopardize the attainment of air quality standards in the 2016 AQMP for the South Coast Air Basin and the Los Angeles County portion of the South Coast Air Basin. As such, the Project would not have a cumulatively considerable contribution to a potential conflict with or obstruction of the implementation of the AQMP regional reduction plans.

Greenhouse Gas Emissions

The forecasting of construction-related GHG emissions requires assumptions regarding the timing of construction as the emission factors for some of the Project's construction-related GHG emission sources decline over time. As shown in **Table 14: Construction GHG Emissions**, total construction emissions would be 378 metric tons of CO2e (MTCO2e). One-time, short-term emissions are converted to average annual emissions by amortizing them over the service life of a building. For buildings in general, it is reasonable to look at a 30-year time frame because this is a typical interval before a new building requires its first major renovation.[31] As shown in **Table 14**, when amortized over an average 30-year Project lifetime, average annual construction emissions from the Project would be 13 MTCO2e per year.

31 International Energy Agency (IEA), Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings, IEA Information Paper (2008).

TABLE 14 CONSTRUCTION GHG EMISSIONS	
Construction Phase	**MTCO2e/Year**
2022	29
2023	349
Overall Total	**378**
30-Year Annual Amortized Rate	**13**

*Refer to **Appendix A.3 (Annual)**, Section 2.1 for overall construction emissions.*
Notes: GHG = greenhouse gas; MTCO2e = metric tons of carbon dioxide equivalent.

The southern portion of the site (along Brand Boulevard) proposed for the parking structure currently features a surface parking lot with three solar panel structures and a 561 square-foot accessory building. Development of the site will result in demolition of the accessory building and the solar panel structures will be removed and relocated to the rooftop of the new parking structure. However, for a worst-case assessment, the emissions presented below do not take into account the reduction of emissions from the existing use nor does it take into account the energy savings from the solar panels. As such, the emissions presented below are considered to be conservative and a worst-case assessment. Additionally, the City's Traffic Engineer determined no significant increase in traffic could occur as a result of the Project as the current car inventory and car sales/service floor area would remain unchanged. The area of parking garages is not considered for purposes of trip generation. However, for a conservative assessment, the default ITE Trip Generation Rate for an Automobile Care Center (ITE 942) in CalEEMod was assumed, which generates approximately 652 weekday daily trips.

Operational Project emissions from area sources, energy sources, mobile sources, solid waste, and water and wastewater conveyance are shown in **Table 15: Operational GHG Emissions** below. As shown in **Table 15**, average annual net operational emissions from the proposed Project would be 936 MTCO2e per year.

TABLE 15 OPERATIONAL GHG EMISSIONS	
Source	**Unmitigated MTCO2e per year**
Construction (amortized)	13
Area	<1
Energy	559
Mobile	285
Waste	53
Water	26
Net Total	**936**

*Refer to **Appendix A.3 (Annual)**, Section 2.2 for maximum annual operation emissions.*
Abbreviation: MTCO2e = metric tons of carbon dioxide emissions.

Conflict with Applicable Greenhouse Gas Reduction Plans, Policies, or Regulations

There are no federal, State, or local quantitative adopted thresholds of significance for addressing a project's GHG emissions. In the absence of any adopted, numeric threshold, this analysis evaluates the significance of a project by considering whether the project conflicts with applicable regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction of mitigation of greenhouse gas emissions. The following analysis describes the extent the Project complies with the regulations and policies outlined in the City's Greener Glendale Plan, and the City's South Glendale Community Plan EIR.

Consistency with Greener Glendale Plan

As discussed previously, the City adopted the Greener Glendale Plan.[32] The Greener Glendale Plan incorporates 12 measures in addition to the mandatory Green Building Standards for new construction projects. These measures went into effect on July 7, 2011. The 12 measures and applicability to the Project are provided in **Table 16: Project Consistency with Greener Glendale Plan**. These measures would be imposed by a conditions of approval (COA) upon approval of the Project. By complying with the 12 measures listed in **Table 16**, the Project would be consistent with the Greener Glendale Plan.

TABLE 16
PROJECT CONSISTENCY WITH GREENER GLENDALE PLAN

	Measure	Applicability
1.	Expand applicability of green building standards to residential buildings over 3-stories.	**No Conflict.** The Project does not include a residential development.
2.	Exceed California Energy Code requirements by 15 percent.	**No Conflict.** The southern portion of the site (along Brand Boulevard) proposed for the parking structure currently features a surface parking lot with three solar panel structures, thus exceeding California Energy Code requirements. Additionally, the solar panel structures will be removed and relocated to the rooftop of the new parking structure.
3.	Reduce baseline water usage by 20 percent.	**No Conflict.** The new parking structure would not require the use of water.
4.	A radian roof barrier shall be installed.	**No Conflict.** The new parking structure would not require a radian roof barrier. Additionally, the existing solar panel structures will be removed and relocated to the rooftop of the new parking structure.
5.	Gas fired tankless water heaters shall have an energy factor of at least 0.80.	**No Conflict.** The new parking structure would not require gas fired tankless water heaters.
6.	Gas-fired storage-tank type water heaters shall have an energy factor of at 0.61.	**No Conflict.** The new parking structure would not require gas-fire storage-tank type water heaters =.
7.	Buildings shall be "solar ready."	**No Conflict.** The southern portion of the site (along Brand Boulevard) proposed for the parking structure currently features a surface parking lot with three solar panel structures. The solar panel structures will be removed and relocated to the rooftop of the new parking structure.
8.	At least 20 percent of certain paved areas in residential projects shall be permeable.	**No Conflict.** The Project does not include a residential development.
9.	Residential gas-fired heating equipment shall be high efficiency units.	**No Conflict.** The Project does not include a residential development.
10.	Residential air conditioning equipment shall be high-efficiency units.	**No Conflict.** The Project does not include a residential development.

32 City of Glendale, Greener Glendale, https://www.glendaleca.gov/government/departments/management-services/office-of-sustainability/greener-glendale, accessed June 2022.

TABLE 16
PROJECT CONSISTENCY WITH GREENER GLENDALE PLAN

Measure	Applicability
11. Natural light ventilation in residential habitable room shall be increased.	**No Conflict.** The Project does not include a residential development.
12. New single-family dwellings with floor area greater than 5,000 square feet shall be required to meet CALGreen Tier 1.	**No Conflict.** The Project does not include a residential development.

Source: City of Glendale, Greener Glendale, https://www.glendaleca.gov/government/departments/management-services/office-of-sustainability/greener-glendale, accessed June 2022.

Consistency with South Glendale Community Plan EIR

As discussed previously, Policy GHG-3 of the South Glendale Community Plan EIR requires the City to reduce GHG emissions from new development by discouraging auto-dependent sprawl and dependence on the private automobile; promoting water conservation and recycling; promoting development that is compact, mixed use, pedestrian friendly, and transit oriented; and promoting energy-efficient building design and site planning. As mentioned previously, the site currently includes three solar panel structure that would be relocated to the rooftop of the new parking structure. Therefore, the Project has already committed to meeting the requirements of the CALGreen Code by incorporating strategies such as energy and resource conservation measures. The Project would comply with applicable energy, water, and waste efficiency measures specified in the Title 24 Building Energy Efficiency Standards and CALGreen standards. As such, the Project would be consistent with the policies mentioned in the South Glendale Community Plan EIR.

For the reasons described above, the Project would be consistent with State-applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions, impacts would not be considered significant.

Cumulative Impacts

To achieve Statewide goals, CARB is in the process of establishing and implementing regulations to reduce Statewide GHG emissions. Currently, there is no generally accepted methodology that exists to determine whether GHG emissions associated with a specific project represent new emissions or existing and/or displaced emissions. Therefore, consistent with CEQA Guidelines Section 15064h(3), this analysis has determined that the Project's contribution to cumulative GHG emission and global climate change would be less than significant if the Project is consistent with the applicable regulatory plans and polices to reduce GHG emissions. Accordingly, the analysis above considered the potential for the Project to contribute to the cumulative impact of global climate change. As stated above, with compliance of regulatory measures and implementation of CALGreen Building Standards, the Project would not conflict with applicable plans including the City's Greener Glendale Plan, and the City's South Glendale Community Plan EIR. As such, cumulative impacts would be less than significant during construction and operation.

CERTIFICATION

The contents of this Air Quality and Greenhouse Gas Study represent an accurate depiction of the air quality environment and impacts associated with the proposed Pacific BMW Dealership Expansion Project. The information contained in this study is based on the best available information at the time of preparation. If you have any questions, please contact me directly at (805) 413-4187.

Christ Kirikian
Principal | Director of Air Quality & Acoustics
ckirikian@meridianconsultantsllc.com

APPENDIX A

CalEEMod Air Quality Emission Output Files

Appendix A.1

Summer

Date: 6/9/2022 10:41 AM

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

901 S. Brand BMW Inventory Structure

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	171.14	1000sqft	0.60	171,140.00	0
Parking Lot	13.72	1000sqft	0.31	13,720.00	0
Automobile Care Center	27.50	1000sqft	1.00	27,557.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2024
Utility Company	Glendale Water and Power				
CO2 Intensity (lb/MWhr)	948.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Project site is 82,550 sq. ft. (1.89 acres) and developed with two buildings (18,365 SF and 9,192 SF; 27,557 SF combined) utilized as vehicle repair shops. (Refer to Site Plan Cover Sheet)

Construction Phase - Based on updated construction schedule shifted about 4 months from original assumption

Demolition - Demolition will include an at-grade asphalt parking lot (approximately 155' x 220') and a 561 sq. ft. building

Grading - Approximately 1,750 cubic yards of export

Trips and VMT -

Vehicle Trips - Per the City's MND, the City's Traffic Engineer determined no significant increase in traffic could occur as a result of the Project because the proposed use is a parking structure for the current car inventory and the car sales/service floor area will remain the same. The area of parking garages is not considered for purposes of trip generation. However, for a worst-case assessment default assumption is assumed

Construction Off-road Equipment Mitigation - Regulatory Compliance Measures for dust control (Rule 403). Minimum measures are implemented for purposes of a worst-case assessment.

Area Mitigation - Rule 1113: Architectural Coating

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	2.00	5.00
tblGrading	MaterialExported	0.00	1,750.00
tblLandUse	LandUseSquareFeet	27,500.00	27,557.00
tblLandUse	LotAcreage	3.93	0.60
tblLandUse	LotAcreage	0.63	1.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Baseline Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.7707	17.9814	14.7822	0.0304	6.3535	0.8487	6.9766	3.0276	0.7932	3.6008	0.0000	2,996.4461	2,996.4461	0.6243	0.0886	3,038.4520
2023	30.9330	19.2528	16.2479	0.0429	7.8663	0.6351	8.5013	3.6345	0.5854	4.2199	0.0000	4,442.5854	4,442.5854	0.7772	0.3748	4,573.7072
Maximum	**30.9330**	**19.2528**	**16.2479**	**0.0429**	**7.8663**	**0.8487**	**8.5013**	**3.6345**	**0.7932**	**4.2199**	**0.0000**	**4,442.5854**	**4,442.5854**	**0.7772**	**0.3748**	**4,573.7072**

Regulatory Compliance Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.7707	17.9814	14.7822	0.0304	2.5324	0.8487	3.1555	1.1952	0.7932	1.7685	0.0000	2,996.4461	2,996.4461	0.6243	0.0886	3,038.4520
2023	30.9330	19.2528	16.2479	0.0429	3.5258	0.6351	4.1608	1.5424	0.5854	2.1278	0.0000	4,442.5854	4,442.5854	0.7772	0.3748	4,573.7072
Maximum	**30.9330**	**19.2528**	**16.2479**	**0.0429**	**3.5258**	**0.8487**	**4.1608**	**1.5424**	**0.7932**	**2.1278**	**0.0000**	**4,442.5854**	**4,442.5854**	**0.7772**	**0.3748**	**4,573.7072**

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**57.40**	**0.00**	**52.73**	**58.91**	**0.00**	**50.18**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Baseline Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6972	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495
Energy	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721
Mobile	1.3272	1.0215	9.6778	0.0182	1.8396	0.0141	1.8537	0.4900	0.0130	0.5031		1,882.3293	1,882.3293	0.1581	0.0935	1,914.1466
Total	**2.0390**	**1.1546**	**9.8111**	**0.0190**	**1.8396**	**0.0242**	**1.8639**	**0.4900**	**0.0232**	**0.5133**		**2,041.8999**	**2,041.8999**	**0.1613**	**0.0964**	**2,074.6682**

Regulatory Compliance Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6972	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495
Energy	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721
Mobile	1.3272	1.0215	9.6778	0.0182	1.8396	0.0141	1.8537	0.4900	0.0130	0.5031		1,882.3293	1,882.3293	0.1581	0.0935	1,914.1466
Total	**2.0390**	**1.1546**	**9.8111**	**0.0190**	**1.8396**	**0.0242**	**1.8639**	**0.4900**	**0.0232**	**0.5133**		**2,041.8999**	**2,041.8999**	**0.1613**	**0.0964**	**2,074.6682**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/1/2022	12/28/2022	5	20	
2	Site Preparation	Site Preparation	12/29/2022	1/4/2023	5	5	
3	Grading	Grading	1/5/2023	1/12/2023	5	6	
4	Building Construction	Building Construction	1/13/2023	10/19/2023	5	200	
5	Paving	Paving	10/20/2023	11/2/2023	5	10	
6	Architectural Coating	Architectural Coating	11/3/2023	11/16/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.69

Acres of Grading (Grading Phase): 6

Acres of Paving: 0.91

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 41,336; Non-Residential Outdoor: 13,779; Striped Parking Area: 11,092

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	158.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	219.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	86.00	35.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7059	0.0000	1.7059	0.2583	0.0000	0.2583			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829		2,323.4168	2,323.4168	0.5921		2,338.2191
Total	**1.6889**	**16.6217**	**13.9605**	**0.0241**	**1.7059**	**0.8379**	**2.5438**	**0.2583**	**0.7829**	**1.0412**		**2,323.4168**	**2,323.4168**	**0.5921**		**2,338.2191**

Baseline Construction Off-Site

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0368	1.3268	0.3094	4.9100e-003	0.1383	9.8600e-003	0.1481	0.0379	9.4300e-003	0.0473		537.8127	537.8127	0.0286	0.0853	563.9555
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0450	0.0329	0.5124	1.3300e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		135.2165	135.2165	3.6600e-003	3.2500e-003	136.2774
Total	**0.0818**	**1.3597**	**0.8217**	**6.2400e-003**	**0.2836**	**0.0108**	**0.2944**	**0.0765**	**0.0103**	**0.0867**		**673.0292**	**673.0292**	**0.0322**	**0.0886**	**700.2329**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6653	0.0000	0.6653	0.1007	0.0000	0.1007			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191
Total	**1.6889**	**16.6217**	**13.9605**	**0.0241**	**0.6653**	**0.8379**	**1.5032**	**0.1007**	**0.7829**	**0.8836**	**0.0000**	**2,323.4168**	**2,323.4168**	**0.5921**		**2,338.2191**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0368	1.3268	0.3094	4.9100e-003	0.1383	9.8600e-003	0.1481	0.0379	9.4300e-003	0.0473		537.8127	537.8127	0.0286	0.0853	563.9555
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0450	0.0329	0.5124	1.3300e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		135.2165	135.2165	3.6600e-003	3.2500e-003	136.2774
Total	**0.0818**	**1.3597**	**0.8217**	**6.2400e-003**	**0.2836**	**0.0108**	**0.2944**	**0.0765**	**0.0103**	**0.0867**		**673.0292**	**673.0292**	**0.0322**	**0.0886**	**700.2329**

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2641	0.0000	6.2641	3.0039	0.0000	3.0039			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727		1,666.1738	1,666.1738	0.5389		1,679.6457
Total	**1.3122**	**14.6277**	**7.0939**	**0.0172**	**6.2641**	**0.6225**	**6.8866**	**3.0039**	**0.5727**	**3.5766**		**1,666.1738**	**1,666.1738**	**0.5389**		**1,679.6457**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0202	0.3153	8.2000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		83.2102	83.2102	2.2500e-003	2.0000e-003	83.8630
Total	**0.0277**	**0.0202**	**0.3153**	**8.2000e-004**	**0.0894**	**5.7000e-004**	**0.0900**	**0.0237**	**5.3000e-004**	**0.0242**		**83.2102**	**83.2102**	**2.2500e-003**	**2.0000e-003**	**83.8630**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Fugitive Dust					2.4430	0.0000	2.4430	1.1715	0.0000	1.1715			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457
Total	**1.3122**	**14.6277**	**7.0939**	**0.0172**	**2.4430**	**0.6225**	**3.0655**	**1.1715**	**0.5727**	**1.7442**	**0.0000**	**1,666.1738**	**1,666.1738**	**0.5389**		**1,679.6457**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0202	0.3153	8.2000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		83.2102	83.2102	2.2500e-003	2.0000e-003	83.8630
Total	**0.0277**	**0.0202**	**0.3153**	**8.2000e-004**	**0.0894**	**5.7000e-004**	**0.0900**	**0.0237**	**5.3000e-004**	**0.0242**		**83.2102**	**83.2102**	**2.2500e-003**	**2.0000e-003**	**83.8630**

3.3 Site Preparation - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2641	0.0000	6.2641	3.0039	0.0000	3.0039			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2641**	**0.5074**	**6.7715**	**3.0039**	**0.4668**	**3.4707**		**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0256	0.0179	0.2899	7.9000e-004	0.0894	5.4000e-004	0.0900	0.0237	5.0000e-004	0.0242		81.0090	81.0090	2.0200e-003	1.8500e-003	81.6097
Total	**0.0256**	**0.0179**	**0.2899**	**7.9000e-004**	**0.0894**	**5.4000e-004**	**0.0900**	**0.0237**	**5.0000e-004**	**0.0242**		**81.0090**	**81.0090**	**2.0200e-003**	**1.8500e-003**	**81.6097**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4430	0.0000	2.4430	1.1715	0.0000	1.1715			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**2.4430**	**0.5074**	**2.9504**	**1.1715**	**0.4668**	**1.6383**	**0.0000**	**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0256	0.0179	0.2899	7.9000e-004	0.0894	5.4000e-004	0.0900	0.0237	5.0000e-004	0.0242		81.0090	81.0090	2.0200e-003	1.8500e-003	81.6097
Total	**0.0256**	**0.0179**	**0.2899**	**7.9000e-004**	**0.0894**	**5.4000e-004**	**0.0900**	**0.0237**	**5.0000e-004**	**0.0242**		**81.0090**	**81.0090**	**2.0200e-003**	**1.8500e-003**	**81.6097**

3.4 Grading - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1156	0.0000	7.1156	3.4297	0.0000	3.4297			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.1156**	**0.6044**	**7.7199**	**3.4297**	**0.5560**	**3.9857**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0792	4.7629	1.2712	0.0214	0.6389	0.0300	0.6690	0.1752	0.0287	0.2039		2,345.7094	2,345.7094	0.1293	0.3725	2,459.9449
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0320	0.0223	0.3624	9.9000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		101.2613	101.2613	2.5200e-003	2.3100e-003	102.0121
Total	**0.1112**	**4.7852**	**1.6336**	**0.0223**	**0.7507**	**0.0307**	**0.7814**	**0.2048**	**0.0294**	**0.2342**		**2,446.9707**	**2,446.9707**	**0.1318**	**0.3748**	**2,561.9569**

Regulatory Compliance Construction On-Site

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7751	0.0000	2.7751	1.3376	0.0000	1.3376			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**2.7751**	**0.6044**	**3.3794**	**1.3376**	**0.5560**	**1.8936**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0792	4.7629	1.2712	0.0214	0.6389	0.0300	0.6690	0.1752	0.0287	0.2039		2,345.7094	2,345.7094	0.1293	0.3725	2,459.9449
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0320	0.0223	0.3624	9.9000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		101.2613	101.2613	2.5200e-003	2.3100e-003	102.0121
Total	**0.1112**	**4.7852**	**1.6336**	**0.0223**	**0.7507**	**0.0307**	**0.7814**	**0.2048**	**0.0294**	**0.2342**		**2,446.9707**	**2,446.9707**	**0.1318**	**0.3748**	**2,561.9569**

3.5 Building Construction - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Date: 6/9/2022 10:41 AM

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0403	1.3434	0.5205	6.5100e-003	0.2242	6.7500e-003	0.2309	0.0646	6.4600e-003	0.0710		700.9887	700.9887	0.0235	0.1008	731.6089
Worker	0.2754	0.1920	3.1164	8.5100e-003	0.9613	5.8000e-003	0.9671	0.2549	5.3400e-003	0.2603		870.8470	870.8470	0.0217	0.0199	877.3039
Total	**0.3157**	**1.5354**	**3.6369**	**0.0150**	**1.1855**	**0.0126**	**1.1980**	**0.3195**	**0.0118**	**0.3313**		**1,571.8357**	**1,571.8357**	**0.0452**	**0.1206**	**1,608.9128**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0403	1.3434	0.5205	6.5100e-003	0.2242	6.7500e-003	0.2309	0.0646	6.4600e-003	0.0710		700.9887	700.9887	0.0235	0.1008	731.6089

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.2754	0.1920	3.1164	8.5100e-003	0.9613	5.8000e-003	0.9671	0.2549	5.3400e-003	0.2603		870.8470	870.8470	0.0217	0.0199	877.3039
Total	**0.3157**	**1.5354**	**3.6369**	**0.0150**	**1.1855**	**0.0126**	**1.1980**	**0.3195**	**0.0118**	**0.3313**		**1,571.8357**	**1,571.8357**	**0.0452**	**0.1206**	**1,608.9128**

3.6 Paving - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7258**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0416	0.0290	0.4711	1.2900e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0393		131.6397	131.6397	3.2800e-003	3.0000e-003	132.6157
Total	**0.0416**	**0.0290**	**0.4711**	**1.2900e-003**	**0.1453**	**8.8000e-004**	**0.1462**	**0.0385**	**8.1000e-004**	**0.0393**		**131.6397**	**131.6397**	**3.2800e-003**	**3.0000e-003**	**132.6157**

Regulatory Compliance Construction On-Site

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7258**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0416	0.0290	0.4711	1.2900e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0393		131.6397	131.6397	3.2800e-003	3.0000e-003	132.6157
Total	**0.0416**	**0.0290**	**0.4711**	**1.2900e-003**	**0.1453**	**8.8000e-004**	**0.1462**	**0.0385**	**8.1000e-004**	**0.0393**		**131.6397**	**131.6397**	**3.2800e-003**	**3.0000e-003**	**132.6157**

3.7 Architectural Coating - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	30.6869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**30.8786**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0544	0.0380	0.6160	1.6800e-003	0.1900	1.1500e-003	0.1912	0.0504	1.0600e-003	0.0515		172.1442	172.1442	4.2900e-003	3.9200e-003	173.4206
Total	**0.0544**	**0.0380**	**0.6160**	**1.6800e-003**	**0.1900**	**1.1500e-003**	**0.1912**	**0.0504**	**1.0600e-003**	**0.0515**		**172.1442**	**172.1442**	**4.2900e-003**	**3.9200e-003**	**173.4206**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	30.6869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**30.8786**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0544	0.0380	0.6160	1.6800e-003	0.1900	1.1500e-003	0.1912	0.0504	1.0600e-003	0.0515		172.1442	172.1442	4.2900e-003	3.9200e-003	173.4206
Total	**0.0544**	**0.0380**	**0.6160**	**1.6800e-003**	**0.1900**	**1.1500e-003**	**0.1912**	**0.0504**	**1.0600e-003**	**0.0515**		**172.1442**	**172.1442**	**4.2900e-003**	**3.9200e-003**	**173.4206**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Regulatory	1.3272	1.0215	9.6778	0.0182	1.8396	0.0141	1.8537	0.4900	0.0130	0.5031		1,882.3293	1,882.3293	0.1581	0.0935	1,914.1466
Compliance																
Baseline	1.3272	1.0215	9.6778	0.0182	1.8396	0.0141	1.8537	0.4900	0.0130	0.5031		1,882.3293	1,882.3293	0.1581	0.0935	1,914.1466

4.2 Trip Summary Information

	Average Daily Trip Rate			Baseline	Regulatory Compliance
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	652.30	652.30	326.70	811,481	811,481
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	652.30	652.30	326.70	811,481	811,481

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Enclosed Parking with Elevator	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Regulatory	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721
NaturalGas Baseline	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721

5.2 Energy by Land Use - NaturalGas

Baseline

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1355.96	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1329**	**0.1117**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.5242**	**159.5242**	**3.0600e-003**	**2.9200e-003**	**160.4721**

Regulatory Compliance

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1.35596	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1329**	**0.1117**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.5242**	**159.5242**	**3.0600e-003**	**2.9200e-003**	**160.4721**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Regulatory Compliance	0.6972	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495
Baseline	0.6972	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495

6.2 Area by SubCategory

Baseline

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6111					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-003	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495
Total	**0.6972**	**2.0000e-004**	**0.0217**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0465**	**0.0465**	**1.2000e-004**		**0.0495**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6111					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-003	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495
Total	**0.6972**	**2.0000e-004**	**0.0217**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0465**	**0.0465**	**1.2000e-004**		**0.0495**

Regulatory Compliance

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix A.2

Winter

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

901 S. Brand BMW Inventory Structure

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	171.14	1000sqft	0.60	171,140.00	0
Parking Lot	13.72	1000sqft	0.31	13,720.00	0
Automobile Care Center	27.50	1000sqft	1.00	27,557.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2024
Utility Company	Glendale Water and Power				
CO2 Intensity (lb/MWhr)	948.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Project site is 82,550 sq. ft. (1.89 acres) and developed with two buildings (18,365 SF and 9,192 SF; 27,557 SF combined) utilized as vehicle repair shops. (Refer to Site Plan Cover Sheet)
Construction Phase - Based on updated construction schedule shifted about 4 months from original assumption

Demolition - Demolition will include an at-grade asphalt parking lot (approximately 155' x 220') and a 561 sq. ft. building

Grading - Approximately 1,750 cubic yards of export

Trips and VMT -

Vehicle Trips - Per the City's MND, the City's Traffic Engineer determined no significant increase in traffic could occur as a result of the Project because the proposed use is a parking structure for the current car inventory and the car sales/service floor area will remain the same. The area of parking garages is not considered for purposes of trip generation. However, for a worst-case assessment default assumption is assumed

Construction Off-road Equipment Mitigation - Regulatory Compliance Measures for dust control (Rule 403). Minimum measures are implemented for purposes of a worst-case assessment.
Area Mitigation - Rule 1113: Architectural Coating

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	2.00	5.00
tblGrading	MaterialExported	0.00	1,750.00
tblLandUse	LandUseSquareFeet	27,500.00	27,557.00
tblLandUse	LotAcreage	3.93	0.60
tblLandUse	LotAcreage	0.63	1.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Baseline Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.7730	18.0387	14.7457	0.0303	6.3535	0.8487	6.9766	3.0276	0.7932	3.6008	0.0000	2,989.4545	2,989.4545	0.6243	0.0888	3,031.5351
2023	30.9371	19.4651	16.0124	0.0429	7.8663	0.6352	8.5014	3.6345	0.5854	4.2200	0.0000	4,439.7193	4,439.7193	0.7770	0.3754	4,571.0020
Maximum	**30.9371**	**19.4651**	**16.0124**	**0.0429**	**7.8663**	**0.8487**	**8.5014**	**3.6345**	**0.7932**	**4.2200**	**0.0000**	**4,439.7193**	**4,439.7193**	**0.7770**	**0.3754**	**4,571.0020**

Regulatory Compliance Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.7730	18.0387	14.7457	0.0303	2.5324	0.8487	3.1555	1.1952	0.7932	1.7685	0.0000	2,989.4545	2,989.4545	0.6243	0.0888	3,031.5351
2023	30.9371	19.4651	16.0124	0.0429	3.5258	0.6352	4.1609	1.5424	0.5854	2.1279	0.0000	4,439.7193	4,439.7193	0.7770	0.3754	4,571.0020

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Maximum	**30.9371**	**19.4651**	**16.0124**	**0.0429**	**3.5258**	**0.8487**	**4.1609**	**1.5424**	**0.7932**	**2.1279**	**0.0000**	**4,439.7193**	**4,439.7193**	**0.7770**	**0.3754**	**4,571.0020**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**57.40**	**0.00**	**52.73**	**58.91**	**0.00**	**50.18**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Baseline Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6972	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495
Energy	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721
Mobile	1.2871	1.1035	9.8432	0.0174	1.8396	0.0141	1.8537	0.4900	0.0131	0.5031		1,805.5920	1,805.5920	0.1670	0.0980	1,838.9715
Total	**1.9989**	**1.2367**	**9.9766**	**0.0182**	**1.8396**	**0.0243**	**1.8639**	**0.4900**	**0.0232**	**0.5133**		**1,965.1626**	**1,965.1626**	**0.1701**	**0.1009**	**1,999.4931**

Regulatory Compliance Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6972	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495
Energy	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721
Mobile	1.2871	1.1035	9.8432	0.0174	1.8396	0.0141	1.8537	0.4900	0.0131	0.5031		1,805.5920	1,805.5920	0.1670	0.0980	1,838.9715
Total	**1.9989**	**1.2367**	**9.9766**	**0.0182**	**1.8396**	**0.0243**	**1.8639**	**0.4900**	**0.0232**	**0.5133**		**1,965.1626**	**1,965.1626**	**0.1701**	**0.1009**	**1,999.4931**

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/1/2022	12/28/2022	5	20	
2	Site Preparation	Site Preparation	12/29/2022	1/4/2023	5	5	
3	Grading	Grading	1/5/2023	1/12/2023	5	6	
4	Building Construction	Building Construction	1/13/2023	10/19/2023	5	200	
5	Paving	Paving	10/20/2023	11/2/2023	5	10	
6	Architectural Coating	Architectural Coating	11/3/2023	11/16/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.69

Acres of Grading (Grading Phase): 6

Acres of Paving: 0.91

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 41,336; Non-Residential Outdoor: 13,779; Striped Parking Area: 11,092

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	158.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	219.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	86.00	35.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7059	0.0000	1.7059	0.2583	0.0000	0.2583			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829		2,323.4168	2,323.4168	0.5921		2,338.2191

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**1.6889**	**16.6217**	**13.9605**	**0.0241**	**1.7059**	**0.8379**	**2.5438**	**0.2583**	**0.7829**	**1.0412**		**2,323.4168**	**2,323.4168**	**0.5921**		**2,338.2191**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0359	1.3806	0.3148	4.9100e-003	0.1383	9.8800e-003	0.1482	0.0379	9.4500e-003	0.0474		537.9704	537.9704	0.0285	0.0854	564.1202
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0482	0.0363	0.4704	1.2600e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		128.0673	128.0673	3.7000e-003	3.4800e-003	129.1958
Total	**0.0841**	**1.4169**	**0.7852**	**6.1700e-003**	**0.2836**	**0.0108**	**0.2944**	**0.0765**	**0.0103**	**0.0868**		**666.0377**	**666.0377**	**0.0322**	**0.0888**	**693.3160**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6653	0.0000	0.6653	0.1007	0.0000	0.1007			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191
Total	**1.6889**	**16.6217**	**13.9605**	**0.0241**	**0.6653**	**0.8379**	**1.5032**	**0.1007**	**0.7829**	**0.8836**	**0.0000**	**2,323.4168**	**2,323.4168**	**0.5921**		**2,338.2191**

Regulatory Compliance Construction Off-Site

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0359	1.3806	0.3148	4.9100e-003	0.1383	9.8800e-003	0.1482	0.0379	9.4500e-003	0.0474		537.9704	537.9704	0.0285	0.0854	564.1202
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0482	0.0363	0.4704	1.2600e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		128.0673	128.0673	3.7000e-003	3.4800e-003	129.1958
Total	**0.0841**	**1.4169**	**0.7852**	**6.1700e-003**	**0.2836**	**0.0108**	**0.2944**	**0.0765**	**0.0103**	**0.0868**		**666.0377**	**666.0377**	**0.0322**	**0.0888**	**693.3160**

3.3 Site Preparation - 2022

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2641	0.0000	6.2641	3.0039	0.0000	3.0039			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727		1,666.1738	1,666.1738	0.5389		1,679.6457
Total	**1.3122**	**14.6277**	**7.0939**	**0.0172**	**6.2641**	**0.6225**	**6.8866**	**3.0039**	**0.5727**	**3.5766**		**1,666.1738**	**1,666.1738**	**0.5389**		**1,679.6457**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0223	0.2895	7.7000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		78.8107	78.8107	2.2800e-003	2.1400e-003	79.5051
Total	**0.0296**	**0.0223**	**0.2895**	**7.7000e-004**	**0.0894**	**5.7000e-004**	**0.0900**	**0.0237**	**5.3000e-004**	**0.0242**		**78.8107**	**78.8107**	**2.2800e-003**	**2.1400e-003**	**79.5051**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4430	0.0000	2.4430	1.1715	0.0000	1.1715			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457
Total	**1.3122**	**14.6277**	**7.0939**	**0.0172**	**2.4430**	**0.6225**	**3.0655**	**1.1715**	**0.5727**	**1.7442**	**0.0000**	**1,666.1738**	**1,666.1738**	**0.5389**		**1,679.6457**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0223	0.2895	7.7000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		78.8107	78.8107	2.2800e-003	2.1400e-003	79.5051
Total	**0.0296**	**0.0223**	**0.2895**	**7.7000e-004**	**0.0894**	**5.7000e-004**	**0.0900**	**0.0237**	**5.3000e-004**	**0.0242**		**78.8107**	**78.8107**	**2.2800e-003**	**2.1400e-003**	**79.5051**

3.3 Site Preparation - 2023

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2641	0.0000	6.2641	3.0039	0.0000	3.0039			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2641**	**0.5074**	**6.7715**	**3.0039**	**0.4668**	**3.4707**		**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0275	0.0197	0.2665	7.5000e-004	0.0894	5.4000e-004	0.0900	0.0237	5.0000e-004	0.0242		76.7381	76.7381	2.0500e-003	1.9700e-003	77.3770
Total	**0.0275**	**0.0197**	**0.2665**	**7.5000e-004**	**0.0894**	**5.4000e-004**	**0.0900**	**0.0237**	**5.0000e-004**	**0.0242**		**76.7381**	**76.7381**	**2.0500e-003**	**1.9700e-003**	**77.3770**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4430	0.0000	2.4430	1.1715	0.0000	1.1715			0.0000			0.0000

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**2.4430**	**0.5074**	**2.9504**	**1.1715**	**0.4668**	**1.6383**	**0.0000**	**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0275	0.0197	0.2665	7.5000e-004	0.0894	5.4000e-004	0.0900	0.0237	5.0000e-004	0.0242		76.7381	76.7381	2.0500e-003	1.9700e-003	77.3770
Total	**0.0275**	**0.0197**	**0.2665**	**7.5000e-004**	**0.0894**	**5.4000e-004**	**0.0900**	**0.0237**	**5.0000e-004**	**0.0242**		**76.7381**	**76.7381**	**2.0500e-003**	**1.9700e-003**	**77.3770**

3.4 Grading - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1156	0.0000	7.1156	3.4297	0.0000	3.4297			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.1156**	**0.6044**	**7.7199**	**3.4297**	**0.5560**	**3.9857**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Baseline Construction Off-Site

Date: 6/9/2022 10:42 AM

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0741	4.9729	1.2887	0.0214	0.6389	0.0301	0.6690	0.1752	0.0288	0.2040		2,348.1819	2,348.1819	0.1290	0.3729	2,462.5305
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0344	0.0247	0.3331	9.4000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		95.9227	95.9227	2.5600e-003	2.4700e-003	96.7212
Total	**0.1085**	**4.9975**	**1.6218**	**0.0223**	**0.7507**	**0.0308**	**0.7815**	**0.2048**	**0.0294**	**0.2343**		**2,444.1046**	**2,444.1046**	**0.1316**	**0.3754**	**2,559.2517**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7751	0.0000	2.7751	1.3376	0.0000	1.3376			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**2.7751**	**0.6044**	**3.3794**	**1.3376**	**0.5560**	**1.8936**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0741	4.9729	1.2887	0.0214	0.6389	0.0301	0.6690	0.1752	0.0288	0.2040		2,348.1819	2,348.1819	0.1290	0.3729	2,462.5305

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0344	0.0247	0.3331	9.4000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		95.9227	95.9227	2.5600e-003	2.4700e-003	96.7212
Total	**0.1085**	**4.9975**	**1.6218**	**0.0223**	**0.7507**	**0.0308**	**0.7815**	**0.2048**	**0.0294**	**0.2343**		**2,444.1046**	**2,444.1046**	**0.1316**	**0.3754**	**2,559.2517**

3.5 Building Construction - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0389	1.4065	0.5368	6.5300e-003	0.2242	6.8000e-003	0.2310	0.0646	6.5000e-003	0.0711		702.1711	702.1711	0.0234	0.1011	732.8689
Worker	0.2959	0.2121	2.8645	8.0600e-003	0.9613	5.8000e-003	0.9671	0.2549	5.3400e-003	0.2603		824.9350	824.9350	0.0220	0.0212	831.8024
Total	**0.3348**	**1.6186**	**3.4013**	**0.0146**	**1.1855**	**0.0126**	**1.1981**	**0.3195**	**0.0118**	**0.3313**		**1,527.1060**	**1,527.1060**	**0.0454**	**0.1223**	**1,564.6713**

Regulatory Compliance Construction On-Site

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0389	1.4065	0.5368	6.5300e-003	0.2242	6.8000e-003	0.2310	0.0646	6.5000e-003	0.0711		702.1711	702.1711	0.0234	0.1011	732.8689
Worker	0.2959	0.2121	2.8645	8.0600e-003	0.9613	5.8000e-003	0.9671	0.2549	5.3400e-003	0.2603		824.9350	824.9350	0.0220	0.0212	831.8024
Total	**0.3348**	**1.6186**	**3.4013**	**0.0146**	**1.1855**	**0.0126**	**1.1981**	**0.3195**	**0.0118**	**0.3313**		**1,527.1060**	**1,527.1060**	**0.0454**	**0.1223**	**1,564.6713**

3.6 Paving - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**0.7258**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0447	0.0321	0.4330	1.2200e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0393		124.6995	124.6995	3.3200e-003	3.2000e-003	125.7376
Total	**0.0447**	**0.0321**	**0.4330**	**1.2200e-003**	**0.1453**	**8.8000e-004**	**0.1462**	**0.0385**	**8.1000e-004**	**0.0393**		**124.6995**	**124.6995**	**3.3200e-003**	**3.2000e-003**	**125.7376**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7258**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Regulatory Compliance Construction Off-Site

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0447	0.0321	0.4330	1.2200e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0393		124.6995	124.6995	3.3200e-003	3.2000e-003	125.7376
Total	**0.0447**	**0.0321**	**0.4330**	**1.2200e-003**	**0.1453**	**8.8000e-004**	**0.1462**	**0.0385**	**8.1000e-004**	**0.0393**		**124.6995**	**124.6995**	**3.3200e-003**	**3.2000e-003**	**125.7376**

3.7 Architectural Coating - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	30.6869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**30.8786**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0585	0.0419	0.5662	1.5900e-003	0.1900	1.1500e-003	0.1912	0.0504	1.0600e-003	0.0515		163.0685	163.0685	4.3500e-003	4.1900e-003	164.4261
Total	**0.0585**	**0.0419**	**0.5662**	**1.5900e-003**	**0.1900**	**1.1500e-003**	**0.1912**	**0.0504**	**1.0600e-003**	**0.0515**		**163.0685**	**163.0685**	**4.3500e-003**	**4.1900e-003**	**164.4261**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	30.6869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**30.8786**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0585	0.0419	0.5662	1.5900e-003	0.1900	1.1500e-003	0.1912	0.0504	1.0600e-003	0.0515		163.0685	163.0685	4.3500e-003	4.1900e-003	164.4261
Total	**0.0585**	**0.0419**	**0.5662**	**1.5900e-003**	**0.1900**	**1.1500e-003**	**0.1912**	**0.0504**	**1.0600e-003**	**0.0515**		**163.0685**	**163.0685**	**4.3500e-003**	**4.1900e-003**	**164.4261**

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Regulatory Compliance	1.2871	1.1035	9.8432	0.0174	1.8396	0.0141	1.8537	0.4900	0.0131	0.5031		1,805.5920	1,805.5920	0.1670	0.0980	1,838.9715
Baseline	1.2871	1.1035	9.8432	0.0174	1.8396	0.0141	1.8537	0.4900	0.0131	0.5031		1,805.5920	1,805.5920	0.1670	0.0980	1,838.9715

4.2 Trip Summary Information

	Average Daily Trip Rate			Baseline	Regulatory Compliance
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	652.30	652.30	326.70	811,481	811,481
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	652.30	652.30	326.70	811,481	811,481

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Enclosed Parking with Elevator	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

5.0 Energy Detail

Historical Energy Use: N

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Regulatory Compliance	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721
NaturalGas Baseline	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721

5.2 Energy by Land Use - NaturalGas

Baseline

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1355.96	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1329**	**0.1117**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.5242**	**159.5242**	**3.0600e-003**	**2.9200e-003**	**160.4721**

Regulatory Compliance

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1.35596	0.0146	0.1329	0.1117	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5242	159.5242	3.0600e-003	2.9200e-003	160.4721
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1329**	**0.1117**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.5242**	**159.5242**	**3.0600e-003**	**2.9200e-003**	**160.4721**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Regulatory Compliance	0.6972	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495
Baseline	0.6972	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495

6.2 Area by SubCategory

Baseline

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

SubCategory	lb/day										lb/day					
Architectural Coating	0.0841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6111					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-003	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495
Total	**0.6972**	**2.0000e-004**	**0.0217**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0465**	**0.0465**	**1.2000e-004**		**0.0495**

Regulatory Compliance

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6111					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-003	2.0000e-004	0.0217	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0465	0.0465	1.2000e-004		0.0495
Total	**0.6972**	**2.0000e-004**	**0.0217**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0465**	**0.0465**	**1.2000e-004**		**0.0495**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix A.3

Annual

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

901 S. Brand BMW Inventory Structure

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	171.14	1000sqft	0.60	171,140.00	0
Parking Lot	13.72	1000sqft	0.31	13,720.00	0
Automobile Care Center	27.50	1000sqft	1.00	27,557.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2024
Utility Company	Glendale Water and Power				
CO2 Intensity (lb/MWhr)	948.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Project site is 82,550 sq. ft. (1.89 acres) and developed with two buildings (18,365 SF and 9,192 SF; 27,557 SF combined) utilized as vehicle repair shops. (Refer to Site Plan Cover Sheet)
Construction Phase - Based on updated construction schedule shifted about 4 months from original assumption

Demolition - Demolition will include an at-grade asphalt parking lot (approximately 155' x 220') and a 561 sq. ft. building

Grading - Approximately 1,750 cubic yards of export

Trips and VMT -

Vehicle Trips - Per the City's MND, the City's Traffic Engineer determined no significant increase in traffic could occur as a result of the Project because the proposed use is a parking structure for the current car inventory and the car sales/service floor area will remain the same. The area of parking garages is not considered for purposes of trip generation. However, for a worst-case assessment default assumption is assumed

Construction Off-road Equipment Mitigation - Regulatory Compliance Measures for dust control (Rule 403). Minimum measures are implemented for purposes of a worst-case assessment.

Area Mitigation - Rule 1113: Architectural Coating

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	2.00	5.00
tblGrading	MaterialExported	0.00	1,750.00
tblLandUse	LandUseSquareFeet	27,500.00	27,557.00
tblLandUse	LotAcreage	3.93	0.60
tblLandUse	LotAcreage	0.63	1.00

2.0 Emissions Summary

2.1 Overall Construction

Baseline Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0190	0.1952	0.1549	3.2000e-004	0.0277	9.1100e-003	0.0368	6.5200e-003	8.5100e-003	0.0150	0.0000	28.7205	28.7205	6.1500e-003	8.1000e-004	29.1152
2023	0.3482	1.4490	1.7072	3.9300e-003	0.1520	0.0573	0.2093	0.0474	0.0551	0.1025	0.0000	344.1337	344.1337	0.0398	0.0122	348.7547
Maximum	**0.3482**	**1.4490**	**1.7072**	**3.9300e-003**	**0.1520**	**0.0573**	**0.2093**	**0.0474**	**0.0551**	**0.1025**	**0.0000**	**344.1337**	**344.1337**	**0.0398**	**0.0122**	**348.7547**

Regulatory Compliance Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0190	0.1952	0.1549	3.2000e-004	0.0126	9.1100e-003	0.0217	3.0200e-003	8.5000e-003	0.0115	0.0000	28.7205	28.7205	6.1500e-003	8.1000e-004	29.1152
2023	0.3482	1.4490	1.7072	3.9300e-003	0.1327	0.0573	0.1899	0.0383	0.0551	0.0934	0.0000	344.1335	344.1335	0.0398	0.0122	348.7545

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Maximum	0.3482	1.4490	1.7072	3.9300e-003	0.1327	0.0573	0.1899	0.0383	0.0551	0.0934	0.0000	344.1335	344.1335	0.0398	0.0122	348.7545

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	19.20	0.00	14.02	23.38	0.02	10.72	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Baseline ROG + NOX (tons/quarter)	Maximum Regulatory Compliance ROG + NOX (tons/quarter)
1	12-1-2022	2-28-2023	0.5493	0.5493
2	3-1-2023	5-31-2023	0.4968	0.4968
3	6-1-2023	8-31-2023	0.4956	0.4956
4	9-1-2023	9-30-2023	0.1616	0.1616
		Highest	0.5493	0.5493

2.2 Overall Operational

Baseline Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1271	2.0000e-005	2.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2700e-003	5.2700e-003	1.0000e-005	0.0000	5.6100e-003
Energy	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	558.0481	558.0481	0.0190	2.7300e-003	559.3350
Mobile	0.2121	0.1876	1.6647	2.9700e-003	0.3049	2.3700e-003	0.3073	0.0813	2.2000e-003	0.0835	0.0000	279.6777	279.6777	0.0254	0.0150	284.7905
Waste						0.0000	0.0000		0.0000	0.0000	21.3242	0.0000	21.3242	1.2602	0.0000	52.8298
Water						0.0000	0.0000		0.0000	0.0000	0.8208	22.0845	22.9054	0.0851	2.0800e-003	25.6531
Total	**0.3419**	**0.2119**	**1.6878**	**3.1200e-003**	**0.3049**	**4.2200e-003**	**0.3091**	**0.0813**	**4.0500e-003**	**0.0854**	**22.1450**	**859.8156**	**881.9606**	**1.3896**	**0.0198**	**922.6141**

Regulatory Compliance Operational

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1271	2.0000e-005	2.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2700e-003	5.2700e-003	1.0000e-005	0.0000	5.6100e-003
Energy	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	558.0481	558.0481	0.0190	2.7300e-003	559.3350
Mobile	0.2121	0.1876	1.6647	2.9700e-003	0.3049	2.3700e-003	0.3073	0.0813	2.2000e-003	0.0835	0.0000	279.6777	279.6777	0.0254	0.0150	284.7905
Waste						0.0000	0.0000		0.0000	0.0000	21.3242	0.0000	21.3242	1.2602	0.0000	52.8298
Water						0.0000	0.0000		0.0000	0.0000	0.6567	18.7217	19.3784	0.0681	1.6700e-003	21.5788
Total	**0.3419**	**0.2119**	**1.6878**	**3.1200e-003**	**0.3049**	**4.2200e-003**	**0.3091**	**0.0813**	**4.0500e-003**	**0.0854**	**21.9809**	**856.4528**	**878.4336**	**1.3727**	**0.0194**	**918.5398**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.74**	**0.39**	**0.40**	**1.22**	**2.07**	**0.44**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/1/2022	12/28/2022	5	20	
2	Site Preparation	Site Preparation	12/29/2022	1/4/2023	5	5	
3	Grading	Grading	1/5/2023	1/12/2023	5	6	
4	Building Construction	Building Construction	1/13/2023	10/19/2023	5	200	
5	Paving	Paving	10/20/2023	11/2/2023	5	10	
6	Architectural Coating	Architectural Coating	11/3/2023	11/16/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.69

Acres of Grading (Grading Phase): 6

Acres of Paving: 0.91

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 41,336; Non-Residential Outdoor: 13,779; Striped Parking Area: 11,092 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	158.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	219.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	86.00	35.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Baseline Construction On-Site

Date: 6/9/2022 10:40 AM

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0171	0.0000	0.0171	2.5800e-003	0.0000	2.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120
Total	**0.0169**	**0.1662**	**0.1396**	**2.4000e-004**	**0.0171**	**8.3800e-003**	**0.0254**	**2.5800e-003**	**7.8300e-003**	**0.0104**	**0.0000**	**21.0777**	**21.0777**	**5.3700e-003**	**0.0000**	**21.2120**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.6000e-004	0.0140	3.1200e-003	5.0000e-005	1.3600e-003	1.0000e-004	1.4600e-003	3.7000e-004	9.0000e-005	4.7000e-004	0.0000	4.8796	4.8796	2.6000e-004	7.7000e-004	5.1168
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.7000e-004	4.8300e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1792	1.1792	3.0000e-005	3.0000e-005	1.1896
Total	**8.1000e-004**	**0.0143**	**7.9500e-003**	**6.0000e-005**	**2.7800e-003**	**1.1000e-004**	**2.8900e-003**	**7.5000e-004**	**1.0000e-004**	**8.6000e-004**	**0.0000**	**6.0587**	**6.0587**	**2.9000e-004**	**8.0000e-004**	**6.3063**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.6500e-003	0.0000	6.6500e-003	1.0100e-003	0.0000	1.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**0.0169**	**0.1662**	**0.1396**	**2.4000e-004**	**6.6500e-003**	**8.3800e-003**	**0.0150**	**1.0100e-003**	**7.8300e-003**	**8.8400e-003**	**0.0000**	**21.0777**	**21.0777**	**5.3700e-003**	**0.0000**	**21.2119**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.6000e-004	0.0140	3.1200e-003	5.0000e-005	1.3600e-003	1.0000e-004	1.4600e-003	3.7000e-004	9.0000e-005	4.7000e-004	0.0000	4.8796	4.8796	2.6000e-004	7.7000e-004	5.1168
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.7000e-004	4.8300e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1792	1.1792	3.0000e-005	3.0000e-005	1.1896
Total	**8.1000e-004**	**0.0143**	**7.9500e-003**	**6.0000e-005**	**2.7800e-003**	**1.1000e-004**	**2.8900e-003**	**7.5000e-004**	**1.0000e-004**	**8.6000e-004**	**0.0000**	**6.0587**	**6.0587**	**2.9000e-004**	**8.0000e-004**	**6.3063**

3.3 Site Preparation - 2022

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.7600e-003	0.0000	7.7600e-003	3.1600e-003	0.0000	3.1600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0146	7.0900e-003	2.0000e-005		6.2000e-004	6.2000e-004		5.7000e-004	5.7000e-004	0.0000	1.5115	1.5115	4.9000e-004	0.0000	1.5238
Total	**1.3100e-003**	**0.0146**	**7.0900e-003**	**2.0000e-005**	**7.7600e-003**	**6.2000e-004**	**8.3800e-003**	**3.1600e-003**	**5.7000e-004**	**3.7300e-003**	**0.0000**	**1.5115**	**1.5115**	**4.9000e-004**	**0.0000**	**1.5238**

Baseline Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	3.0000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0726	0.0726	0.0000	0.0000	0.0732
Total	**3.0000e-005**	**2.0000e-005**	**3.0000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0726**	**0.0726**	**0.0000**	**0.0000**	**0.0732**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0200e-003	0.0000	3.0200e-003	1.2300e-003	0.0000	1.2300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0146	7.0900e-003	2.0000e-005		6.2000e-004	6.2000e-004		5.7000e-004	5.7000e-004	0.0000	1.5115	1.5115	4.9000e-004	0.0000	1.5238
Total	**1.3100e-003**	**0.0146**	**7.0900e-003**	**2.0000e-005**	**3.0200e-003**	**6.2000e-004**	**3.6400e-003**	**1.2300e-003**	**5.7000e-004**	**1.8000e-003**	**0.0000**	**1.5115**	**1.5115**	**4.9000e-004**	**0.0000**	**1.5238**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	3.0000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0726	0.0726	0.0000	0.0000	0.0732

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**3.0000e-005**	**2.0000e-005**	**3.0000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0726**	**0.0726**	**0.0000**	**0.0000**	**0.0732**

3.3 Site Preparation - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0104	0.0000	0.0104	4.6100e-003	0.0000	4.6100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-003	0.0186	9.9600e-003	3.0000e-005		7.6000e-004	7.6000e-004		7.0000e-004	7.0000e-004	0.0000	2.2671	2.2671	7.3000e-004	0.0000	2.2855
Total	**1.7000e-003**	**0.0186**	**9.9600e-003**	**3.0000e-005**	**0.0104**	**7.6000e-004**	**0.0112**	**4.6100e-003**	**7.0000e-004**	**5.3100e-003**	**0.0000**	**2.2671**	**2.2671**	**7.3000e-004**	**0.0000**	**2.2855**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	4.1000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1060	0.1060	0.0000	0.0000	0.1069
Total	**4.0000e-005**	**3.0000e-005**	**4.1000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1060**	**0.1060**	**0.0000**	**0.0000**	**0.1069**

Regulatory Compliance Construction On-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.0500e-003	0.0000	4.0500e-003	1.8000e-003	0.0000	1.8000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-003	0.0186	9.9600e-003	3.0000e-005		7.6000e-004	7.6000e-004		7.0000e-004	7.0000e-004	0.0000	2.2671	2.2671	7.3000e-004	0.0000	2.2855
Total	**1.7000e-003**	**0.0186**	**9.9600e-003**	**3.0000e-005**	**4.0500e-003**	**7.6000e-004**	**4.8100e-003**	**1.8000e-003**	**7.0000e-004**	**2.5000e-003**	**0.0000**	**2.2671**	**2.2671**	**7.3000e-004**	**0.0000**	**2.2855**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	4.1000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1060	0.1060	0.0000	0.0000	0.1069
Total	**4.0000e-005**	**3.0000e-005**	**4.1000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1060**	**0.1060**	**0.0000**	**0.0000**	**0.1069**

3.4 Grading - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0214	0.0000	0.0214	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	**4.0000e-003**	**0.0434**	**0.0261**	**6.0000e-005**	**0.0214**	**1.8100e-003**	**0.0232**	**0.0103**	**1.6700e-003**	**0.0120**	**0.0000**	**5.4312**	**5.4312**	**1.7600e-003**	**0.0000**	**5.4751**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3000e-004	0.0151	3.8300e-003	6.0000e-005	1.8800e-003	9.0000e-005	1.9700e-003	5.2000e-004	9.0000e-005	6.0000e-004	0.0000	6.3868	6.3868	3.5000e-004	1.0100e-003	6.6978
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	1.0200e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2650	0.2650	1.0000e-005	1.0000e-005	0.2672
Total	**3.3000e-004**	**0.0151**	**4.8500e-003**	**6.0000e-005**	**2.2100e-003**	**9.0000e-005**	**2.3000e-003**	**6.1000e-004**	**9.0000e-005**	**6.9000e-004**	**0.0000**	**6.6518**	**6.6518**	**3.6000e-004**	**1.0200e-003**	**6.9650**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.3300e-003	0.0000	8.3300e-003	4.0100e-003	0.0000	4.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	**4.0000e-003**	**0.0434**	**0.0261**	**6.0000e-005**	**8.3300e-003**	**1.8100e-003**	**0.0101**	**4.0100e-003**	**1.6700e-003**	**5.6800e-003**	**0.0000**	**5.4312**	**5.4312**	**1.7600e-003**	**0.0000**	**5.4751**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Hauling	2.3000e-004	0.0151	3.8300e-003	6.0000e-005	1.8800e-003	9.0000e-005	1.9700e-003	5.2000e-004	9.0000e-005	6.0000e-004	0.0000	6.3868	6.3868	3.5000e-004	1.0100e-003	6.6978
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	1.0200e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2650	0.2650	1.0000e-005	1.0000e-005	0.2672
Total	**3.3000e-004**	**0.0151**	**4.8500e-003**	**6.0000e-005**	**2.2100e-003**	**9.0000e-005**	**2.3000e-003**	**6.1000e-004**	**9.0000e-005**	**6.9000e-004**	**0.0000**	**6.6518**	**6.6518**	**3.6000e-004**	**1.0200e-003**	**6.9650**

3.5 Building Construction - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1523	1.1710	1.2611	2.2100e-003		0.0515	0.0515		0.0497	0.0497	0.0000	181.5991	181.5991	0.0308	0.0000	182.3701
Total	**0.1523**	**1.1710**	**1.2611**	**2.2100e-003**		**0.0515**	**0.0515**		**0.0497**	**0.0497**	**0.0000**	**181.5991**	**181.5991**	**0.0308**	**0.0000**	**182.3701**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9500e-003	0.1411	0.0528	6.5000e-004	0.0221	6.8000e-004	0.0227	6.3700e-003	6.5000e-004	7.0100e-003	0.0000	63.6378	63.6378	2.1300e-003	9.1600e-003	66.4202
Worker	0.0273	0.0217	0.2938	8.2000e-004	0.0942	5.8000e-004	0.0948	0.0250	5.3000e-004	0.0256	0.0000	75.9532	75.9532	2.0000e-003	1.9500e-003	76.5849
Total	**0.0313**	**0.1627**	**0.3466**	**1.4700e-003**	**0.1163**	**1.2600e-003**	**0.1176**	**0.0314**	**1.1800e-003**	**0.0326**	**0.0000**	**139.5910**	**139.5910**	**4.1300e-003**	**0.0111**	**143.0051**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1523	1.1710	1.2611	2.2100e-003		0.0515	0.0515		0.0497	0.0497	0.0000	181.5989	181.5989	0.0308	0.0000	182.3698
Total	**0.1523**	**1.1710**	**1.2611**	**2.2100e-003**		**0.0515**	**0.0515**		**0.0497**	**0.0497**	**0.0000**	**181.5989**	**181.5989**	**0.0308**	**0.0000**	**182.3698**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9500e-003	0.1411	0.0528	6.5000e-004	0.0221	6.8000e-004	0.0227	6.3700e-003	6.5000e-004	7.0100e-003	0.0000	63.6378	63.6378	2.1300e-003	9.1600e-003	66.4202
Worker	0.0273	0.0217	0.2938	8.2000e-004	0.0942	5.8000e-004	0.0948	0.0250	5.3000e-004	0.0256	0.0000	75.9532	75.9532	2.0000e-003	1.9500e-003	76.5849
Total	**0.0313**	**0.1627**	**0.3466**	**1.4700e-003**	**0.1163**	**1.2600e-003**	**0.1176**	**0.0314**	**1.1800e-003**	**0.0326**	**0.0000**	**139.5910**	**139.5910**	**4.1300e-003**	**0.0111**	**143.0051**

3.6 Paving - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**3.6300e-003**	**0.0312**	**0.0440**	**7.0000e-005**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**5.8862**	**5.8862**	**1.8700e-003**	**0.0000**	**5.9329**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.6000e-004	2.2200e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5741	0.5741	2.0000e-005	1.0000e-005	0.5788
Total	**2.1000e-004**	**1.6000e-004**	**2.2200e-003**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5741**	**0.5741**	**2.0000e-005**	**1.0000e-005**	**0.5788**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.6300e-003**	**0.0312**	**0.0440**	**7.0000e-005**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**5.8862**	**5.8862**	**1.8700e-003**	**0.0000**	**5.9329**

Regulatory Compliance Construction Off-Site

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.6000e-004	2.2200e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5741	0.5741	2.0000e-005	1.0000e-005	0.5788
Total	**2.1000e-004**	**1.6000e-004**	**2.2200e-003**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5741**	**0.5741**	**2.0000e-005**	**1.0000e-005**	**0.5788**

3.7 Architectural Coating - 2023

Baseline Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1534					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.1544**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

Baseline Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.1000e-004	2.9000e-003	1.0000e-005	9.3000e-004	1.0000e-005	9.4000e-004	2.5000e-004	1.0000e-005	2.5000e-004	0.0000	0.7507	0.7507	2.0000e-005	2.0000e-005	0.7569

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Total	**2.7000e-004**	**2.1000e-004**	**2.9000e-003**	**1.0000e-005**	**9.3000e-004**	**1.0000e-005**	**9.4000e-004**	**2.5000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.7507**	**0.7507**	**2.0000e-005**	**2.0000e-005**	**0.7569**

Regulatory Compliance Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1534					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.1544**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

Regulatory Compliance Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.1000e-004	2.9000e-003	1.0000e-005	9.3000e-004	1.0000e-005	9.4000e-004	2.5000e-004	1.0000e-005	2.5000e-004	0.0000	0.7507	0.7507	2.0000e-005	2.0000e-005	0.7569
Total	**2.7000e-004**	**2.1000e-004**	**2.9000e-003**	**1.0000e-005**	**9.3000e-004**	**1.0000e-005**	**9.4000e-004**	**2.5000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.7507**	**0.7507**	**2.0000e-005**	**2.0000e-005**	**0.7569**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Regulatory Compliance	0.2121	0.1876	1.6647	2.9700e-003	0.3049	2.3700e-003	0.3073	0.0813	2.2000e-003	0.0835	0.0000	279.6777	279.6777	0.0254	0.0150	284.7905
Baseline	0.2121	0.1876	1.6647	2.9700e-003	0.3049	2.3700e-003	0.3073	0.0813	2.2000e-003	0.0835	0.0000	279.6777	279.6777	0.0254	0.0150	284.7905

4.2 Trip Summary Information

	Average Daily Trip Rate			Baseline	Regulatory Compliance
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	652.30	652.30	326.70	811,481	811,481
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	652.30	652.30	326.70	811,481	811,481

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Enclosed Parking with Elevator	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Regulatory						0.0000	0.0000		0.0000	0.0000	0.0000	531.6371	531.6371	0.0185	2.2400e-003	532.7671
Electricity Baseline						0.0000	0.0000		0.0000	0.0000	0.0000	531.6371	531.6371	0.0185	2.2400e-003	532.7671
NaturalGas Regulatory	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.4110	26.4110	5.1000e-004	4.8000e-004	26.5680
NaturalGas Baseline	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.4110	26.4110	5.1000e-004	4.8000e-004	26.5680

5.2 Energy by Land Use - NaturalGas

Baseline

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	494924	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.4110	26.4110	5.1000e-004	4.8000e-004	26.5680
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6700e-003**	**0.0243**	**0.0204**	**1.5000e-004**		**1.8400e-003**	**1.8400e-003**		**1.8400e-003**	**1.8400e-003**	**0.0000**	**26.4110**	**26.4110**	**5.1000e-004**	**4.8000e-004**	**26.5680**

Regulatory Compliance

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					

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Automobile Care Center	494924	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.4110	26.4110	5.1000e-004	4.8000e-004	26.5680
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6700e-003**	**0.0243**	**0.0204**	**1.5000e-004**		**1.8400e-003**	**1.8400e-003**		**1.8400e-003**	**1.8400e-003**	**0.0000**	**26.4110**	**26.4110**	**5.1000e-004**	**4.8000e-004**	**26.5680**

5.3 Energy by Land Use - Electricity

Baseline

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	299269	128.8204	4.4800e-003	5.4000e-004	129.0942
Enclosed Parking with Elevator	931002	400.7497	0.0139	1.6900e-003	401.6015
Parking Lot	4802	2.0670	7.0000e-005	1.0000e-005	2.0714
Total		**531.6371**	**0.0185**	**2.2400e-003**	**532.7671**

Regulatory Compliance

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	299269	128.8204	4.4800e-003	5.4000e-004	129.0942
Enclosed Parking with Elevator	931002	400.7497	0.0139	1.6900e-003	401.6015
Parking Lot	4802	2.0670	7.0000e-005	1.0000e-005	2.0714
Total		**531.6371**	**0.0185**	**2.2400e-003**	**532.7671**

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6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Regulatory Compliance	0.1271	2.0000e-005	2.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2700e-003	5.2700e-003	1.0000e-005	0.0000	5.6100e-003
Baseline	0.1271	2.0000e-005	2.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2700e-003	5.2700e-003	1.0000e-005	0.0000	5.6100e-003

6.2 Area by SubCategory

Baseline

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1115					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2700e-003	5.2700e-003	1.0000e-005	0.0000	5.6100e-003
Total	**0.1271**	**2.0000e-005**	**2.7100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.2700e-003**	**5.2700e-003**	**1.0000e-005**	**0.0000**	**5.6100e-003**

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Regulatory Compliance

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1115					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2700e-003	5.2700e-003	1.0000e-005	0.0000	5.6100e-003
Total	**0.1271**	**2.0000e-005**	**2.7100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.2700e-003**	**5.2700e-003**	**1.0000e-005**	**0.0000**	**5.6100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Regulatory Compliance	19.3784	0.0681	1.6700e-003	21.5788
Baseline	22.9054	0.0851	2.0800e-003	25.6531

7.2 Water by Land Use

Baseline

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	2.58723 / 1.58572	22.9054	0.0851	2.0800e-003	25.6531
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**22.9054**	**0.0851**	**2.0800e-003**	**25.6531**

Regulatory Compliance

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	2.06978 / 1.48899	19.3784	0.0681	1.6700e-003	21.5788
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**19.3784**	**0.0681**	**1.6700e-003**	**21.5788**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	MT/yr			
Regulatory Compliance	21.3242	1.2602	0.0000	52.8298
Baseline	21.3242	1.2602	0.0000	52.8298

8.2 Waste by Land Use

Baseline

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	105.05	21.3242	1.2602	0.0000	52.8298
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**21.3242**	**1.2602**	**0.0000**	**52.8298**

Regulatory Compliance

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	105.05	21.3242	1.2602	0.0000	52.8298
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**21.3242**	**1.2602**	**0.0000**	**52.8298**

901 S. Brand BMW Inventory Structure - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation